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February 16, 2011  
Project No. 0771-368-11-25-01

Richard Carmichael, PhD, PE, CIH  
MC 124  
Municipal Solid Waste Permits Section  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

RE: Permit Modification – Spray-Type Alternative Daily Cover  
Turkey Creek Landfill – Permit No. MSW-1417B  
Johnson County, Texas

Dear Dr. Carmichael:

The purpose of this permit modification, submitted on behalf of IESE TX Landfill LP, is to request the use of a posi-shell spray type alternative daily cover (ADC) at the referenced facility on a permanent basis. As noted in the status reports submitted to the TCEQ during the trial period, the spray-type ADC has been used effectively at the site to control odors, vectors, and windblown waste.

Please process this modification per Title 30 Texas Administrative Code (TAC) §305.70(k)(1) which allows for the use of an alternative daily cover material on a permanent basis.


Additionally, the Part I form which includes the applicant's signature page (page 10) is included in Appendix C of the permit modification. In accordance with Title 30 TAC §330.59(h)(1), a \$150 application fee has been submitted to the TCEQ, as documented on page 8 of the Part I form.

One original and one copy are provided for your use and distribution. Consistent with Title 30 TAC §305.70(f), a copy of this submittal was sent to the TCEQ regional office. A copy of this submittal was placed in the site operating record for this facility.

Dr. Richard Carmichael  
February 16, 2011  
Page 2

Please call if you have any questions or need additional information.

Sincerely,  
Weaver Boos Consultants, LLC-Southwest



Jason A. Edwards, P.E.  
Senior Project Engineer

Attachments: Appendix A – SOP Replacement Pages (Redline/Strikeout Copy)  
Appendix B – SOP Replacement Pages (Clean Copy)  
Appendix C – Posi-Shell Temporary Authorization Approval Letter and  
Status Report Acceptance Letters  
Appendix D – TCEQ Part I Form  
Appendix E – Landowner List and Map

cc: TCEQ Region 4  
Joseph Viceili, IESI TX Landfill LP  
Timothy C. Sues, IESI TX Landfill LP

**APPENDIX A**

**SOP REPLACEMENT PAGES  
(REDLINE/STRIKEOUT COPY)**

**TURKEY CREEK LANDFILL  
JOHNSON COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1417B**

**PERMIT MODIFICATION**

**SITE OPERATING PLAN**

Prepared for

IESI TX Landfill LP

TCEQ Approved April 28, 2006

Revised January 2007

Revised July 2007

Revised May 2010

Revised February 2011



Prepared by

**Weaver Boos Consultants, LLC-Southwest**

TBPE Registration No. F-3727

6420 Southwest Blvd., Suite 206

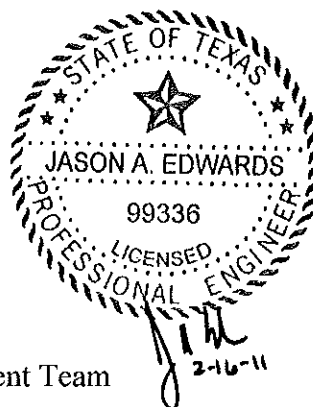
Fort Worth, Texas 76109

817-735-9770

WBC Project No. 0771-368-11-01-01

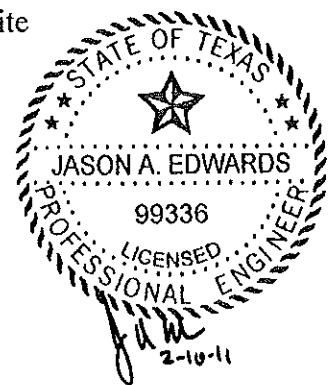
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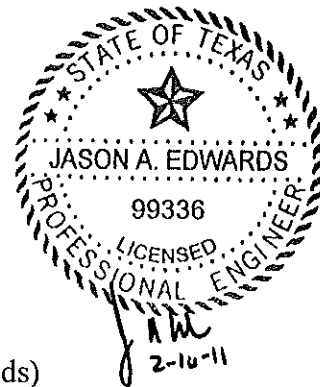
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### APPENDIX A

Example Load Inspection Report

### APPENDIX B

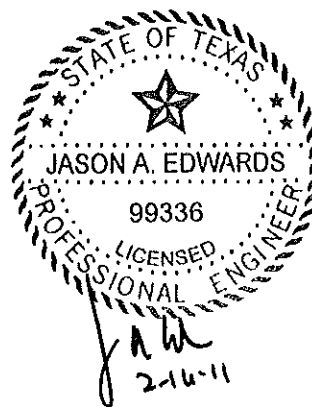
Alternative Daily Cover Operating Plan Information

### APPENDIX C

Waste Acceptance Plan Approval Letter

### APPENDIX D

Waste-for-Ballast Placement Record



**TURKEY CREEK LANDFILL  
JOHNSON COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1417B**

**PERMIT MODIFICATION**

**SITE OPERATING PLAN  
APPENDIX B  
ALTERNATIVE DAILY COVER OPERATING PLAN  
INFORMATION**

Prepared for

IESI TX Landfill LP

June 2005

Revised November 2005

Revised February 2006

Revised July 2009

Revised February 2011



Prepared by

**Weaver Boos Consultants, LLC--Southwest**

TBPE Registration No. F-3727

6420 Southwest Blvd., Suite 206

Fort Worth, Texas 76109

817-735-9770

WBC Project No. 0771-368-11-01-01

## ADC SUMMARY

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The site is currently approved to use the following types of ADC.

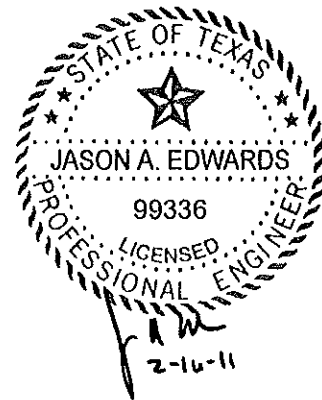
- Biocover. This material was approved on November 6, 2002. The approval letter and ADCOP is provided on pages B-2 through B-12 of this SOP.
- Petroleum Contaminated Soils and Tire Shredding Process Waste. These materials were approved on September 17, 1996. The approval letter and ADCOP for these materials are presented on page B-13 through B-22 of this SOP. Also included in this ADCOP is a ConCover paper mulch material. This material has been replaced with Biocover and subsequently approved (refer to first bullet).
- Posi-Shell. The Posi-Shell spray-type ADCOP is provided on pages B-23 through B-53.

Consistent with §330.133(c), a temporary authorization will be submitted for any additional future ADC materials. Consistent with 30 TAC 330.133(c)(2), after a Temporary Authorization to use a new ADC material is approved, a status report for the new ADC materials will be submitted on a two-month basis to the TCEQ describing the effectiveness of the alternative materials, any problems that may have occurred, and corrective actions required as a result of such problems. If no problems occur within six months of use, status reports will no longer be required and the site will submit a permit modification per §305.70(k)(1) to obtain permanent approval of the ADC material.

**TURKEY CREEK LANDFILL  
JOHNSON COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1417B**

**ALTERNATE DAILY COVER OPERATING PLAN  
FOR  
POSI-SHELL ALTERNATIVE DAILY COVER**

Prepared for  
IESI TX Landfill LP  
February 2011



Prepared by  
**Weaver Boos Consultants, LLC—Southwest**  
6420 Southwest Blvd., Suite 206  
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817-735-9770  
WBC Project No. 0771-368-11-25-01

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### APPENDIX A

Posi-Shell Information

## 1 INTRODUCTION

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This Alternative Daily Cover Operating Plan (ADCOP) has been prepared for the Turkey Creek Landfill consistent with §330.165(d). The purpose of this ADCOP is to address the following issues associated with spray-type Alternative Daily Cover (ADC) materials:

- Description and thickness of the proposed ADC material;
- Chemical composition of the material and the Material Safety Data Sheets (MSDS) for the spray-type ADC;
- Operation methods to be utilized at the site when using spray-type ADC;
- Effect of spray-type ADC material on vectors, fires, odors, and windblown waste.

