LANDFILL MANAGEMENT PLAN
FORMER EUBANK LANDFILL
ALBUQUERQUE, NEW MEXICO

Prepared for:

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LIST OF ACRONYMS

AEHD	City of Albuquerque Environmental Health Department
AGIS	Albuquerque Geographic Information System
AGRA	AGRA Environmental
APS	Albuquerque Public Schools
bgs	below ground surface
CO	certificate of occupancy
COA	City of Albuquerque
COCs	constituent of concerns
DBSA	Daniel B. Stephens and Associates, Inc.
Former Eubank Landfill	formerly COA operated Eubank Landfill
ft^3/lb-yr	cubic feet per pound per year
ftp	file transfer protocol
GIS	Geographic Information Systems
GEI	Gordon Environmental Incorporated
GPR	Ground Penetrating Radar
INTERA	INTERA Incorporated
Interim Guidelines	Interim Guidelines for Development within City Designated Landfill Buffer Zones
KAFB	Kirtland Air Force Base
LEL	lower explosive limit
LFG	landfill gas
LMP	landfill management plan
OMMP	Operation Maintenance and Monitoring Plan
PE	Professional Engineer
PCE	tetrachloroethene
PNM	Public Service Company of New Mexico
ppm	parts per million
PVC	poly vinyl chloride
scfm	standard cubic feet per minute
SLO	New Mexico State Land Office
SS&TP	Sandia Science and Technology Park
TCE	trichloroethene
UEL	upper explosive limit
Vinyard	Vinyard and Associates
VOCs	volatile organic compounds

1. INTRODUCTION

This landfill management plan (LMP), for the formerly City of Albuquerque (COA) operated Eubank Landfill (former Eubank Landfill), has been prepared by INTERA Incorporated (INTERA) on behalf of the COA Environmental Health Department (AEHD). The purpose of this LMP is to establish a plan to monitor and control landfill gas (LFG) that exceeds guideline concentrations, as it impacts development on the landfill and within the established buffer zone around the landfill. Of particular concern is the Phase II development at the Sandia Science and Technology Park (SS&TP), parts of which will be within the buffer zone and possibly on top of land which currently contains landfill waste. INTERA was directed to prepare the LMP in accordance with the AEHD's *Scope of Services*, *Landfill Gas Investigation and Characterization Study, Phase II*, dated September 10, 2002. As required by the AEHD *Scope of Services*, this LMP incorporates the following elements:

- guidelines for development on the landfill and within the buffer zone around the perimeter of the landfill;
- a Utility Plan;
- a LFG Monitoring Plan;
- a Long-Term LFG Monitoring Plan;
- a LFG Control Plan; and
- a Landfill Drainage and Surface Maintenance Plan

The *Scope of Services* also states that the LMP should address development both on the landfill and within the landfill buffer zone relative to the AEHD *Interim Guidelines for Development within City Designated Landfill Buffer Zones (Interim Guidelines)* (COA, 2004b).

1.1. Landfill Description and History

The former Eubank Landfill is located in southeast Albuquerque at the south end of Eubank Boulevard, northwest of the Tijeras Arroyo and east of Sandia National Laboratories and Kirtland Air Force Base (KAFB). The location of the landfill is shown on Figure 1. The former Eubank Landfill consisted of two distinct fill areas: the northeast fill area and the southwest fill area. The South Pointe Village Mobile Home Park is located immediately north of the former Eubank Landfill northeast fill area. The Public Service Company of New Mexico (PNM) Substation is located immediately north of the former Eubank Landfill southwest fill area (Figure 1).

The northeast fill area of the former Eubank Landfill was operated by the COA between 1963 and 1973 on property leased from the New Mexico State Land Office (SLO). The northeast fill area of the landfill is unlined and covers approximately 21 acres (Daniel B. Stephens and Associates [DBSA], 2002). The northeast fill area occupies the southeastern two-thirds of the southwest quarter of the northeast quarter of Section 33, Township 10N, Range 4E (please see Figure 1). Upon review of the DBSA report, the depth of waste within the northeast fill area extends to approximately 27-feet below ground surface (bgs). Based on DBSA waste characterization work, the buried waste within the former Eubank Landfill northeast fill area consists of approximately 45 percent organic material which may produce LFG (paper, wood, green waste, and cardboard) and approximately 55 percent inorganic material which is unlikely to produce LFG (concrete, plastic, metal, and glass). Based on the DBSA study and INTERA's quarterly monitoring results, LFG does exist within the former Eubank Landfill northeast fill area and in areas along the immediate perimeter of the lot (INTERA, 2009). Please see Table 1 for physical data pertaining to the northeast fill area.

In 1968, the Shaw Mobile Home Park (now the South Pointe Village mobile home park, located directly north of the northeast fill area) leased approximately 5 acres for installation of a septic tank and a sewage lagoon. From 1973 until 1984, RECO Corporation leased the site for trailer park predevelopment, drainage, and sewer services (Aldaz, 1991).

The southwest fill area of the former Eubank Landfill was leased by the COA for use as a landfill in 1974 from the State Land Office and the Cathedral of St. John and Margaret Glasebrook. The COA operated the southwest fill area from 1974 to 1984, and the lease expired in 1986. This portion of the former Eubank Landfill is also unlined and covers approximately 60 acres, with a maximum waste depth of approximately 36 to 40 feet. It is reported that this fill area also received residential and commercial waste (DBSA, 2002). Please see Table 1 for physical data pertaining to the southwest fill area.

Currently, both the northeast and southwest fill areas of the Site have soil covers consisting of on-site soils covered by sparse to moderate vegetation. The southwest area of the Site has been graded to some degree to prevent ponding, but water-collecting depressions still exist. The northeast fill area has areas where piles of soil have been dumped; these hummocky areas contain numerous small water catchments. Because of minimal grading and waste settlement, storm water continues to flow across the former Eubank Landfill and collect in depressions. Storm water runoff has contributed to the erosion of the bank of the Tijeras Arroyo on the east side and southern corner of the northeast fill area. Illegal dumping activities have occurred at the surface in both the southwest and northeast fill areas and surrounding land (DBSA, 2002).

A cooperative effort between SS&TP, COA, and SLO was completed in November 2003 to remove the surface solid waste from those properties currently owned by the SLO and Albuquerque Public Schools (APS) and to limit access to the former Eubank Landfill to eliminate future illegal dumping. After solid waste removal, some limited site grading was conducted in an attempt to eliminate ponding and direct surface water away from the former fill areas. This site grading has had a limited effect improving surface drainage as subsurface waste continues to decompose and differential settlement occurs across the former fill areas.

In October 2008, 68 test pits were excavated along the northern and western edges of the former Eubank Landfill in order to delineate the exact boundaries of the landfill. It was found that the north and west boundaries of the northeast fill area were fairly consistent to the boundaries that were previously understood, but the north boundary of the southwest fill area as previously defined was not entirely accurate. Buried debris (approximately 32,000 cubic yards) extends onto APS property, and buried debris may also extend onto the current PNM property which was part of the State Land Office property during the operation of the landfill. The landfill boundary shown on Figure 1 is the revised boundary based on the October 2008 test pit work (INTERA, 2008).

1.2. Description of LFG and Associated Risks

LFG is predominantly a product of the anaerobic decomposition of organic waste, and it is comprised of a variety of different components. For landfills containing mostly household waste, the typical steady-state composition of LFG in decreasing concentrations are methane, carbon dioxide, nitrogen, oxygen, hydrogen sulfide, and volatile organic compounds (VOCs). Of these constituents, methane has the highest explosive potential. The concentration level at which a gas has a potential to explode is called the explosive limit. The potential for a gas to explode is determined by its lower explosive limit (LEL) and its upper explosive limit (UEL). The LEL and UEL are measures of the percent of gas in the air by volume. Methane has an LEL of 5 percent and an UEL of 15 percent.

The amount of methane produced by a landfill is dependent on a variety of conditions including landfill age, the mass of organic material, and moisture. For newer landfills, methane concentrations typically range between 45 and 75 percent by volume, with a gradual reduction in concentration over time.

If production of LFG is significant, the landfill can become pressurized, forcing LFG outward beyond the boundaries of the landfill. Migrating LFG follows the path of least resistance which includes utility corridors, deposits of sand and gravel, or areas of prior excavation that have not been properly compacted. In some instances, LFG has been detected at distances of over 1,000 feet from a landfill. There is a potential danger associated with development activities within and near closed landfills, because LFG can migrate to off-site areas surrounding a landfill. The presence of the LFG constituent methane also presents a risk to development occurring at the surface of a former landfill, where migration of methane beneath the surface and through the surface cover of the landfill can occur, with methane potentially accumulating in confined spaces and buildings.

In addition to potentially being combustive, LFG may also be a health hazard due to other gases such as carbon dioxide, hydrogen sulfide, and VOCs. Carbon dioxide is a simple asphyxiate, hydrogen sulfide is extremely toxic, and VOCs present a range of hazards including the potential for exposure to constituents which are known human carcinogens.

As a result of the above concerns, all property development on the landfill and within the designated landfill buffer zone is subject to AEHD's *Interim Guidelines*. The *Interim Guidelines* were developed to reduce/mitigate the risks associated with LFG to new private and commercial development within a COA-designated buffer zone. The *Interim Guidelines* apply to all landfills under COA or private ownership and all permitted landfills, un-permitted landfills, and/or illegal dumpsites (COA, 2004b).

1.3. Past LFG Studies

In November 1994, Ground Penetrating Radar (GPR) was used in conjunction with downhole drilling to examine the subgrade composition of the former Eubank Landfill by AGRA Environmental (AGRA). This system used high frequency impulse radar to obtain a continuous high resolution profile of the subsurface. Traverses were made across the landfill from west to east and north to south. Boreholes were drilled to verify the data acquired with the GPR. The GPR detected varying amounts/thickness of landfill material, with an average depth of 15 to 17 feet. Eight (8) confirmatory borings were drilled by AGRA to depths ranging from 20 to 40 feet bgs. The confirmatory borings showed that some landfill material was present in small, discontinuous, pockets up to 35 feet deep. (AGRA, 1994).

LFG monitoring has been performed at the former Eubank Landfill. In 1996, CH2M Hill performed monitoring activities on the northeast fill area of the former Eubank Landfill. Trace levels of tetrachloroethene (PCE), trichloroethene (TCE), and methane were measured during the study. In 1996, the COA analyzed samples of LFG as part of a storm sewer investigation and detected trace levels of several organic compounds such as TCE, PCE, and vinyl chloride. Methane concentrations were measured across the Site from west to east (from the PNM substation to the Tijeras Arroyo) at temporary sampling points (CH2M, 1996).

DBSA, under contract with the COA in 2001 and 2002, performed a landfill characterization study at the former Eubank Landfill. The characterization study assessed whether LFG was present at the former Eubank Landfill, and investigated the types of waste deposited at the landfill. Using the data obtained, DBSA performed modeling to estimate current and future LFG generation rates. The DBSA LFG survey conducted at the former Eubank Landfill consisted of (1) installing 36 temporary gas sampling probes across the landfill and at the boundary of the South Pointe Village mobile home park and the proposed SS&TP, (2) installing 2 permanent monitoring probes at the northern boundary of the proposed technology park, (3) testing LFG samples for methane, carbon dioxide, oxygen, and hydrogen sulfide using field instruments, and (4) conducting laboratory analysis of 11 samples for 35 VOCs commonly found in LFG. Methane concentrations ranged from 0 to 61 percent and low levels of 27 VOCs were detected in LFG samples taken beneath the ground surface of the northeast and southwest fill areas.

DBSA also conducted a waste characterization study at the former Eubank Landfill. The study included (1) drilling four borings with a large-diameter bucket auger to depths of 7 to 30 feet and (2) collecting and analyzing the waste samples to establish their composition, percentage of degradable material, and moisture content.

Additionally, DBSA conducted LFG pumping tests at the former Eubank Landfill. The tests included (1) installing a LFG extraction well and three monitoring probes (located 50, 100, and 200 feet away from the extraction well) and (2) a five-day series of three pumping tests to measure methane flows and concentrations. These tests were conducted by DBSA to determine an estimated methane generation rate within the former Eubank Landfill. Waste characterization boring WC-8 was completed as a LFG extraction well, and waste characterization borings WC-9 and WC-11 were completed as LFG monitoring wells. The tests conducted by DBSA utilized

WC-8 as the extraction well and WC-9 and WC-11 as LFG monitoring wells. Extraction flow rates varied from 10 standard cubic feet per minute (scfm) to 47 scfm.

Site-calibrated methane generation values were calculated based on LFG generation rates measured during the pumping tests. DBSA modeled four different projections using a combination of site-calibrated and “typical” landfill values. The results of the modeling indicated that the peak year for LFG generation was 1985, which was one year after the former Eubank Landfill closed. The model indicates that LFG generation will continue to steadily decline as long as conditions do not change. DBSA determined that the LFG generation rate of the former Eubank Landfill is 270,000 cubic feet per pound per year (ft^3/lb-yr) during 2001 and a conservative ultimate projected rate decreasing to 246,000 ft^3/lb-yr through 2020, if all landfill waste material is left in place. DBSA indicated that this is a moderate gas generation rate from this relatively large former landfill and suggested that there is a moderate potential for off-site LFG migration (DBSA, 2002)

1.4. Current LFG Monitoring Infrastructure and Data

INTERA installed 17 perimeter LFG monitoring wells at the former Eubank Landfill between May and July, 2003. INTERA installed an additional 5 perimeter monitoring wells (north of the northeast fill area) in December 2003. The locations of the LFG monitoring wells are depicted on Figure 2. LFG monitoring wells were located to the north of the northeast fill area and to the north and west of the southwest fill area. It should be noted that no LFG monitoring wells were installed to the south of either former fill area (northeast or southwest) because of the presence of Tijeras Arroyo. The LFG monitoring wells were placed between the landfill and where the majority of the private development has occurred or will occur. The placement of these LFG monitoring wells was performed by INTERA at the direction of AEHD. AEHD intended to focus resources on those areas that exhibited the most current (or future) likelihood of development (or re-development). The LFG monitoring wells have been monitored quarterly by INTERA since installation in 2003. Table 2 presents the quarterly monitoring data collected through March 2009 (INTERA, 2009).

In 2001, DBSA installed two LFG monitoring wells (DBSA E-28 and DBSA E-31), one extraction well (WC8), and three pressure monitoring probes (WC8-50, WC8-100, and WC8-200) in the center of the northeast fill area (see Figure 2). AEHD requested that INTERA begin reading LFG monitoring wells E-28 and E-31 after the November 2003 second quarter monitoring event, and requested that INTERA begin taking LFG readings from wells WC8-50, WC8-100, and WC8-200 in October 2007, and LFG extraction well WC8 in February 2008. Between the sixteenth and seventeenth quarter monitoring events, LFG monitoring well DBSA-E31 was destroyed during road construction activities (Innovation Parkway). The DBSA monitoring well DBSA-E28 contains one shallow probe in each monitoring well completed to a depth of 10 feet bgs. The four DBSA WC8 wells are completed with one casing to an approximate depth of 30 feet bgs. WC8 is a total of 30.0 feet deep. WC8-50 is a total of 32.05 feet deep, WC8-100 is a total of 31.23 feet deep, and WC8-200 is a total of 31.18 feet deep. The quarterly monitoring data through March 2009 for these wells is shown at the end of Table 2 (INTERA, 2009).

1.5. Landfill Area Geology

The Site is geologically located in the east portion of the Albuquerque Basin. This basin is one of the largest of the south-trending series of grabens that form the Rio Grande Drainage Basin, which was formed in response to the Rio Grande Rift (Thorn et al., 1993). The Rio Grande Rift is a north- to south-trending, down-dropped area extending for more than 600 miles. The rift is an area of crustal extension originating in central Colorado and extending south through New Mexico to south of the Mexico/Texas border.

The Albuquerque Basin is filled with up to 10,000 feet of clastic sediments. These sedimentary deposits are of two types: 1) sediment that has filled the subsiding trough, and 2) floodplain deposits, terraces, dunes, alluvial fans and cones, spring deposits, caliche blankets, landslides, and some pediments. The latter group of deposits represents processes of erosion and deposition which may have prevailed throughout subsidence and filling of the basin (Kelley, 1977). The Santa Fe Formation sediments fill the majority of the basin.

The Tertiary and Quaternary Santa Fe Formation is composed of unconsolidated to loosely consolidated gravels, sands, silts, and clays. The thickness of this unit ranges from 2,400 feet on the basin margins to 14,000 feet along the axis of the basin. In the vicinity of the Site, the thickness of this formation is on the order of 4,700 feet. The Santa Fe Group is overlain by Quaternary sediments, which have a similar facies distribution. These post-Santa Fe deposits are alluvial fan and floodplain deposits that are up to 200 feet thick (Thorn et al., 1993).

The Santa Fe Group and post-Santa Fe deposits are the principal water bearing units in the vicinity of the Site and are hydraulically connected (USACE, 1979; Thorn et al., 1993). However, the Albuquerque Basin aquifer is anisotropic laterally and vertically because of spatial variations in the lithology of these two water-bearing units (Chamberlin et al., 1992). Clay layers of 12 to 15 feet thick are commonly observed in the alluvium of the Albuquerque Basin; these clay layers restrict vertical movement of water and may locally limit hydraulic interconnection between the shallow Quaternary aquifer and the Santa Fe Group aquifer. As a result of spatial variations in lithology, the hydraulic transmissivity of the Albuquerque aquifer varies tremendously, from less than 10 square feet per day to 80,000 square feet per day. The hydraulic conductivity of the upper part of the Santa Fe Group varies also, but is estimated to be approximately 20 feet per day on average in the vicinity of the Site (Thorn et al., 1993).

Depth to ground water varies in the aquifer ranging from 2 feet near the Rio Grande to about 1,180 feet along the West Mesa. The COA indicates that ground water is located approximately 600 feet below ground surface (bgs) at the Site with a hydraulic gradient to the southwest (Daugherty, 2009).

During the drilling of the perimeter LFG monitoring wells, an INTERA geologist recorded the lithology by visually classifying grab samples from the drill cuttings and assigning a written two-letter classification according to the Unified Soil Classification System on the soil gas boring logs and cross sections. Sands, gravels, and silts consistent with those found in typical arroyo deposits were encountered during the drilling of the former Eubank Landfill LFG monitoring wells.

The soils encountered at the site were consistent with soils classified as poorly graded gravels or gravel-sand mixtures, little or no fines (GP); well graded gravels or gravel sand mixtures, little or no fines (GW); sandy gravels, gravel-sand-silt mixtures (GM); well graded gravel with silts and sands (GW-GM), poorly graded gravel with silts and sands (GP-GM), silty sands and sand-silt mixtures (SM), well graded sand with silt and gravel (SW-SM), poorly graded sands or gravelly sands with little or no fines (SP); poorly graded sand with silt and gravel (SP-SM), well graded sands or gravelly sands, little or no fines (SW), silts (ML) and inorganic clays of low to medium plasticity, gravelly clays, sandy clays, and lean clays (CL). Also encountered were thin interbedded cobble layers (3-8 inches in diameter). Cobble layer thickness and location differed from boring to boring. The amount of cobbles encountered at each boring varied (INTERA, 2003).

The clay observed at the former Eubank Landfill was generally mixed with sand and gravel. Clay was observed in soil borings ELMW-03, ELMW-04, ELMW-05, ELMW-11, ELMW-12, and ELMW-16. Clay was encountered in each of these soil borings (with the exception of soil boring ELMW-11) at approximately 15-feet to 20-feet bgs. Clay located at approximately 30-feet bgs was encountered at soil borings ELMW-03, ELMW-05, ELMW-11, ELMW-12 and ELMW-16. The thickness of clay encountered ranged from 3 to 8 feet. The only clay layers encountered where clay was the primary or only constituent was located at soil borings ELMW-11 (depth 25 to 30 feet bgs), ELMW-12 (depth 27 to 36 feet bgs), and ELMW-16 (depths 17 to 19 feet bgs and 27 to 30 feet bgs). Intermittent cobble layers were observed in the all of the LFG monitoring well borings except borings ELMW-14, ELMW-17, and ELMW-19. Cobble layer thickness, location, and quantity differed from soil boring to soil boring. The moisture content of the majority of the subsurface materials encountered was damp. Natural subsurface moisture was observed within the soil matrix as well as on drilling equipment. Ground water was not encountered in any of the soil borings during drilling operations (INTERA, 2003).

1.6. Planning and Zoning On the Landfill and within the Buffer Zone

The former Eubank Landfill is located in the southeastern portion of Albuquerque. The northeast fill area is located in the Sandia Science and Technology Park Subdivision, and the southwest fill area of the former landfill is located partially in the Sandia Science and Technology Park Subdivision and partially in the Juan Tabo Hills West Subdivision in the Albuquerque Geographic Information System (AGIS) Zone Atlas Page M-21-Z. The 1,000-foot landfill buffer zone extends into portions of AGIS Zone Atlas Pages M-20-Z, N-20-Z, and N-21-Z. The northeast fill area, and parts of the southwest fill area of the former Eubank Landfill are currently zoned IP (Industrial Park Zone), as designated by the COA. The majority of the southwest fill area (as well as the Tijeras Arroyo to the southeast) is located outside of the City limits and is zoned by Bernalillo County as A-1 (Rural Agricultural). The land to the west and south of the southwest fill area belongs to KAFB. Area zoning information is shown on Figure 3. The zoning designations immediately north and east of the northeast fill area of the former Eubank Landfill are designated as follows:

- Sandia Science and Technology Park – IP (Industrial Park Zone)
- Shaw Mitchel Mallory Partnership and Four Hills Mobile Home Park – SU-1 MH (Special Use Zone, Residential Zone: Mobile Houses)

- Juan Tabo Hills Unit 1, Lot 4A – SU-1 for Village Square C-2 O-1 R-T with Exceptions (Community Commercial Zone, Office and Institutional Zone, and Residential Zone: Houses and Townhouses)
- Juan Tabo Hills Unit 1B – R-D (Residential and Related Uses Zone, Developing Area)
- Juan Tabo Hills Unit 2 – SU-1 For Major Public Open Space
- Bernalillo County, Track A (Owned by Albuquerque Metropolitan Arroyo Flood Control Authority) – A-1 (Rural Agricultural)

2. GUIDELINES FOR DEVELOPMENT

Decisions to approve various types of development on the former Eubank Landfill and within its associated landfill buffer zone are guided by the requirements of the *Interim Guidelines* (COA, 2004b). The *Interim Guidelines* provide a description of all required components of a development plan for properties on a landfill and/or within the buffer zone. *The Guidance for Compliance with the COA AEHD Interim Guidelines* is intended to assist developers and their agents through the COA's approval process (COA, 2004a). The former Eubank Landfill is a large landfill and the potential for LFG generation is significant.

The LFG survey conducted in 2002 by DBSA at the former landfill provided initial data on the potential for LFG at the former Eubank Landfill (see Section 1.3 and Figure 4). The results of this study indicated that the highest level of methane (61.3 percent) occurred at the center of the northeast fill area (see Figure 4). The survey also found that the majority of the northeast fill area exceeded 100 percent of the LEL, and that the southwest fill area had three distinct zones of high methane levels: the northern edge of the fill area (13.7 percent methane), the south-central portion of the fill area (20.1 percent methane), and the very southern tip of the fill area (18.9 percent methane). The results of the study indicated signs of waste degradation across both fill areas of the former landfill. Varying levels of 25 different VOCs were also detected during the survey. Based upon the result of this survey, permanent LFG monitoring wells were installed at the former landfill for the COA by INTERA in 2003 (see Section 1.4). Several years of LFG monitoring data from the perimeter LFG monitoring wells have indicated elevated levels of methane along the northern boundary of the northeast fill area. Trace levels of methane have also been detected to the north of the southwest fill area and at the southern tip of the southwest fill area (INTERA, 2009). The October 2008 field work has determined that the edge of the landfill is closer to these wells than previously thought. Methane has either not been detected, or has been detected intermittently at relatively low concentrations in the wells that are located closest to current development, including the wells closest to the mobile home park (see Table 2).

2.1. Key Requirements of the *Interim Guidelines*

The *Interim Guidelines* (COA, 2004b) is the primary guidance document that describes the document submittal, approval, and certification process for development on a landfill or within a landfill buffer zone. The required documents for a development project within the landfill buffer zone must be stamped by a New Mexico Professional Engineer (PE) who meets all AEHD requirements for rendering a qualified opinion on LFG issues. According to the *Interim Guidelines*, a LFG Assessment Report must accompany the Site Development Plan. The requirements of the LFG Assessment Report are presented in detail in the *Interim Guidelines*. The qualified PE is fully responsible for evaluating LFG risk and establishing any and all LFG mitigation measures. The AEHD maintains review authority over the qualified PE's findings and recommendations.

For construction within the buffer zone where buildings are not placed on waste material, LFG monitoring may be less stringent, but mitigation measures (trench venting, conduit seals, passive ventilation systems, etc.) could still be required. The primary potential avenues of LFG exposure are either their proximity to landfill waste material or the potential for transport along utility corridors or similar conveyances. AEHD has the primary responsibility to ensure that reports and plans submitted by the qualified PE meet all of the requirements of the *Interim Guidelines* prior to development approval.

2.2. Development on the Landfill

As discussed previously, development within the boundaries of the former Eubank Landfill has a significant potential to encounter LFG. Even on properties where a significant portion of the buried waste may be removed, there will still be the potential for LFG to migrate from other areas of the former landfill. Therefore, there needs to be careful consideration of historical and current data concerning the distribution of waste, the location of potential subsurface migration pathways, the locations of methane detections, and changes to the surface of the landfill when decisions are made concerning development, and required mitigation. The assessment of LFG at any particular property undergoing proposed development is the responsibility of the property owner/developer and the qualified PE that is contracted to provide a professional opinion. It should be noted that development projects within the landfill boundary are likely to require, at a minimum, monitoring of LFG beneath and within structures built on the landfill. Even if waste material is removed beneath structures built on the landfill, these structures are at risk for accumulation of LFG beneath impervious slabs and paving materials. The only exception would be when a qualified PE provides a construction plan which requires no LFG monitoring, and the plan is acceptable to AEHD.

2.2.1. Current Development

Currently there is no development on the former Eubank Landfill. However, former development included a sewer line, sewage lagoons, and a septic tank on the northeast fill area. The sewer line was abandoned but remains in-place; it is assumed that the septic tanks were abandoned in place, and the sewage lagoons were removed (INTERA, 2004c). The initial phase of construction at SS&TP (Phase I) completed to date has not involved building on the former Eubank Landfill; however, Phase II of the SS&TP Master Development Plan does indicate development of several parcels on the former Eubank Landfill (see Figure 5).

2.2.2. Future Development and Development Restrictions and Requirements

Current and future development on the former landfill must comply with the *Interim Guidelines* (COA, 2004b) or subsequent landfill development ordinances that exist at the time of development. Other future development considerations are:

- Potential restriction of any additional building on buried landfill material (piers or landfill removal);
- Providing adequate drainage of surface water runoff away from landfill areas;
- Prohibition of storm water retention and detention basins over and/or adjacent to landfill materials;
- Use of landscape practices that require little or no irrigation or providing means of prohibiting irrigation water from infiltrating and reaching buried landfill materials;

- Removal of landfill material beneath subsurface utilities or adequate design to account for settlement;
- Include adequate design to control the migration of LFG away from the landfill and/or off the subject property; and
- Develop LFG mitigation measures that are protective of structures, utilities, and occupants.

2.3. Development within the Buffer Zone

The buffer zone at the former Eubank Landfill extends 1,000 feet from the edges of the landfill, except where it runs along Innovation Parkway. The 1,000-foot buffer zone width was based upon known facts concerning the landfill, typical patterns of LFG migration, and potential future scenarios of development on the landfill itself. The buffer zone is designed to be protective of human health with regard to development and occupancy within 1,000 feet of a former landfill.

2.3.1. Current Development in the Buffer Zone

Currently there is a significant level of already built and planned development within the buffer zone at the former Eubank Landfill. Buffer zone development includes residential development (single family homes) special use development (mobile home parks) and commercial development (a PNM switching station). Phase 1 of the SS&TP development is nearly complete, and for the most part, is outside of the buffer zone.

2.3.2. Future Changes to the LFG Migration, Redesignating the Buffer Zone

The establishment of a buffer zone is designed to reduce potential future impacts associated with LFG migration. Due to the fact that development within the buffer zone is relatively dense compared to the landfill itself, the potential exists for a large number of people to be impacted if LFG migrates from the landfill. LFG data collected within the landfill shows that there are areas within the former Eubank Landfill where significant concentrations of LFG exist (DBSA, 2002). The surface of the former landfill is undeveloped and consists of cover material that is dry and relatively permeable. As the former landfill is developed, this situation will change as the surface of the landfill is gradually covered by large commercial buildings, parking lots, and cement paving. Areas of the former landfill surface that are covered with impermeable materials will be more likely to trap LFG. LFG production is dependent upon the volume of waste and is variable over time, dependent upon such things as moisture present in the landfill and atmospheric conditions. Because of these variables, LFG production is difficult to predict. As additional infrastructure is constructed, the number of potential conduits for LFG migration will increase. For these reasons, it is important to closely control construction within the buffer zone because as the nature of LFG production at the former landfill will change over time with development.