As specified in the Site Operating Plan (SOP), ADC may be used to cover exposed waste except when the landfill is to be closed for a period greater than 24 hours (unless otherwise approved by the TCEQ). However, if the area in which ADC has been used is not filled over with waste within 24 hours, the area will be covered with a minimum of six inches of daily cover soil.

## 2 MATERIAL CHARACTERISTICS

---

### 2.1 Description of Posi-Shell

Posi-Shell is manufactured by Landfill Service Corporation. Posi-Shell consists of polyester fibers which are mixed with a binder and applied with a hydromulch machine. This ADC spray material will form a crust-like barrier after application. The hardened product is similar to other TCEQ approved ADC materials. Additional information for Posi-Shell is included in Appendix A.

### 2.2 Chemical Characteristics

The MSDS for Posi-Shell is included in Appendix A. Posi-Shell is not reactive, ignitable, or corrosive under the expected conditions (e.g., high temperature, intense sunlight).

## 3 OPERATIONAL METHODS

---

### 3.1 Spray-Type ADC Materials

Spray-type ADC materials will be applied to the working face using a FINN T90 (900-gallon capacity) or similar equipment following the procedure listed below.

1. The operator will become familiar with this ADCOP and Posi-Shell. Specifically the mixing ratio and application rate for the spray-type ADC material. This ADCOP includes information on Posi-Shell in Appendix A as well as the MSDS for this product; however, manufacturer's instructions included with the ADC material itself should be followed as well.
2. The operator will not operate the hydromulch machine until he has been trained by qualified personnel. Site personnel that are responsible for the application of ADC materials will receive training in the operation of the equipment, mixing procedures, and application methods.
3. The operator will mix the spray ADC according to the manufacturer's recommendation. Then, using the hydromulch machine, the operator will apply the ADC from at least two different directions to achieve an overall thickness of approximately 0.25 inches over the exposed waste at the working face.

## 4 SPRAY-TYPE ADC MATERIAL PERFORMANCE AND INSPECTION PROCEDURES

---

### 4.1 ADC Performance

The spray-type ADC material included in this plan will control vectors, fires, odors, and windblown litter and waste. This type of ADC forms a crust-like barrier over the waste and this crust-like surface serves as a barrier. The spray-type ADC will control vectors and windblown waste by creating a physical barrier between the atmosphere and waste (e.g., the cohesive nature of the ADC material will prevent windblown waste and the crust-like barrier of Posi-Shell has been proven to prevent vectors). The cohesive nature of the spray-type ADC also minimizes the airflow between the working face and the atmosphere, which minimizes the fire hazard and odor potential.

### 4.2 Verification and Inspection Procedures

At the end of each working day, landfill personnel will inspect the working face to confirm that the minimum thickness of an approved ADC has been placed over the working face in accordance with this ADCOP. Landfill personnel will routinely assess the effectiveness of Posi-Shell in controlling vectors, fires, odors, and windblown litter and waste. Daily application of ADC will be documented and maintained in the Site Operating Record.

In the event that the ADC does not control vectors, fires, odors, or windblown litter and waste, then the ADC application process will be re-evaluated to ensure that Posi-Shell adequately covers the working face and serves its intended purpose. Any required changes to the ADC operational procedures will be documented in the Site Operating Record.

## APPENDIX A

### POSI-SHELL INFORMATION

- Posi-Shell Synthetic Cover Advanced Formulation MSDS Sheet
- Posi-Pak Type P-100 Fibers MSDS Sheet
- PSM-200 Setting Agent MSDS Sheet
- Portland Cement MSDS Sheet
- Extreme RainShield MSDS Sheet



## MATERIAL SAFETY DATA SHEET

MATERIAL: POSI-SHELL® SYNTHETIC COVER ADVANCED FORMULATION  
OSHA 29CFR 1910.1200  
DATE OF PREPARATION: APRIL 2009

### SECTION I - IDENTITY

Distributor's Name and Address: Landfill Service Corporation  
2183 Pennsylvania Avenue  
Apalachin, NY 13732

Emergency Telephone: (607) 625-3050

Chemical Name and Synonyms: Aqueous alkaline slurry

Generic Name: N/A

Trade Name: Posi-Shell® Synthetic Cover Advanced Formulation

### SECTION II - HAZARDOUS INGREDIENTS

N/A

### SECTION III - PHYSICAL DATA

Boiling Point (°F) (Aqueous Portion): 212

Vapor Pressure (mm. Hg): N/A

Vapor Density (Air=1): N/A

Solubility in Water: N/A

Percent Volatile by Volume (%): N/A

Specific Gravity (H<sub>2</sub>O=1): 1.21

Evaporation Rate: N/A

Appearance and Odor: Brown viscid liquid slurry with a smell similar to wet Portland cement and liquid clay.

#### SECTION IV – CHEMICAL DATA

Chemical family: N/A

Formula: The major constituents are water, Portland cement, and PSM-200 Setting Agent, a blend of sodium montmorillonite clay with adhesives. The slurry also contains P.E.T. fibers, water (or landfill leachate), and optional iron oxide coloring agent.

Hazardous mixtures of other liquids, solids, or gases: N/A

#### SECTION V – FIRE AND EXPLOSION HAZARD DATA

Non-explosive, Non-flammable

#### SECTION VI – HEALTH HAZARD DATA

Threshold Limit Value: N/A

Effects of Overexposure:

Acute: Can dry skin and cause alkali burns. May cause eye and skin irritation to those with sensitive skin.

Chronic: Non-observed, if properly handled. If cured material is pulverized and dispersed, fugitive dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis.

Emergency and First Aid Procedures: Irrigate eyes with water. Wash exposed skin areas with soap and water.

#### SECTION VII – REACTIVITY DATA

Stability: Product is stable.

Hazardous Polymerization: Will not occur.

Incompatibility: None known.

Hazardous Decomposition Products: None known.

### SECTION VIII – SPILL PROCEDURES

Steps to be Taken if Material is Released or Spilled:

Handle as normal non-hazardous solid waste.

### SECTION IX – EXPOSURES OF CONCERN

N/A

### SECTION X – HANDLING AND USE PRECAUTIONS

Waste Disposal Methods:

Material can be disposed of as common waste in approved landfill.

### SECTION XI – INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements:

Local exhaust may be used.

Respiratory Protection:

A dust mask is recommended during mixing procedures.

Eye Protection:

Use of tight-fitting goggles is recommended.

Skin Protection:

Avoid skin contact with wet slurry. Wear rubber or plastic gloves.

Other Protective Clothing or Equipment

Use barrier creams; wear coveralls; shower with soap and water.

### SECTION XII – SPECIAL PRECAUTIONS

No special precautions need to be taken in handling and storing.

### SECTION XIII – DISPOSAL AND SHIPPING INFORMATION

Shipping Name:

N/A (Not Regulated)

Hazardous Substance:

N/A

Hazard Class:

N/A

Caution Labeling:

N/A

*\*N/A = Not Applicable. \*\*N/D = Not Determined*

*All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances.  
No warranty or guarantee, expressed or implied, is made by Landfill Service Corporation as to this information or as to the safety, toxicity, or effect of the use of this product.*



Landfill Service  
CORPORATION

## MATERIAL SAFETY DATA SHEET

MATERIAL: OSHA 29CFR 1910.1200  
POSI-PAK® TYPE P-100 FIBERS DATE OF PREPARATION: AUGUST 2009

### SECTION I -- IDENTITY

Distributor's Name and Address: Landfill Service Corporation  
2183 Pennsylvania Avenue  
Apalachin, NY 13732

Emergency Telephone: (607) 625-3050

Chemical Name and Synonyms:

Generic Name: Polyester Staple

Trade Name: Posi-Pak® Type P-100 Fibers

### SECTION II -- HAZARDOUS INGREDIENTS

Ingredient: Polyethylene terephthalate polymer and one or more surface finishes (organic lubricants).

CAS No.: 25038-59-9

Hazard: No known physical or health hazards associated with this product.

Note: Polyester Staple is a family of fiber products having similar hazard and physical property characteristics. The polymer immobilizes the constituents of the polymer system (delusterants, catalyst residues, etc.) which, therefore, present no likelihood of exposure under normal conditions of processing and handling.