2.4. Managing Future Land Use

Currently, development plans (building permits) for construction on or within a landfill buffer zone are referred by the COA Planning Department to AEHD for review. The review may be conducted by AEHD or a designated contractor. The initial review is to determine the location of the development relative to the landfill and buffer zone. If the development is within the landfill buffer zone, the developer is notified by AEHD of the need to comply with the *Interim Guidelines* including submittal of a LFG Assessment Report. The AEHD then reviews the developer's LFG assessment and may approve the assessment or may request additional effort/design. Once the assessment is complete, the AEHD will review the plans for mitigation of LFG (if applicable) and approve once the requirements are met.

AEHD will continue to communicate with the COA Planning Department to track the current development plans for the area on the former Eubank Landfill or within the landfill buffer zone.

2.5. Documentation of Actual Site Conditions

A New Mexico-licensed PE must inspect each facility during construction to ensure that LFG mitigation measures have been implemented as planned. A Qualified PE must certify waste excavation and removal from the property. As part of the certification process, the AEHD will require written and photographic documentation of the location and approximate volume of waste remaining on each property (if any) after construction is complete. As the land above the landfill is developed, it is important that this information is transmitted to the AEHD so that the City can update its records regarding the areal extent of the trash and dimensional/physical characteristics of the trash remaining under developed properties. Currently, development and construction planning is based on limited data concerning how much waste is present beneath each property. The actual volume of waste on each property can only be assessed once the site is being excavated. For future development, it will be required that developers of the former Eubank Landfill provide to AEHD all waste quantities, waste qualifications (plastic, green, etc.) waste removal manifests, and a figure (site plan and cross-section, stamped by Qualified PE) showing the past and current locations of waste.

2.6. Data Review by AEHD

Data obtained from the former Eubank Landfill may include data from LFG monitoring wells, data collected from passive and active LFG recovery systems; data from monitoring subsurface vaults and other collection points; and data from building alarms and the monitoring of interior air quality. AEHD will obtain and review data from private property owners, tenants, developers, or approved agent(s) that are required to collect data. The following will be included:

- A registered New Mexico PE will submit a report or equivalent correspondence to the AEHD to document that the LFG monitoring and mitigation systems in place are constructed and operating in accordance with engineering design plan specifications that were approved by the AEHD during the planning process;
- AEHD will require that LFG monitoring system operators provide monitoring results to the AEHD schedule developed by the qualified PE and approved by AEHD.
- AEHD will require building owners to report records of alarms within 24 hours and monitoring of building interiors on a specified schedule;

- AEHD will require that operator inspection reports include maintenance or repair actions be submitted; and
- The AEHD may conduct periodic inspections of any LFG mitigation measures developed within the landfill buffer zone.

AEHD will review the information provided and may recommend additional LFG mitigation measures, if necessary. These measures may include the installation of passive venting systems, additional sensors in buildings, LFG concentration alarm systems, installation of additional LFG monitoring wells, and other miscellaneous LFG monitoring measures.

2.7. Data Management

All data collected at the former Eubank Landfill must be managed in an integrated manner. Data should be maintained by AEHD as the agency for safety measures at the landfill. Data records should be maintained by property owners and the AEHD; and should include records of interior methane gas alarms, records of LFG data collection within buildings, maintenance or calibration records for established LFG mitigation measures, data collected from LFG monitoring wells on landfill properties, data from passive LFG mitigation systems, and data from sumps and other collection points, as required. Data should also be maintained from perimeter monitoring wells by AEHD, on a similar basis. All data submitted to AEHD must include GPS coordinate data for the collection point, so that data can be compared with nearby data to identify trends or issues of concern. Data should be maintained in a relational database so that any data of interest can be easily assessed and mapped as needed.

AEHD will review data when it is received to identify any unanticipated detections of LFG which may require immediate action.

3. UTILITY PLAN

This section includes information previously submitted to the AEHD by INTERA in 2004. This information has been updated with utility infrastructure development information provided to INTERA by AEHD. INTERA has worked in conjunction with the AEHD reviewing construction design plans for projects that have occurred within the former Eubank Landfill buffer zone since 2003.

3.1. Purpose and Use

The objective of the Utility Plan is to identify the locations of current and/or former subsurface trenches that might act as migration pathways for LFG. In addition, the Utility Plan provides a framework for understanding the potential impact of LFG mitigation on new utility corridors. The known subsurface utilities located at the former Eubank Landfill and within the general vicinity are shown on Plate 1.

There are two primary reasons for determining the locations of subsurface utilities.

- First, subsurface utility corridors may act as conduits for LFG migration away from the landfill. These factors may allow LFG to migrate away from the landfill substantial distances, potentially endangering off-site properties. Factors that may contribute to the movement of LFG along utility trenches are:
  - use of non-native fill material that is more porous than native soils;
  - uneven backfilling around the utility resulting in bridging or incomplete compaction; and,
  - backfill material surrounding a subsurface utility may be less compact than native soil surrounding the trench.
- Second, some subsurface utilities such as storm and/or sanitary sewers and water-supply pipelines may leak and hydrate the buried trash in the landfill. The addition of moisture to the underlying waste may accelerate the production of LFG, and thus should be minimized or eliminated.

The following sections of this LMP describe the methods used to identify the locations of subsurface utility lines and the types of subsurface lines that are known to be present under or near the former Eubank Landfill. The following sections present information on each of the types of subsurface utilities at the former Eubank Landfill.

3.2. Existing Subsurface Utility Trenches

The following types of subsurface utility trenches have been identified within the buffer zone of the former Eubank Landfill:

- Storm sewer
- Sanitary sewer

- Potable water
- Natural gas
- Overhead electric and communications lines
- Fiber optic lines

These utilities may have the potential to be LFG migration pathways.

3.2.1. Subsurface Utility Research Methodology and Findings

In 2003 INTERA retrieved ArcView shapefiles of subsurface sanitary sewer, storm sewer, natural gas, and water utility lines from the Bernalillo County Geographic Information Systems (GIS) file transfer protocol (ftp) site (ftp://wilbur.bernco.gov/data/). These data were used to assemble a GIS file of subsurface utility locations and create the Subsurface Utility Location Map included as Plate 1. INTERA called New Mexico One-Call, the subsurface utility locating service serving the State of New Mexico and the subsurface utility locations were marked with paint and/or flagging at the Site. These locations were noted in the field logbook during the drilling of the LFG monitoring wells. In 2008 the Albuquerque Bernalillo County Water Utility Authority provided INTERA with updated ArcView shapefiles for the potable water and sewer lines.

INTERA determined that there are no subsurface utilities running through the former landfill, but there are many utilities within the buffer zone. SS&TP proposes to install underground utilities including sanitary sewer, water, and storm sewer as part of their Phase II development. Existing storm water, sanitary sewer, and water line locations, as well as existing overhead electrical service and communication lines, are shown in Plate 1. These locations are considered herein for siting of facilities and pipelines related to subsurface remediation.

3.2.2. Storm Sewer

An underground drainage network consisting of a 96-inch diameter reinforced concrete pipe runs north-south from Eubank Boulevard. The storm-water outfall point is located on the south end of the western abutment of the Tijeras Arroyo. Storm sewer lines follow along Innovation Parkway, as well as the Tijeras Arroyo. Various storm sewer lines for the Juan Tabo Hills Subdivision also empty into the Tijeras Arroyo.

3.2.3. Sanitary Sewer

A sanitary sewer runs north-south along the west side of Eubank Boulevard. Sanitary sewer lines (8 inch) run along the streets in the Juan Tabo Hills Subdivision, to the main interceptor in the southeastern edge of the Tijeras Arroyo.

3.2.4. Potable Water

There are numerous potable water lines within the buffer zone of the former Eubank Landfill that may serve as conduits for LFG. Potable water lines run north-south on Eubank Boulevard, and along Innovation Parkway. Potable water lines also run to each house in the Juan Tabo Hills Subdivision, via the streets of the subdivision. These water lines range in diameter from 6-inch to 10-inch.

3.2.5. Natural Gas

A buried natural gas line runs northeast to southwest along the west perimeter of KAFB and east of the PNM substation. The gas line briefly emerges from underground at the southwest corner of SLO property and then continues south beneath Eubank Boulevard and near the Tijeras Arroyo bluff.

3.2.6. Overhead Electric Lines

Many overhead electric lines originate from the PNM station located in the western side of the buffer zone of the former Eubank Landfill. These lines also run north/south along Eubank Boulevard, and east/west across the landfill area, between the two landfill fill areas. Some of these overhead lines also contain communications lines. The electric and communications lines are overhead supported by utility poles.

3.2.7. Fiber Optic Subsurface Utilities

There are currently no known fiber optic subsurface utility lines, however, due to the nature of the SS&TP, it is not unreasonable to assume that these may eventually be installed within the buffer zone. Communication and fiber optic lines must be part of any required notification locate that is performed prior to excavation on any property or within a right-of-way.

3.3. Future Utility Corridors

Plans for construction of new utility corridors within the former landfill or within the former landfill buffer zone should account for the potential for LFG migration. These plans must include risk abatement measures which are adequate to address any potential existing and/or future risk from LFG migration.

Any portion of a new utility corridor construction plan dealing with LFG abatement measures shall be certified by a qualified PE as defined by the *Interim Guidelines*. This certification will be noted on plat/site development plans or building permits and reviewed and signed by designated AEHD staff or its designated consultant. The COA will not issue work orders for construction of public infrastructure within the landfill buffer zone until the required certifications and signatures are on the construction plans and AEHD signature approval has been obtained. The COA Planning Department will not issue a Certificate of Occupancy (CO) or a Certificate of Completion until the AEHD has verified that the risk abatement measures have been properly constructed (COA, 2004b).

New underground utilities should be constructed to prevent the migration of LFG into proposed structures. For example, new underground utilities should be designed to avoid contact with the landfill whenever possible, unless there is no reasonable alternative route. Any “wet” utilities should be prohibited over or adjacent to buried waste or designed to prevent fluids from entering this landfill. Utilities that are to be transferred to COA infrastructure as part of property development are prohibited from being placed over trash (as specified by the Planning Department). Exceptions to this ordinance have been obtained under rare conditions and only with very stringent design controls. Details of any proposed LFG barrier(s), such as utility corridor plugs or other proposed LFG mitigation measures to be installed within the landfill buffer zone, must be provided to AEHD for review. Design details may vary depending on whether utility lines are placed beneath hard surfaces such as asphalt (which may be resistant to LFG and water leakage) or soft surfaces such as turf (which may be more susceptible to LFG and water leakage).

4. LFG MONITORING PLAN

This section focuses on LFG monitoring at the former Eubank Landfill. The LFG Monitoring Plan has been developed based on previously collected LFG data at the landfill. This section describes the criteria that trigger the requirement for LFG monitoring and installation options for any additional LFG monitoring wells.

4.1. Requirement for LFG Monitoring and Reporting

LFG monitoring will be required for any property on the landfill where a building or parking lot is constructed, unless a qualified PE makes a determination that monitoring wells are not necessary and AEHD approves that proposal. For example, if a building is constructed on a lot where all of the waste is removed from the lot prior to construction and there is passive mitigation in place beneath portions of the parking lot that abut areas where waste is in place, the potential for LFG accumulation may be deemed insignificant and monitoring may not be required. It is important that each development project be handled individually in terms of requirements for LFG monitoring. In the landfill buffer zone, monitoring will generally be required unless a determination is made by a qualified PE that monitoring is not a necessary part of LFG mitigation.

For all properties where LFG monitoring wells are required, a baseline condition for the property will be established by two years of quarterly LFG monitoring. Quarterly monitoring data must be sent to AEHD. If baseline conditions are determined to be reasonably low, LFG monitoring will continue for another eight years, and monitoring may be semi-annual. At the end of those eight years AEHD will re-evaluate the monitoring data to determine if continued monitoring is necessary. However, if baseline conditions show high levels of LFG, quarterly monitoring may be required in perpetuity. While LFG monitoring wells belong to individual property owners, they are a part of a larger, landfill-wide LFG monitoring network. Thus even if AEHD makes a determination at some point that LFG monitoring is no longer required in a particular well, AEHD may still require that the LFG monitoring well be maintained and not destroyed. AEHD should have access to all LFG monitoring wells in the event that AEHD decides to perform a landfill-wide monitoring event, or if it is determined that methane levels have reached significant or dangerous concentrations on an adjoining property and additional data are required to protect public safety. Access agreements and Right to Enter documents between this property owner and the COA should be negotiated during the planning process.

All data collected from private LFG monitoring wells must be reported to AEHD within 30 days of data collection, or a written request for extension and reason for the needed extension must be submitted to AEHD. The requirements for data collection and reporting must be specified in each property development plan. These requirements must be made part of any Operation Maintenance and Monitoring Plan (OMMP) submitted by the developer during the development process.

4.2. Criteria for Decreasing or Increasing Future LFG Monitoring Frequency

Future LFG monitoring requirements will be based on the criteria presented in Table 3. These criteria address potential safety concerns related to the production and emission of LFG, while recognizing the increased development of areas on and adjacent to the former Eubank Landfill. These criteria are based on the AEHD's observations of LFG levels since 2002 initial soil gas readings and LFG monitoring well data. Action levels for Constituents of Concern (COCs) are listed in Section 6.6.

4.3. Installation of New Perimeter Monitoring Wells by AEHD

Development on the landfill, such as buildings and paving, could increase the area of impervious cover, thereby causing LFG to migrate further off-site. In this event, AEHD may need to install new LFG monitoring wells. Several conditions under which new monitoring wells may be required are presented below:

- LFG concentrations become elevated (greater than 1 percent of the methane LEL) for two or more consecutive monitoring events in existing AEHD perimeter LFG monitoring wells;
- LFG concentrations become elevated (greater than 100 percent of the methane LEL) in one or more LFG monitoring wells located within the landfill, and it is determined that the perimeter monitoring wells are not properly positioned to assess migration from the landfill; and
- New development on the landfill that could potentially change the volume or migration of LFG, such as impervious paving or the construction of buildings at the former landfill.

The LFG monitoring wells will be installed as follows:

Each LFG monitoring well will be 40.5 feet deep and be completed with three air sampling probes constructed of 1.0-inch diameter schedule 80 polyvinyl chloride (PVC), with a 2.5-foot screen interval (the bottom 6 inches of the probe is blank casing). The screen interval will be machine-slotted with 0.20-mm openings. Each probe will be fitted with a laboratory-grade valve/sample port.

Deep probe, labeled "D" will be installed as follows:

- Screened interval between approximately 37.5 and 40 feet bgs;
- Bottom of the probe will be at 40.5 feet bgs;
- Void space from 35.5 to 40.5 feet bgs (or from bottom of borehole to 2 feet above top of deep screen) will be filled with 3/8-inch pea gravel;
- Void space from 25.5 to 35.5 feet bgs (or total of 10 feet above pea gravel) will have a bentonite seal installed and hydrated.

Intermediate probe, labeled "M" will be installed as follows:

- Screened interval between approximately 22.5 and 25 feet bgs;
- Bottom of the probe will be at 25.5 feet bgs;
- Void space from 20.5 to 25.5 feet bgs (or from top of bentonite seal for deep probe to 2 feet above top of intermediate screen) will be filled with 3/8-inch pea gravel;
- Void space from 10.5 to 20.5 feet bgs (or total of 10 feet above pea gravel) will have a bentonite seal installed and hydrated.

Shallow probe, labeled “S” will be installed as follows:

- Screened interval between approximately 7.5 and 10 feet bgs;
- Bottom of the probe will be at 10.5 feet bgs;
- Void space from 5.5 to 10.5 feet bgs (or from top of bentonite seal for intermediate probe to 2 feet above top of shallow screen) will be filled with 3/8-inch pea gravel;
- Void space from 2 to 5.5 feet bgs (or as much as necessary to fill borehole to within 2 feet of surface) will have a bentonite seal installed and hydrated.

A 2-foot by 2-foot concrete pad with a flush-mounted traffic-rated steel vault should be completed for each LFG monitoring well installation. In some instances a vault to accommodate well stick-up may be needed (i.e. landscaped areas).

The depth of the screened intervals may vary due to the presence of clay layers, waste material or other considerations. Well construction diagrams must be completed for each well and any variations in the well construction from the proposed specifications should be noted on the diagram.

The bentonite seal will consist of Wyoming “Hole Plug” bentonite 1/2-inch pellets. The bentonite should be installed and hydrated with 5 gallons of water for every 2.5 feet of bentonite. In an effort to ensure that enough bentonite material is placed into the soil boring void space and no caving of the borehole occurs, the quantity of bentonite (by weight) required to fill the void space should always be calculated and weighed prior to emplacement. The weight of bentonite placed in the hole should be compared with depth measurements every two feet as the borehole is backfilled.

4.4. LFG Monitoring Wells Installed by Private Entities

A qualified PE may recommend the installation of LFG monitoring wells as part of the design and construction of any new development on the former landfill or within the landfill buffer zone. AEHD must approve plans for LFG monitoring well construction before the wells are installed. Soil boring logs and construction diagrams for each LFG monitoring well must be provided to AEHD. The design of LFG monitoring wells should be similar to that described in Section 4.3. The private property owner must monitor the LFG well(s) at a frequency approved by AEHD. The required LFG monitoring frequency will vary with each property and may change over time, depending upon monitoring results. All LFG monitoring data must be collected on a schedule agreed to by each property owner and AEHD and the LFG monitoring data must be submitted to AEHD within 30 days of collection.

4.5. General Sampling Methodology

LFG sampling in the perimeter monitoring wells will be performed with a CES Landtec GEM-500, or similar, instrument. Calibration must be performed according to the instrument manufacturer's recommendations and the calibration process documented by the operator prior to operation. The GEM-500 series gas monitor is capable of measuring percent LEL, percent methane, percent carbon dioxide, percent oxygen, and percent nitrogen as a balance gas. The instrument must be calibrated with span gas each day of sampling. The instrument at a minimum should be calibrated twice a day if the instrument is used continuously for over a four-hour period. Calibration should be rechecked if problems are observed with instrument readings.

The GEM-500 should be connected by rubber hose to each LFG monitoring probe. LFG readings should be observed for stability, which generally takes up to 5 minutes. Record should be made of the sampling technician, type of sampling port, sampling time, instrument readings, weather conditions at the time of sampling, etc.

5. LONG-TERM LFG MONITORING PLAN

The current surface of the landfill is dry soil cover. Phase II development of SS&TP is proposed to be partially located over the former Eubank Landfill. As the surface of the landfill is developed with buildings and parking lots, the distribution and/or migration of subsurface LFG may change. These changes would be difficult to assess without ongoing, long-term LFG monitoring. As long as the surface of the former Eubank Landfill is in this dynamic state, there should be periodic review of the Long-Term LFG Monitoring Plan to ensure that it is adequate to identify problems and protect human health and safety.

5.1. Long-Term LFG Monitoring Decision

Decisions concerning long-term LFG monitoring shall be made based upon the ongoing review of LFG data collected at the former Eubank Landfill. LFG data collected on a regular schedule and intermittently are both important for understanding changes that might occur in the distribution of subsurface LFG. These data will include monitoring for LFG:

- In LFG monitoring wells;
- In sumps, utility vaults, and other low spots;
- As part of a recovery or other mitigation system; and
- Within the interior of buildings.

If LFG is detected at any of these types of monitoring locations at concentrations near the guidelines, then decisions must be made about what additional data may be needed to assess the location, potential migration, and potential impacts of the LFG.

5.2. Monitoring Perimeter LFG Monitoring Wells

Based on data from quarterly LFG monitoring at the former Eubank Landfill, the following determinations have been made: methane has either not been detected, or has been detected intermittently at relatively low concentrations in the LFG monitoring wells that are located closest to current development, including those LFG monitoring wells closest to the mobile home park. However, the amount of LFG present at other LFG monitoring wells along the former landfill perimeter (specifically methane) is marginal (Table 2). At a minimum, those LFG monitoring wells closest to the current development should be monitored on a quarterly basis at the former Eubank Landfill to assess potential accumulation and/or migration of LFG off-site.

5.3. Monitoring Interior LFG Monitoring Wells

LFG monitoring wells located on private property within the former landfill will be monitored on a schedule that is approved by AEHD. It is important that these recommendations be made by a qualified PE and that AEHD concurs with the recommended monitoring locations and monitoring frequency. These decisions will be made based upon, but not limited to, a number of factors including the volume of waste remaining on each property, the types of construction and impermeable surface cover, and the presence of other mitigation measures.

5.4. Surface LFG Emissions Monitoring

Surface LFG emissions are not currently being monitored at the former Eubank Landfill. As the surface of the landfill changes as a result of continued development, surface emissions monitoring may be considered because the current relatively unconsolidated soil cover material will be converted to harder surfaces (building concrete slabs, asphalt parking areas, etc.). The more impervious surfaces will results in a change of LFG migration patterns both horizontally and vertically within the landfill and through the landfill surface. The monitoring of surface emissions should be linked to the results of other types of LFG monitoring. If LFG is detected at levels that approach Tier Levels (see Section 6.6) in LFG monitoring wells or subsurface structures and there is a pathway to the surface, then surface monitoring at designated points on the surface of the landfill should be incorporated into the quarterly monitoring activities.

Surface emissions monitoring can be conducted by either using direct reading field instruments or by collecting samples for laboratory analysis. Direct reading field instruments can be combustible gas meters (suitable for somewhat confined areas with revised air transfer) or flame ionizing detectors (i.e., Landtec's SEM-500). Flame ionizing detectors have a lower detection limit and are more suitable for measuring emissions from the ground surface.

Collection of discreet samples for laboratory analyses has the benefit of providing data from a point in time or a representative sample over a period of time. Samples are typically collected using Summa canisters or an equivalent sample container. Summa canisters can be deployed in low-lying areas and deployed to collect ambient air samples if deemed necessary. The Summa canister samples can be analyzed for the presence of LFG.

5.5. Monitoring Indoor Air Quality

Structures on the former Eubank Landfill will likely require the installation and maintenance of indoor gas detectors and alarms. These detectors and alarms must be maintained in perpetuity. An OMMP for the site must guide the building owner and occupants in the proper use and maintenance of methane monitoring systems. The OMMP must be detailed enough to specify:

- How to understand the operation and purpose of the methane sensors;
- Maintenance and calibration requirements (must be in accordance with manufacturer's recommendations);
- Replacement requirements;
- Frequency and methods for confirmation monitoring of indoor air quality;
- Frequency of reporting of maintenance, calibration, and monitoring data to AEHD;
- Procedures to follow in the event the sensors detect methane and an alarm condition occurs; and
- Hierarchy of emergency/alarm notification with contact information (immediate reporting to AEHD in the event of an alarm condition shall be mandatory).

Methane monitors should be mounted in accordance with manufacturer's recommendations in a location where accidental damage is unlikely, but where access for servicing and calibration is convenient. Preferences in sensor location should include consideration of confined areas and/or where utilities, drains, etc. penetrate the slab.

Monitoring of indoor air quality must be initiated if the presence of LFG is suspected in any structure with or without indoor gas detection systems.

6. LFG CONTROL PLAN

The LFG Control Plan discusses conceptual remediation alternatives that have been evaluated by INTERA at the request of SS&TP stakeholders (this plan does not replace the LFG Assessment Report that will be required before actual development). The LFG Control Plan also describes how LFG will be controlled if a constituent (or constituents) of LFG identified during the monitoring of the landfill exceed levels which jeopardize the public's health and safety. This plan recommends LFG values which would cause the AEHD to institute the LFG Control Plan.

6.1. Conceptual Remediation Alternatives

From September 2003 until December 2003, INTERA assessed subsurface remediation alternatives that may be implemented to abate LFG at the former Eubank Landfill (INTERA, 2004a). INTERA's evaluation of remedial alternatives considered the following:

- No Action (monitoring LFG only);
- Excavation of all landfill waste; and
- Extraction and treatment of LFG from the entire landfill area.

Sub options to the conceptual remediation alternatives listed above included the following:

- Passive venting of building foundations;
- Grading and drainage to minimize infiltration of storm water;
- Localized excavation of landfill waste (under building footprints, down to native soil); and
- Partial excavation of landfill waste (under building footprints, but leaving deeper wastes in place).

The three primary conceptual remediation alternatives are assumed to be project-wide undertakings, while all four of the conceptual remediation sub-options are assumed to be decided and executed on a lot-by-lot basis by individual lot developers at SS&TP.

Table 4 summarizes the advantages, disadvantages, schedule, and effectiveness of the conceptual remediation alternatives and remediation sub-options. All three conceptual remediation alternatives were considered individually and are mutually exclusive. Some of the conceptual remediation alternatives may be used in combination with one or more of the remediation sub-options to the benefit of SS&TP and the individual lot developers during planning and construction (INTERA, 2004a).

6.1.1. Conceptual Remediation Alternative 1 – No Action (LFG Monitoring Only)

The "no action" conceptual remediation alternative would likely limit safe development to a small area. This would leave LFG constituents uncontrolled, and these constituents could migrate throughout the subsurface, where they could pose potential fire, explosion, or health risks to occupants of SS&TP buildings if not mitigated. The "no action" conceptual remediation alternative does not mitigate the effects of differential settlement that could result from the decomposition of waste or waste consolidation. Based on the recommendations outlined in the *Preliminary Geotechnical Investigation* prepared by Vinyard and Associates (Vinyard) for Bohannan Huston Inc. for inclusion in the *SS&TP Master Development Plan*, all landfill waste and uncontrolled soils must be completely removed below the proposed structures, or significant building distress will result (Vinyard, 2000). LFG monitoring would continue, to ensure the health and safety of the occupants.

6.1.2. Conceptual Remediation Alternative 2 - Excavation of All Landfill Waste

Assuming excavation of the entire northeastern fill area (21 acres) and that the former Eubank Landfill material was uniformly buried (approximately 37.5 feet of material) over the extent of the northeast fill area, approximately 1.3-million cubic yards of waste material would be required to be removed and relocated. In addition, removing and relocating the southwest fill area (60 acres) would require the removal of 3.7-million cubic yards of landfill material, for a total of 5 million cubic yards in place. The total excavation process is assumed to be a phased removal. Each phase will require approximately six months to be completed. This process will include excavation, waste characterization, loading, transportation, and a cost estimate of tipping fees to the Cerro Colorado Landfill. Simultaneously with excavation, engineered fill (soil) will be placed in the excavated landfill to backfill excavated areas to the final grade. The exact landfill limits (the former Eubank Landfill boundaries are estimated) will be required to accurately determine the total landfill volume (INTERA 2004a).

Waste material removal would not only eliminate concerns about future LFG generation. Waste material removal would also ensure structural integrity of the proposed facilities, roadways, and other infrastructure provided that engineered fill material (soil) is placed correctly.

6.1.3. Conceptual Remediation Alternative 3 - Extraction and Treatment of LFG from the Entire Former Eubank Landfill Area

Under this conceptual remediation alternative, SS&TP Development Corp. would implement a LFG collection/extraction system covering the entire 81 acres of former Eubank Landfill, with all buried waste remaining in place. LFG extraction wells would be spaced at one LFG extraction well per acre.

The methane plume is presently located within the lateral extent of the former Eubank Landfill. It is anticipated that the start-up and operation of the LFG collection/extraction system will have an immediate response in the subsurface, based upon the results of previous pilot testing (DBSA, 2002). Recent surface cleanup has exposed the LFG extraction well WC-8, installed and tested by DBSA. INTERA has included this existing LFG extraction well in the network of LFG extraction wells proposed for LFG control.

Two options were considered for control of LFG air emissions from the LFG collection/extraction system:

- Flaring- About 30% - 50% of the LFG produced is methane, which is a powerful greenhouse gas. By flaring this gas, carbon dioxide would be the main by-product, and carbon dioxide is a substantially less potent greenhouse gas than methane.
- Microturbine- The quantity of gas yield from the site is not as significant as some other landfill sites around the country, and it may be difficult to economically utilize the energy from the gas. Microturbine technology is typically used for small-scale generation of electricity, such as stand-by power, peak-shaving to reduce overall power consumption costs, and provision of operating power at remote locations. Microturbines are generally fueled by natural gas, propane, or sour gas. Recent technological advances have created the potential for use of LFG as a fuel for microturbines. A minimum of 30% methane is required for microturbine operation.

INTERA recommends that an enclosed flare (as opposed to open flaring) be utilized because it reduces odor, noise pollution, radiative heat, and visual impact. Although considered a separate option from flaring, the microturbine may in fact be utilized in conjunction with flaring to supplement energy to the blower and reduce overall operational costs. The cost to purchase and operate a microturbine may be wholly or partially offset by the value of electric power that it would generate. If a microturbine were installed in the northeast area LFG collection system, it would provide more power than each blower would require (the blower for the microturbine in the northeast area and the blower for the flare in the southwest area), with surplus power for use elsewhere on-site (INTERA, 2004a).

6.1.4. Conceptual Remediation Options for Building Foundations

Gordon Environmental Incorporated (GEI) summarized three options for consideration as conceptual foundation types for buildings to be constructed at the SS&TP. They were:

- Option 1 – Shallow foundations with complete waste material removal from within the proposed building footprint;
- Option 2 – Shallow foundations with partial waste material removal from within the proposed building footprint (refuse would be removed to a specified depth, potentially to a depth of 15 feet, after removal of the local soil cover); and
- Option 3 – Deep foundation with waste material remaining in place or limited waste material removal in areas where piles (and/or piers/caissons) are designed to be installed.

GEI recommended that Option 1 (“localized” excavation of landfill waste) be utilized at the SS&TP during the design and construction of buildings. GEI stated that this option would significantly reduce LFG generated in the area of the constructed building, and also limit LFG migration into the structure. This option also provides good flexibility for design, construction, and efficient operation of a LFG control system (passive venting, connection to the LFG collection/extraction system, etc.) beneath the building. Disadvantages include the costs for extensive excavation of buried waste, extensive health and safety considerations during construction, and the extensive amount of engineered fill material required (GEI, 2003).

Localized or partial excavation would ensure the structural integrity of proposed development; however, this would not eliminate the generation of LFG from waste left near the buildings. Additional LFG mitigation devices and monitoring would be required in conjunction with this option of localized waste material excavation (INTERA, 2004a).

Construction on piers would potentially eliminate the need for extensive trash removal, and by elevating the structure slightly above grade, would prevent landfill gas from entering the structure through the floor. The building will also be more structurally sound, long-term, than if the building were constructed over partially removed trash. However, the land under and around the structure will be in a continuous state of dynamic differential settlement causing frequent maintenance to sidewalk, parking areas, drainage features, and utilities (which may also be a problem with partial removal), and extensive structural and LFG mitigation measures may be required for infrastructure constructed underground or on the ground surface (i.e. underground utilities, parking lots, lighting, etc.).

6.1.5. Conceptual Remediation Sub-Option 1 - Passive Venting of Building Foundations

A passive venting system may be required by the COA EHD for the development of any parcel on or near a former COA landfill to control possible future accumulation of LFG beneath the building structures and paved parking areas. The passive venting system is simply a series of interconnected piping constructed below a building foundation which provides a preferential pathway for LFG to follow. The LFG will "vent" through the piping to the atmosphere, rather than accumulating beneath a building foundation or within the first floor of a slab-on-grade building.

A similar passive venting system should be considered for beneath paved parking areas for each individual lot. The purposes of the passive venting systems beneath the paved parking areas are to promote airflow beneath the relatively impervious parking surface, to discourage accumulation of LFG beneath the pavement, and to help control migration of LFG off-site (INTERA, 2004a).

6.1.6. Conceptual Remediation Sub-Option 2-Grading and Drainage to Minimize Infiltration of Storm Water

The minimum objectives of the Site Grading and Drainage sub-option are as follows:

- To eliminate surface water impoundments on the former Eubank Landfill that potentially increase LFG generation through infiltration;
- To provide proper drainage, limiting surface erosion and erosion of landfill materials off-site;
- To decrease landfill cover permeability and limit surface water infiltration into underlying landfill waste materials; and
- To perform construction activities with minimal risk to the health and safety of the workers and to the environment.

The following are some of the assumptions relevant to the surface water drainage system sub-option:

- The northeast fill area should be graded so that surface water runoff will enter the existing drainage ditch, directing storm water from South Pointe Mobile Home Park to the Tijeras Arroyo located along the SLO and APS parcels (oriented north to south). This drainage ditch should be enhanced by lining the drainage bed with an impervious liner and by removing any superficial garbage or construction debris that may impede storm water flows. The SLO and the COA are currently evaluating the present surface of the landfill and developing options for re-grading and drainage control (see Section 7).
- The southwestern cell should also be graded so that surface water will enter the Tijeras Arroyo along the southern border of the southwestern fill area of the former Eubank Landfill.
- A flexible membrane liner may need to be installed to cover the estimated 15% of the land that would not be made impervious by roofs and pavement.

This sub-option does not eliminate generation of LFG, nor does it eliminate the structural constraints required for building construction outlined in the geotechnical review. All development requires a drainage plan; no on-site ponding will be allowed. Surface water drainage should be considered as a supplemental improvement in conjunction with other options.

6.1.7. Conceptual Remediation Sub–Option 3 - “Localized” Excavation of Landfill Waste

Limiting excavation of the buried waste material to the areal extent of the proposed building footprint (“localized”) plus an additional 1:1 slope cut back for safety during construction, rather than removing the waste material from the entire former Eubank Landfill, would significantly reduce the total volume of waste removed and would allow for phased construction of separate parcels.

6.1.8. Conceptual Remediation Sub-Option 4 - “Partial” Excavation of Landfill Waste

Partial excavation of material below the proposed structures’ areal footprint would further decrease the total volume of waste removed from the former Eubank Landfill. Partial excavation is the removal of landfill waste to a specified depth, such as 10 to 15 feet below the structural foundation, within a proposed building footprint. Excavation in this manner would use the same area parameters as localized excavation, requiring an areal extent of the proposed building footprint, plus an additional 1:1 slope cut back for safety. This option would increase the structural requirements of the foundation slab and building infrastructure.

6.2. LFG Constituent Control

LFG can be controlled by passive venting or actively extracting the LFG by mechanical means. The types of LFG control at each property on the former landfill must be site specific and based upon the recommendations of a qualified PE. There currently is not a LFG extraction system at the landfill. If the surface of the landfill is developed with impermeable barriers (concrete slabs, asphalt parking areas, etc.) additional monitoring of either interior LFG monitoring wells and/or perimeter LFG monitoring wells is recommended.

6.3. Protection of the Public

The current development controls established by the AEHD as specified in the *Interim Guidelines* provide reasonable measures to protect the public from the risks associated with LFG and other landfill related concerns (i.e. gas exposure, settlement, landfill fires, etc.). The AEHD will confirm that specified mitigation measures for each development are adequate to protect site occupants and adjacent property owners. The AEHD will be proactive in ensuring that the mitigation measures are maintained and monitored by tracking and enforcing the approved monitoring and maintenance procedures that had been approved by qualified PEs during the development process. The AEHD may be required to oversee or perform monitoring and maintenance actions at the expense of the property owner.

Should conditions at the former landfill change significantly, rendering existing LFG mitigation measures inadequate to protect the public from LFG risks, the AEHD may elect to install passive and/or active LFG venting systems in any public right of way or may elect to have developers increase their mitigation measures, whatever is the best measure to remedy the situation. Additional monitoring may be required within the former landfill to design an appropriate LFG recovery system.

6.4. Mitigation Measures

LFG monitoring wells and sensors must be maintained properly. AEHD will require a specific monitoring frequency for LFG monitoring wells, if deemed necessary. If LFG monitoring is required, LFG data must be submitted to AEHD within 30 days after LFG monitoring is completed.

LFG has not been identified in elevated concentrations at the landfill perimeter wells nearest to current development. If LFG is observed in these LFG monitoring wells at elevated concentrations, additional mitigation measures may be necessary (see Section 6.6).

6.5. List of Constituents of Concern (COCs)

As described previously in Section 1.2, LFG generally consists of methane, carbon dioxide, nitrogen, oxygen, hydrogen sulfide, and VOCs. The concentration of these gases is dependent upon the amount of biological activity in the landfill related to the breakdown of degradable waste. LFG byproduct gases, such as carbon dioxide, hydrogen sulfide, and VOCs pose various threats to public health. Carbon dioxide is a simple asphyxiate, hydrogen sulfide is extremely toxic, and certain VOC constituents are known carcinogens.

6.6. Action Levels for COCs

In September 2004, AEHD began using the *Interim Guidelines* (COA, 2004b). Development projects initiated prior to September 2004 did not include engineering controls or LFG monitoring plans. Since September 2004, the development of action levels for LFG has been the responsibility of the developer (property owner) and is site-specific, as approved by the AEHD. To protect preexisting developments from risks associated with LFG, the following tiered action levels and responses will be enforced.

TIER 1

Should the following conditions be observed at the existing COA-owned perimeter LFG monitoring wells located nearest to existing development:

- Methane – greater than 5 percent of the LEL; and/or
- Carbon dioxide – greater than 25 percent.

then the following actions should be taken:

- Increase LFG monitoring frequency to monthly and include monitoring for VOCs and hydrogen sulfide, and
- Continue monthly LFG monitoring until LFG concentrations are reduced to below the above action levels.

TIER 2

Should the following conditions be observed at the existing COA-owned perimeter LFG monitoring wells:

- Methane – greater than 20 percent of the LEL;
- Hydrogen sulfide is greater than 5 parts per million (ppm); and/or
- Total VOCs exceed 1,000 ppm.

then the following actions should be taken:

- Notify adjacent property owners;
- Initiate routine (monthly) LFG monitoring in unmitigated structures;
- Install additional LFG monitoring wells between existing structures and the perimeter LFG monitoring wells; and
- Conditional: if VOCs exceed 1,000 ppm – collect vapor samples for compound specific analyses using laboratory methods.

TIER 3

Should the following conditions be observed:

- Methane – greater than 100 percent of the LEL and/or greater than 10 percent of the LEL at unprotected structures; and/or
- Permissible exposure limits (NIOSH time weighted average) for either hydrogen sulfide (10 ppm) or a specific a VOC are exceeded.

then the following actions should be taken:

- Install passive or forced LFG venting systems and/or site specific LFG mitigation controls.

6.7. Contingency Plan

If methane is detected in a building at concentrations exceeding 10 percent of the LEL, then COA Emergency Response Personnel (Fire Department) must be notified. The Albuquerque Fire Department will be responsible for any required evacuation actions. If an OMMP is required for a particular property, then that document must clearly outline the notification procedures during an emergency. Each plan should clearly state that AEHD will be notified if sensors detect methane in a building no matter the concentration. If AEHD maintains a contact list, it will be considered for informational purposes only. It is the responsibility of each individual property owner to have a contingency plan in place, as part of its OMMP, in the event methane is detected.

7. LANDFILL DRAINAGE AND SURFACE MAINTENANCE PLAN

Currently, both the northeast and southwest fill areas of the former Eubank Landfill have un-maintained soil covers with sparse to moderate vegetation. The southwest area of the former Eubank Landfill has been graded to some degree to prevent ponding, but water-collecting depressions still exist. The northeast fill area has hummocky areas that contain numerous small water catchments. Because of minimal grading and waste settlement, storm water continues to flow across the landfill and collect in depressions. Storm water runoff has contributed to the erosion of the bank of the Tijeras Arroyo on the east side and southern corner of the northeast fill area.

A cooperative effort between SS&TP, COA, and SLO was completed in November 2003 to remove the surface solid waste from those properties currently owned by the SLO and APS and to limit access to the former Eubank Landfill to eliminate future illegal dumping. After solid waste removal, some limited site grading was conducted in an attempt to eliminate ponding and direct surface water away from the former fill areas. This site grading has had a limited effect improving surface drainage as subsurface waste continues to decompose and differential settlement occurs across the former fill areas.

A Landfill Drainage and Surface Maintenance Plan, entitled *Final Cover and Sideslope Stabilization Analysis, Former Eubank Landfill*, dated June 2009, has been developed by GEI as a subcontractor to INTERA (GEI, 2009) according to the INTERA Task 2 Proposal – Development of a Landfill Drainage and Surface Maintenance Plan at the Former Eubank Landfill (INTERA, 2008), which provides the COA and the SLO a plan for maintenance of the landfill surface before any future development occurs. The landfill drainage and surface maintenance plan specifically pertains to surface water drainage issues and how to prevent ponding on the landfill surface. The Landfill Drainage and Surface Maintenance Plan includes a topographical survey of the entire land fill area, a drawing of the landfill surface with projected surface topography and construction details, and options for slope stability concerning the eastern and southern edges of the landfill along the Tijeras Arroyo (northeast fill area). The drainage plan includes required fill amounts at 50-foot grid increments and a point data table providing initial and final elevations and fill amounts at each point. See Attachment 1 for the Landfill Drainage and Surface Maintenance Plan.

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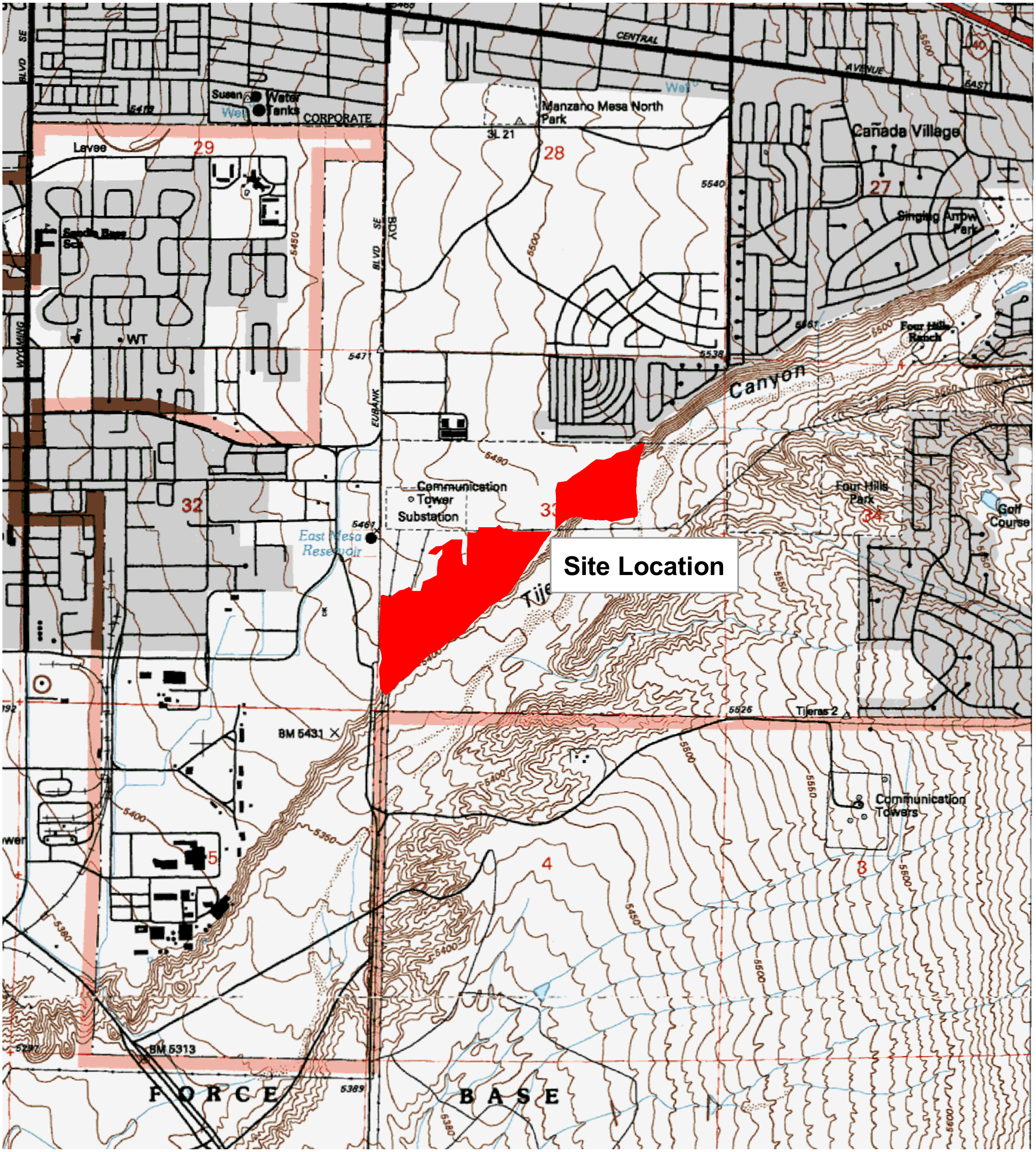
FIGURES



Source(s): Topo map – MapTech

USGS 7.5 Minute Topographic Map:
Albuquerque East Quadrangle,
1996, Contour Interval 10 Feet

0 1,000 2,000 4,000 Feet

INTERA

Figure 1
Site Location Map
Eubank Landfill Management Plan

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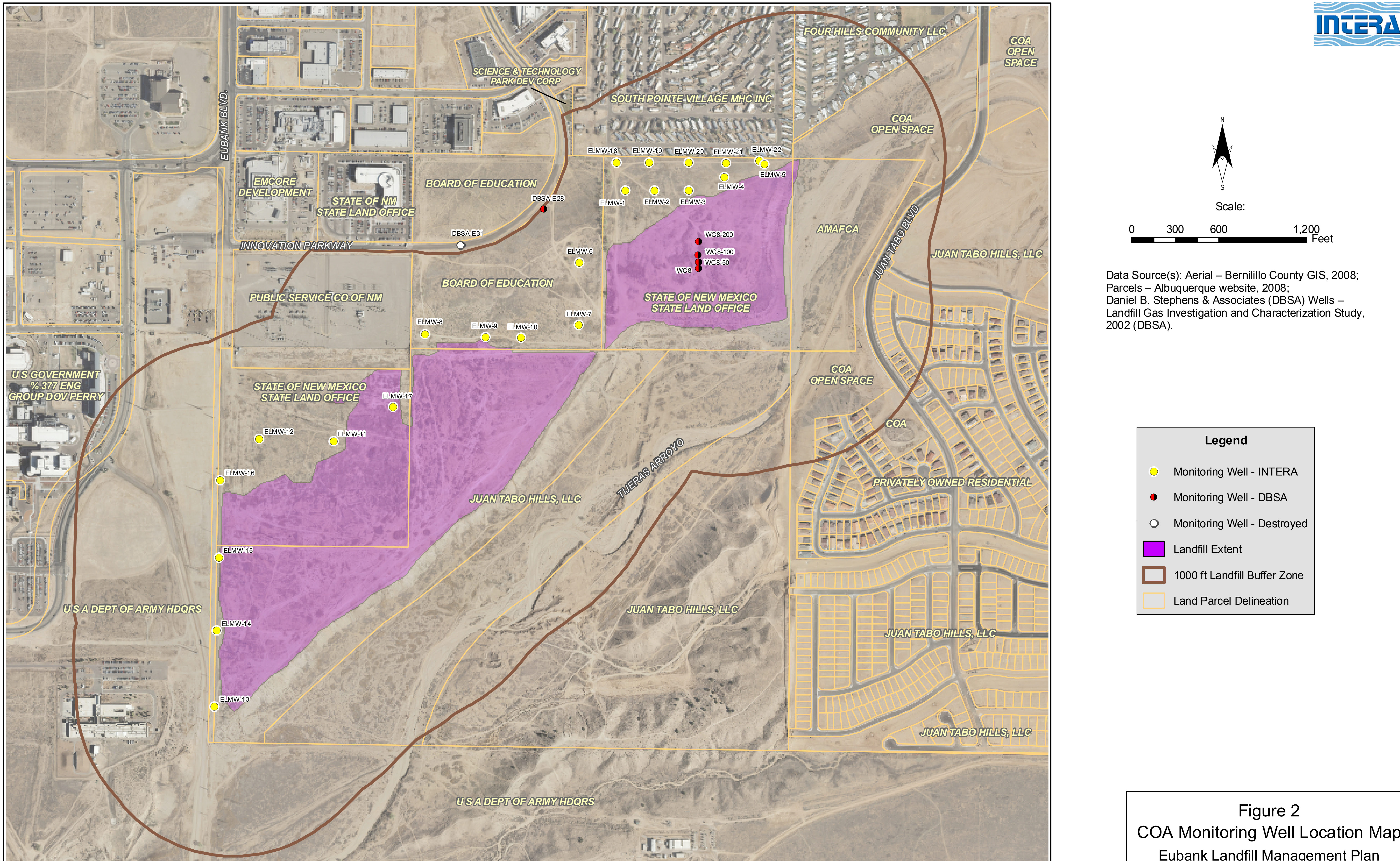

Data Source(s): Aerial – Bernilillo County GIS, 2008;
Parcels – Albuquerque website, 2008;
Daniel B. Stephens & Associates (DBSA) Wells – Landfill Gas Investigation and Characterization Study, 2002 (DBSA).

Figure 2
COA Monitoring Well Location Map
Eubank Landfill Management Plan

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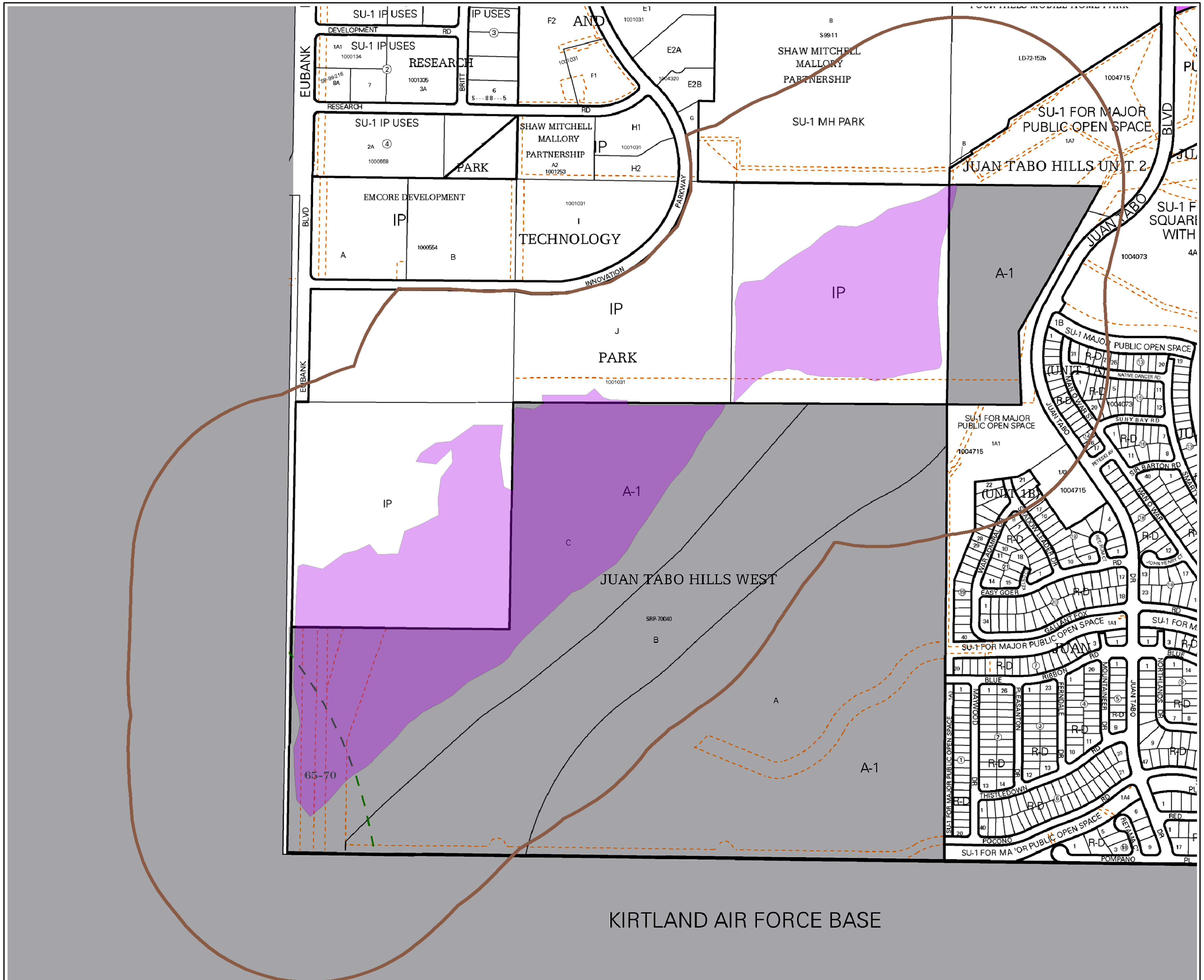

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Scale:

0 300 600 1,200 Feet

Data Source(s): Zoning – Bernalillo County GIS, dated 2008.

Legend

- Landfill Extent
- 1000 ft Landfill Buffer Zone

Figure 3
Area Lot, Parcel and Zoning Information
Eubank Landfill Management Plan

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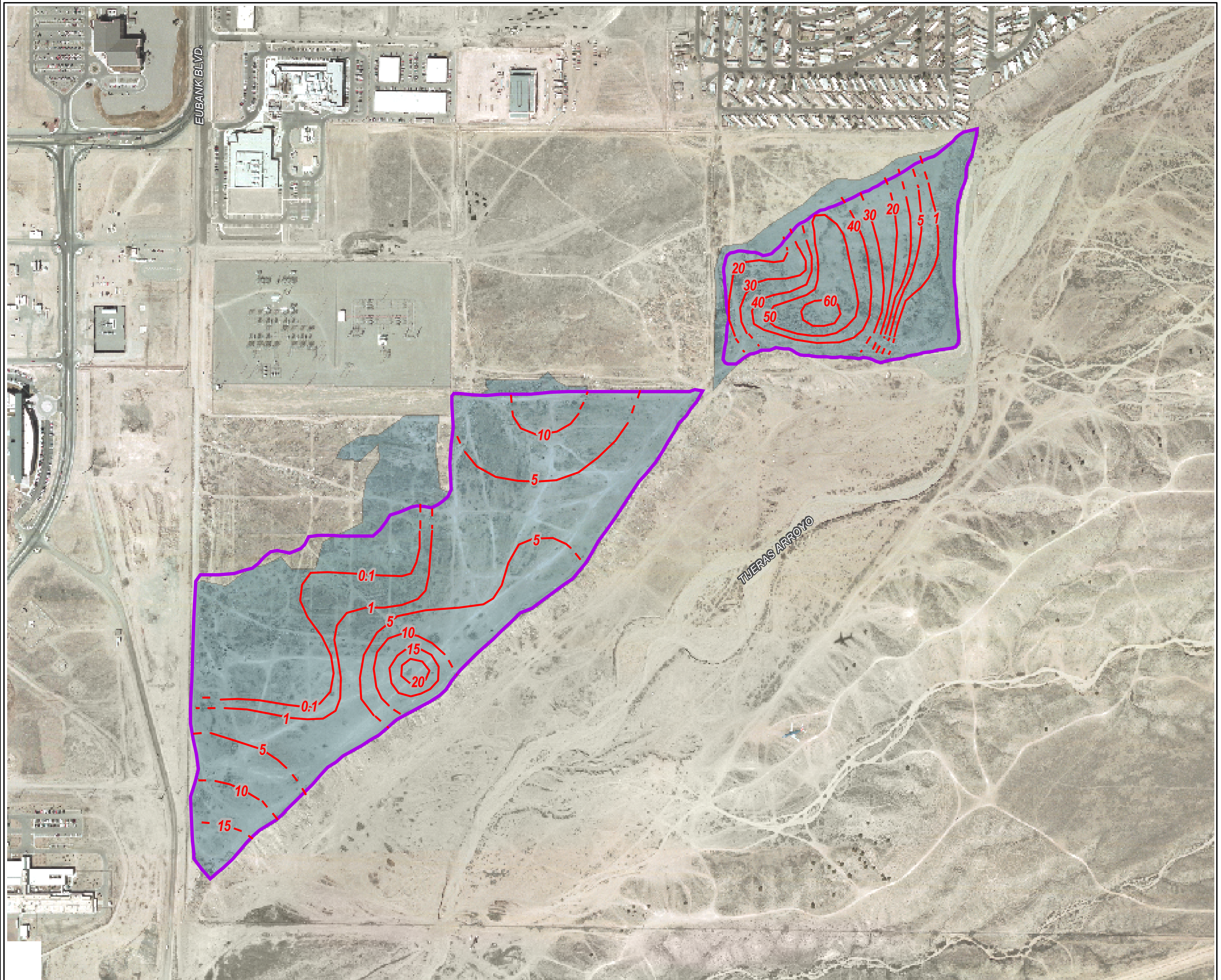

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0 250 500 1,000
Feet

Data Source(s): Aerial – Bernalillo County GIS, 2002; Methane data – Daniel B. Stephens & Assoc., Inc. (DBSA), 2002.