### SECTION III -- PHYSICAL DATA

Melting Point: Approx. 500° F (260° C)

### SECTION IV -- CHEMICAL DATA

Polyethylene terephthalate is chemically stable and resistant to attack by oils, solvents, weak acids, and weak alkalis.

#### SECTION V -- FIRE AND EXPLOSION HAZARD DATA

Polyester Staple will burn if exposed to flame. Decomposition products generated from molten polymer may be subject to autoignition. Combustion products will be comprised of carbon, hydrogen, and oxygen. The exact composition will depend on the conditions of combustion.

#### SECTION VI -- HEALTH HAZARD DATA

This product has not been fully evaluated for toxicological properties. Preliminary evaluation of chemical components used in the finish and toxicological testing of the polymer have given no indication that health problems would occur in normal handling and use.

Similar products have given no indication that health problems would occur in normal handling and use.

#### SECTION VII -- REACTIVITY DATA

N/A

#### SECTION VIII -- SPILL PROCEDURES

N/A

#### SECTION IX -- EXPOSURES OF CONCERN

Inhalation of finish mist above the recommended 3 mg/m<sup>3</sup> 8-hour TWA would be an exposure of concern.

#### SECTION X -- HANDLING AND USE PRECAUTIONS

Personal hygiene measures, such as washing hands and face immediately after working with the fibers and before eating, smoking, or using lavatory facilities, are recommended.

#### SECTION XI -- INDUSTRIAL HYGIENE CONTROL MEASURES

Adequate ventilation is recommended to maintain finish mist levels below 3 mg/m<sup>3</sup> 8-hour TWA and minimize exposure.

Fire fighters should protect themselves from decomposition and combustion products that may include carbon monoxide and other toxic gases.

## SECTION XII -- SPECIAL PRECAUTIONS

N/A

## SECTION XIII -- DISPOSAL AND SHIPPING INFORMATION

These products are not classified as hazardous wastes under the Resource Conservation and Recovery Act, and unless prohibited by state or local regulation, can be disposed of in a municipal landfill or incinerated. Any finish oils contained in plant wastewater should be biodegradable in conventional biological wastewater treatment systems.

These fibers are not classified by the Department of Transportation as a hazardous material.

**\*N/A = Not Applicable. \*\*N/D = Not Determined**

*All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances.*

*No warranty or guarantee, expressed or implied, is made by Landfill Service Corporation as to this information or as to the safety, toxicity, or effect of the use of this product.*



**Landfill Service**  
CORPORATION

**MATERIAL SAFETY DATA SHEET**

MATERIAL: PSM-200 SETTING AGENT™ OSHA 29CFR 1910.1200  
DATE OF PREPARATION: AUGUST 2009

**SECTION I -- IDENTITY**

Distributor's Name and Address: Landfill Service Corporation  
2183 Pennsylvania Avenue  
Apalachin, NY 13732  
Emergency Telephone: (607) 625-3050  
Chemical Name and Synonyms: Sodium Montmorillonite Clay with Additives  
Generic Name: (SMC) (CAS No. 1318-93-0)  
SMC with proprietary additives (CAS No. 1318-93-0)  
Trade Name: Posi-Shell® PSM 200 Setting Agent

**SECTION II -- HAZARDOUS INGREDIENTS**

Ingredient: Crystalline Silica (SiO<sub>2</sub>) as Quartz  
CAS No.: 14808-60-7  
Hazard: Low concentrations of crystalline silica in the form of quartz may be present in airborne SMC dust. See Section VI for discussion of health hazard.  
Note: Although the typical quartz content of western SMC is in the range of 2 to 6% most of the quartz particles are larger than the 10µ respirable threshold size. The actual respirable quartz concentration in airborne SMC dust will depend upon SMC source, fineness of product, moisture content of product, local humidity and wind condition at point of use and other use specific factors.

**SECTION III -- PHYSICAL DATA**

Boiling Point (°F): N/A  
Vapor Pressure (mm. Hg): N/A

Vapor Density (Air=1):	N/A
Solubility in Water:	Insoluble, forms colloidal suspension
Density (at 20° C):	55 lbs/cu ft as product
Specific Gravity (H2O=1):	2.45-2.55
Melting Point:	Approx. 1450° C
Evaporation Rate (Butyl Acetate=1):	N/A
pH:	8-10 (5% aqueous suspension)

#### SECTION IV -- CHEMICAL DATA

PSM-200 is a blend of sodium montmorillonite clay and proprietary adhesive ingredients.

#### SECTION V -- FIRE AND EXPLOSION HAZARD DATA

Flash Point:	N/A
Special Fire Fighting Procedures:	N/A
Unusual Fire and Explosion Hazards:	None. Product will not support combustion.
Extinguishing Media:	None for product. Any media can be used for the packaging. Product becomes slippery when wet.
Flammable Limits:	LEL: N/A UEL: N/A

#### SECTION VI -- HEALTH HAZARD DATA

##### Routes of Exposure and Effects:

Skin:	Possible drying resulting in dermatitis.
Eyes:	Mechanical irritant.
Inhalation:	<i>Acute</i> (short term) exposure to dust levels exceeding the PEL may cause irritation of respiratory tract resulting in a dry cough. <i>Chronic</i> (long term) exposure to airborne SMC dust containing respirable size ( $\approx 10\mu$ ) quartz particles, where respirable quartz particle levels are higher than TLVs, may lead to development of silicosis or other respiratory problems. Persistent dry cough and labored breathing upon exertion may be symptomatic.
Ingestion:	No adverse effects.

Permissible Exposure Limits:  
(for air contaminants)

OSHA PEL  
(8 HR. TWA)      ACGIH TLV

SMC as "Particulates not otherwise regulated" (formerly nuisance dust)

Total dust	15mg/m <sup>3</sup>	N/D
Respirable dust	5mg/m <sup>3</sup>	N/D
Crystalline Quartz (respirable)	0.1mg/m <sup>3</sup>	0.1mg/m <sup>3</sup>

**Carcinogenicity:**

SMC is not listed by ACGIH, IARC, NTP, or OSHA. IARC, 1997, concludes that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica from occupational sources (IARC Class 1), that carcinogenicity was not detected in all industrial circumstances studied and that carcinogenicity may depend on characteristics of the crystalline silica or on external factors affecting its biological activity. NTP classifies respirable crystalline silica as "known to be a human carcinogen" (NTP 9th Report on Carcinogens - 2000). ACGIH classifies crystalline silica quartz as a suspected human carcinogen (A2).

Acute Oral LD50: N/D

Acute Dermal LD50: N/D

Aquatic Toxicology LC50: N/D

**Emergency and First Aid Procedures:**

Skin: Wash with soap and water until clean.

Eyes: Flush with water until irritation ceases.

Inhalation: Move to area free from dust. If symptoms of irritation persist, contact physician. Inhalation may aggravate existing respiratory illness.

### SECTION VII -- REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: None

Incompatibility: None

Hazardous Decomposition Products: None

### SECTION VIII -- SPILL PROCEDURES

Steps to be Taken if Material is Released or Spilled: Avoid breathing dust; wear respirator approved for silica bearing dust. Vacuum up to avoid generating airborne dust. Avoid using water. Product slippery when wetted.

### SECTION IX -- EXPOSURES OF CONCERN

N/A

### SECTION X -- HANDLING AND USE PRECAUTIONS

Waste Disposal Methods: Product should be disposed of in accordance with applicable local, state, and federal regulations.

Handling and Storage Precautions: Use NIOSH/MSHA respirators approved for silica bearing dust when free silica containing airborne SMC dust levels exceed PEL/TLVs. Clean up spills promptly to avoid making dust. Storage area floors may become slippery if wetted.

### SECTION XI -- INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements: Mechanical, general room ventilation. Use local ventilation to maintain PELs/TLVs.

Respirator: Use respirators approved by NIOSH/MSHA for silica bearing dust.

Eye Protection: Generally not necessary. Personal preference.

Gloves: Generally not necessary. Personal preference.

Other Protective Clothing or Equipment: None.

### SECTION XII -- SPECIAL PRECAUTIONS

Avoid prolonged inhalation of airborne dust.