Legend

- 2002 Landfill Extent
- 2008 Landfill Extent
- Methane Concentration Contour (%), DBSA, 2002
- Contour dashed where inferred

Figure 4
Methane Concentration Contour Map – July 2002
Eubank Landfill Management Plan

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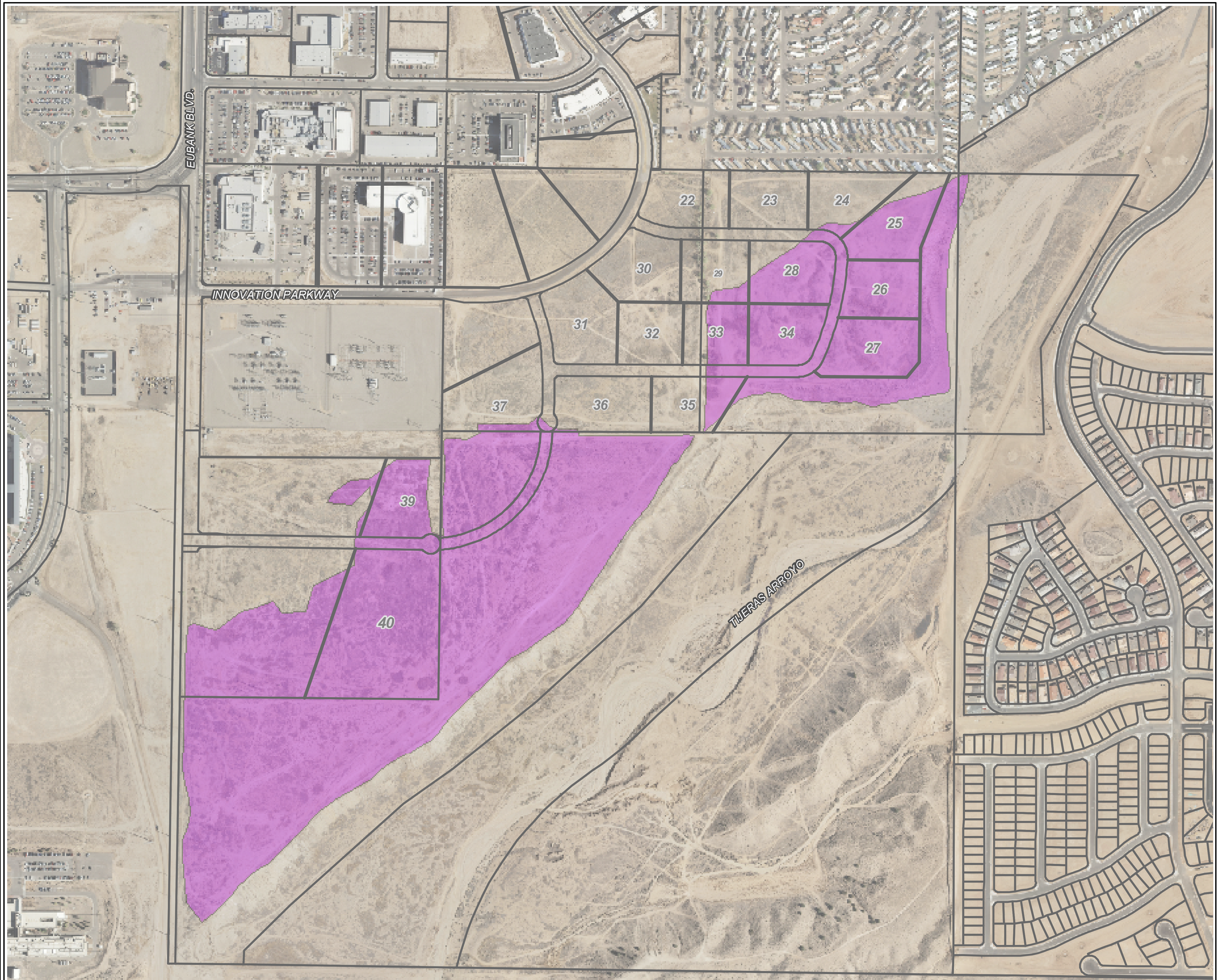

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0 250 500 1,000
Feet

Data Source(s): Aerial – Bernilillo County GIS, 2002;
Parcels – Bernalillo County Assessors Office and SS&TP.

Legend

- Land Parcel Delineation – SS&TP
- Land Parcel Delineation – Bernalillo County, 2008
- 2008 Landfill Extent
- 30 SS&TP Lot Number Phase II

Figure 5
Sandia Science & Technology Park,
Master Development Plan
Eubank Landfill Management Plan

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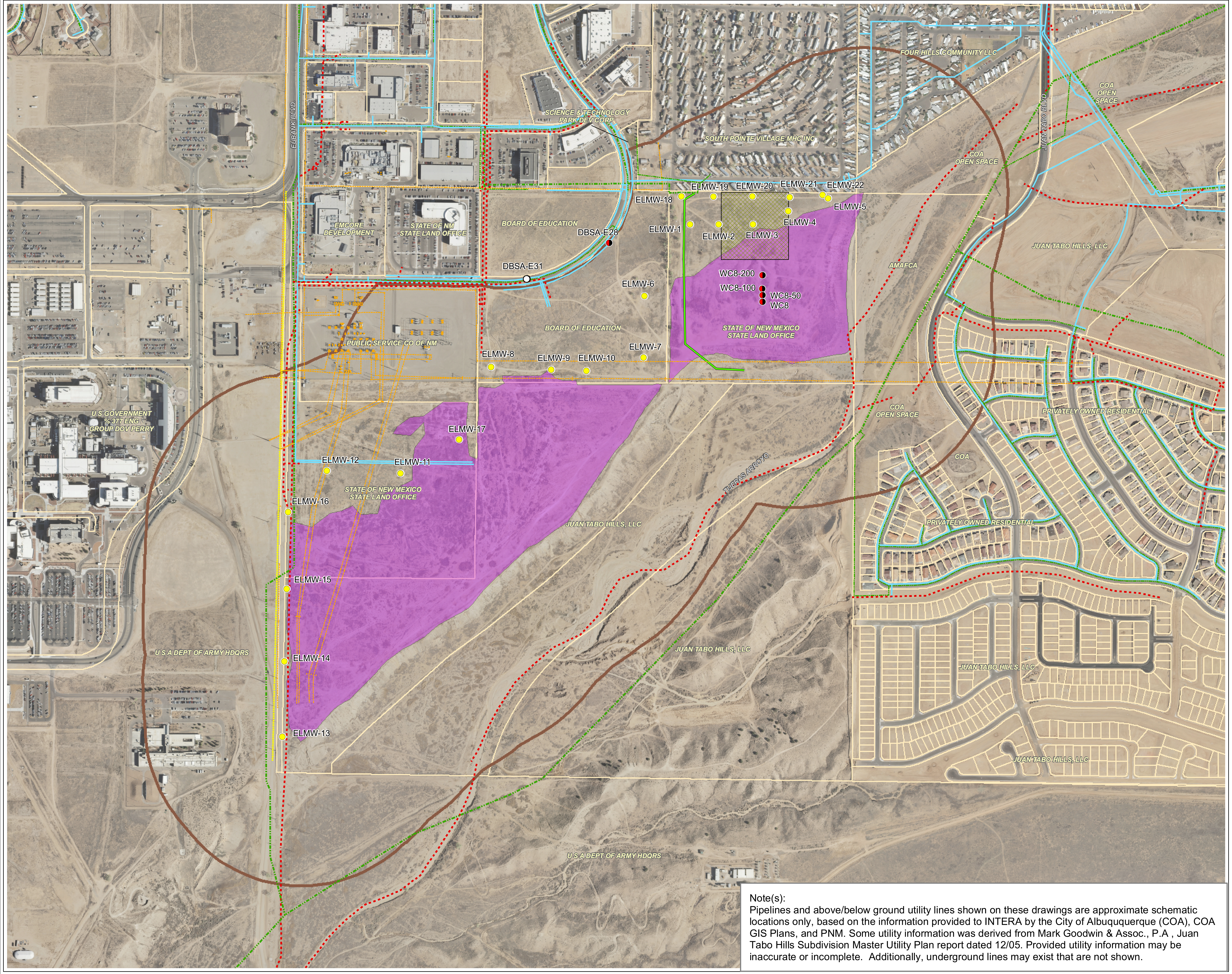
PLATES



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Data Source(s): Aerial – Bernilillo County GIS, 2008;
Parcels – Albuquerque website, 2008;
Daniel B. Stephens & Associates (DBSA) Wells – Landfill Gas Investigation and Characterization Study, 2002 (DBSA).

Legend

- Monitoring Well - INTERA
- Monitoring Well - DBSA
- Monitoring Well - Destroyed
- Potable Water
- Sanitary Sewer
- Gas Lines
- Storm Sewer
- Overhead Electric Line
- Approximate Location and Orientation of Abandoned Sewer Line
- Lease Area of Former Sewage Lagoons/Septic Tanks, Shaw Mobile Home Park (Reco Corporation)
- Landfill Extent
- 1000 ft Landfill Buffer Zone
- Land Parcel Delineation and Ownership

Note(s):
Pipelines and above/below ground utility lines shown on these drawings are approximate schematic locations only, based on the information provided to INTERA by the City of Albuquerque (COA), COA GIS Plans, and PNM. Some utility information was derived from Mark Goodwin & Assoc., P.A , Juan Tabo Hills Subdivision Master Utility Plan report dated 12/05. Provided utility information may be inaccurate or incomplete. Additionally, underground lines may exist that are not shown.

Plate 1
Utility Map
Eubank Landfill
Management Plan

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TABLES

Table 1
Landfill Physical Data Summary
Former Eubank Landfill
Albuquerque, New Mexico

Location	Northeast Fill Area	Southwest Fill Area
Period of Operation	1963-1973	1974-1984
Size	20 acres	60 acres
Depth of Waste	Believed to be 30-40 feet bgs	36-40 feet bgs
Type of waste	Residential, Commercial, and Construction/Demolition	Residential and Commercial
Depth to Groundwater	Approximately 600 feet bgs	
Number of City-installed Landfill Gas Monitoring Wells	22	
Number of Landfill Gas Monitoring Wells within the landfill	4	0
Maximum Methane Concentration, Monitoring Well, Date	12.4% methane, ELMW-4(D), in May 4, 2004	2.6% methane, ELMW-13(D), in May 4, 2004
Maximum Methane Concentration, most recent quarter (March 2009), Monitoring Well	2.5% methane, ELMW-4(D)	0.7% methane, ELMW-13(D)

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-1	6-Jun-03	1408	S	7-10	0.0	0.0	1.2	19.2	79.6
			M	22-25	0.0	0.0	2.4	18.2	79.4
			D	37-40	0.0	0.0	4.4	16.4	79.2
	6-Aug-03	1308	S	7-10	0.0	0.0	0.4	20.2	79.4
			M	22-25	0.0	0.0	2.2	18.6	79.2
			D	37-40	0.0	0.0	4.1	16.7	79.2
	6-Nov-03	1316	S	7-10	0.0	0.0	0.4	20.0	79.6
			M	22-25	0.0	0.0	2.2	18.7	79.1
			D	37-40	0.0	0.0	4.4	16.8	78.8
	5-Dec-03	1417	S	7-10	0.0	0.0	0.3	20.7	79.0
			M	22-25	0.0	0.0	2.1	19.4	78.5
			D	37-40	0.0	0.0	4.3	17.6	78.1
	4-Feb-04	1350	S	7-10	0.0	0.0	0.1	20.3	79.6
			M	22-25	0.0	0.0	1.6	18.9	79.5
			D	37-40	0.0	0.0	3.6	17.1	79.3
	4-May-04	1412	S	7-10	0.0	0.0	0.3	19.6	80.1
			M	22-25	0.0	0.0	1.4	18.6	80.0
			D	37-40	0.0	0.0	3.4	16.9	79.7
	7-Sep-04	1320	S	7-10	0.0	0.0	1.1	19.2	79.7
			M	22-25	0.0	0.0	2.2	18.0	79.8
			D	37-40	0.0	0.0	3.9	16.8	79.3
	20-Dec-04	1455	S	7-10	0.0	0.0	0.5	19.6	79.9
			M	22-25	0.0	0.0	2.0	18.4	79.6
			D	37-40	0.0	0.0	4.1	16.8	79.1
	21-Mar-05	1350	S	7-10	0.0	0.0	0.8	18.8	80.4
			M	22-25	0.0	0.0	1.1	18.4	80.5
			D	37-40	0.0	0.0	1.4	18.3	80.3
	14-Jun-05	1232	S	7-10	0.0	0.0	0.3	19.0	80.7
			M	22-25	0.0	0.0	0.5	18.8	80.7
			D	37-40	0.0	0.0	0.2	19.1	80.7
	8-Sep-05	1227	S	7-10	0.0	0.0	1.4	17.7	80.9
			M	22-25	0.0	0.0	1.7	17.1	81.2
			D	37-40	0.0	0.0	1.0	17.9	81.1
	19-Dec-05	1244	S	7-10	0.0	0.0	0.3	18.9	80.8
			M	22-25	0.0	0.0	0.3	18.9	80.8
			D	37-40	0.0	0.0	0.4	18.9	80.7
	19-Apr-06	1600	S	7-10	0.0	0.0	0.4	18.7	80.9
			M	22-25	**2.0**	**0.1**	0.4	18.7	80.8
			D	37-40	0.0	0.0	1.0	18.3	80.7
	5-Jul-06	1447	S	7-10	0.0	0.0	0.7	19.5	79.8
			M	22-25	0.0	0.0	0.8	19.5	79.7
			D	37-40	0.0	0.0	0.6	19.6	79.8
	2-Oct-06	1602	S	7-10	0.0	0.0	1.0	19.1	79.9
			M	22-25	0.0	0.0	1.0	19.0	80.0
			D	37-40	0.0	0.0	0.6	19.3	80.1
	16-Feb-07	1503	S	7-10	0.0	0.0	0.2	20.1	79.7
			M	22-25	0.0	0.0	0.4	19.9	79.7
			D	37-40	0.0	0.0	0.2	20.0	79.8
	7-May-07	1610	S	7-10	0.0	0.0	0.2	20.0	79.8
			M	22-25	0.0	0.0	0.2	19.8	80.0
			D	37-40	0.0	0.0	0.1	20.3	79.6
	21-Sep-07	1555	S	7-10	0.0	0.0	1.1	19.7	79.2
			M	22-25	0.0	0.0	1.2	19.6	79.2
			D	37-40	0.0	0.0	1.0	19.7	79.3
	17-Dec-07	1436	S	7-10	0.0	0.0	0.7	19.6	79.7
			M	22-25	0.0	0.0	0.9	19.6	79.5
			D	37-40	0.0	0.0	1.0	19.4	79.6
	18-Mar-08	1501	S	7-10	0.0	0.0	0.4	20.1	79.5
			M	22-25	0.0	0.0	0.6	19.9	79.5
			D	37-40	0.0	0.0	0.7	20.0	79.3
	2-Jun-08	1641	S	7-10	0.0	0.0	0.3	19.6	80.1
			M	22-25	0.0	0.0	0.3	19.3	80.4
			D	37-40	0.0	0.0	0.4	19.3	80.3
	29-Sep-08	1627	S	7-10	0.0	0.0	0.4	19.1	80.5
			M	22-25	0.0	0.0	0.7	18.9	80.4
			D	37-40	0.0	0.0	0.5	19.0	80.5
	15-Dec-08	1505	S	7-10	0.0	0.0	0.8	19.4	79.8
			M	22-25	0.0	0.0	1.1	19.2	79.7
			D	37-40	0.0	0.0	1.0	19.3	79.7
	16-Mar-09	1542	S	7-10	0.0	0.0	0.2	19.2	80.6
			M	22-25	0.0	0.0	0.5	19.1	80.4
			D	37-40	0.0	0.0	0.4	19.1	80.5

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-2	6-Jun-03	1415	S	7-10	0.0	0.0	3.3	17.2	79.5
			M	22-25	0.0	0.0	6.0	14.0	80.0
			D	37-40	0.0	0.0	8.7	11.2	80.1
	6-Aug-03	1315	S	7-10	0.0	0.0	2.1	18.1	79.8
			M	22-25	0.0	0.0	6.3	14.2	79.5
			D	37-40	0.0	0.0	4.8	15.0	80.2
	6-Nov-03	1324	S	7-10	0.0	0.0	1.7	18.4	79.9
			M	22-25	0.0	0.0	6.7	13.8	79.5
			D	37-40	0.0	0.0	2.8	17.3	79.9
	5-Dec-03	1411	S	7-10	0.0	0.0	1.6	18.9	79.5
			M	22-25	0.0	0.0	5.8	15.3	78.9
			D	37-40	0.0	0.0	2.4	18.3	79.3
	4-Feb-04	1355	S	7-10	0.0	0.0	1.1	19.0	79.9
			M	22-25	0.0	0.0	5.0	14.7	80.3
			D	37-40	0.0	0.0	2.2	17.5	80.3
	4-May-04	1420	S	7-10	0.0	0.0	1.5	18.0	80.5
			M	22-25	0.0	0.0	5.0	14.2	80.8
			D	37-40	0.0	0.0	6.5	13.2	80.3
	7-Sep-04	1325	S	7-10	0.0	0.0	1.3	18.7	80.0
			M	22-25	0.0	0.0	3.4	16.6	80.0
			D	37-40	0.0	0.0	1.4	18.5	80.1
	20-Dec-04	1500	S	7-10	**4.0**	**0.2**	1.9	17.7	80.2
			M	22-25	0.0	0.0	5.6	14.5	79.9
			D	37-40	0.0	0.0	2.8	16.6	80.6
	21-Mar-05	1408	S	7-10	0.0	0.0	2.3	15.9	81.8
			M	22-25	0.0	0.0	2.3	16.6	81.1
			D	37-40	0.0	0.0	2.4	16.8	80.8
	14-Jun-05	1240	S	7-10	0.0	0.0	1.9	17.2	80.9
			M	22-25	0.0	0.0	0.3	18.9	80.8
			D	37-40	0.0	0.0	0.7	18.3	81.0
	8-Sep-05	1213	S	7-10	0.0	0.0	3.5	15.5	81.0
			M	22-25	0.0	0.0	1.4	17.2	81.4
			D	37-40	0.0	0.0	1.4	17.1	81.5
	19-Dec-05	1253	S	7-10	0.0	0.0	2.1	16.9	81.0
			M	22-25	0.0	0.0	1.5	17.4	81.1
			D	37-40	0.0	0.0	1.4	17.2	81.4
	19-Apr-06	1551	S	7-10	0.0	0.0	1.3	17.8	80.9
			M	22-25	0.0	0.0	1.6	17.3	81.1
			D	37-40	0.0	0.0	2.0	16.8	81.2
	5-Jul-06	1441	S	7-10	0.0	0.0	1.9	18.5	79.6
			M	22-25	0.0	0.0	2.0	18.6	79.4
			D	37-40	0.0	0.0	2.3	18.0	79.7
	2-Oct-06	1556	S	7-10	0.0	0.0	2.2	18.0	79.8
			M	22-25	0.0	0.0	1.4	18.5	80.1
			D	37-40	0.0	0.0	1.6	18.4	80.0
	16-Feb-07	1456	S	7-10	0.0	0.0	1.3	18.2	80.5
			M	22-25	0.0	0.0	0.6	19.0	80.4
			D	37-40	0.0	0.0	0.7	19.0	80.3
	7-May-07	1605	S	7-10	0.0	0.0	1.1	18.4	80.5
			M	22-25	0.0	0.0	0.3	19.6	80.1
			D	37-40	0.0	0.0	0.4	19.4	80.2
	21-Sep-07	1545	S	7-10	0.0	0.0	2.1	18.8	79.1
			M	22-25	0.0	0.0	1.7	18.9	79.4
			D	37-40	0.0	0.0	1.8	18.5	79.7
	17-Dec-07	1430	S	7-10	0.0	0.0	1.8	18.4	79.8
			M	22-25	0.0	0.0	2.0	18.4	79.6
			D	37-40	0.0	0.0	2.2	18.1	79.7
	18-Mar-08	1455	S	7-10	0.0	0.0	1.4	19.0	79.6
			M	22-25	0.0	0.0	1.3	19.2	79.5
			D	37-40	0.0	0.0	1.2	19.1	79.7
	2-Jun-08	1635	S	7-10	0.0	0.0	1.3	18.4	80.3
			M	22-25	0.0	0.0	0.9	18.6	80.5
			D	37-40	0.0	0.0	1.0	18.5	80.5
	29-Sep-08	1622	S	7-10	0.0	0.0	1.1	18.3	80.6
			M	22-25	0.0	0.0	1.7	17.7	80.6
			D	37-40	0.0	0.0	1.1	18.2	80.7
	15-Dec-08	1458	S	7-10	0.0	0.0	2.1	18.4	79.5
			M	22-25	0.0	0.0	1.9	18.6	79.5
			D	37-40	0.0	0.0	1.9	18.4	79.7
	16-Mar-09	1537	S	7-10	0.0	0.0	1.0	18.5	80.5
			M	22-25	0.0	0.0	1.0	18.5	80.5
			D	37-40	0.0	0.0	1.1	18.4	80.5

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-3	6-Jun-03	1430	S	7-10	0.0	0.0	10.9	8.8	80.3
			M	22-25	0.0	0.0	19.5	0.7	79.8
			D	37-40	**48.0**	**2.5**	20.4	0.2	76.9
	6-Aug-03	1325	S	7-10	0.0	0.0	10.9	9.8	79.3
			M	22-25	0.0	0.0	19.3	1.9	78.8
			D	37-40	**26.0**	**1.3**	21.5	0.0	77.2
	6-Nov-03	1330	S	7-10	0.0	0.0	10.0	10.2	79.8
			M	22-25	0.0	0.0	18.2	2.7	79.1
			D	37-40	**10.0**	**0.5**	21.5	0.0	78.0
	5-Dec-03	1407	S	7-10	0.0	0.0	5.6	14.6	79.8
			M	22-25	0.0	0.0	17.1	3.0	79.9
			D	37-40	**10.0**	**0.5**	18.1	2.7	78.7
	4-Feb-04	1400	S	7-10	0.0	0.0	7.7	10.5	81.8
			M	22-25	0.0	0.0	17.2	1.1	81.7
			D	37-40	**38.0**	**1.9**	19.5	0.0	78.6
	4-May-04	1431	S	7-10	0.0	0.0	12.1	7.6	80.3
			M	22-25	**2.0**	**0.1**	21.3	0.0	78.6
			D	37-40	**36.0**	**1.8**	23.6	0.0	74.6
	7-Sep-04	1330	S	7-10	0.0	0.0	4.6	15.0	80.4
			M	22-25	0.0	0.0	19.8	1.5	78.7
			D	37-40	**30.0**	**1.5**	21.9	0.0	76.6
	20-Dec-04	1506	S	7-10	0.0	0.0	9.1	10.4	80.5
			M	22-25	0.0	0.0	19.4	0.5	80.1
			D	37-40	**30.0**	**1.5**	21.8	0.0	76.7
	21-Mar-05	1418	S	7-10	0.0	0.0	15.8	1.0	83.2
			M	22-25	**40.0**	**1.7**	14.7	3.7	79.9
			D	37-40	**16.0**	**0.7**	6.3	12.8	80.2
	14-Jun-05	1247	S	7-10	0.0	0.0	12.8	7.3	79.9
			M	22-25	0.0	0.0	0.2	19.0	80.8
			D	37-40	**8.0**	**0.3**	1.4	17.3	81.0
	8-Sep-05	1234	S	7-10	0.0	0.0	7.6	11.5	80.9
			M	22-25	0.0	0.0	1.6	16.7	81.7
			D	37-40	**10.0**	**0.5**	3.4	15.3	80.8
	19-Dec-05	1303	S	7-10	0.0	0.0	9.9	9.6	80.5
			M	22-25	0.0	0.0	0.2	18.8	81.0
			D	37-40	**6.0**	**0.3**	1.8	16.9	81.0
	19-Apr-06	1540	S	7-10	0.0	0.0	4.4	14.4	81.2
			M	22-25	0.0	0.0	4.9	13.4	81.7
			D	37-40	**20.0**	**1.0**	6.4	12.9	79.7
	5-Jul-06	1434	S	7-10	0.0	0.0	5.9	13.7	80.4
			M	22-25	0.0	0.0	6.6	13.2	80.2
			D	37-40	**14.0**	**0.7**	5.2	14.7	79.4
	2-Oct-06	1550	S	7-10	0.0	0.0	5.8	13.9	80.3
			M	22-25	0.0	0.0	1.2	18.6	80.2
			D	37-40	**2.0**	**0.1**	2.3	17.6	80.0
	16-Feb-07	1450	S	7-10	**6.0**	**0.3**	7.6	11.4	80.7
			M	22-25	**4.0**	**0.2**	0.2	19.9	79.7
			D	37-40	**24.0**	**1.2**	1.8	18.0	79.0
	7-May-07	1600	S	7-10	**12.0**	**0.6**	6.4	13.7	79.3
			M	22-25	0.0	0.0	0.0	20.6	79.4
			D	37-40	**20.0**	**1.0**	0.6	19.0	79.4
	21-Sep-07	1526	S	7-10	0.0	0.0	14.1	6.9	79.0
			M	22-25	0.0	0.0	2.1	18.1	79.8
			D	37-40	**20.0**	**1.0**	4.4	16.3	78.3
	17-Dec-07	1425	S	7-10	0.0	0.0	5.5	14.7	79.8
			M	22-25	**2.0**	**0.1**	2.4	17.5	80.0
			D	37-40	**20.0**	**1.0**	3.8	16.7	78.5
	18-Mar-08	1450	S	7-10	**2.0**	**0.1**	4.3	15.6	80.0
			M	22-25	**2.0**	**0.1**	0.3	20.2	79.4
			D	37-40	**16.0**	**0.8**	1.8	18.6	78.8
	2-Jun-08	1629	S	7-10	0.0	0.0	4.0	15.3	80.7
			M	22-25	0.0	0.0	2.1	16.9	81.0
			D	37-40	**18.0**	**0.9**	2.2	17.1	79.8
	29-Sep-08	1617	S	7-10	0.0	0.0	3.4	15.7	80.9
			M	22-25	0.0	0.0	0.7	18.3	81.0
			D	37-40	**12.0**	**0.6**	1.7	17.3	80.4
	15-Dec-08	1451	S	7-10	0.0	0.0	4.6	15.9	79.5
			M	22-25	0.0	0.0	0.5	19.3	80.2
			D	37-40	**8.0**	**0.4**	2.2	18.2	79.2
	16-Mar-09	1531	S	7-10	0.0	0.0	4.0	15.3	80.7
			M	22-25	0.0	0.0	0.2	19.2	80.6
			D	37-40	**8.0**	**0.4**	1.8	17.5	80.3

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-4	6-Jun-03	1440	S	7-10	0.0	0.0	13.7	6.8	79.5
			M	22-25	**64.0**	**3.2**	22.8	0.2	73.8
			D	37-40	0.0	0.0	12.6	7.7	79.7
	6-Aug-03	1336	S	7-10	0.0	0.0	9.6	11.5	78.9
			M	22-25	**12.0**	**0.6**	18.4	4.1	76.9
			D	37-40	**66.0**	**3.3**	21.0	2.0	73.7
	6-Nov-03	1339	S	7-10	0.0	0.0	8.4	11.3	80.3
			M	22-25	**14.0**	**0.7**	17.7	3.6	78.0
			D	37-40	**74.0**	**3.7**	20.8	2.2	73.3
	5-Dec-03	1400	S	7-10	0.0	0.0	9.1	10.5	80.4
			M	22-25	**18.0**	**0.9**	18.9	2.0	78.2
			D	37-40	**96.0**	**4.8**	21.3	1.6	72.3
	4-Feb-04	1408	S	7-10	0.0	0.0	11.5	6.3	82.2
			M	22-25	**122.0**	**6.1**	21.4	0.5	72.0
			D	37-40	**186.0**	**9.3**	22.4	0.4	67.9
	4-May-04	1443	S	7-10	**64.0**	**3.2**	23.8	0.0	73.0
			M	22-25	**128.0**	**10.9**	28.1	0.0	61.0
			D	37-40	**248.0**	**12.4**	30.3	0.0	57.3
	7-Sep-04	1335	S	7-10	0.0	0.0	5.3	14.6	80.1
			M	22-25	**16.0**	**0.8**	22.0	0.8	76.4
			D	37-40	**100.0**	**5.0**	23.3	0.5	71.2
	20-Dec-04	1513	S	7-10	0.0	0.0	13.7	5.0	81.3
			M	22-25	**122.0**	**6.1**	22.8	0.0	71.1
			D	37-40	**150.0**	**7.5**	23.6	0.1	68.8
	21-Mar-05	1435	S	7-10	**192.0**	**9.4**	19.4	1.0	70.2
			M	22-25	**154.0**	**7.3**	13.1	8.5	71.1
			D	37-40	**114.0**	**5.3**	10.5	10.7	73.5
	14-Jun-05	1257	S	7-10	0.0	0.0	10.4	9.5	80.1
			M	22-25	**60.0**	**3.0**	7.8	12.4	76.8
			D	37-40	**58.0**	**2.8**	5.7	14.2	77.3
	8-Sep-05	1244	S	7-10	0.0	0.0	10.5	8.8	80.7
			M	22-25	**8.0**	**0.4**	8.4	11.2	80.0
			D	37-40	**16.0**	**0.8**	5.2	14.2	79.8
	19-Dec-05	1315	S	7-10	0.0	0.0	7.4	11.4	81.2
			M	22-25	**34.0**	**1.7**	8.2	11.8	78.3
			D	37-40	**36.0**	**1.8**	5.3	14.2	78.7
	19-Apr-06	1529	S	7-10	0.0	0.0	7.3	12.0	80.7
			M	22-25	**20.0**	**1.0**	1.0	12.7	85.3
			D	37-40	**80.0**	**4.0**	11.8	10.1	74.1
	5-Jul-06	1425	S	7-10	0.0	0.0	6.0	14.0	80.0
			M	22-25	**2.0**	**0.1**	11.6	8.9	79.4
			D	37-40	**30.0**	**1.5**	6.5	13.8	78.2
	2-Oct-06	1543	S	7-10	0.0	0.0	6.5	12.7	80.8
			M	22-25	**16.0**	**0.8**	5.6	13.7	79.9
			D	37-40	**20.0**	**1.0**	4.4	15.5	79.1
	16-Feb-07	1442	S	7-10	**82.0**	**4.1**	10.4	8.1	77.4
			M	22-25	**86.0**	**4.3**	7.5	13.8	74.4
			D	37-40	**68.0**	**3.4**	5.5	15.7	75.4
	7-May-07	1552	S	7-10	**88.0**	**4.4**	9.2	11.0	75.4
			M	22-25	**90.0**	**4.5**	6.2	14.9	74.4
			D	37-40	**76.0**	**3.8**	4.5	16.0	75.7
	21-Sep-07	1510	S	7-10	0.0	0.0	7.0	13.6	79.4
			M	22-25	**10.0**	**0.5**	7.3	13.3	78.9
			D	37-40	**24.0**	**1.2**	5.4	15.4	78.0
	17-Dec-07	1419	S	7-10	0.0	0.0	6.9	12.3	80.8
			M	22-25	**30.0**	**1.5**	7.6	13.2	77.7
			D	37-40	**40.0**	**2.0**	6.4	14.7	76.9
	18-Mar-08	1443	S	7-10	**2.0**	**0.1**	7.8	11.8	80.3
			M	22-25	**72.0**	**3.5**	6.5	14.3	75.7
			D	37-40	**72.0**	**3.5**	5.2	15.9	75.4
	2-Jun-08	1622	S	7-10	0.0	0.0	6.1	12.6	81.3
			M	22-25	**36.0**	**1.8**	5.7	13.8	78.7
			D	37-40	**66.0**	**3.3**	5.4	14.2	77.1
	29-Sep-08	1612	S	7-10	0.0	0.0	4.0	15.2	80.8
			M	22-25	**6.0**	**0.3**	5.1	14.0	80.6
			D	37-40	**26.0**	**1.3**	4.0	15.1	79.6
	15-Dec-08	1446	S	7-10	0.0	0.0	6.8	13.7	79.5
			M	22-25	**18.0**	**0.9**	4.2	16.4	78.5
			D	37-40	**30.0**	**1.8**	6.0	15.3	76.9
	16-Mar-09	1525	S	7-10	0.0	0.0	5.9	12.9	81.2
			M	22-25	**30.0**	**1.5**	6.0	13.8	78.7
			D	37-40	**50.0**	**2.5**	5.4	14.3	77.8

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-5	6-Jun-03	1453	S	7-10	0.0	0.0	5.5	13.7	80.8
			M	22-25	0.0	0.0	17.4	2.8	79.8
			D	37-40	**92.0**	**4.6**	22.0	0.2	73.2
	6-Aug-03	1347	S	7-10	0.0	0.0	3.7	15.7	80.6
			M	22-25	0.0	0.0	10.4	10.5	79.1
			D	37-40	0.0	0.0	19.8	1.6	78.6
	6-Nov-03	1350	S	7-10	0.0	0.0	4.6	14.9	80.5
			M	22-25	0.0	0.0	11.7	7.1	81.2
			D	37-40	**2.0**	**0.1**	20.1	0.0	79.8
	5-Dec-03	1356	S	7-10	0.0	0.0	3.1	15.8	81.1
			M	22-25	0.0	0.0	14.5	4.2	81.3
			D	37-40	**40.0**	**2.0**	20.5	0.5	77.0
	4-Feb-04	1425	S	7-10	0.0	0.0	6.9	9.2	83.9
			M	22-25	**108.0**	**5.3**	19.1	0.0	75.6
			D	37-40	**188.0**	**9.4**	21.8	0.0	68.8
	4-May-04	1453	S	7-10	0.0	0.0	6.9	11.3	81.8
			M	22-25	**36.0**	**1.8**	23.1	0.0	75.1
			D	37-40	**156.0**	**7.8**	27.4	0.0	64.8
	7-Sep-04	1340	S	7-10	0.0	0.0	2.8	16.9	80.3
			M	22-25	0.0	0.0	11.9	8.7	79.4
			D	37-40	0.0	0.0	1.9	1.3	96.8
	20-Dec-04	1519	S	7-10	**26.0**	**1.3**	10.2	10.0	78.5
			M	22-25	**20.0**	**1.0**	19.6	0.0	79.4
			D	37-40	0.0	0.0	6.6	9.9	83.5
	21-Mar-05	1448	S	7-10	0.0	0.0	10.6	4.2	85.2
			M	22-25	**44.0**	**2.1**	10.8	7.9	79.2
			D	37-40	**52.0**	**2.5**	8.9	11.4	77.2
	14-Jun-05	1306	S	7-10	0.0	0.0	2.7	16.3	81.0
			M	22-25	0.0	0.0	5.6	12.6	81.8
			D	37-40	**6.0**	**0.3**	2.3	16.3	81.1
	8-Sep-05	1253	S	7-10	0.0	0.0	3.9	14.4	81.7
			M	22-25	0.0	0.0	4.3	14.4	81.3
			D	37-40	0.0	0.0	2.3	16.2	81.5
	19-Dec-05	1324	S	7-10	0.0	0.0	2.4	16.0	81.6
			M	22-25	0.0	0.0	6.9	11.1	82.0
			D	37-40	**6.0**	**0.3**	2.9	15.4	81.4
	19-Apr-06	1520	S	7-10	0.0	0.0	2.0	16.8	81.2
			M	22-25	0.0	0.0	7.0	11.6	81.4
			D	37-40	**14.0**	**0.7**	3.5	15.5	80.3
	5-Jul-06	1419	S	7-10	0.0	0.0	2.8	16.7	80.5
			M	22-25	0.0	0.0	4.9	15.0	80.1
			D	37-40	0.0	0.0	3.3	16.4	80.3
	2-Oct-06	1537	S	7-10	0.0	0.0	3.1	16.4	80.5
			M	22-25	0.0	0.0	3.6	15.2	81.2
			D	37-40	0.0	0.0	2.4	17.2	80.4
	16-Feb-07	1436	S	7-10	0.0	0.0	4.4	13.7	81.9
			M	22-25	**44.0**	**2.2**	6.7	13.3	77.8
			D	37-40	**42.0**	**2.1**	4.8	15.9	77.2
	7-May-07	1544	S	7-10	0.0	0.0	1.6	17.6	80.8
			M	22-25	**28.0**	**1.4**	4.1	15.5	79.0
			D	37-40	**28.0**	**1.4**	1.9	17.8	78.9
	21-Sep-07	1451	S	7-10	0.0	0.0	3.0	17.6	79.4
			M	22-25	0.0	0.0	3.8	16.3	79.9
			D	37-40	0.0	0.0	3.1	16.9	80.0
	17-Dec-07		S	7-10	0.0	0.0	2.7	16.7	80.6
			M	22-25	0.0	0.0	6.4	13.1	80.5
			D	37-40	**14.0**	**0.7**	4.5	15.7	79.1
	18-Mar-08	1438	S	7-10	0.0	0.0	3.0	16.8	80.2
			M	22-25	**38.0**	**1.9**	5.9	14.0	78.2
			D	37-40	**38.0**	**1.9**	4.0	16.8	77.3
	2-Jun-08	1616	S	7-10	0.0	0.0	1.7	18.0	80.3
			M	22-25	0.0	0.0	4.4	14.0	81.6
			D	37-40	**22.0**	**1.1**	2.7	16.6	79.6
	29-Sep-08	1606	S	7-10	0.0	0.0	1.6	17.7	80.7
			M	22-25	0.0	0.0	2.6	16.3	81.1
			D	37-40	0.0	0.0	1.5	17.3	81.2
	15-Dec-08	1440	S	7-10	0.0	0.0	3.1	16.2	80.7
			M	22-25	0.0	0.0	5.5	14.2	80.3
			D	37-40	**12.0**	**0.6**	4.6	15.8	79.0
	16-Mar-09	1519	S	7-10	0.0	0.0	2.8	15.9	81.3
			M	22-25	**14.0**	**0.7**	5.7	12.8	80.8
			D	37-40	**28.0**	**1.4**	3.8	15.7	79.1

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-6	31-Jul-03	1500	S	6.5-9.5	0.0	0.0**	11.0	19.2	NT
			M	21.5-24.5	0.0	0.0**	9.0	18.7	NT
			D	37-40	0.0	0.0**	269.0	16.0	NT
	6-Aug-03	1356	S	6.5-9.5	0.0	0.0	1.2	18.6	80.2
			M	21.5-24.5	0.0	0.0	3.8	16.2	80.0
			D	37-40	0.0	0.0	6.7	13.7	79.6
	6-Nov-03	1400	S	6.5-9.5	0.0	0.0	0.7	19.3	80.0
			M	21.5-24.5	0.0	0.0	4.5	15.7	79.8
			D	37-40	0.0	0.0	7.5	12.5	80.0
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1438	S	6.5-9.5	0.0	0.0	1.1	18.8	80.1
			M	21.5-24.5	0.0	0.0	3.6	16.4	80.0
			D	37-40	0.0	0.0	6.8	13.2	80.0
	4-May-04	1503	S	6.5-9.5	0.0	0.0	1.1	18.5	80.4
			M	21.5-24.5	0.0	0.0	3.1	16.4	80.5
			D	37-40	0.0	0.0	6.6	13.6	79.8
	7-Sep-04	1440	S	6.5-9.5	0.0	0.0	1.2	18.9	79.9
			M	21.5-24.5	0.0	0.0	4.3	16.0	79.7
			D	37-40	0.0	0.0	7.1	13.5	79.4
	20-Dec-04	1610	S	6.5-9.5	0.0	0.0	1.1	18.7	80.2
			M	21.5-24.5	0.0	0.0	4.3	16.0	79.7
			D	37-40	0.0	0.0	8.1	12.8	79.1
	21-Mar-05	1614	S	6.5-9.5	0.0	0.0	1.8	17.3	80.9
			M	21.5-24.5	0.0	0.0	2.8	16.6	80.6
			D	37-40	0.0	0.0	2.2	17.0	80.8
	14-Jun-05	1413	S	6.5-9.5	0.0	0.0	0.8	18.5	80.7
			M	21.5-24.5	0.0	0.0	0.4	18.9	80.7
			D	37-40	0.0	0.0	0.3	19.4	80.3
	8-Sep-05	1359	S	6.5-9.5	0.0	0.0	1.2	18.0	80.8
			M	21.5-24.5	0.0	0.0	1.1	18.0	80.9
			D	37-40	0.0	0.0	1.2	18.0	80.8
	19-Dec-05	1423	S	6.5-9.5	0.0	0.0	0.5	18.8	80.7
			M	21.5-24.5	0.0	0.0	0.2	19.1	80.7
			D	37-40	0.0	0.0	0.2	19.3	80.5
	19-Apr-06	1428	S	6.5-9.5	0.0	0.0	0.8	18.7	80.5
			M	21.5-24.5	0.0	0.0	1.6	17.8	80.6
			D	37-40	0.0	0.0	0.5	18.8	80.7
	5-Jul-06	1530	S	6.5-9.5	0.0	0.0	1.7	18.9	79.4
			M	21.5-24.5	0.0	0.0	3.2	17.6	79.2
			D	37-40	0.0	0.0	1.8	18.9	79.3
	2-Oct-06	1433	S	6.5-9.5	0.0	0.0	1.1	19.2	79.7
			M	21.5-24.5	0.0	0.0	1.6	18.7	79.7
			D	37-40	0.0	0.0	0.9	19.4	79.7
	16-Feb-07	1356	S	6.5-9.5	0.0	0.0	0.5	19.8	79.7
			M	21.5-24.5	0.0	0.0	0.5	19.5	80.0
			D	37-40	0.0	0.0	0.2	20.1	79.7
	7-May-07	1508	S	6.5-9.5	0.0	0.0	0.2	20.3	79.5
			M	21.5-24.5	0.0	0.0	0.2	19.9	79.9
			D	37-40	0.0	0.0	0.0	20.6	79.4
	21-Sep-07	1638	S	6.5-9.5	0.0	0.0	1.6	19.4	79.0
			M	21.5-24.5	0.0	0.0	1.6	19.0	79.4
			D	37-40	0.0	0.0	1.0	9.6	89.4
	17-Dec-07	1337	S	6.5-9.5	0.0	0.0	1.3	19.3	79.4
			M	21.5-24.5	0.0	0.0	1.8	18.7	79.5
			D	37-40	0.0	0.0	1.1	19.3	79.6
	18-Mar-08	1349	S	6.5-9.5	0.0	0.0	0.6	20.0	79.4
			M	21.5-24.5	0.0	0.0	1.1	19.6	79.3
			D	37-40	0.0	0.0	0.3	20.3	79.4
	2-Jun-08	1531	S	6.5-9.5	0.0	0.0	0.5	19.4	80.1
			M	21.5-24.5	0.0	0.0	1.2	18.5	80.3
			D	37-40	0.0	0.0	0.4	19.4	80.2
	29-Sep-08	1515	S	6.5-9.5	0.0	0.0	0.9	19.0	80.1
			M	21.5-24.5	0.0	0.0	4.2	15.9	79.9
			D	37-40	0.0	0.0	4.1	15.9	80.0
	15-Dec-08	1545	S	6.5-9.5	0.0	0.0	1.2	19.2	79.6
			M	21.5-24.5	0.0	0.0	1.5	18.8	79.7
			D	37-40	0.0	0.0	1.0	19.3	79.7
	16-Mar-09	1434	S	6.5-9.5	0.0	0.0	0.3	19.3	80.4
			M	21.5-24.5	0.0	0.0	0.8	18.8	80.4
			D	37-40	0.0	0.0	0.1	19.6	80.3

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-7	31-Jul-03	959	S	6.5-9.5	0.0	0.0**	17.0	20.1	NT
			M	21.5-24.5	0.0	0.0**	9.0	19.3	NT
			D	37-40	0.0	0.0**	11.0	17.7	NT
	6-Aug-03	1405	S	6.5-9.5	0.0	0.0	1.5	18.4	80.1
			M	21.5-24.5	0.0	0.0	3.8	16.4	79.8
			D	37-40	0.0	0.0	6.0	14.4	79.6
	6-Nov-03	1410	S	6.5-9.5	0.0	0.0	0.9	19.4	79.7
			M	21.5-24.5	0.0	0.0	4.3	16.5	79.2
			D	37-40	0.0	0.0	6.5	14.4	79.1
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1443	S	6.5-9.5	0.0	0.0	1.2	19.1	79.7
			M	21.5-24.5	0.0	0.0	3.2	16.8	80.0
			D	37-40	0.0	0.0	6.0	14.3	79.7
	4-May-04	1512	S	6.5-9.5	0.0	0.0	1.5	18.2	80.3
			M	21.5-24.5	0.0	0.0	3.7	15.9	80.4
			D	37-40	0.0	0.0	6.1	13.9	80.0
	7-Sep-04	1430	S	6.5-9.5	0.0	0.0	1.0	19.2	79.8
			M	21.5-24.5	0.0	0.0	4.1	16.5	79.4
			D	37-40	0.0	0.0	6.3	14.6	79.1
	20-Dec-04	1604	S	6.5-9.5	0.0	0.0	1.3	18.6	80.1
			M	21.5-24.5	0.0	0.0	4.0	16.4	79.6
			D	37-40	0.0	0.0	6.8	14.3	78.9
	21-Mar-05	1636	S	6.5-9.5	0.0	0.0	1.5	17.6	80.9
			M	21.5-24.5	0.0	0.0	1.7	17.6	80.7
			D	37-40	0.0	0.0	2.7	16.8	80.5
	14-Jun-05	1511	S	6.5-9.5	0.0	0.0	1.2	18.1	80.7
			M	21.5-24.5	0.0	0.0	1.1	18.1	80.8
			D	37-40	0.0	0.0	0.7	18.4	80.9
	8-Sep-05	1350	S	6.5-9.5	0.0	0.0	1.2	18.0	80.8
			M	21.5-24.5	0.0	0.0	1.3	17.9	80.8
			D	37-40	0.0	0.0	1.2	18.0	80.8
	19-Dec-05	1433	S	6.5-9.5	0.0	0.0	0.9	18.5	80.6
			M	21.5-24.5	0.0	0.0	1.4	17.8	80.8
			D	37-40	0.0	0.0	1.0	18.3	80.7
	19-Apr-06	1345	S	6.5-9.5	0.0	0.0	1.0	18.6	80.4
			M	21.5-24.5	**4.0**	**0.2**	1.4	18.1	80.3
			D	37-40	0.0	0.0	1.3	18.2	80.5
	5-Jul-06	1454	S	6.5-9.5	0.0	0.0	1.6	19.1	79.3
			M	21.5-24.5	0.0	0.0	2.1	18.7	79.2
			D	37-40	0.0	0.0	3.0	17.7	79.3
	2-Oct-06	1357	S	6.5-9.5	0.0	0.0	1.4	18.7	79.9
			M	21.5-24.5	0.0	0.0	1.8	18.5	79.7
			D	37-40	0.0	0.0	1.1	19.0	79.9
	16-Feb-07	1312	S	6.5-9.5	0.0	0.0	0.6	19.4	80.0
			M	21.5-24.5	0.0	0.0	1.1	19.0	79.9
			D	37-40	0.0	0.0	0.6	19.5	79.9
	7-May-07	1438	S	6.5-9.5	0.0	0.0	0.6	19.7	79.7
			M	21.5-24.5	0.0	0.0	0.9	19.1	80.0
			D	37-40	0.0	0.0	0.2	20.0	79.8
	21-Sep-07	1602	S	6.5-9.5	0.0	0.0	1.5	19.6	78.9
			M	21.5-24.5	0.0	0.0	1.8	19.3	78.9
			D	37-40	0.0	0.0	2.0	18.9	79.1
	17-Dec-07	1308	S	6.5-9.5	0.0	0.0	1.5	19.1	79.4
			M	21.5-24.5	0.0	0.0	2.0	18.6	79.4
			D	37-40	0.0	0.0	1.9	18.7	79.4
	18-Mar-08	1333	S	6.5-9.5	0.0	0.0	1.2	19.6	79.2
			M	21.5-24.5	0.0	0.0	1.9	19.1	79.0
			D	37-40	0.0	0.0	1.3	19.5	79.2
	2-Jun-08	1501	S	6.5-9.5	0.0	0.0	0.8	19.3	79.9
			M	21.5-24.5	0.0	0.0	1.2	18.6	80.2
			D	37-40	0.0	0.0	1.3	18.6	80.1
	29-Sep-08	1439	S	6.5-9.5	0.0	0.0	1.0	18.9	80.1
			M	21.5-24.5	0.0	0.0	2.8	17.2	80.0
			D	37-40	0.0	0.0	1.1	18.7	80.2
	15-Dec-08	1514	S	6.5-9.5	0.0	0.0	1.7	18.8	79.5
			M	21.5-24.5	0.0	0.0	2.4	18.4	79.2
			D	37-40	0.0	0.0	1.7	18.8	79.5
	16-Mar-09	1402	S	6.5-9.5	0.0	0.0	1.0	18.8	80.2
			M	21.5-24.5	0.0	0.0	1.8	18.1	80.1
			D	37-40	0.0	0.0	1.0	18.8	80.2

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-8	29-Jul-03	1536	S	6.5-9.5	0.0	0.0**	10.0	18.1	NT
			M	21.5-24.5	0.0	0.0**	11.0	13.3	NT
			D	37-40	**7.0**	**0.35****	8.0	7.8	NT
	6-Aug-03	1432	S	6.5-9.5	0.0	0.0	2.4	17.2	80.4
			M	21.5-24.5	0.0	0.0	9.2	11.7	79.1
			D	37-40	0.0	0.0	16.4	5.1	78.5
	6-Nov-03	1420	S	6.5-9.5	0.0	0.0	2.5	17.8	79.7
			M	21.5-24.5	0.0	0.0	10.0	11.0	79.0
			D	37-40	0.0	0.0	17.0	4.7	78.3
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1450	S	6.5-9.5	0.0	0.0	1.4	18.7	79.9
			M	21.5-24.5	0.0	0.0	9.5	10.5	80.0
			D	37-40	0.0	0.0	16.6	3.9	79.5
	4-May-04	1521	S	6.5-9.5	0.0	0.0	4.1	15.3	80.6
			M	21.5-24.5	0.0	0.0	2.5	16.8	80.7
			D	37-40	0.0	0.0	18.9	5.3	75.8
	7-Sep-04	1510	S	6.5-9.5	0.0	0.0	1.3	18.6	80.1
			M	21.5-24.5	0.0	0.0	9.8	11.4	78.8
			D	37-40	0.0	0.0	16.4	5.3	78.3
	20-Dec-04	1628	S	6.5-9.5	0.0	0.0	2.4	17.2	80.4
			M	21.5-24.5	0.0	0.0	10.6	10.9	78.5
			D	37-40	0.0	0.0	18.2	4.5	77.3
	21-Mar-05	1713	S	6.5-9.5	0.0	0.0	2.5	16.4	81.1
			M	21.5-24.5	0.0	0.0	3.4	15.7	80.9
			D	37-40	0.0	0.0	2.9	16.0	81.1
	14-Jun-05	1445	S	6.5-9.5	0.0	0.0	1.3	18.0	80.7
			M	21.5-24.5	0.0	0.0	0.3	18.9	80.8
			D	37-40	0.0	0.0	1.4	17.7	80.9
	8-Sep-05	1420	S	6.5-9.5	0.0	0.0	1.8	17.2	81.0
			M	21.5-24.5	0.0	0.0	1.4	17.3	81.3
			D	37-40	0.0	0.0	2.0	17.1	80.9
	19-Dec-05	1505	S	6.5-9.5	0.0	0.0	2.0	17.0	81.0
			M	21.5-24.5	0.0	0.0	0.7	18.2	81.1
			D	37-40	0.0	0.0	1.2	17.8	81.0
	19-Apr-06	1412	S	6.5-9.5	0.0	0.0	1.3	18.0	80.7
			M	21.5-24.5	0.0	0.0	0.8	18.4	80.8
			D	37-40	0.0	0.0	1.4	17.9	80.7
	5-Jul-06	1511	S	6.5-9.5	0.0	0.0	2.4	18.1	79.5
			M	21.5-24.5	0.0	0.0	0.3	19.9	79.8
			D	37-40	0.0	0.0	2.9	17.5	79.6
	2-Oct-06	1417	S	6.5-9.5	0.0	0.0	2.1	18.5	79.4
			M	21.5-24.5	0.0	0.0	1.7	18.7	79.6
			D	37-40	0.0	0.0	2.6	17.9	79.5
	16-Feb-07	1333	S	6.5-9.5	0.0	0.0	0.6	19.0	80.4
			M	21.5-24.5	0.0	0.0	1.3	18.8	79.9
			D	37-40	0.0	0.0	2.2	17.7	80.1
	7-May-07	1653	S	6.5-9.5	0.0	0.0	0.5	19.4	80.1
			M	21.5-24.5	0.0	0.0	0.6	19.6	79.8
			D	37-40	0.0	0.0	1.4	18.3	80.3
	21-Sep-07	1620	S	6.5-9.5	0.0	0.0	2.2	18.7	79.1
			M	21.5-24.5	0.0	0.0	1.8	18.9	79.3
			D	37-40	0.0	0.0	3.3	17.4	79.3
	17-Dec-07	1325	S	6.5-9.5	0.0	0.0	1.9	18.4	79.7
			M	21.5-24.5	0.0	0.0	2.0	18.4	79.6
			D	37-40	0.0	0.0	2.4	17.9	79.7
	18-Mar-08	1349	S	6.5-9.5	0.0	0.0	1.6	19.0	79.4
			M	21.5-24.5	0.0	0.0	1.6	19.2	79.2
			D	37-40	0.0	0.0	2.8	17.7	79.5
	2-Jun-08	1519	S	6.5-9.5	0.0	0.0	1.6	18.4	80.0
			M	21.5-24.5	0.0	0.0	1.3	18.5	80.2
			D	37-40	0.0	0.0	1.8	18.0	80.2
	29-Sep-08	1459	S	6.5-9.5	0.0	0.0	1.3	18.4	80.3
			M	21.5-24.5	0.0	0.0	8.3	11.5	80.2
			D	37-40	0.0	0.0	16.5	4.2	79.3
	15-Dec-08	1531	S	6.5-9.5	0.0	0.0	2.4	18.0	79.6
			M	21.5-24.5	0.0	0.0	2.0	18.6	79.4
			D	37-40	0.0	0.0	3.7	17.0	79.3
	16-Mar-09	1421	S	6.5-9.5	0.0	0.0	1.4	18.2	80.4
			M	21.5-24.5	0.0	0.0	1.0	18.7	80.3
			D	37-40	0.0	0.0	2.1	17.5	80.4

Table 2
LFG Monitoring Results
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Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-9	30-Jul-03	1125	S	6.5-9.5	0.0	0.0**	1.0	20.9	NT
			M	21.5-24.5	0.0	0.0**	1.0	20.9	NT
			D	37-40	0.0	0.0**	1.0	20.9	NT
	6-Aug-03	1424	S	6.5-9.5	0.0	0.0	1.5	18.6	79.9
			M	21.5-24.5	0.0	0.0	9.6	11.5	78.9
			D	37-40	0.0	0.0	14.1	6.9	79.0
	6-Nov-03	1430	S	6.5-9.5	0.0	0.0	1.8	18.5	79.7
			M	21.5-24.5	0.0	0.0	10.8	10.7	78.5
			D	37-40	0.0	0.0	14.8	6.9	78.3
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1502	S	6.5-9.5	0.0	0.0	1.6	18.5	79.9
			M	21.5-24.5	0.0	0.0	10.1	10.5	79.4
			D	37-40	0.0	0.0	13.5	7.0	79.5
	4-May-04	1528	S	6.5-9.5	0.0	0.0	1.3	18.1	80.6
			M	21.5-24.5	0.0	0.0	10.2	10.7	79.1
			D	37-40	0.0	0.0	16.4	6.9	76.7
	7-Sep-04	1515	S	6.5-9.5	0.0	0.0	2.1	18.1	79.8
			M	21.5-24.5	0.0	0.0	10.7	10.5	78.8
			D	37-40	0.0	0.0	14.6	6.8	78.6
	20-Dec-04	1634	S	6.5-9.5	0.0	0.0	1.4	18.0	80.6
			M	21.5-24.5	0.0	0.0	12.0	10.2	77.8
			D	37-40	0.0	0.0	12.9	9.0	78.1
	21-Mar-05	1700	S	6.5-9.5	0.0	0.0	2.5	16.5	81.0
			M	21.5-24.5	0.0	0.0	3.0	16.0	81.0
			D	37-40	0.0	0.0	5.8	14.3	79.9
	14-Jun-05	1454	S	6.5-9.5	0.0	0.0	1.8	17.4	80.8
			M	21.5-24.5	0.0	0.0	1.1	18.0	80.9
			D	37-40	0.0	0.0	1.4	17.3	81.3
	8-Sep-05	1429	S	6.5-9.5	0.0	0.0	1.7	17.4	80.9
			M	21.5-24.5	0.0	0.0	3.9	15.4	80.7
			D	37-40	0.0	0.0	3.5	15.7	80.8
	19-Dec-05	1453	S	6.5-9.5	0.0	0.0	1.8	17.3	80.9
			M	21.5-24.5	0.0	0.0	1.0	17.9	81.1
			D	37-40	0.0	0.0	2.8	16.3	80.9
	19-Apr-06	1405	S	6.5-9.5	0.0	0.0	1.3	17.7	81.0
			M	21.5-24.5	0.0	0.0	1.1	18.1	80.8
			D	37-40	0.0	0.0	2.9	16.3	80.8
	5-Jul-06	1505	S	6.5-9.5	0.0	0.0	2.1	18.3	79.6
			M	21.5-24.5	0.0	0.0	2.1	18.1	79.8
			D	37-40	0.0	0.0	4.1	16.3	79.6
	2-Oct-06	1411	S	6.5-9.5	0.0	0.0	1.8	18.4	79.8
			M	21.5-24.5	0.0	0.0	2.0	18.2	79.8
			D	37-40	0.0	0.0	2.5	17.7	79.8
	16-Feb-07	1326	S	6.5-9.5	0.0	0.0	1.1	18.8	80.1
			M	21.5-24.5	0.0	0.0	0.5	19.5	80.0
			D	37-40	0.0	0.0	1.3	18.6	80.1
	7-May-07	1449	S	6.5-9.5	0.0	0.0	1.0	19.0	80.0
			M	21.5-24.5	0.0	0.0	0.5	19.8	79.7
			D	37-40	0.0	0.0	0.4	19.6	80.0
	21-Sep-07	1616	S	6.5-9.5	0.0	0.0	1.8	19.0	79.2
			M	21.5-24.5	0.0	0.0	1.9	18.9	79.2
			D	37-40	0.0	0.0	2.8	17.8	79.4
	17-Dec-07	1320	S	6.5-9.5	0.0	0.0	1.8	18.9	79.3
			M	21.5-24.5	0.0	0.0	1.9	18.5	79.6
			D	37-40	0.0	0.0	3.3	17.4	79.3
	18-Mar-08	1343	S	6.5-9.5	0.0	0.0	1.5	19.2	79.3
			M	21.5-24.5	0.0	0.0	1.1	19.9	79.0
			D	37-40	0.0	0.0	1.9	18.9	79.2
	2-Jun-08	1514	S	6.5-9.5	0.0	0.0	1.1	18.9	80.0
			M	21.5-24.5	0.0	0.0	1.6	18.0	80.4
			D	37-40	0.0	0.0	2.6	17.0	80.4
	29-Sep-08	1455	S	6.5-9.5	0.0	0.0	1.1	18.6	80.3
			M	21.5-24.5	0.0	0.0	5.7	14.0	80.3
			D	37-40	0.0	0.0	5.2	14.4	80.4
	15-Dec-08	1525	S	6.5-9.5	0.0	0.0	2.2	18.1	79.7
			M	21.5-24.5	0.0	0.0	1.9	18.7	79.4
			D	37-40	0.0	0.0	2.4	18.1	79.5
	16-Mar-09	1402	S	6.5-9.5	0.0	0.0	1.2	18.5	80.3
			M	21.5-24.5	0.0	0.0	0.6	19.1	80.3
			D	37-40	0.0	0.0	1.5	18.1	80.4