### SECTION XIII -- DISPOSAL AND SHIPPING INFORMATION

Shipping Name:	N/A (Not Regulated)
Hazardous Substance:	N/A
Hazard Class:	N/A
Caution Labeling:	N/A

**\*N/A = Not Applicable. \*\*N/D = Not Determined**

*All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances.*

*No warranty or guarantee, expressed or implied, is made by Landfill Service Corporation as to this information or as to the safety, toxicity, or effect of the use of this product.*



# MATERIAL SAFETY DATA SHEET

MATERIAL: OSHA 29CFR 1910.1200  
 PORTLAND CEMENT DATE OF PREPARATION: MARCH 2006

## SECTION I -- IDENTITY

Distributor's Name and Address: Landfill Service Corporation  
 2183 Pennsylvania Avenue  
 Apalachin, NY 13732

Emergency Telephone: (607) 625-3050

Chemical Name and Synonyms: Portland Cement

Generic Name: Also known as hydraulic cement

Trade Name: Portland Cement Type I, IA, II III, V

## SECTION II -- HAZARDOUS INGREDIENTS

Component (percentage)	CAS No.	OSHA PEL (8-hour TWA)	ACGIH TLV-TWA (2002)
Tri-calcium silicate (20-70)	12168-85-3	see Nuisance Dust PEL	see Nuisance Dust TLV
Di-calcium silicate (10-80)	10034-77-2	see Nuisance Dust PEL	see Nuisance Dust TLV
Tetra-calcium-alumino-ferrite (5-15)	12088-35-8	see Nuisance Dust PEL	see Nuisance Dust TLV
Calcium sulfate (2-10)	N/D	see Nuisance Dust PEL	see Nuisance Dust TLV
Tri-calcium Aluminate (1-15)	12042-78-3	see Nuisance Dust PEL	see Nuisance Dust TLV
Magnesium oxide (0-4)	1309-48-4	see Nuisance Dust PEL	see Nuisance Dust TLV
Nuisance Dusts	N/D	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)	10 mg/m <sup>3</sup> (total dust) 3 mg/m <sup>3</sup> (respirable dust)
Crystalline Silica (Quartz)* (0-1)	14808-80-7	10mg/m <sup>3</sup> /percent silica + 2 (respirable dust) 30 mg total dust/m <sup>3</sup> /percent silica + 2 (total dust)	0.10 mg/m <sup>3</sup>
Hexavalent Chromium (measured as chromic acid and chromates)	18540-29-9	(100 mg/m <sup>3</sup> )	N/D

**\*Trace Constituents:** Portland cement has a variable composition depending upon the cementitious products produced in the cement kiln. Small amounts of naturally occurring, but potentially harmful, chemical compounds might be detected during chemical analysis. These trace compounds might include free crystalline silica, potassium, and sodium compounds; heavy metals, including cadmium, chromium, nickel, and lead; and organic compounds. Other trace constituents may include calcium oxide (also known as free lime or quick lime).

### SECTION III -- PHYSICAL DATA

Boiling Point (°F) (Aqueous Portion):	N/A
Vapor Pressure (mm. Hg):	N/A
Vapor Density (Air=1):	N/A
Solubility in Water:	Slight (0.1-1.0%)
pH (in water):	12-13
Specific Gravity (H <sub>2</sub> O=1):	2.9-3.15
Evaporation Rate:	N/A
Appearance and Odor:	Gray or white powder, no distinct odor

### SECTION IV -- CHEMICAL DATA

N/A

### SECTION V -- FIRE AND EXPLOSION HAZARD DATA

Portland cement is non-combustible and not explosive.  
Special firefighting procedures are not applicable. (Although Portland cement poses no fire-related hazards, a self-contained breathing apparatus is recommended to limit exposure to combustion products when fighting any fire.)

### SECTION VI -- HEALTH HAZARD DATA

Threshold Limit Value: N/A

Effects of Overexposure:

Acute:

Wet cement on unprotected skin, whether direct or through saturated clothing, can cause severe, third-degree caustic burns.

*NOTE: Portland cement burns skin with little warning; discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure. The severity of the burn may not be detected until several hours after the damage begins.*

Dry Portland cement can produce mild irritation to severe burns of the eye; it can irritate the upper respiratory system.

Chronic: Dry Portland cement can cause inflammation of the lining of the nose and the cornea. Repeated exposure to Portland cement may result in drying of the skin and may lead to thickening, cracking, or fissuring, of the skin. Hypersensitive individuals may develop an allergic dermatitis (possibly due to trace amounts of hexavalent chromium at less than 0.005%). This reaction may appear in several forms including a mild rash to severe skin ulcers. Persons already sensitized may react to their first contact with the product. Other persons may experience this effect after years of exposure to Portland cement products.

While Portland cement typically has less than 0.2% crystalline silica, other additives to Portland cement and those components (e.g. aggregates) added to produce Portland cement concrete may significantly increase the amount of crystalline silica that is present. Exposure to respirable crystalline silica without the use of a respirator can cause silicosis and may aggravate other lung conditions.

Signs and Symptoms of Exposure: Burning sensation around moist tissue areas (i.e., eyes, nose, upper respiratory system); painful burning on exposed skin that can develop with little warning. *Exposure of sufficient duration to wet Portland cement can cause serious, potentially irreversible tissue (skin or eye) destruction in the form of chemical (caustic) burns, including third-degree burns.* The same kind of destruction can occur if wet or moist areas of the body are exposed for sufficient duration to dry Portland cement.

***Do not allow wet Portland cement to get inside boots, shoes, or gloves, and do not allow wet, saturated clothing to remain against the skin.***

Emergency and First Aid Procedures:

- Irrigate eyes immediately and repeatedly with large amount of clean water for at least 15 minutes and get prompt medical attention.
- Wash exposed skin areas with pH-neutral soap and clean water.
- Apply sterile dressings; seek medical treatment in all cases of prolonged exposure to wet Portland cement, Portland cement mixtures, liquids from fresh Portland cement products, or prolonged wet skin exposure to dry Portland cement.
- If ingested, consult a physician immediately.
- Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.
- In the event of inhalation, remove to fresh air.
- Seek medical attention if coughing and other symptoms do not subside.
- Inhalation of gross amounts of Portland cement requires immediate medical attention.

## SECTION VII -- REACTIVITY DATA

Stability:

Product is stable. Keep dry until used.

Hazardous Polymerization:

Will not occur. ...

Incompatibility:

Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off, depending on the acid involved.

Hazardous Decomposition Products:

None known.

## SECTION VIII – SPILL PROCEDURES

Steps to be Taken if Material is Released or Spilled:

Use dry cleanup methods that do not disperse the dust into the air. Avoid breathing the dust. Emergency procedures are not required.

## SECTION IX -- EXPOSURES OF CONCERN

Medical Conditions Generally Aggravated by Exposure:

Pre-existing skin conditions may be worsened. Silicosis may aggravate other chronic pulmonary conditions and may increase the risk of pulmonary tuberculosis infection.

Chemical Listed as Carcinogenic or Potential Carcinogen:

Portland cements are not considered carcinogenic. However, the International Agency for Research on Cancer (IARC) has determined, primarily through animal studies, that silica is a known human carcinogen. The National Toxicology Program (NTP) has characterized respirable quartz silica as reasonably anticipated to be a carcinogen. OSHA does not regulate silica as a carcinogen.

## SECTION X -- HANDLING AND USE PRECAUTIONS

Portland cement should only be used by knowledgeable persons. While the information provided in the material safety data sheet is believed to provide a useful summary of the hazards of Portland cement, as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product.

A key to using the product safely requires the user to recognize that Portland cement chemically reacts with water, and that some of the intermediate products of this reaction (that is, those present while a Portland cement product is "setting") pose a more severe hazard than does Portland cement itself. These hazards include potential injuries to eyes and skin.

The data furnished in this sheet do not address hazards that may be posed by other materials mixed with Portland cement to produce Portland cement products. Users should review other relevant material safety data sheets before working with this Portland cement or with Portland cement products, including, for example, Portland cement concrete.

## SECTION XI -- INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements:

Local exhaust can be used to control airborne dust levels.