Table 2
LFG Monitoring Results
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Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-10	30-Jul-03	1355	S	6.5-9.5	0.0	0.0**	1.0	20.2	NT
			M	21.5-24.5	0.0	0.0**	3.0	18.7	NT
			D	37-40	**7.0**	**0.35****	2.0	13.5	NT
	6-Aug-03	1415	S	6.5-9.5	0.0	0.0	1.8	18.2	80.0
			M	21.5-24.5	0.0	0.0	6.7	13.9	79.4
			D	37-40	**4.0**	**0.2**	10.4	10.8	78.6
	6-Nov-03	1442	S	6.5-9.5	0.0	0.0	1.8	18.4	79.8
			M	21.5-24.5	0.0	0.0	7.2	13.7	79.1
			D	37-40	**2.0**	**0.1**	10.9	10.5	78.5
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1513	S	6.5-9.5	0.0	0.0	1.6	18.4	80.0
			M	21.5-24.5	0.0	0.0	5.4	14.7	79.9
			D	37-40	**4.0**	**0.2**	6.9	13.2	79.7
	4-May-04	1535	S	6.5-9.5	0.0	0.0	2.0	17.4	80.6
			M	21.5-24.5	0.0	0.0	6.9	13.0	80.1
			D	37-40	**4.0**	**0.2**	11.6	9.8	78.4
	7-Sep-04	1520	S	6.5-9.5	0.0	0.0	1.5	18.4	80.1
			M	21.5-24.5	0.0	0.0	7.1	13.6	79.3
			D	37-40	0.0	0.0	10.9	10.5	78.6
	20-Dec-04	1140	S	6.5-9.5	0.0	0.0	2.1	17.4	80.5
			M	21.5-24.5	0.0	0.0	7.9	12.9	79.2
			D	37-40	**4.0**	**0.2**	12.2	9.7	77.9
	21-Mar-05	1648	S	6.5-9.5	0.0	0.0	2.9	15.9	81.2
			M	21.5-24.5	0.0	0.0	3.7	15.5	80.8
			D	37-40	0.0	0.0	4.0	15.1	80.9
	14-Jun-05	1501	S	6.5-9.5	0.0	0.0	2.0	17.2	80.8
			M	21.5-24.5	0.0	0.0	1.6	17.1	81.3
			D	37-40	0.0	0.0	3.1	15.5	81.4
	8-Sep-05	1442	S	6.5-9.5	0.0	0.0	2.2	17.0	80.8
			M	21.5-24.5	0.0	0.0	2.7	16.4	80.9
			D	37-40	0.0	0.0	4.0	15.1	80.9
	19-Dec-05	1443	S	6.5-9.5	0.0	0.0	1.5	17.6	80.9
			M	21.5-24.5	0.0	0.0	2.4	16.6	81.0
			D	37-40	0.0	0.0	2.4	16.7	80.9
	19-Apr-06	1353	S	6.5-9.5	0.0	0.0	1.5	17.7	80.8
			M	21.5-24.5	0.0	0.0	2.3	16.9	80.8
			D	37-40	**2.0**	**0.1**	2.6	16.7	80.6
	5-Jul-06	1459	S	6.5-9.5	0.0	0.0	2.1	18.3	79.6
			M	21.5-24.5	0.0	0.0	3.1	17.4	79.5
			D	37-40	0.0	0.0	4.6	15.6	79.8
	2-Oct-06	1405	S	6.5-9.5	0.0	0.0	2.5	18.0	79.5
			M	21.5-24.5	0.0	0.0	2.7	17.7	79.6
			D	37-40	0.0	0.0	3.7	16.6	79.7
	16-Feb-07	1319	S	6.5-9.5	0.0	0.0	1.9	18.2	79.9
			M	21.5-24.5	0.0	0.0	1.9	18.1	80.0
			D	37-40	0.0	0.0	3.1	17.0	79.9
	7-May-07	1444	S	6.5-9.5	0.0	0.0	1.7	18.5	79.8
			M	21.5-24.5	0.0	0.0	1.1	18.7	80.2
			D	37-40	0.0	0.0	2.6	17.5	79.9
	21-Sep-07	1606	S	6.5-9.5	0.0	0.0	2.4	18.7	78.9
			M	21.5-24.5	0.0	0.0	2.9	18.1	79.0
			D	37-40	0.0	0.0	6.9	14.2	78.9
	17-Dec-07	1314	S	6.5-9.5	0.0	0.0	2.4	18.2	79.4
			M	21.5-24.5	0.0	0.0	3.0	17.8	79.2
			D	37-40	0.0	0.0	4.2	16.6	79.2
	18-Mar-08	1338	S	6.5-9.5	0.0	0.0	2.4	18.6	79.0
			M	21.5-24.5	0.0	0.0	2.5	18.3	79.2
			D	37-40	0.0	0.0	3.3	17.4	79.3
	2-Jun-08	1507	S	6.5-9.5	0.0	0.0	1.4	18.6	80.0
			M	21.5-24.5	0.0	0.0	2.3	17.4	80.3
			D	37-40	**2.0**	**0.1**	3.3	16.4	80.2
	29-Sep-08	1448	S	6.5-9.5	0.0	0.0	1.5	18.4	80.1
			M	21.5-24.5	0.0	0.0	6.7	13.5	79.8
			D	37-40	**4.0**	**0.2**	10.0	10.2	79.6
	15-Dec-08	1521	S	6.5-9.5	0.0	0.0	2.9	17.9	79.2
			M	21.5-24.5	0.0	0.0	3.0	17.6	79.4
			D	37-40	0.0	0.0	4.2	16.4	79.4
	16-Mar-09	1409	S	6.5-9.5	0.0	0.0	1.8	18.0	80.2
			M	21.5-24.5	0.0	0.0	2.7	17.2	80.1
			D	37-40	0.0	0.0	3.1	16.6	80.3

Table 2
LFG Monitoring Results
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Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-11	6-Jun-03	1521	S	7-10	0.0	0.0	2.5	17.6	79.9
			M	20-23	0.0	0.0	9.6	10.3	80.1
			D	37-40	0.0	0.0	14.4	6.2	79.4
	6-Aug-03	1452	S	7-10	0.0	0.0	2.1	17.7	80.2
			M	20-23	0.0	0.0	9.5	10.5	80.0
			D	37-40	0.0	0.0	14.5	5.5	80.0
	6-Nov-03	1506	S	7-10	0.0	0.0	1.5	18.6	79.9
			M	20-23	0.0	0.0	8.0	12.0	80.0
			D	37-40	0.0	0.0	15.6	5.1	79.3
	5-Dec-03	N/A	S	7-10	Not Measured				
			M	22-25					
			D	37-40					
	4-Feb-04	1523	S	7-10	0.0	0.0	1.2	18.7	80.1
			M	22-25	0.0	0.0	9.6	10.3	80.1
			D	37-40	0.0	0.0	14.6	5.5	79.9
	4-May-04	1544	S	7-10	0.0	0.0	1.3	18.2	80.5
			M	22-25	0.0	0.0	10.0	10.4	79.6
			D	37-40	0.0	0.0	16.5	6.6	76.9
	7-Sep-04	1540	S	7-10	0.0	0.0	1.4	18.4	80.2
			M	22-25	0.0	0.0	0.9	19.0	80.1
			D	37-40	0.0	0.0	15.4	5.7	78.9
	20-Dec-04	1656	S	7-10	0.0	0.0	1.5	18.2	80.3
			M	22-25	0.0	0.0	11.6	10.4	78.0
			D	37-40	**2.0**	**0.1**	17.4	5.9	76.6
	21-Mar-05	1740	S	7-10	0.0	0.0	2.5	16.5	81.0
			M	22-25	0.0	0.0	3.4	15.8	80.8
			D	37-40	0.0	0.0	4.4	15.1	80.5
	14-Jun-05	1546	S	7-10	0.0	0.0	1.8	17.5	80.7
			M	22-25	0.0	0.0	1.1	18.1	80.8
			D	37-40	0.0	0.0	2.0	16.9	81.1
	8-Sep-05	1507	S	7-10	0.0	0.0	1.7	17.5	80.8
			M	22-25	0.0	0.0	2.3	16.6	81.1
			D	37-40	0.0	0.0	3.6	15.5	80.9
	19-Dec-05	1541	S	7-10	0.0	0.0	1.6	17.6	80.8
			M	22-25	0.0	0.0	7.9	12.5	79.6
			D	37-40	0.0	0.0	2.5	16.6	80.9
	19-Apr-06	1307	S	7-10	**2.0**	**0.1**	1.6	17.7	80.6
			M	22-25	0.0	0.0	1.1	18.2	80.7
			D	37-40	0.0	0.0	4.0	15.6	80.4
	5-Jul-06	1308	S	7-10	0.0	0.0	2.0	18.5	79.5
			M	22-25	0.0	0.0	2.0	18.5	79.5
			D	37-40	0.0	0.0	3.9	16.6	79.5
	2-Oct-06	1334	S	7-10	0.0	0.0	2.1	18.2	79.7
			M	22-25	0.0	0.0	1.9	18.5	79.6
			D	37-40	0.0	0.0	2.9	17.4	79.7
	16-Feb-07	1248	S	7-10	0.0	0.0	1.3	18.8	79.9
			M	22-25	0.0	0.0	1.2	18.8	80.0
			D	37-40	0.0	0.0	1.4	18.6	80.0
	7-May-07	1417	S	7-10	0.0	0.0	1.2	18.9	79.9
			M	22-25	0.0	0.0	1.0	19.2	79.8
			D	37-40	0.0	0.0	0.7	19.2	80.1
	21-Sep-07	1417	S	7-10	0.0	0.0	2.2	18.6	79.2
			M	22-25	0.0	0.0	2.4	18.4	79.2
			D	37-40	0.0	0.0	4.5	16.1	79.4
	17-Dec-07	1246	S	7-10	0.0	0.0	1.9	18.7	79.4
			M	22-25	0.0	0.0	1.8	18.6	79.6
			D	37-40	0.0	0.0	3.1	17.7	79.2
	18-Mar-08	1312	S	7-10	0.0	0.0	1.9	19.0	79.1
			M	22-25	0.0	0.0	1.1	19.8	79.1
			D	37-40	0.0	0.0	2.0	18.7	79.3
	2-Jun-08	1439	S	7-10	0.0	0.0	1.2	18.8	80.0
			M	22-25	0.0	0.0	1.0	18.9	80.1
			D	37-40	0.0	0.0	2.1	17.7	80.2
	29-Sep-08	1416	S	7-10	0.0	0.0	1.3	18.6	80.1
			M	22-25	0.0	0.0	2.8	17.0	80.2
			D	37-40	0.0	0.0	10.8	8.9	80.3
	15-Dec-08	1618	S	7-10	0.0	0.0	2.6	17.9	79.5
			M	22-25	0.0	0.0	1.8	18.6	79.6
			D	37-40	0.0	0.0	3.8	17.1	79.1
	16-Mar-09	1340	S	7-10	0.0	0.0	1.5	18.3	80.2
			M	22-25	0.0	0.0	0.7	19.0	80.3
			D	37-40	0.0	0.0	1.9	17.7	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-12	6-Jun-03	1530	S	7-10	0.0	0.0	0.4	20.0	79.6
			M	19-22	0.0	0.0	0.5	19.5	80.0
			D	37-40	0.0	0.0	1.5	18.8	79.7
	6-Aug-03	1502	S	7-10	0.0	0.0	0.2	19.5	80.3
			M	19-22	0.0	0.0	0.1	19.6	80.3
			D	37-40	0.0	0.0	1.1	18.5	80.4
	6-Nov-03	1515	S	7-10	0.0	0.0	0.3	19.9	79.8
			M	19-22	0.0	0.0	0.1	20.2	79.7
			D	37-40	0.0	0.0	1.3	18.9	79.8
	5-Dec-03	N/A	S	7-10	Not Measured				
			M	19-22					
			D	37-40					
	4-Feb-04	1537	S	7-10	0.0	0.0	0.0	20.3	79.7
			M	19-22	0.0	0.0	0.1	20.5	79.4
			D	37-40	0.0	0.0	1.1	19.3	79.6
	4-May-04	1551	S	7-10	0.0	0.0	0.0	19.8	80.2
			M	19-22	0.0	0.0	0.0	20.0	80.0
			D	37-40	0.0	0.0	0.8	18.9	80.3
	7-Sep-04	1545	S	7-10	0.0	0.0	0.4	19.4	80.2
			M	19-22	0.0	0.0	0.1	19.8	80.1
			D	37-40	0.0	0.0	1.1	18.7	80.2
	20-Dec-04	1706	S	7-10	**2.0**	**0.1**	0.3	19.6	80.0
			M	19-22	**6.0**	**0.3**	0.4	19.6	79.7
			D	37-40	**2.0**	**0.1**	1.4	18.5	80.0
	21-Mar-05	1752	S	7-10	0.0	0.0	0.3	19.1	80.6
			M	19-22	0.0	0.0	0.3	19.1	80.6
			D	37-40	0.0	0.0	0.6	18.7	80.7
	14-Jun-05	1557	S	7-10	0.0	0.0	0.4	18.9	80.7
			M	19-22	0.0	0.0	0.1	18.9	81.0
			D	37-40	0.0	0.0	0.4	18.5	81.1
	8-Sep-05	1518	S	7-10	0.0	0.0	0.4	18.6	81.0
			M	19-22	0.0	0.0	0.2	18.9	80.9
			D	37-40	**4.0***	**0.2***	0.4	18.5	80.9
	19-Dec-05	1553	S	7-10	0.0	0.0	0.2	18.9	80.9
			M	19-22	0.0	0.0	0.2	19.0	80.8
			D	37-40	0.0	0.0	0.4	18.5	81.1
	19-Apr-06	1259	S	7-10	**4.0**	**0.2**	0.2	18.8	80.8
			M	19-22	**6.0**	**0.3**	0.2	19.0	80.5
			D	37-40	0.0	0.0	0.4	18.6	81.0
	5-Jul-06	1302	S	7-10	0.0	0.0	0.6	19.7	79.7
			M	19-22	0.0	0.0	0.5	19.8	79.7
			D	37-40	0.0	0.0	0.9	19.3	79.8
	2-Oct-06	1324	S	7-10	0.0	0.0	1.2	18.8	80.0
			M	19-22	0.0	0.0	0.5	19.4	80.1
			D	37-40	0.0	0.0	0.9	19.0	80.1
	16-Feb-07	1240	S	7-10	0.0	0.0	0.2	20.1	79.7
			M	19-22	0.0	0.0	0.2	20.4	79.4
			D	37-40	0.0	0.0	0.4	19.8	79.8
	7-May-07	1411	S	7-10	0.0	0.0	0.2	19.9	79.9
			M	19-22	0.0	0.0	0.1	20.4	79.5
			D	37-40	0.0	0.0	0.2	19.9	79.9
	21-Sep-07	1410	S	7-10	0.0	0.0	0.8	19.7	79.5
			M	19-22	0.0	0.0	0.5	19.9	79.6
			D	37-40	0.0	0.0	0.9	19.6	79.5
	17-Dec-07	1241	S	7-10	0.0	0.0	0.7	19.8	79.5
			M	19-22	0.0	0.0	0.6	19.9	79.5
			D	37-40	0.0	0.0	1.1	19.3	79.6
	18-Mar-08	1304	S	7-10	0.0	0.0	0.3	20.1	79.6
			M	19-22	0.0	0.0	0.3	20.4	79.3
			D	37-40	0.0	0.0	0.8	19.7	79.5
	2-Jun-08	1433	S	7-10	0.0	0.0	0.2	19.9	79.9
			M	19-22	0.0	0.0	0.1	20.0	79.9
			D	37-40	0.0	0.0	0.4	19.4	80.2
	29-Sep-08	1410	S	7-10	0.0	0.0	0.3	19.3	80.4
			M	19-22	0.0	0.0	0.2	19.5	80.3
			D	37-40	0.0	0.0	1.4	18.1	80.5
	15-Dec-08	1611	S	7-10	0.0	0.0	0.8	18.6	80.6
			M	19-22	0.0	0.0	0.7	19.3	80.0
			D	37-40	0.0	0.0	1.3	18.6	80.1
	16-Mar-09	1334	S	7-10	0.0	0.0	0.2	19.3	80.5
			M	19-22	0.0	0.0	0.2	19.5	80.3
			D	37-40	0.0	0.0	0.7	18.9	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-13	28-Jul-03	1519	S	6.5-9.5	0.0	0.0**	25.0	14.4	NT
			M	21.5-24.5	**4.0**	**0.2****	20.0	8.7	NT
			D	37-40	**28.0**	**1.4****	116.0	4.5	NT
	6-Aug-03	1515	S	6.5-9.5	0.0	0.0	5.2	13.5	81.3
			M	21.5-24.5	**6.0**	**0.3**	14.8	5.2	79.7
			D	37-40	**50.0**	**2.5**	18.7	3.0	75.8
	6-Nov-03	1523	S	6.5-9.5	0.0	0.0	6.7	12.9	80.4
			M	21.5-24.5	0.0	0.0	9.1	10.5	80.4
			D	37-40	**18.0**	**0.9**	10.0	10.0	79.1
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1548	S	6.5-9.5	0.0	0.0	4.4	14.8	80.8
			M	21.5-24.5	0.0	0.0	0.0	20.6	79.4
			D	37-40	0.0	0.0	0.0	20.7	79.3
	4-May-04	1605	S	6.5-9.5	0.0	0.0	6.8	12.7	80.5
			M	21.5-24.5	0.0	0.0	19.8	3.3	76.9
			D	37-40	**52.0**	**2.6**	25.5	0.8	71.1
	7-Sep-04	1555	S	6.5-9.5	0.0	0.0	5.5	14.2	80.3
			M	21.5-24.5	0.0	0.0	15.6	5.1	79.3
			D	37-40	**16.0**	**0.8**	18.5	3.4	77.3
	20-Dec-04	1718	S	6.5-9.5	**4.0**	**0.2**	7.4	12.4	80.0
			M	21.5-24.5	**8.0**	**0.4**	12.4	8.8	78.4
			D	37-40	**8.0**	**0.4**	12.4	8.6	78.6
	21-Mar-05	1840	S	6.5-9.5	0.0	0.0	7.3	11.9	80.8
			M	21.5-24.5	0.0	0.0	13.2	6.2	80.6
			D	37-40	**22.0**	**1.1**	12.1	7.9	78.9
	14-Jun-05	1650	S	6.5-9.5	0.0	0.0	6.2	13.5	80.3
			M	21.5-24.5	0.0	0.0	2.7	15.6	81.7
			D	37-40	**2.0**	**0.1**	2.8	15.4	81.7
	8-Sep-05	1605	S	6.5-9.5	0.0	0.0	5.8	13.5	80.7
			M	21.5-24.5	0.0	0.0	8.3	11.1	80.6
			D	37-40	**8.0**	**0.4**	7.1	12.0	80.5
	19-Dec-05	1633	S	6.5-9.5	0.0	0.0	5.3	13.9	80.8
			M	21.5-24.5	0.0	0.0	9.8	10.0	80.2
			D	37-40	**14.0**	**0.7**	10.0	10.1	79.2
	19-Apr-06	1242	S	6.5-9.5	0.0	0.0	4.8	14.5	80.7
			M	21.5-24.5	0.0	0.0	11.0	9.3	79.7
			D	37-40	**12.0**	**0.6**	6.3	13.1	80.0
	5-Jul-06	1252	S	6.5-9.5	0.0	0.0	2.2	18.1	79.7
			M	21.5-24.5	0.0	0.0	3.9	16.1	80.0
			D	37-40	**4.0**	**0.2**	4.6	15.1	80.1
	2-Oct-06	1311	S	6.5-9.5	0.0	0.0	2.3	18.0	79.7
			M	21.5-24.5	0.0	0.0	5.0	14.7	80.3
			D	37-40	**12.0**	**0.6**	7.4	12.3	79.7
	16-Feb-07	1227	S	6.5-9.5	0.0	0.0	6.1	13.9	80.0
			M	21.5-24.5	**8.0**	**0.4**	11.5	7.9	80.2
			D	37-40	**18.0**	**0.9**	5.4	14.8	78.9
	7-May-07	1400	S	6.5-9.5	0.0	0.0	4.0	16.8	79.2
			M	21.5-24.5	0.0	0.0	12.7	7.0	80.3
			D	37-40	**30.0**	**1.5**	9.8	9.7	79.0
	21-Sep-07	1358	S	6.5-9.5	0.0	0.0	2.5	18.0	79.5
			M	21.5-24.5	0.0	0.0	6.6	13.3	80.1
			D	37-40	**6.0**	**0.3**	5.5	14.7	79.5
	17-Dec-07	1230	S	6.5-9.5	0.0	0.0	5.2	15.1	79.7
			M	21.5-24.5	0.0	0.0	8.6	11.8	79.6
			D	37-40	**18.0**	**0.9**	7.8	12.9	78.4
	18-Mar-08	1300	S	6.5-9.5	0.0	0.0	3.1	17.8	79.1
			M	21.5-24.5	0.0	0.0	7.5	12.7	79.8
			D	37-40	**16.0**	**0.8**	5.5	15.0	78.7
	2-Jun-08	1422	S	6.5-9.5	0.0	0.0	0.0	20.5	79.5
			M	21.5-24.5	0.0	0.0	0.0	20.5	79.5
			D	37-40	0.0	0.0	0.0	20.5	79.5
	29-Sep-08	1356	S	6.5-9.5	0.0	0.0	1.7	18.1	80.2
			M	21.5-24.5	0.0	0.0	14.1	5.8	80.1
			D	37-40	**28.0**	**1.4**	17.4	3.0	78.2
	15-Dec-08	1351	S	6.5-9.5	0.0	0.0	3.3	17.2	79.5
			M	21.5-24.5	0.0	0.0	7.4	13.0	79.6
			D	37-40	**12.0**	**0.6**	5.7	14.6	79.1
	16-Mar-09	1324	S	6.5-9.5	0.0	0.0	2.3	17.6	80.1
			M	21.5-24.5	0.0	0.0	6.8	12.5	80.7
			D	37-40	**14.0**	**0.7**	6.4	13.2	79.7

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-14	28-Jul-03	1507	S	6.5-9.5	0.0	0.0**	0.0	20.9	NT
			M	21.5-24.5	0.0	0.0**	0.0	20.9	NT
			D	37-40	0.0	0.0**	10.0	15.3	NT
	6-Aug-03	1522	S	6.5-9.5	0.0	0.0	1.0	18.3	80.7
			M	21.5-24.5	0.0	0.0	4.8	15.2	80.0
			D	37-40	0.0	0.0	6.7	13.4	79.9
	6-Nov-03	1535	S	6.5-9.5	0.0	0.0	1.0	19.3	79.7
			M	21.5-24.5	0.0	0.0	1.0	19.1	79.9
			D	37-40	0.0	0.0	3.0	17.3	79.7
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1553	S	6.5-9.5	0.0	0.0	0.4	19.5	80.1
			M	21.5-24.5	0.0	0.0	0.0	20.6	79.4
			D	37-40	0.0	0.0	0.0	20.8	79.2
	4-May-04	1615	S	6.5-9.5	0.0	0.0	1.3	18.0	80.7
			M	21.5-24.5	0.0	0.0	4.3	15.1	80.6
			D	37-40	0.0	0.0	6.6	13.4	80.0
	7-Sep-04	1615	S	6.5-9.5	0.0	0.0	1.9	18.3	79.8
			M	21.5-24.5	0.0	0.0	4.8	15.6	79.6
			D	37-40	0.0	0.0	6.9	13.9	79.2
	20-Dec-04	1725	S	6.5-9.5	**12.0**	**0.6**	2.1	17.8	79.5
			M	21.5-24.5	**12.0**	**0.6**	6.5	15.3	77.6
			D	37-40	**16.0**	**0.8**	8.8	14.1	76.3
	21-Mar-05	1831	S	6.5-9.5	0.0	0.0	1.7	17.1	81.2
			M	21.5-24.5	0.0	0.0	1.8	17.2	81.0
			D	37-40	0.0	0.0	2.5	16.7	80.8
	14-Jun-05	1638	S	6.5-9.5	0.0	0.0	1.4	17.8	80.8
			M	21.5-24.5	0.0	0.0	0.4	18.6	81.0
			D	37-40	0.0	0.0	0.4	18.7	80.9
	8-Sep-05	1553	S	6.5-9.5	0.0	0.0	2.6	16.3	81.1
			M	21.5-24.5	0.0	0.0	2.2	16.5	81.3
			D	37-40	0.0	0.0	1.4	17.1	81.5
	19-Dec-05	1624	S	6.5-9.5	0.0	0.0	1.3	17.9	80.8
			M	21.5-24.5	0.0	0.0	0.5	18.5	81.0
			D	37-40	0.0	0.0	0.8	18.3	80.9
	19-Apr-06	1233	S	6.5-9.5	0.0	0.0	1.0	18.2	80.8
			M	21.5-24.5	0.0	0.0	1.4	17.8	80.8
			D	37-40	0.0	0.0	0.8	18.3	80.9
	5-Jul-06	1244	S	6.5-9.5	0.0	0.0	1.5	18.5	80.0
			M	21.5-24.5	0.0	0.0	0.7	19.3	80.0
			D	37-40	0.0	0.0	0.7	19.2	80.1
	2-Oct-06	1300	S	6.5-9.5	0.0	0.0	2.5	17.9	79.6
			M	21.5-24.5	0.0	0.0	1.0	19.0	80.0
			D	37-40	0.0	0.0	2.4	17.9	79.7
	16-Feb-07	1220	S	6.5-9.5	0.0	0.0	1.2	18.6	80.2
			M	21.5-24.5	0.0	0.0	0.2	19.7	80.1
			D	37-40	0.0	0.0	6.0	14.7	79.3
	7-May-07	1354	S	6.5-9.5	0.0	0.0	0.9	18.8	80.3
			M	21.5-24.5	0.0	0.0	0.0	20.4	79.6
			D	37-40	0.0	0.0	3.2	16.6	80.2
	21-Sep-07	1350	S	6.5-9.5	0.0	0.0	2.0	18.8	79.2
			M	21.5-24.5	0.0	0.0	1.7	18.8	79.5
			D	37-40	0.0	0.0	2.1	18.5	79.4
	17-Dec-07	1224	S	6.5-9.5	0.0	0.0	1.7	18.7	79.6
			M	21.5-24.5	0.0	0.0	2.0	18.4	79.6
			D	37-40	0.0	0.0	4.8	15.6	79.6
	18-Mar-08	1250	S	6.5-9.5	0.0	0.0	1.4	19.4	79.2
			M	21.5-24.5	0.0	0.0	0.5	20.2	79.3
			D	37-40	0.0	0.0	0.7	20.0	79.3
	2-Jun-08	1415	S	6.5-9.5	0.0	0.0	1.0	19.0	80.0
			M	21.5-24.5	0.0	0.0	0.8	19.0	80.2
			D	37-40	0.0	0.0	0.5	19.3	80.2
	29-Sep-08	1348	S	6.5-9.5	0.0	0.0	2.2	17.8	80.0
			M	21.5-24.5	0.0	0.0	5.6	14.6	79.8
			D	37-40	0.0	0.0	6.9	13.1	80.0
	15-Dec-08	1344	S	6.5-9.5	0.0	0.0	2.0	18.4	79.6
			M	21.5-24.5	0.0	0.0	0.4	19.5	80.1
			D	37-40	0.0	0.0	0.9	19.3	79.8
	16-Mar-09	1318	S	6.5-9.5	0.0	0.0	1.2	18.7	80.1
			M	21.5-24.5	0.0	0.0	0.2	19.4	80.4
			D	37-40	0.0	0.0	1.0	18.4	80.6