Respiratory Protection:

Avoid actions that cause dust to become airborne. Use local or general ventilation to control exposures below applicable exposure limits.

Use NIOSH/MSHA-approved (under 30 CFR 11) or NIOSH-approved (under 42 CFR 84) respirators in poorly ventilated areas, or if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation. *(Advisory: Respirators and filters purchased after July 10, 1998, must be certified under 42 CFR 84.)*

Eye Protection:

When engaged in activities where Portland cement dust or wet Portland cement or concrete could contact the eye, wear goggles or safety glasses with side shields. In extremely dusty environments and unpredictable environments, wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with Portland cement or wet Portland cement products.

Skin Protection:

Prevention is essential to avoiding potentially severe skin injury. Avoid contact with unhardened (wet) Portland cement products. If contact occurs, promptly wash affected area with soap and water.

*Do Not Allow Wet Portland Cement to Get Inside Boots, Shoes, or Gloves; and Do Not Allow Wet, Saturated Clothing to Remain Against the Skin.*

Do not rely on barrier creams. Barrier creams should not be used in place of gloves. Use impervious, abrasion- and alkali-resistant gloves, boots, and protective clothing to protect the skin from prolonged contact with wet Portland cement in plastic concrete, mortar, or slurries.

**SECTION XII -- SPECIAL PRECAUTIONS**

Work/Hygienic Practices:

- Periodically wash areas contacted by dry Portland cement, or by wet Portland cement, or concrete fluids with a pH neutral soap and clean, uncontaminated water.
- Wash again at the end of the work.
- If irritation occurs, immediately wash the affected area and seek treatment.
- If clothing becomes saturated with wet Portland cement or concrete, it should be removed and replaced with clean, dry clothing.
- Follow listed precautions as appropriate, during repair or maintenance work on contaminated equipment.

**SECTION XIII -- DISPOSAL AND SHIPPING INFORMATION**

Shipping Name:

Portland cement is not hazardous under US Dept. of Transportation (DOT) regulations.

Hazardous Substance:

N/A

Hazard Class:

N/A

Caution Labeling:

N/A

Identification Number:

N/A

Disposal Method:

Small amounts of material can be returned to the container for later use if it is not contaminated. Dispose of waste material in accordance with Federal, State, and Local requirements. Portland cement is not a hazardous waste as defined by the Resource Conservation and Recovery Act (40 CFR 261).

## SECTION XIV -- OTHER REGULATORY INFORMATION

Status under USDOL--OSHA Hazard Communication Standard (29 CFR 1910.1200):

Portland cement is considered a "hazardous chemical" under this regulation and should be a part of any Hazard Communication Program.

Status under CERCLA / Superfund (40 CFR 117 and 302):

Not listed.

Status under SARA (Title III, Sections 311 and 312):

Portland cement qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III, Section 313):

This product may contain constituents listed under SARA (Title III, Section 313,) but not in amounts requiring supplier notification under 40 CFR Part 372 Subpart C.

Status under TSCA (as of May 1997):

Portland cement and some of the substances in Portland cement are on the TSCA inventory list.

Status under the Federal Hazardous Substances Act:

Portland cement is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65:

Portland cement contains chemicals (trace metals) including silica and hexavalent chromium, known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

Status under the Canadian Environmental Protection Act:

Not listed.

Workplace Hazardous Material Information System (Canada):

Portland cement is considered to be a hazardous material under the Hazardous Product Act as defined by the Controlled Products Regulations (Class E - Corrosive Material), and is therefore, subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

**\*N/A = Not Applicable. \*\*N/D = Not Determined**

*All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances.  
No warranty or guarantee, expressed or implied, is made by Landfill Service Corporation as to this information or as to the safety, toxicity, or effect of the use of this product.*



Landfill Service  
CORPORATION

**MATERIAL SAFETY DATA SHEET**

Date of Preparation: October 20, 2009

1. Product: **Extreme RainShield™**
2. Chemical Name: **HYDROXYPROPYL METHYLCELLULOSE**  
Manufacturer: BioPolymer Industries  
2001 North 170<sup>th</sup> East Ave.  
Tulsa, OK 74116  
Phone: (918) 437-1880  
Fax: (918) 437-1123  
Product Code: BPI 0152  
Effective Date: 04/14/08

In case of emergency: (918) 625-1101 (BioPolymer Industries)

3. **COMPOSITION / INFORMATION ON INGREDIENTS**

Hydroxypropyl methylcellulose	CAS# 009004-65-3	85-99%
Water	CAS# 007732-18-5	1-10%
Sodium Chloride	CAS# 007647-14-5	0.5-5%

4. **HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

White to off-white, free-flowing powder. No odor. Dust explosion hazard.

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

**EYE:** Essentially nonirritating to skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

**SKIN:** Essentially nonirritating to skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

**INGESTION:** Single dose oral toxicity is considered to be low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

**INHALATION:** Single exposure to dust is not likely to be hazardous.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:** Repeated ingestion of similar cellulose by humans has not resulted in known significant adverse effects.

## MATERIAL SAFETY DATA SHEET

**CANCER INFORMATION:** Similar celluloseics did not cause cancer in long-term animal studies.

**TERATOLOGY (BIRTH DEFECTS):** Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.

**REPRODUCTIVE EFFECTS:** In animal studies, a similar celluloseic has been shown not to interfere with reproduction.

### 5. FIRST AID

**EYE:** Flush eyes with plenty of water, mechanical effects only.

**SKIN:** Wash off in flowing water or shower.

**INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

**INHALATION:** No adverse effects anticipated by this route of exposure.

### 6. FIRE FIGHTING MEASURES

#### FLAMMABLE PROPERTIES

**FLASH POINT:** Not applicable.

**METHOD USED:** Not applicable.

**AUTOIGNITION TEMPERATURE:** Not applicable.

#### FLAMMABILITY LIMITS

**LFL:** Not determined

**UFL:** Not determined

**HAZARDOUS COMBUSTION PRODUCTS:** During a fire, smoke may contain the original material in addition to unidentified toxic and / or irritating compounds. Hazardous combustion products may include and are not limited to carbon monoxide, carbon dioxide.

**OTHER FLAMMABILITY INFORMATION:** Mechanical handling can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. Material can be ignited by static discharge. Electrically ground all equipment. Do not permit dust to accumulate. Dust

layers can be ignited by spontaneous combustion or other ignition sources. When suspended in air dust can pose an explosion hazard.

EXTINGUISHING MEDIA: Water, carbon dioxide and dry chemical.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held carbon dioxide or dry chemical hazard may result from forceful application of fire extinguishing agents.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

7. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Material becomes slippery when wet.

PROTECT THE ENVIRONMENT: Contain spilled material to prevent contamination of soil, surface water or ground water.

CLEANUP: Spills should be cleaned up immediately using care to minimize generation of airborne dust.

8. HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling of dusts are necessary for safe handling of product. No smoking, open flames or sources of ignition in handling and storage area.

STORAGE: Store in a dry place. Store below 90 F (32 C).

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general and / or local exhaust ventilation to control airborne levels below the exposure guidelines.

## PERSONAL PROTECTIVE EQUIPMENT

**EYE / FACE PROTECTION:** Use safety glasses. If there is a potential for exposure to particles, which could cause mechanical injury to the eye, wear chemical goggles.

**SKIN PROTECTION:** No precautions other than clean body-covering clothing should be needed.

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guideline. In dusty atmospheres, use an approved dust respirator.

**EXPOSURE GUIDELINES:** Hydroxopropyl methyl cellulose: IHG is 10 mg/m<sup>3</sup>.

## 10. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE / PHYSICAL STATE:** White to off-white free-flowing powder.

**ODOR:** Not available.

**VAPOR PRESSURE:** Not applicable.

**VAPOR DENSITY:** Not applicable.

**BOILING POINT:** Not applicable.

**SOLUBILITY IN WATER / MISCIBILITY:** Not applicable.

**SPECIFIC GRAVITY / OR DENSITY:** Not applicable.

## 11. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under recommended storage conditions. See Storage, Section 7.

**CONDITIONS TO AVOID:** product can decompose at elevated temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

**HAZARDOUS POLYMERIZATION:** Will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with oxidizing materials. Avoid contact with strong acids, strong bases.

12. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

INGESTION: The oral LD50 for rats is >10,000 mg/kg.

MUTAGENICITY: For methylcellulose, a similar cellulosic: in vitro mutagenicity studies were negative; animal mutagenicity studies were negative.

13. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

DEGRADATION & PERSISTENCE: Based on information for methocellulose. Biodegradation may occur under aerobic conditions (in the presence of oxygen). The half-life in activated sludge is less than 20 days.

ECOTOXICITY: Not expected to be acutely toxic.

14. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. BIOPOLYMER INDUSTRIES HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED

CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition / Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator, or landfill.

#### 15. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.) : This product is not regulated by D.O.T. when shipped domestically by land.

#### CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers.

#### 16. REGULATORY INFORMATION (Not meant to be all-inclusive—selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ

#### NOTICE CONT.

from one location to another, it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

#### U.S. REGULATIONS

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

A fire hazard

(Due to dust explosion potential)

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of  
New Jersey  
Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

CANADIAN TDG INFORMATION: For guidance, the Transportation of Dangerous Goods Classification for this product is:

Not regulated.

17. OTHER INFORMATION

MSDS STATUS: Revised to 16 Section format.

**APPENDIX B**

**SOP REPLACEMENT PAGES  
(CLEAN COPY)**

**TURKEY CREEK LANDFILL  
JOHNSON COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1417B**

**PERMIT MODIFICATION**

**SITE OPERATING PLAN**

Prepared for

IESI TX Landfill LP

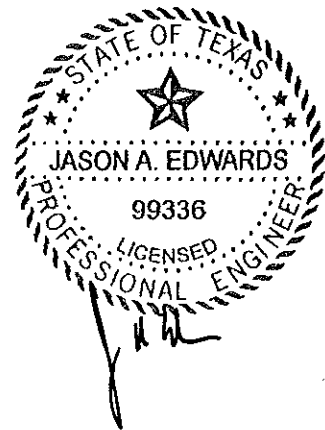
TCEQ Approved April 28, 2006

Revised January 2007

Revised July 2007

Revised May 2010

Revised February 2011



Prepared by

**Weaver Boos Consultants, LLC–Southwest**

TBPE Registration No. F-3727

6420 Southwest Blvd., Suite 206

Fort Worth, Texas 76109

817-735-9770

WBC Project No. 0771-368-11-01-01

**TURKEY CREEK LANDFILL  
JOHNSON COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1417B**

**PERMIT MODIFICATION**

**SITE OPERATING PLAN  
APPENDIX B  
ALTERNATIVE DAILY COVER OPERATING PLAN  
INFORMATION**

Prepared for

IESI TX Landfill LP

June 2005

Revised November 2005

Revised February 2006

Revised July 2009

Revised February 2011



Prepared by

**Weaver Boos Consultants, LLC–Southwest**

TBPE Registration No. F-3727

6420 Southwest Blvd., Suite 206

Fort Worth, Texas 76109

817-735-9770

WBC Project No. 0771-368-11-01-01

## ADC SUMMARY

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The site is currently approved to use the following types of ADC.

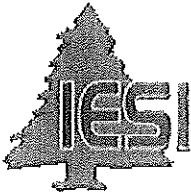
- Biocover. This material was approved on November 6, 2002. The approval letter and ADCOP is provided on pages B-2 through B-12 of this SOP.
- Petroleum Contaminated Soils and Tire Shredding Process Waste. These materials were approved on September 17, 1996. The approval letter and ADCOP for these materials are presented on page B-13 through B-22 of this SOP. Also included in this ADCOP is a ConCover paper mulch material. This material has been replaced with Biocover and subsequently approved (refer to first bullet).
- Posi-Shell. The Posi-Shell spray-type ADCOP is provided on pages B-23 through B-53.

Consistent with §330.133(c), a temporary authorization will be submitted for any additional future ADC materials. Consistent with 30 TAC 330.133(c)(2), after a Temporary Authorization to use a new ADC material is approved, a status report for the new ADC materials will be submitted on a two-month basis to the TCEQ describing the effectiveness of the alternative materials, any problems that may have occurred, and corrective actions required as a result of such problems. If no problems occur within six months of use, status reports will no longer be required and the site will submit a permit modification per §305.70(k)(1) to obtain permanent approval of the ADC material.

## **APPENDIX C**

**POSI-SHELL TEMPORARY AUTHORIZATION APPROVAL  
LETTER AND STATUS REPORT ACCEPTANCE LETTERS**

## First Status Report and TCEQ Acceptance Letter



## IESI TX Landfill LP

July 27, 2010

Dr. Richard Carmichael, PhD, P.E., CIH  
Manager, Permit Section  
Municipal Solid Waste Division, MC-124  
Texas Commission on Environmental Quality  
12100 Park 35 Circle  
Austin, TX 78753

**RE: Status Report for the Temporary Authorization of Alternate Daily Cover  
Posi-Shell  
IESI Turkey Creek Landfill, Johnson County, Texas  
TCEQ Permit No. MSW 1417A  
CN: 600505655; RN:100825462**

Dear Dr. Carmichael:

On behalf of IESI Turkey Creek Landfill and in accordance with 30 TAC §330.165(d)(2) and the temporary authorization granted on March 17, 2010, for the use of Posi-Shell as alternate daily cover material, this status report covers the period April 1 through June 1, 2010. As allowed under this TA, the effective implementation trail date is 15 days from the approval date of March 17<sup>th</sup>. The status report covers the effectiveness, problems and any corrective action required, as stated in the Temporary Alternate Daily Cover (ADC) Operating Guidelines for Posi-Shell.

### **Effectiveness:**

During the period April 1<sup>st</sup> through June 1<sup>st</sup>, Posi-Shell was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the 2 month period that Posi-Shell was used. The placement and handling of the Posi-Shell has not cause or created any operational difficulties, and was only used during periods that the landfill was closed no greater than 24 hours (e.g., Monday through Saturday).

### **Problems:**

There have been no known problems to report to the TCEQ. Additionally, there have been no complaints from adjoining landowners or from landfill operations during this period.

### **Corrective Action:**

No corrective action is required.

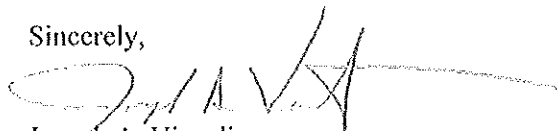
Dr. Richard Carmichael, P.E.

July 27, 2010

Page 2 of 2

A copy of this report has been forwarded directly to TCEQ Region 4 and one copy has been placed in the site's operating record. If you have any questions or comments, please feel free to contact me at (817) 632-4000.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joseph A. Viceli', with a long horizontal flourish extending to the right.

Joseph A. Viceli

IESI Region Environmental Manager

cc: Sam Barrett, TCEQ Region 4 Waste Program Manager  
Tim Sues, IESI Turkey Creek Landfill Manager  
Bob Kneis, IESI Sr. Area Manager  
John Gustafson, IESI Vice President

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

August 19, 2010

Mr. Joseph A. Viccelli  
Region Environmental Manager  
IESI TX Landfill LP  
2301 Eagle Parkway, Suite 200  
Fort Worth, TX 76177

Re: Turkey Creek Landfill - Johnson County  
Municipal Solid Waste (MSW) - Permit No. 1417B  
Status Report for the Temporary Authorization of Alternate Daily Cover (ADC) Posi-Shell  
Tracking No. 13153690; RN100825462/CN600505655

Dear Mr. Viccelli:

The MSW Permits Section received the 60-day status report on July 28, 2010 regarding the use of Posi-Shell as an ADC cover material. The report has been submitted in fulfillment of the temporary authorization issued on March 17, 2010.

The report indicates that the use of Posi-Shell as an ADC cover material was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the period of April 1 through June 1, 2010. It also indicates that there have been no complaints from adjoining landowners or from landfill operations during this period. Thank you for the submission of the report. The report will be placed in the file for MSW Permit No. 1417B.