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-15	29-Jul-03	1055	S	6.5-9.5	0.0	0.0**	9.0	20.3	NT
			M	21.5-24.5	0.0	0.0**	8.0	20.0	NT
			D	37-40	0.0	0.0**	4.0	17.6	NT
	6-Aug-03	1530	S	6.5-9.5	0.0	0.0	1.2	18.4	80.4
			M	21.5-24.5	0.0	0.0	2.7	16.9	80.4
			D	37-40	0.0	0.0	4.9	15.1	80.0
	6-Nov-03	1543	S	6.5-9.5	0.0	0.0	1.4	19.0	79.6
			M	21.5-24.5	0.0	0.0	3.4	17.3	79.3
			D	37-40	0.0	0.0	5.5	15.5	79.0
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	21.5-24.5					
			D	37-40					
	4-Feb-04	1558	S	6.5-9.5	0.0	0.0	0.4	19.8	79.8
			M	21.5-24.5	0.0	0.0	0.0	20.8	79.2
			D	37-40	0.0	0.0	0.0	20.9	79.1
	4-May-04	1623	S	6.5-9.5	0.0	0.0	0.8	18.2	81.0
			M	21.5-24.5	0.0	0.0	2.5	16.8	80.7
			D	37-40	0.0	0.0	4.7	15.2	80.1
	7-Sep-04	1630	S	6.5-9.5	0.0	0.0	1.7	18.5	79.8
			M	21.5-24.5	0.0	0.0	3.3	17.1	79.6
			D	37-40	0.0	0.0	5.2	15.5	79.3
	21-Dec-04	1537	S	6.5-9.5	0.0	0.0	1.6	17.8	80.6
			M	21.5-24.5	0.0	0.0	3.7	16.4	79.9
			D	37-40	**2.0**	**0.1**	6.1	14.6	79.2
	21-Mar-05	1821	S	6.5-9.5	0.0	0.0	1.2	17.8	81.0
			M	21.5-24.5	0.0	0.0	1.6	17.6	80.8
			D	37-40	0.0	0.0	1.7	17.5	80.8
	14-Jun-05	1626	S	6.5-9.5	0.0	0.0	1.5	17.5	81.0
			M	21.5-24.5	0.0	0.0	1.5	17.4	81.1
			D	37-40	0.0	0.0	1.3	17.6	81.1
	8-Sep-05	1543	S	6.5-9.5	0.0	0.0	2.1	17.0	80.9
			M	21.5-24.5	0.0	0.0	1.9	17.1	81.0
			D	37-40	0.0	0.0	1.7	17.2	81.1
	19-Dec-05	1613	S	6.5-9.5	0.0	0.0	1.3	18.1	80.6
			M	21.5-24.5	0.0	0.0	1.4	17.9	80.7
			D	37-40	0.0	0.0	1.7	17.6	80.7
	19-Apr-06	1226	S	6.5-9.5	0.0	0.0	0.9	18.2	80.9
			M	21.5-24.5	0.0	0.0	1.3	17.8	80.9
			D	37-40	0.0	0.0	1.4	17.7	80.9
	5-Jul-06	1236	S	6.5-9.5	0.0	0.0	1.4	18.7	79.9
			M	21.5-24.5	0.0	0.0	1.9	18.5	79.6
			D	37-40	0.0	0.0	2.5	17.9	79.6
	2-Oct-06	1252	S	6.5-9.5	0.0	0.0	2.0	18.3	79.7
			M	21.5-24.5	0.0	0.0	1.3	17.0	81.7
			D	37-40	0.0	0.0	3.1	17.3	79.6
	16-Feb-07	1213	S	6.5-9.5	0.0	0.0	0.5	19.5	80.0
			M	21.5-24.5	0.0	0.0	2.0	18.3	79.7
			D	37-40	0.0	0.0	2.2	18.2	79.6
	7-May-07	1347	S	6.5-9.5	0.0	0.0	0.4	19.7	79.9
			M	21.5-24.5	0.0	0.0	0.9	18.9	80.2
			D	37-40	0.0	0.0	1.0	18.9	80.1
	21-Sep-07	1342	S	6.5-9.5	0.0	0.0	1.7	19.3	79.0
			M	21.5-24.5	0.0	0.0	2.4	18.5	79.1
			D	37-40	0.0	0.0	2.7	18.0	79.3
	17-Dec-07	1217	S	6.5-9.5	0.0	0.0	1.6	19.1	79.3
			M	21.5-24.5	0.0	0.0	1.6	19.1	79.3
			D	37-40	0.0	0.0	2.3	18.4	79.3
	18-Mar-08	1238	S	6.5-9.5	0.0	0.0	0.9	20.0	79.1
			M	21.5-24.5	0.0	0.0	0.4	20.2	79.4
			D	37-40	0.0	0.0	1.5	19.5	79.0
	2-Jun-08	1408	S	6.5-9.5	0.0	0.0	0.8	19.5	79.7
			M	21.5-24.5	0.0	0.0	0.7	18.1	81.2
			D	37-40	0.0	0.0	1.1	18.9	80.0
	29-Sep-08	1337	S	6.5-9.5	0.0	0.0	1.1	19.0	79.9
			M	21.5-24.5	**2.0**	**0.1**	3.5	16.8	79.6
			D	37-40	**2.0**	**0.1**	5.4	15.0	79.5
	15-Dec-08	1337	S	6.5-9.5	0.0	0.0	0.9	19.3	79.8
			M	21.5-24.5	0.0	0.0	1.6	18.9	79.5
			D	37-40	0.0	0.0	1.7	18.6	79.7
	16-Mar-09	1311	S	6.5-9.5	0.0	0.0	0.5	19.4	80.1
			M	21.5-24.5	0.0	0.0	0.3	19.4	80.3
			D	37-40	0.0	0.0	1.3	18.6	80.1

Table 2
LFG Monitoring Results
Eubank Landfill
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Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-16	6-Jun-03	1540	S	7-10	0.0	0.0	1.3	19.0	79.7
			M	22-25	0.0	0.0	1.9	18.1	80.0
			D	37-40	0.0	0.0	3.7	16.9	79.4
	6-Aug-03	1541	S	7-10	0.0	0.0	1.2	18.2	80.6
			M	22-25	0.0	0.0	1.5	17.3	81.2
			D	37-40	0.0	0.0	3.2	16.2	80.6
	6-Nov-03	1555	S	7-10	0.0	0.0	1.0	19.5	79.5
			M	22-25	0.0	0.0	1.5	19.0	79.5
			D	37-40	0.0	0.0	3.8	17.0	79.2
	5-Dec-03	N/A	S	7-10	Not Measured				
			M	22-25					
			D	37-40					
	4-Feb-04	1605	S	7-10	0.0	0.0	0.3	20.0	79.7
			M	22-25	0.0	0.0	1.1	19.4	79.5
			D	37-40	0.0	0.0	3.2	17.3	79.5
	4-May-04	1630	S	7-10	0.0	0.0	0.3	18.3	81.4
			M	22-25	0.0	0.0	0.8	18.3	80.9
			D	37-40	0.0	0.0	3.0	16.4	80.6
	7-Sep-04	1640	S	7-10	0.0	0.0	2.6	15.0	82.4
			M	22-25	0.0	0.0	1.3	17.0	81.7
			D	37-40	0.0	0.0	2.8	16.4	80.8
	21-Dec-04	1545	S	7-10	0.0	0.0	1.4	17.6	81.0
			M	22-25	0.0	0.0	1.5	17.1	81.4
			D	37-40	0.0	0.0	4.0	15.2	80.8
	21-Mar-05	1807	S	7-10	0.0	0.0	1.2	17.3	81.5
			M	22-25	0.0	0.0	1.9	16.7	81.4
			D	37-40	0.0	0.0	2.9	16.0	81.1
	14-Jun-05	1610	S	7-10	0.0	0.0	1.8	16.9	81.3
			M	22-25	0.0	0.0	1.0	17.2	81.8
			D	37-40	0.0	0.0	1.1	17.5	81.4
	8-Sep-05	1532	S	7-10	0.0	0.0	2.7	14.9	82.4
			M	22-25	0.0	0.0	1.7	16.4	81.9
			D	37-40	0.0	0.0	2.0	16.2	81.8
	19-Dec-05	1603	S	7-10	0.0	0.0	1.1	18.1	80.8
			M	22-25	0.0	0.0	1.6	17.0	81.4
			D	37-40	0.0	0.0	1.5	17.0	81.5
	19-Apr-06	1216	S	7-10	0.0	0.0	1.2	18.1	80.7
			M	22-25	0.0	0.0	1.3	17.7	81.0
			D	37-40	0.0	0.0	1.3	17.3	81.4
	5-Jul-06	1225	S	7-10	**2.0**	**0.1**	2.5	17.4	80.0
			M	22-25	0.0	0.0	2.1	17.9	80.0
			D	37-40	0.0	0.0	2.2	17.9	79.9
	2-Oct-06	1242	S	7-10	0.0	0.0	3.2	15.5	81.3
			M	22-25	0.0	0.0	2.1	16.9	81.0
			D	37-40	0.0	0.0	3.4	16.0	80.6
	16-Feb-07	1204	S	7-10	0.0	0.0	0.8	18.5	80.7
			M	22-25	0.0	0.0	0.6	18.4	81.0
			D	37-40	0.0	0.0	2.5	16.6	80.9
	7-May-07	1339	S	7-10	0.0	0.0	0.6	19.0	80.4
			M	22-25	0.0	0.0	1.2	17.7	81.1
			D	37-40	0.0	0.0	3.0	16.1	80.9
	21-Sep-07	1335	S	7-10	0.0	0.0	2.1	18.6	79.3
			M	22-25	0.0	0.0	1.9	18.4	79.7
			D	37-40	0.0	0.0	1.5	18.8	79.7
	17-Dec-07	1209	S	7-10	0.0	0.0	1.5	18.9	79.6
			M	22-25	0.0	0.0	2.9	17.9	79.2
			D	37-40	0.0	0.0	2.8	17.3	79.9
	18-Mar-08	1231	S	7-10	0.0	0.0	1.1	19.6	79.3
			M	22-25	0.0	0.0	1.7	19.0	79.3
			D	37-40	0.0	0.0	2.3	18.3	79.4
	2-Jun-08	1359	S	7-10	0.0	0.0	1.3	18.9	79.8
			M	22-25	0.0	0.0	1.2	18.8	80.0
			D	37-40	0.0	0.0	2.7	16.9	80.4
	29-Sep-08	1330	S	7-10	**4.0**	**0.2**	1.5	18.6	79.7
			M	22-25	**4.0**	**0.2**	1.5	18.3	80.0
			D	37-40	**2.0**	**0.1**	4.1	15.7	80.1
	15-Dec-08	1322	S	7-10	0.0	0.0	2.1	18.7	79.2
			M	22-25	0.0	0.0	3.9	17.5	78.6
			D	37-40	0.0	0.0	4.9	16.4	78.7
	16-Mar-09	1304	S	7-10	0.0	0.0	1.0	18.8	80.2
			M	22-25	0.0	0.0	1.3	18.6	80.1
			D	37-40	0.0	0.0	3.3	16.7	80.0

Table 2
LFG Monitoring Results
Eubank Landfill
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Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-17	6-Jun-03	1510	S	6.5-9.5	0.0	0.0	13.0	7.0	80.0
			M	22-25	0.0	0.0	21.0	0.4	78.6
			D	37-40	**8.0**	**0.4**	19.9	1.3	78.4
	6-Aug-03	1440	S	6.5-9.5	0.0	0.0	14.2	6.5	79.3
			M	22-25	**2.0**	**0.1**	22.0	0.0	77.9
			D	37-40	**8.0**	**0.4**	20.1	1.3	78.2
	6-Nov-03	1455	S	6.5-9.5	0.0	0.0	13.9	7.1	79.0
			M	22-25	**4.0**	**0.2**	13.7	7.6	78.5
			D	37-40	**6.0**	**0.3**	20.8	1.0	77.9
	5-Dec-03	N/A	S	6.5-9.5	Not Measured				
			M	22-25					
			D	37-40					
	4-Feb-04	1612	S	6.5-9.5	0.0	0.0	12.3	6.8	80.9
			M	22-25	**8.0**	**0.4**	19.3	1.0	79.3
			D	37-40	0.0	0.0	0.0	20.3	79.7
	4-May-04	1638	S	6.5-9.5	0.0	0.0	15.4	6.8	77.8
			M	22-25	**2.0**	**0.1**	22.5	1.5	75.9
			D	37-40	**6.0**	**0.3**	24.3	0.8	74.6
	7-Sep-04	1530	S	6.5-9.5	0.0	0.0	7.0	13.6	79.4
			M	22-25	0.0	0.0	22.6	0.2	77.2
			D	37-40	0.0	0.0	21.1	1.3	77.6
	20-Dec-04	1648	S	6.5-9.5	0.0	0.0	7.5	12.6	79.9
			M	22-25	**18.0**	**0.9**	22.2	0.8	76.1
			D	37-40	**18.0**	**0.9**	22.3	0.8	76.0
	21-Mar-05	1727	S	6.5-9.5	0.0	0.0	13.7	7.0	79.3
			M	22-25	0.0	0.0	8.9	11.4	79.7
			D	37-40	0.0	0.0	0.0	19.7	80.3
	14-Jun-05	1535	S	6.5-9.5	0.0	0.0	8.8	11.6	79.6
			M	22-25	0.0	0.0	1.2	17.6	81.2
			D	37-40	0.0	0.0	4.4	14.5	81.1
	8-Sep-05	1454	S	6.5-9.5	0.0	0.0	15.3	6.8	77.9
			M	22-25	**4.0**	**0.2**	12.1	8.8	78.9
			D	37-40	0.0	0.0	7.0	12.5	80.5
	19-Dec-05	1529	S	6.5-9.5	0.0	0.0	11.5	9.0	79.5
			M	22-25	0.0	0.0	0.4	18.5	81.1
			D	37-40	0.0	0.0	5.7	13.8	80.5
	19-Apr-06	1322	S	6.5-9.5	**2.0**	**0.1**	12.5	8.6	78.8
			M	22-25	**2.0**	**0.1**	5.0	14.2	80.7
			D	37-40	**4.0**	**0.2**	6.5	13.2	80.1
	5-Jul-06	1315	S	6.5-9.5	0.0	0.0	13.1	7.9	79.0
			M	22-25	0.0	0.0	15.7	6.2	78.1
			D	37-40	0.0	0.0	6.2	14.0	79.8
	2-Oct-06	1341	S	6.5-9.5	0.0	0.0	8.4	12.7	78.9
			M	22-25	0.0	0.0	1.9	18.3	79.8
			D	37-40	0.0	0.0	4.8	15.5	79.7
	16-Feb-07	1258	S	6.5-9.5	0.0	0.0	8.7	12.3	79.0
			M	22-25	0.0	0.0	0.3	19.9	79.8
			D	37-40	**6.0**	**0.3**	4.5	16.1	79.1
	7-May-07	1423	S	6.5-9.5	0.0	0.0	6.3	14.7	79.0
			M	22-25	0.0	0.0	0.0	20.7	79.3
			D	37-40	**2.0**	**0.1**	2.9	17.2	79.8
	21-Sep-07	1426	S	6.5-9.5	0.0	0.0	10.4	10.6	79.0
			M	22-25	0.0	0.0	4.0	16.5	79.5
			D	37-40	0.0	0.0	7.8	12.7	79.5
	17-Dec-07	1252	S	6.5-9.5	0.0	0.0	7.9	13.2	78.9
			M	22-25	**8.0**	**0.4**	3.7	16.8	79.1
			D	37-40	**4.0**	**0.2**	5.8	15.0	79.0
	18-Mar-08	1318	S	6.5-9.5	0.0	0.0	7.1	13.8	79.1
			M	22-25	0.0	0.0	0.3	20.2	79.5
			D	37-40	**2.0**	**0.1**	4.2	16.4	79.3
	2-Jun-08	1447	S	6.5-9.5	0.0	0.0	7.2	12.5	80.3
			M	22-25	**4.0**	**0.2**	4.3	15.1	80.4
			D	37-40	**4.0**	**0.2**	4.5	15.1	80.2
	29-Sep-08	1423	S	6.5-9.5	0.0	0.0	6.4	13.5	80.1
			M	22-25	**4.0**	**0.2**	2.6	16.8	80.4
			D	37-40	**6.0**	**0.3**	19.2	1.0	79.5
	15-Dec-08	1626	S	6.5-9.5	0.0	0.0	8.5	12.9	78.6
			M	22-25	0.0	0.0	0.7	18.8	80.5
			D	37-40	0.0	0.0	5.0	16.0	79.0
	16-Mar-09	1347	S	6.5-9.5	0.0	0.0	6.7	13.1	80.2
			M	22-25	0.0	0.0	0.2	19.4	80.4
			D	37-40	0.0	0.0	4.1	15.5	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-18	6-Jun-03	Not Installed							
	6-Aug-03	Not Installed							
	6-Nov-03	Not Installed							
	5-Dec-03	1321	S	6.5-9.5	0.0	0.0	0.4	19.8	79.8
			M	21.5-24.5	0.0	0.0	1.6	19.4	79.0
			D	37-40	0.0	0.0	2.9	18.3	78.8
	4-Feb-04	1625	S	6.5-9.5	0.0	0.0	0.2	20.3	79.5
			M	21.5-24.5	0.0	0.0	0.0	20.6	79.4
			D	37-40	0.0	0.0	0.0	20.8	79.2
	4-May-04	1652	S	6.5-9.5	0.0	0.0	0.3	19.3	80.4
			M	21.5-24.5	0.0	0.0	1.0	18.5	80.5
			D	37-40	0.0	0.0	2.2	17.6	80.2
	7-Sep-04	1350	S	6.5-9.5	0.0	0.0	0.9	19.0	80.1
			M	21.5-24.5	0.0	0.0	1.6	18.2	80.2
			D	37-40	0.0	0.0	2.5	17.6	79.9
	20-Dec-04	1556	S	6.5-9.5	0.0	0.0	0.8	19.1	80.1
			M	21.5-24.5	0.0	0.0	1.6	18.5	79.9
			D	37-40	0.0	0.0	2.8	17.4	79.8
	21-Mar-05	1551	S	6.5-9.5	0.0	0.0	1.0	18.3	80.7
			M	21.5-24.5	0.0	0.0	1.4	17.9	80.7
			D	37-40	0.0	0.0	1.4	18.0	80.6
	14-Jun-05	1353	S	6.5-9.5	0.0	0.0	0.6	18.5	80.9
			M	21.5-24.5	0.0	0.0	0.1	19.1	80.8
			D	37-40	0.0	0.0	0.4	18.7	80.9
	8-Sep-05	1337	S	6.5-9.5	0.0	0.0	1.2	17.8	81.0
			M	21.5-24.5	0.0	0.0	0.7	18.3	81.0
			D	37-40	0.0	0.0	0.7	18.3	81.0
	19-Dec-05	1412	S	6.5-9.5	0.0	0.0	1.1	18.3	80.6
			M	21.5-24.5	0.0	0.0	0.2	19.2	80.6
			D	37-40	0.0	0.0	0.7	18.8	80.5
	19-Apr-06	1439	S	6.5-9.5	0.0	0.0	0.6	18.7	80.7
			M	21.5-24.5	0.0	0.0	0.7	18.7	80.6
			D	37-40	0.0	0.0	0.6	18.7	80.7
	5-Jul-06	1333	S	6.5-9.5	0.0	0.0	1.3	19.0	79.7
			M	21.5-24.5	0.0	0.0	0.6	19.4	80.0
			D	37-40	0.0	0.0	1.6	18.7	79.7
	2-Oct-06	1452	S	6.5-9.5	0.0	0.0	2.0	18.5	79.5
			M	21.5-24.5	0.0	0.0	0.7	19.4	79.9
			D	37-40	0.0	0.0	2.9	17.3	79.8
	16-Feb-07	1405	S	6.5-9.5	0.0	0.0	0.5	19.5	80.0
			M	21.5-24.5	0.0	0.0	0.2	20.0	79.8
			D	37-40	0.0	0.0	1.2	18.7	80.1
	7-May-07	1516	S	6.5-9.5	0.0	0.0	0.4	19.7	79.9
			M	21.5-24.5	0.0	0.0	0.1	20.6	79.3
			D	37-40	0.0	0.0	0.2	20.2	79.6
	21-Sep-07	1550	S	6.5-9.5	0.0	0.0	1.5	19.4	79.1
			M	21.5-24.5	0.0	0.0	0.9	19.5	79.6
			D	37-40	0.0	0.0	1.6	19.2	79.2
	17-Dec-07	1345	S	6.5-9.5	0.0	0.0	1.3	19.5	79.2
			M	21.5-24.5	0.0	0.0	1.4	19.2	79.4
			D	37-40	0.0	0.0	2.1	18.6	79.3
	18-Mar-08	1407	S	6.5-9.5	0.0	0.0	0.8	20.0	79.2
			M	21.5-24.5	0.0	0.0	0.3	20.4	79.3
			D	37-40	0.0	0.0	0.7	19.8	79.5
	2-Jun-08	1539	S	6.5-9.5	0.0	0.0	0.4	19.4	80.2
			M	21.5-24.5	0.0	0.0	0.3	19.5	80.2
			D	37-40	0.0	0.0	0.6	19.1	80.3
	29-Sep-08	1527	S	6.5-9.5	0.0	0.0	0.8	19.0	80.2
			M	21.5-24.5	0.0	0.0	0.2	19.4	80.4
			D	37-40	0.0	0.0	0.4	19.2	80.4
	15-Dec-08	1407	S	6.5-9.5	0.0	0.0	1.1	19.2	79.7
			M	21.5-24.5	0.0	0.0	0.8	19.4	79.8
			D	37-40	0.0	0.0	1.4	19.0	79.6
	16-Mar-09	1444	S	6.5-9.5	0.0	0.0	0.5	19.2	80.3
			M	21.5-24.5	0.0	0.0	0.0	19.7	80.3
			D	37-40	0.0	0.0	0.3	19.3	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-19	6-Jun-03	Not Installed							
	6-Aug-03								
	6-Nov-03								
	5-Dec-03	1328	S	6.5-9.5	0.0	0.0	0.2	20.1	79.7
			M	21.5-24.5	0.0	0.0	2.3	18.5	79.2
			D	37-40	0.0	0.0	4.3	16.7	79.0
	4-Feb-04	1630	S	6.5-9.5	0.0	0.0	0.1	20.3	79.6
			M	21.5-24.5	0.0	0.0	0.0	20.6	79.4
			D	37-40	0.0	0.0	0.0	20.8	79.2
	4-May-04	1659	S	6.5-9.5	0.0	0.0	0.4	18.8	80.8
			M	21.5-24.5	0.0	0.0	1.7	17.5	80.8
			D	37-40	0.0	0.0	1.5	17.9	80.6
	7-Sep-04	1355	S	6.5-9.5	0.0	0.0	1.0	19.2	79.8
			M	21.5-24.5	0.0	0.0	2.4	17.4	80.2
			D	37-40	0.0	0.0	4.0	16.3	79.7
	20-Dec-04	1550	S	6.5-9.5	0.0	0.0	0.5	19.1	80.4
			M	21.5-24.5	0.0	0.0	2.5	17.6	79.9
			D	37-40	0.0	0.0	4.4	16.0	79.6
	21-Mar-05	1538	S	6.5-9.5	0.0	0.0	1.0	17.6	81.4
			M	21.5-24.5	0.0	0.0	1.5	17.4	81.1
			D	37-40	0.0	0.0	1.6	17.6	80.8
	14-Jun-05	1341	S	6.5-9.5	0.0	0.0	0.7	18.5	80.8
			M	21.5-24.5	0.0	0.0	0.4	18.5	81.1
			D	37-40	0.0	0.0	0.9	18.1	81.0
	8-Sep-05	1328	S	6.5-9.5	0.0	0.0	1.1	17.9	81.0
			M	21.5-24.5	0.0	0.0	1.3	17.5	81.2
			D	37-40	0.0	0.0	1.6	17.1	81.3
	19-Dec-05	1402	S	6.5-9.5	0.0	0.0	0.8	18.4	80.8
			M	21.5-24.5	0.0	0.0	1.5	17.6	80.9
			D	37-40	0.0	0.0	1.6	17.6	80.8
	19-Apr-06	1447	S	6.5-9.5	0.0	0.0	0.7	18.7	80.6
			M	21.5-24.5	0.0	0.0	0.4	18.7	80.9
			D	37-40	0.0	0.0	1.1	17.9	81.0
	5-Jul-06	1353	S	6.5-9.5	0.0	0.0	1.2	18.8	80.0
			M	21.5-24.5	0.0	0.0	1.5	18.5	80.0
			D	37-40	0.0	0.0	1.7	18.3	80.0
	2-Oct-06	1502	S	6.5-9.5	0.0	0.0	1.7	18.5	79.8
			M	21.5-24.5	0.0	0.0	0.9	19.1	80.0
			D	37-40	0.0	0.0	1.7	18.5	79.8
	16-Feb-07	1412	S	6.5-9.5	0.0	0.0	0.6	19.0	80.4
			M	21.5-24.5	0.0	0.0	0.4	19.7	79.9
			D	37-40	0.0	0.0	1.4	18.5	80.1
	7-May-07	1523	S	6.5-9.5	0.0	0.0	0.5	19.5	80.0
			M	21.5-24.5	0.0	0.0	0.1	20.3	79.6
			D	37-40	0.0	0.0	0.5	19.4	80.1
	21-Sep-07	1537	S	6.5-9.5	0.0	0.0	1.5	19.1	79.4
			M	21.5-24.5	0.0	0.0	2.8	18.0	79.2
			D	37-40	0.0	0.0	1.5	18.5	80.0
	17-Dec-07	1351	S	6.5-9.5	0.0	0.0	1.1	19.4	79.5
			M	21.5-24.5	0.0	0.0	3.4	17.7	78.9
			D	37-40	0.0	0.0	2.7	17.8	79.5
	18-Mar-08	1414	S	6.5-9.5	0.0	0.0	0.8	19.9	79.3
			M	21.5-24.5	0.0	0.0	0.1	20.5	79.4
			D	37-40	0.0	0.0	1.2	19.4	79.4
	2-Jun-08	1546	S	6.5-9.5	0.0	0.0	0.4	19.5	80.1
			M	21.5-24.5	0.0	0.0	2.1	17.7	80.2
			D	37-40	0.0	0.0	1.0	18.7	80.3
	29-Sep-08	1539	S	6.5-9.5	0.0	0.0	0.8	18.8	80.4
			M	21.5-24.5	0.0	0.0	0.2	19.2	80.6
			D	37-40	0.0	0.0	1.0	18.3	80.7
	15-Dec-08	1412	S	6.5-9.5	0.0	0.0	1.4	19.0	79.6
			M	21.5-24.5	0.0	0.0	0.4	19.6	80.0
			D	37-40	0.0	0.0	3.4	17.3	79.3
	16-Mar-09	1452	S	6.5-9.5	0.0	0.0	0.8	18.9	80.3
			M	21.5-24.5	0.0	0.0	0.5	19.1	80.4
			D	37-40	0.0	0.0	2.1	17.6	80.3