Please note that the 60-day status report has been submitted on the 58<sup>th</sup> day after completion of the first 60-day period. Since the status report needs to be submitted on a two-month basis during the 180-day trial period, it is recommended that the facility shall submit each status report within two weeks after completion of 60-day periods in the future. The reports shall contain information describing the effectiveness of the alternative material, any problems that may have occurred, and any corrective action required as a result of such problems.

If you have any questions, please contact me at (512) 239-6727. When addressing written correspondence, please use mail code MC 124.

Sincerely,

A handwritten signature in black ink, appearing to read "Chandra S. Yadav".

Chandra S. Yadav, Engineering Specialist  
Municipal Solid Waste Permits Section  
Waste Permits Division

CY/fp

Second Status Report and TCEQ Acceptance Letter



## IESI TX Landfill LP

September 14, 2010

Dr. Richard Carmichael, PhD, P.E., CIH  
Manager, Permit Section  
Municipal Solid Waste Division, MC-124  
Texas Commission on Environmental Quality  
12100 Park 35 Circle  
Austin, TX 78753

**RE: Second Status Report for the Temporary Authorization of Alternate Daily Cover  
Posi-Shell  
IESI Turkey Creek Landfill, Johnson County, Texas  
TCEQ Permit No. MSW 1417A  
CN: 600505655; RN:100825462**

Dear Dr. Carmichael:

On behalf of IESI Turkey Creek Landfill and in accordance with 30 TAC §330.165(d)(2) and the temporary authorization granted on March 17, 2010, for the use of Posi-Shell as alternate daily cover material, this second status report covers the period June 1, 2010 through August 1, 2010. As allowed under this TA, the effective implementation trail date is 15 days from the approval date of March 17<sup>th</sup>. The status report covers the effectiveness, problems and any corrective action required, as stated in the Temporary Alternate Daily Cover (ADC) Operating Guidelines for Posi-Shell.

### **Effectiveness:**

During the period June 1<sup>st</sup> through August 1<sup>st</sup>, Posi-Shell was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the second 2 month period that Posi-Shell was used. The placement and handling of the Posi-Shell has not cause or created any operational difficulties, and was only used during periods that the landfill was closed no greater than 24 hours (e.g., Monday through Saturday).

### **Problems:**

There have been no known problems to report to the TCEQ. Additionally, there have been no complaints from adjoining landowners or from landfill operations during this period.

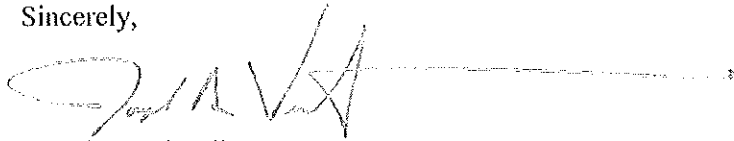
### **Corrective Action:**

No corrective action was required.

Dr. Richard Carmichael, P.E.  
September 14, 2010  
Page 2 of 2

A copy of this report has been forwarded directly to TCEQ Region 4 and one copy has been placed in the site's operating record. If you have any questions or comments, please feel free to contact me at (817) 632-4000.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph A. Vieceli", with a long horizontal line extending to the right.

Joseph A. Vieceli  
IESI Region Environmental Manager

cc: Sam Barrett, TCEQ Region 4 Waste Program Manager  
Tim Sues, IESI Turkey Creek Landfill Manager  
Bob Kneis, IESI Sr. Area Manager  
John Gustafson, IESI Vice President

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

September 23, 2010

Mr. Joseph A. Vieceli  
Region Environmental Manager  
IESI TX Landfill LP  
2301 Eagle Parkway, Suite 200  
Fort Worth, TX 76177

Re: Turkey Creek Landfill - Johnson County  
Municipal Solid Waste (MSW) - Permit No. 1417B  
Temporary Authorization - Second Status Report for Alternate Daily Cover (ADC) Posi-Shell  
Tracking No. 14441519; RN100825462/CN600505655

Dear Mr. Vieceli:

The MSW Permits Section received the second status report on September 15, 2010 regarding the use of Posi-Shell as an ADC cover material. The report has been submitted in fulfillment of the temporary authorization issued on March 17, 2010.

The report indicates that the use of Posi-Shell as an ADC cover material was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the period of June 1 through August 1, 2010. It also indicates that there have been no complaints from adjoining landowners or from landfill operations during this period. Thank you for the submission of the report. The report will be placed in the file for MSW Permit No. 1417B.

If you have any questions, please contact me at (512) 239-6727. When addressing written correspondence, please use mail code MC 124.

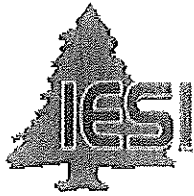
Sincerely,

A handwritten signature in black ink, appearing to read 'Chandra S. Yadav'.

Chandra S. Yadav, Engineering Specialist  
Municipal Solid Waste Permits Section  
Waste Permits Division

CY/sm

## Third Status Report and TCEQ Acceptance Letter



## IESI TX Landfill LP

November 12, 2010

Dr. Richard Carmichael, PhD, P.E., CIH  
Manager, Permit Section  
Municipal Solid Waste Division, MC-124  
Texas Commission on Environmental Quality  
12100 Park 35 Circle  
Austin, TX 78753

**RE: Third Status Report for the Temporary Authorization of Alternate Daily Cover  
Posi-Shell  
IESI Turkey Creek Landfill, Johnson County, Texas  
TCEQ Permit No. MSW 1417A  
CN: 600505655; RN:100825462**

Dear Dr. Carmichael:

On behalf of IESI Turkey Creek Landfill and in accordance with 30 TAC §330.165(d)(2) and the temporary authorization granted on March 17, 2010, for the use of Posi-Shell as alternate daily cover material, this third status report covers the period August 1, 2010 through October 1, 2010. As allowed under this TA, the effective implementation trial date is 15 days from the approval date of March 17, 2010. On September 16, 2010, another request was submitted for an additional 180 day period to utilize and evaluate Posi-shell, which was approved by the TCEQ on Sept 29, 2010. This status report covers the effectiveness, problems and any corrective action required, as stated in the Temporary Alternate Daily Cover (ADC) Operating Guidelines for Posi-Shell, dated in the request March 4 and September 16, 2010.

### **Effectiveness:**

During the period August 1, 2010 through October 1, 2010, Posi-Shell was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the 3<sup>rd</sup> two month period that Posi-Shell was used. The placement and handling of the Posi-Shell has not cause or created any operational difficulties, and was only used during periods that the landfill was closed no greater than 24 hours (e.g., Monday through Saturday).

### **Problems:**

There have been no known problems to report to the TCEQ. Additionally, there have been no complaints from adjoining landowners or from landfill operations during this period.

### **Corrective Action:**

No corrective action was required.

Dr. Richard Carmichael, P.E.

November 12, 2010

Page 2 of 2

A copy of this report has been forwarded directly to TCEQ Region 4 and one copy has been placed in the site's operating record. If you have any questions or comments, please feel free to contact me at (817) 632-4000.

Sincerely,

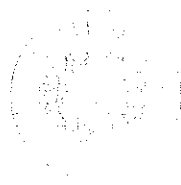
A handwritten signature in black ink, appearing to read "J. A. Vieceli", with a long horizontal line extending to the right.

Joseph A. Vieceli

IESI Region Environmental Manager

cc: Sam Barrett, TCEQ Region 4 Waste Program Manager  
Tim Sues, IESI Turkey Creek Landfill Manager  
Bob Kneis, IESI Sr. Area Manager  
John Gustafson, IESI Vice President

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.C., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 15, 2010

Mr. Joseph A. Vieceli  
Region Environmental Manager  
IESI TX Landfill LP  
2301 Eagle Parkway, Suite 200  
Fort Worth, TX 76177

Re: Turkey Creek Landfill - Johnson County  
Municipal Solid Waste (MSW) - Permit No. 1417B  
Temporary Authorization – Third Status Report for Alternate Daily Cover (ADC) Posi-Shell  
Tracking No. 14507124; RN100825462/CN600505655

Dear Mr. Vieceli:

The MSW Permits Section received the third status report on November 15, 2010 regarding the use of Posi-Shell as an ADC cover material. The report has been submitted in fulfillment of the temporary authorization issued on March 17, 2010.