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-20	6-Jun-03	Not Installed							
	6-Aug-03	Not Installed							
	6-Nov-03	Not Installed							
	5-Dec-03	1333	S	6.5-9.5	0.0	0.0	1.4	19.1	79.5
			M	21.5-24.5	0.0	0.0	3.1	17.3	79.6
			D	37-40	0.0	0.0	6.2	14.9	78.9
	4-Feb-04	1635	S	6.5-9.5	0.0	0.0	0.9	19.1	80.0
			M	21.5-24.5	0.0	0.0	0.0	20.7	79.3
			D	37-40	0.0	0.0	0.0	20.8	79.2
	4-May-04	1706	S	6.5-9.5	0.0	0.0	1.5	17.6	80.9
			M	21.5-24.5	0.0	0.0	2.8	15.9	81.3
			D	37-40	0.0	0.0	5.5	13.5	81.0
	7-Sep-04	1405	S	6.5-9.5	0.0	0.0	2.1	18.0	79.9
			M	21.5-24.5	0.0	0.0	3.6	16.4	80.0
			D	37-40	0.0	0.0	5.7	14.3	80.0
	20-Dec-04	1543	S	6.5-9.5	0.0	0.0	1.7	17.9	80.4
			M	21.5-24.5	0.0	0.0	3.8	16.1	80.1
			D	37-40	0.0	0.0	6.5	13.5	80.0
	21-Mar-05	1526	S	6.5-9.5	0.0	0.0	1.9	16.7	81.4
			M	21.5-24.5	0.0	0.0	3.2	15.5	81.3
			D	37-40	0.0	0.0	3.5	15.4	81.1
	14-Jun-05	1332	S	6.5-9.5	0.0	0.0	1.4	17.5	81.1
			M	21.5-24.5	0.0	0.0	1.2	17.6	81.2
			D	37-40	0.0	0.0	0.2	19.0	80.8
	8-Sep-05	1319	S	6.5-9.5	0.0	0.0	2.2	16.7	81.1
			M	21.5-24.5	0.0	0.0	2.5	16.4	81.1
			D	37-40	0.0	0.0	0.8	18.1	81.1
	19-Dec-05	1354	S	6.5-9.5	0.0	0.0	1.4	17.6	81.0
			M	21.5-24.5	0.0	0.0	2.0	17.3	80.7
			D	37-40	0.0	0.0	0.1	19.2	80.7
	19-Apr-06	1455	S	6.5-9.5	0.0	0.0	1.5	18.1	80.4
			M	21.5-24.5	0.0	0.0	1.8	17.2	81.0
			D	37-40	0.0	0.0	3.5	15.5	81.0
	5-Jul-06	1400	S	6.5-9.5	0.0	0.0	1.8	18.3	79.9
			M	21.5-24.5	0.0	0.0	2.7	17.4	79.9
			D	37-40	0.0	0.0	0.7	19.4	79.9
	2-Oct-06	1511	S	6.5-9.5	0.0	0.0	2.3	17.9	79.8
			M	21.5-24.5	0.0	0.0	3.3	16.6	80.1
			D	37-40	0.0	0.0	0.5	19.6	79.9
	16-Feb-07	1418	S	6.5-9.5	0.0	0.0	1.9	18.0	80.1
			M	21.5-24.5	0.0	0.0	3.5	16.7	79.8
			D	37-40	0.0	0.0	2.4	17.6	80.0
	7-May-07	1528	S	6.5-9.5	0.0	0.0	0.7	19.1	80.2
			M	21.5-24.5	0.0	0.0	2.6	16.8	80.6
			D	37-40	0.0	0.0	0.1	20.6	79.3
	21-Sep-07	1520	S	6.5-9.5	0.0	0.0	2.3	18.3	79.4
			M	21.5-24.5	0.0	0.0	2.1	18.5	79.4
			D	37-40	0.0	0.0	0.6	19.7	79.7
	17-Dec-07	1357	S	6.5-9.5	0.0	0.0	2.2	18.5	79.3
			M	21.5-24.5	0.0	0.0	3.1	17.6	79.3
			D	37-40	0.0	0.0	5.8	15.2	79.0
	18-Mar-08	1421	S	6.5-9.5	0.0	0.0	0.4	20.0	79.6
			M	21.5-24.5	0.0	0.0	2.1	18.4	79.5
			D	37-40	0.0	0.0	0.3	20.1	79.6
	2-Jun-08	1554	S	6.5-9.5	0.0	0.0	1.4	18.4	80.2
			M	21.5-24.5	0.0	0.0	1.5	18.4	80.1
			D	37-40	0.0	0.0	1.6	17.9	80.5
	29-Sep-08	1548	S	6.5-9.5	0.0	0.0	0.8	18.6	80.6
			M	21.5-24.5	0.0	0.0	0.0	19.4	80.6
			D	37-40	0.0	0.0	0.0	19.4	80.6
	15-Dec-08	1421	S	6.5-9.5	0.0	0.0	2.3	18.4	79.3
			M	21.5-24.5	0.0	0.0	3.2	17.6	79.2
			D	37-40	0.0	0.0	0.5	19.6	79.9
	16-Mar-09	1500	S	6.5-9.5	0.0	0.0	1.0	18.5	80.5
			M	21.5-24.5	0.0	0.0	1.6	17.8	80.6
			D	37-40	0.0	0.0	0.0	19.6	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-21	6-Jun-03	Not Installed							
	6-Aug-03								
	6-Nov-03								
	5-Dec-03	1341	S	6.5-9.5	0.0	0.0	0.3	19.8	79.9
			M	21.5-24.5	0.0	0.0	6.0	15.3	78.7
			D	37-40	0.0	0.0	2.2	18.1	79.7
	4-Feb-04	1639	S	6.5-9.5	0.0	0.0	0.0	20.8	79.2
			M	21.5-24.5	0.0	0.0	3.0	16.8	80.2
			D	37-40	0.0	0.0	0.0	20.6	79.4
	4-May-04	1712	S	6.5-9.5	0.0	0.0	0.8	18.3	80.9
			M	21.5-24.5	0.0	0.0	3.1	15.6	81.3
			D	37-40	0.0	0.0	7.0	12.5	80.5
	7-Sep-04	1412	S	6.5-9.5	0.0	0.0	1.4	18.6	80.0
			M	21.5-24.5	0.0	0.0	3.7	16.4	79.9
			D	37-40	0.0	0.0	6.6	13.6	79.8
	20-Dec-04	1537	S	6.5-9.5	0.0	0.0	1.2	18.0	80.8
			M	21.5-24.5	0.0	0.0	4.3	15.7	80.0
			D	37-40	0.0	0.0	7.7	12.5	79.8
	21-Mar-05	1513	S	6.5-9.5	0.0	0.0	1.8	16.5	81.7
			M	21.5-24.5	0.0	0.0	3.3	15.5	81.2
			D	37-40	0.0	0.0	2.6	16.4	81.0
	14-Jun-05	1322	S	6.5-9.5	0.0	0.0	0.0	19.1	80.9
			M	21.5-24.5	0.0	0.0	0.0	19.1	80.9
			D	37-40	0.0	0.0	0.1	17.5	82.4
	8-Sep-05	1310	S	6.5-9.5	0.0	0.0	2.0	16.7	81.3
			M	21.5-24.5	0.0	0.0	1.0	17.7	81.3
			D	37-40	0.0	0.0	1.7	16.7	81.6
	19-Dec-05	1346	S	6.5-9.5	0.0	0.0	1.4	17.6	81.0
			M	21.5-24.5	0.0	0.0	0.1	19.1	80.8
			D	37-40	0.0	0.0	1.4	17.6	81.0
	19-Apr-06	1505	S	6.5-9.5	0.0	0.0	1.1	17.8	81.1
			M	21.5-24.5	0.0	0.0	1.0	18.0	81.0
			D	37-40	0.0	0.0	1.6	16.9	81.5
	5-Jul-06	1407	S	6.5-9.5	0.0	0.0	1.6	18.7	79.7
			M	21.5-24.5	0.0	0.0	0.6	19.4	80.0
			D	37-40	0.0	0.0	2.0	18.1	79.9
	2-Oct-06	1520	S	6.5-9.5	0.0	0.0	1.9	18.5	79.6
			M	21.5-24.5	0.0	0.0	0.8	19.2	80.0
			D	37-40	0.0	0.0	2.1	18.0	79.9
	16-Feb-07	1424	S	6.5-9.5	0.0	0.0	1.0	18.6	80.4
			M	21.5-24.5	0.0	0.0	0.2	20.2	79.6
			D	37-40	0.0	0.0	1.8	18.2	80.0
	7-May-07	1533	S	6.5-9.5	0.0	0.0	0.0	19.0	81.0
			M	21.5-24.5	0.0	0.0	0.1	20.3	79.6
			D	37-40	0.0	0.0	1.2	18.1	80.7
	21-Sep-07	1504	S	6.5-9.5	0.0	0.0	1.8	18.8	79.4
			M	21.5-24.5	0.0	0.0	0.7	19.4	79.9
			D	37-40	0.0	0.0	3.2	17.3	79.5
	17-Dec-07	1402	S	6.5-9.5	0.0	0.0	1.7	18.8	79.5
			M	21.5-24.5	0.0	0.0	1.9	18.7	79.4
			D	37-40	0.0	0.0	2.9	17.7	79.4
	18-Mar-08	1427	S	6.5-9.5	0.0	0.0	1.1	19.4	79.5
			M	21.5-24.5	0.0	0.0	0.3	20.3	79.4
			D	37-40	0.0	0.0	2.2	18.3	79.5
	2-Jun-08	1605	S	6.5-9.5	0.0	0.0	0.8	19.0	80.2
			M	21.5-24.5	0.0	0.0	0.4	19.1	80.5
			D	37-40	0.0	0.0	1.3	18.1	80.6
	29-Sep-08	1554	S	6.5-9.5	0.0	0.0	0.9	18.7	80.4
			M	21.5-24.5	0.0	0.0	0.3	19.0	80.7
			D	37-40	0.0	0.0	1.2	18.0	80.8
	5-Dec-08	1429	S	6.5-9.5	0.0	0.0	1.6	19.0	79.4
			M	21.5-24.5	0.0	0.0	0.7	19.6	79.7
			D	37-40	0.0	0.0	2.5	18.3	79.2
	16-Mar-09	1506	S	6.5-9.5	0.0	0.0	0.9	18.6	80.5
			M	21.5-24.5	0.0	0.0	0.2	19.5	80.3
			D	37-40	0.0	0.0	1.4	18.2	80.4

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
ELMW-22	6-Jun-03	Not Installed							
	6-Aug-03								
	6-Nov-03								
	5-Dec-03	1348	S	6.5-9.5	0.0	0.0	0.1	19.7	80.2
			M	21.5-24.5	0.0	0.0	4.3	15.5	80.2
			D	37-40	0.0	0.0	10.1	9.9	80.0
	4-Feb-04	1646	S	6.5-9.5	0.0	0.0	1.2	18.0	80.8
			M	21.5-24.5	0.0	0.0	0.0	20.7	79.3
			D	37-40	0.0	0.0	0.0	20.8	79.2
	4-May-04	1720	S	6.5-9.5	0.0	0.0	1.2	17.7	81.1
			M	21.5-24.5	0.0	0.0	4.9	12.6	82.5
			D	37-40	0.0	0.0	21.0	1.1	77.9
	7-Sep-04	1420	S	6.5-9.5	0.0	0.0	1.2	18.9	79.9
			M	21.5-24.5	0.0	0.0	5.2	15.2	79.6
			D	37-40	0.0	0.0	11.5	9.8	78.7
	20-Dec-04	1530	S	6.5-9.5	0.0	0.0	2.0	16.6	81.4
			M	21.5-24.5	0.0	0.0	7.0	12.1	80.9
			D	37-40	0.0	0.0	15.2	4.5	80.3
	21-Mar-05	1500	S	6.5-9.5	0.0	0.0	3.6	13.8	82.6
			M	21.5-24.5	0.0	0.0	7.2	10.0	82.8
			D	37-40	0.0	0.0	14.1	3.6	82.3
	14-Jun-05	1315	S	6.5-9.5	0.0	0.0	1.4	17.5	81.1
			M	21.5-24.5	0.0	0.0	2.3	15.8	81.9
			D	37-40	0.0	0.0	0.9	17.6	81.5
	8-Sep-05	1301	S	6.5-9.5	0.0	0.0	1.6	17.1	81.3
			M	21.5-24.5	0.0	0.0	2.3	16.5	81.2
			D	37-40	0.0	0.0	1.3	17.2	81.5
	19-Dec-05	1334	S	6.5-9.5	0.0	0.0	1.4	17.2	81.4
			M	21.5-24.5	0.0	0.0	4.6	13.6	81.8
			D	37-40	0.0	0.0	4.7	13.6	81.7
	19-Apr-06	1513	S	6.5-9.5	0.0	0.0	1.5	16.9	81.6
			M	21.5-24.5	0.0	0.0	2.8	15.2	82.0
			D	37-40	0.0	0.0	1.4	16.8	81.8
	5-Jul-06	1413	S	6.5-9.5	0.0	0.0	1.7	18.3	80.0
			M	21.5-24.5	0.0	0.0	4.2	15.5	80.3
			D	37-40	0.0	0.0	1.2	18.4	80.4
	2-Oct-06	1529	S	6.5-9.5	0.0	0.0	2.3	17.9	79.8
			M	21.5-24.5	0.0	0.0	4.2	15.3	80.5
			D	37-40	0.0	0.0	3.1	16.7	80.2
	16-Feb-07	1430	S	6.5-9.5	0.0	0.0	2.3	16.4	81.3
			M	21.5-24.5	0.0	0.0	8.8	8.2	83.0
			D	37-40	0.0	0.0	7.1	11.7	81.2
	7-May-07	1539	S	6.5-9.5	0.0	0.0	1.8	17.5	80.7
			M	21.5-24.5	0.0	0.0	7.2	10.6	82.2
			D	37-40	**8.0**	**0.4**	5.6	12.8	81.2
	21-Sep-07	1449	S	6.5-9.5	0.0	0.0	2.1	18.5	79.4
			M	21.5-24.5	0.0	0.0	3.1	17.4	79.5
			D	37-40	0.0	0.0	2.7	17.6	79.7
	17-Dec-07	1409	S	6.5-9.5	0.0	0.0	2.4	17.7	79.9
			M	21.5-24.5	0.0	0.0	5.8	14.1	80.1
			D	37-40	0.0	0.0	9.0	10.8	80.2
	18-Mar-08	1433	S	6.5-9.5	0.0	0.0	1.7	18.6	79.7
			M	21.5-24.5	0.0	0.0	3.2	16.4	80.4
			D	37-40	**4.0**	**0.2**	1.7	18.3	79.8
	2-Jun-08	1610	S	6.5-9.5	0.0	0.0	1.3	18.5	80.2
			M	21.5-24.5	0.0	0.0	1.9	17.3	80.8
			D	37-40	0.0	0.0	0.8	18.4	80.8
	29-Sep-08	1600	S	6.5-9.5	0.0	0.0	1.0	18.5	80.5
			M	21.5-24.5	0.0	0.0	1.5	17.9	80.6
			D	37-40	0.0	0.0	0.6	18.6	80.8
	15-Dec-08	1434	S	6.5-9.5	0.0	0.0	2.1	18.4	79.5
			M	21.5-24.5	0.0	0.0	4.7	15.7	79.6
			D	37-40	0.0	0.0	5.3	15.2	79.5
	16-Mar-09	1513	S	6.5-9.5	0.0	0.0	1.5	17.8	80.7
			M	21.5-24.5	0.0	0.0	4.2	14.0	81.8
			D	37-40	0.0	0.0	3.7	14.7	81.6

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
DBSA E-28	25-Jan-02	NP	S	7-10	0.0	0.0	0.0	20.9	79.1
	23-Aug-02	NP	S	7-10	0.0	0.0	0.2	20.1	79.7
	15-Nov-02	NP	S	7-10	0.0	0.0	0.0	21.0	79.0
	20-Feb-03	NP	S	7-10	0.0	0.0	0.0	21.0	79.0
	7-May-03	NP	S	7-10	0.0	0.0	0.2	19.6	80.2
	8-Aug-03	NP	S	7-10	0.0	0.0	0.1	19.8	80.1
	4-Nov-03	NP	S	7-10	0.0	0.0	0.2	19.2	80.6
	4-Feb-04	1652	S	7-10	0.0	0.0	0.0	20.6	79.4
	4-May-04	1730	S	7-10	0.0	0.0	0.0	19.6	80.4
	7-Sep-04	1450	S	7-10	0.0	0.0	0.1	20.1	79.8
	20-Dec-04	1618	S	7-10	0.0	0.0	0.0	19.8	80.2
	21-Mar-05	1627	S	7-10	0.0	0.0	0.0	19.4	80.6
	14-Jun-05	1426	S	7-10	0.0	0.0	0.3	18.9	80.8
	8-Sep-05	1409	S	7-10	0.0	0.0	0.2	18.9	80.9
	19-Dec-05	1521	S	7-10	0.0	0.0	0.0	19.0	81.0
	19-Apr-06	1424	S	7-10	0.0	0.0	0.0	19.0	81.0
	5-Jul-06	1523	S	7-10	0.0	0.0	0.3	19.8	79.9
	2-Oct-06	1429	S	7-10	0.0	0.0	0.4	19.5	80.1
	16-Feb-07	1352	S	7-10	0.0	0.0	0.1	20.1	79.8
	7-May-07	1505	S	7-10	0.0	0.0	0.1	20.1	79.8
	21-Sep-07	1629	S	7-10	0.0	0.0	0.5	20.2	79.3
	17-Dec-07	1333	S	7-10	0.0	0.0	0.3	20.0	79.7
	18-Mar-08	1356	S	7-10	0.0	0.0	0.2	20.3	79.5
	2-Jun-08	1527	S	7-10	0.0	0.0	0.0	20.1	79.9
	29-Sep-08	1511	S	7-10	0.0	0.0	0.2	19.3	80.5
	15-Dec-08	1541	S	7-10	0.0	0.0	0.4	19.4	80.2
	16-Mar-09	1429	S	7-10	0.0	0.0	0.0	19.5	80.5
DBSA E-31	25-Jan-02	NP	S	7-10	0.0	0.0	0.0	20.8	79.2
	23-Aug-02	NP	S	7-10	0.0	0.0	0.6	19.7	79.7
	15-Nov-02	NP	S	7-10	0.0	0.0	0.3	20.5	79.2
	20-Feb-03	NP	S	7-10	0.0	0.0	0.0	20.9	79.1
	7-May-03	NP	S	7-10	0.0	0.0	0.4	19.4	80.2
	8-Aug-03	NP	S	7-10	0.0	0.0	0.5	19.3	80.2
	4-Nov-03	NP	S	7-10	0.0	0.0	0.5	19.0	80.5
	4-Feb-04	1656	S	7-10	0.0	0.0	0.0	20.6	79.4
	4-May-04	1735	S	7-10	0.0	0.0	0.0	19.7	80.3
	7-Sep-04	1455	S	7-10	0.0	0.0	0.2	20.0	79.8
	20-Dec-04	1623	S	7-10	0.0	0.0	0.1	19.9	80.0
	21-Mar-05	1631	S	7-10	0.0	0.0	0.1	19.4	80.5
	14-Jun-05	1438	S	7-10	**4.0**	**0.2**	0.3	18.8	80.7
	8-Sep-05	1413	S	7-10	0.0	0.0	0.3	18.7	81.0
	19-Dec-05	1516	S	7-10	0.0	0.0	0.1	19.0	80.9
	19-Apr-06	1420	S	7-10	0.0	0.0	0.1	19.1	80.8
	5-Jul-06	1519	S	7-10	0.0	0.0	0.4	19.6	80.0
	2-Oct-06	1425	S	7-10	0.0	0.0	0.6	19.4	80.0
	16-Feb-07	1347	S	7-10	0.0	0.0	2.1	17.6	80.3
	7-May-07	1500	S	7-10	0.0	0.0	0.1	20.3	79.6
	21-Sep-07	1625	S	7-10	0.0	0.0	0.5	20.1	79.4
	17-Dec-07	Landfill Gas Monitoring Well Destroyed							

Table 2
LFG Monitoring Results
Eubank Landfill
Albuquerque, New Mexico

Well ID	Date	Time	Probe	Screened Interval (ft)	LEL (%)	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)
Trailer Park Manhole	4-Feb-04	1325	N/A	N/A	0.0	0.0	0.0	20.7	79.3
	4-May-04	1745	N/A	N/A	0.0	0.0	0.0	19.8	80.2
	7-Sep-04	1655	N/A	N/A	0.0	0.0	0.0	20.8	79.2
	21-Dec-04	1557	N/A	N/A	0.0	0.0	0.0	19.2	80.8
	21-Mar-05	1605	N/A	N/A	0.0	0.0	0.0	19.6	80.4
	14-Jun-05	1713	N/A	N/A	0.0	0.0	0.0	18.9	81.1
	8-Sep-05	1628	N/A	N/A	0.0	0.0	0.2	18.9	80.9
	19-Dec-05	1229	N/A	N/A	0.0	0.0	0.0	19.3	80.7
	19-Apr-06	1619	N/A	N/A	**2.0**	**0.1**	0.1	19.1	80.7
	5-Jul-06	1544	N/A	N/A	0.0	0.0	0.5	19.6	79.9
	2-Oct-06	1614	N/A	N/A	0.0	0.0	0.1	19.9	80.0
	16-Feb-07	1513	N/A	N/A	0.0	0.0	0.1	20.2	79.7
	7-May-07	1620	N/A	N/A	0.0	0.0	0.0	20.8	79.2
	2-Oct-07	1708	N/A	N/A	0.0	0.0	0.1	20.0	79.9
	17-Dec-07	1455	N/A	N/A	0.0	0.0	0.3	20.1	79.6
	18-Mar-08	1535	N/A	N/A	0.0	0.0	0.1	20.0	79.9
	2-Jun-08	1710	N/A	N/A	0.0	0.0	0.1	19.3	80.6
	29-Sep-08	1707	N/A	N/A	0.0	0.0	0.1	19.6	80.3
	15-Dec-08	1640	N/A	N/A	0.0	0.0	0.3	19.3	80.4
	16-Mar-09	1610	N/A	N/A	0.0	0.0	0.2	18.9	80.9
WC8	18-Mar-08	1510	N/A	10-30	**948.0**	**47.4**	28.6	0.2	23.8
	2-Jun-08	1650	N/A	10-30	**996.0**	**49.8**	27.6	0.5	22.1
	29-Sep-08	1650	N/A	10-30	**1030.0**	**51.5**	30.0	0.6	17.9
	15-Dec-08	1555	N/A	10-30	**918.0**	**45.9**	30.5	0.2	23.4
	16-Mar-09	1552	N/A	10-30	**882.0**	**44.1**	28.6	0.0	27.3
WC8-50	17-Dec-07	1443	N/A	8-33	**754.0**	**37.7**	28.3	0.1	33.9
	18-Mar-08	1513	N/A	8-33	**654.0**	**32.7**	27.1	0.2	40.0
	2-Jun-08	1653	N/A	8-33	**754.0**	**37.7**	26.2	0.4	35.7
	29-Sep-08	1654	N/A	8-33	**710.0**	**35.5**	28.7	0.5	35.3
	15-Dec-08	1557	N/A	8-33	**660.0**	**33.0**	29.4	0.0	37.6
	16-Mar-09	1554	N/A	8-33	**624.0**	**31.2**	26.1	0.0	42.7
WC8-100	17-Dec-07	1446	N/A	8-33	**670.0**	**33.5**	27.1	0.2	39.2
	18-Mar-08	1518	N/A	8-33	**294.0**	**14.7**	21.6	1.0	62.7
	2-Jun-08	1656	N/A	8-33	**578.0**	**28.9**	22.8	1.5	46.8
	29-Sep-08	1657	N/A	8-33	**428.0**	**21.4**	22.7	1.5	54.4
	15-Dec-08	1600	N/A	8-33	**306.0**	**15.3**	25.0	0.0	59.7
	16-Mar-09	1557	N/A	8-33	**264.0**	**13.2**	20.8	1.3	64.7
WC8-200	17-Dec-07	1449	N/A	8-33	**812.0**	**40.6**	30.2	0.0	29.2
	18-Mar-08	1523	N/A	8-33	**648.0**	**32.4**	27.5	0.4	39.7
	2-Jun-08	1705	N/A	8-33	**770.0**	**38.5**	28.1	0.4	33.0
	29-Sep-08	1700	N/A	8-33	**718.0**	**35.9**	28.7	0.4	35.0
	15-Dec-08	1603	N/A	8-33	**508.0**	**25.4**	20.4	1.9	52.3
	16-Mar-09	1600	N/A	8-33	**554.0**	**27.7**	27.0	0.0	45.3

Notes: Measurements taken using a Landtec GEM-500 Analyzer
Measured amounts of Methane and % Lower Explosive Limits (LEL) in BOLD
Shaded area indicates measurements taken using a Qrae Combustible Gas Indicator (CGI)
NT = Measurement not Taken
* Indicated measurement observed then returned to 0.0 reading
** Indicated calculated amount using LEL measurement
ELMW-18 to ELMW-22 Installed December 2-4,2003
E-28 & E-31 installed by DBSA and monitored by the COA between 1/25/02 and 11/4/03.
N/A - Not Applicable
NP - Information not provided by the COA

Table 3
LFG Monitoring Criteria
Former Eubank Landfill
Albuquerque, New Mexico

Criteria	Outcome
If landfill gas monitoring results are <1% of the LEL over four quarters	AEHD will consider decreasing the monitoring frequency to twice per year (semiannually).
If landfill gas monitoring results in all wells remain < 1% of the LEL	AEHD will consider reducing the number of landfill gas wells monitored semiannually.
If landfill gas monitoring results remain <1% of the LEL	AEHD will consider reducing the landfill buffer zone from 1000 feet to 500 feet.
If landfill gas monitoring results are >1% of the LEL	AEHD will consider installing additional landfill gas monitoring wells.
Conduct landfill gas modeling	AEHD will evaluate the need for continued landfill gas monitoring by applying the landfill gas model results.
Increased development on or near landfill	AEHD willevaluate landfill gas monitoring frequency.
Increased moisture/ponding on landfill	AEHD will watch for increased landfill gas concentrations during landfill gas monitoring. Such an increase in landfill gas may be caused by increased moisture.

Table 4
Comparison of Conceptual Subsurface Remediation Alternatives
Former Eubank Landfill
Albuquerque, New Mexico

	Remediation Selections	Description	Features/Assumptions	Advantages	Disadvantages
Alternatives	1. No Action	LFG monitoring only would be conducted.	No remediation or mitigation would be conducted.	Low cost.	Does not mitigate hazards from LFG.
Alternatives	2. Complete Excavation of Entire Landfill	Excavation of all landfill waste, and replacement with engineered backfill.	Extensive waste characterization required for acceptance at another landfill. Preparation of and adherence to Health and Safety Plan.	Eliminates need for any design precautions or monitoring for LFG, with possible exception of parcel perimeter.	High cost.
Alternatives	3. Extraction (LFGE) and Treatment of Landfill Gas for Entire Landfill	One system, each consisting of sixteen extraction wells in the northeast, and sixty-five wells in the southern area would be constructed.	"Inner" and "outer" valved manifolds would bring the LFG to central systems consisting of condensate sumps blowers, knockout tanks, flares and microturbine.	Would act as the primary mechanism to protect structures and workers from LFG originating from waste left in place. Power from microturbine may offset some of the cost for OM&M.	Adds to cost. Still have structural issues System has to be designed around development.
Sub-options	1. Passive Venting	Sub-foundation venting systems would be installed under buildings.	LFG vented passively to the atmosphere using subsurface and above-grade piping.	Effective supplement to activeLFG extraction to protect buildings and their occupants, especially where LFG concentrations are high.	Adds to cost. Must have an exterior area where LFG can be vented without impacting site occupants.
Sub-options	2. Grading and Drainage	Undeveloped landfill areas would be covered with a geomembrane to minimize infiltration of water into waste materials.	Reducing moisture supply will slow the rate of methane generation by microorganisms in the waste. The geomembrane would be covered with soil to protect the material. Each lot would be graded by the developer to control runoff in accordance with the overall SS&TP plan for storm water management.	Reduces the rate of methane generation.	Adds to cost.

Table 4
Comparison of Conceptual Subsurface Remediation Alternatives
Former Eubank Landfill
Albuquerque, New Mexico

	Remediation Selections	Description	Features/Assumptions	Advantages	Disadvantages
Sub-options	3. Localized Excavation	Excavation of all landfill waste down to native soil beneath each building's footprint, and replacement with engineered backfill.	Extensive waste characterization required for acceptance at another landfill. Preparation of and adherence to Health and Safety Plan. Side slopes of waste excavation at 1:1. Monitoring for LFG.	Less costly than complete excavation. Allows conventional structural design because of sound backfill.	Leaves source of LFG outside of building footprints, requiring design of LFG mitigation and future monitoring.
	4. Partial Excavation	Excavation of landfill waste down to about 10 feet beneath each building's footprint, and replacement with engineered backfill.	Extensive waste characterization required for acceptance at another landfill. Preparation of and adherence to Health and Safety Plan. Side slopes of waste excavation at 1:1 Dynamic compaction of waste left in place. Foundations and slab design will still require special site-specific design to accommodate settling of deep waste. Monitoring for LFG.	Relatively low cost.	Leaves source of LFG beneath and surrounding buildings, requiring careful design of mitigation and careful monitoring. Also, because the organic fraction continues to degrade after compaction, careful structural design is required to either allow the building to "flex" or to be so rigid as to resist differential settling.

Notes:
LFG – Landfill Gas
LFGE – Landfill Gas Extraction
SS&TP – Sandia Science and Technology Park
OM&M – Operation, Maintenance, and Monitoring

ATTACHMENTS