The report indicates that the use of Posi-Shell as an ADC cover material was effective in preventing and limiting the amount of windblown litter from the working face. It was also successful in controlling vectors, odors, fires and scavenging, and there were no bird related issues during the period of August 1, 2010 through October 1, 2010. It also indicates that there have been no complaints from adjoining landowners or from landfill operations during this period. Thank you for the submission of the report. The report will be placed in the file for MSW Permit No. 1417B.

If you have any questions, please contact me at (512) 239-6727. When addressing written correspondence, please use mail code MC 124.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chandra S. Yadav'.

Chandra S. Yadav, Engineering Specialist  
Municipal Solid Waste Permits Section  
Waste Permits Division

CY/fp

**APPENDIX D**  
**TCEQ PART I FORM**



# Texas Commission on Environmental Quality

## Permit or Registration Application for Municipal Solid Waste Facility

### Part I

#### A. General Information

Facility Name:	Turkey Creek Landfill			
Physical or Street Address (if available):	9100 South I-35 West			
(City) (County)( State)( Zip Code):	Alvarado	Johnson	TX	76009
(Area Code) Telephone Number:	817-790-2912			
Charter Number:				

If the application is submitted on behalf of a corporation, provide the Charter Number as recorded with the Office of the Secretary of State for Texas.

Operator Name <sup>1</sup> :	IESI TX Landfill LP			
Mailing Address:	2301 Eagle Parkway, suite 200			
(City) (County)( State)( Zip Code):	Fort Worth	Tarrant	TX	76177
(Area Code) Telephone Number:	817-632-4000			
(Area Code) FAX Number:	817-632-4540			
Charter Number:	121519-10			

If the permittee is the same as the operator, type "Same as Operator".

Permittee Name:	Same as Operator			
Physical or Street Address (if available):				
(City) (County)( State)( Zip Code):			TX	
(Area Code) Telephone Number:				
Charter Number:				

If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

Agent Name:	John Gustafson			
Mailing Address:	2301 Eagle Parkway, Suite 200			
(City) (County)( State)( Zip Code):	Fort Worth	Tarrant	TX	76177
(Area Code) Telephone Number:	817-632-4000			
(Area Code) FAX Number:	817-632-4540			

#### Application Type:

<input checked="" type="checkbox"/>	Permit	<input type="checkbox"/>	Major Amendment	<input type="checkbox"/>	Minor Amendment
<input type="checkbox"/>	Registration	<input checked="" type="checkbox"/>	Modification	<input type="checkbox"/>	Temporary Authorization
		<input checked="" type="checkbox"/>	w/Public Notice		
		<input type="checkbox"/>	w/out Public Notice	<input type="checkbox"/>	Notice of Deficiency Response

<sup>1</sup> The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

Facility Classification:

<input checked="" type="checkbox"/> Type I	<input type="checkbox"/> Type IV	<input type="checkbox"/> Type V	<input type="checkbox"/> Type IX
<input type="checkbox"/> Type I AE	<input type="checkbox"/> Type IV AE	<input type="checkbox"/> Type VI	

Activities covered by this application (check all that apply):

<input type="checkbox"/> Storage	<input type="checkbox"/> Processing	<input checked="" type="checkbox"/> Disposal
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Waste management units covered by this application (check all that apply):

<input type="checkbox"/> Containers	<input type="checkbox"/> Tanks	<input type="checkbox"/> Surface Impoundments	<input checked="" type="checkbox"/> Landfills
<input type="checkbox"/> Incinerators	<input type="checkbox"/> Composting	<input type="checkbox"/> Type IV Demonstration Unit	<input type="checkbox"/> Type IX Energy/Material Recovery
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Other (Specify)	
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Other (Specify)	

Is this submittal part of a Consolidated Permit Processing request, in accordance with 30 TAC Chapter 33?  
 Yes  No

If yes, state the other TCEQ program authorizations requested.

Provide a brief description of the portion of the facility covered by this application. For amendments, modifications, and temporary authorizations, provide a brief description of the exact changes to the permit or registration conditions and supporting documents referenced by the permit or registration. Also, provide an explanation of why the amendment, modification, or temporary authorization is requested.

The purpose of this permit modification is to allow the permanent use of Posi-Shell spray-type alternative daily cover at the site in accordance with Title 30 Texas Administrative Code §305.70(k)(1).

Does the application contain confidential Material?  Yes  No

If yes, cross-reference the confidential material *throughout the application* and submit as a separate document or binder conspicuously marked "CONFIDENTIAL."

Alternative Language Notice Instructions (Not Applicable)

For certain permit applications, public notice in an alternate language is required. If an elementary school or middle school nearest to the facility offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, trigger a bilingual education program to apply to an entire school district should the requisite alternative language speaking student population exist. However, there may not exist any bilingual students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if the nearest elementary or middle school, as a part of a larger school district, is required to make a bilingual education program available to qualifying students and either the school has students enrolled at such a program on-site, or has students who attend such a program at another location in satisfaction of the school's obligation to provide such a program as a member of a triggered district.

If it is determined that an alternative language notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language. Electronic

versions of the Spanish template examples are available from the TCEQ to help the applicant complete the publication in the alternative language.

Alternative Language Notice Application Form:

Alternative language notice confirmation for this application:

1. Is a bilingual program required by the Texas Education Code in the school district where the facility is located?  YES  NO

(If NO, alternative language notice publication not required)

2. If YES to question 1, are students enrolled in a bilingual education program at either the elementary school or the middle school nearest to the facility?  YES  NO

(If YES to questions 1 and 2, alternative language publication is required; If NO to question 2, then consider the next question)

3. If YES to question 1, are there students enrolled at either the elementary school or the middle school nearest to the facility who attend a bilingual education program at another location?  YES  NO

(If Yes to questions 1 and 3, alternative language publication is required; If NO to question 3, then consider the next question)

4. If YES to question 1, would either the elementary school or the middle school nearest to the facility be required to provide a bilingual education program but for the fact that it secured a waiver from this requirement, as available under 19 TAC '89.1205(g)?  YES  NO

(If Yes to questions 1 and 4, alternative language publication is required; If NO to question 4, alternative language notice publication not required)

If a bilingual education program(s) is provided by either the elementary school or the middle school nearest to the facility, which language(s) is required by the bilingual program?

Note: Applicants for new permits and major amendments must make a copy of the administratively complete application available at a public place in the county where the facility is, or will be, located for review and copying by the public.

Public place where administratively complete permit application will be located.			
Public Place (e.g., public library, county court house, city hall, etc.):	Not Applicable		
Mailing Address:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			

**B. Facility Location**

Except for Type I AE and Type IV AE landfill facilities, for permits, registrations, amendments, and modifications requiring public notice, provide the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted.
Not Applicable

Local Government Jurisdiction:	Not Applicable
Within City Limits of:	
Within Extraterritorial Jurisdiction of City of:	
Is the proposed municipal or industrial solid waste disposal or processing facility located in an area in which the governing body of the municipality or county has prohibited the disposal or processing of municipal or industrial solid waste? (If YES, provide a copy of the ordinance or order):	
<input type="checkbox"/> YES <input type="checkbox"/> NO	

Provide a description of the location of the facility with respect to known or easily identifiable landmarks.
Not Applicable

Detail the access routes from the nearest United States or state highway to the facility.
Not Applicable

Provide the latitudinal and longitudinal geographic coordinates of the facility.

Latitude	N
Longitude	W
Elevation (above msl)	

Is the facility within the Coastal Management Program boundary?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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Texas Department of Transportation District Location:

TXDOT District Name & Number:	Not Applicable		
District Engineer's Name:			
Street or P. O. Box:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

The local governmental authority or agency responsible for road maintenance:

Agency Name	Not Applicable		
Contact Person's Name:			
Street or P. O. Box:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

State Representative:

District Number:	Not Applicable		
State Representative's Name:			
District Office Address:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

State Senator:

District Number:	Not Applicable		
State Senator's Name:			
District Office Address:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

Council of Government (COG) Information:

COG Name:	Not Applicable		
COG Representative's Name:			
COG Representative's Title:			
Street or P. O. Box:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

River Basin Information:

River Authority:	Not Applicable		
Contact Person's Name:			
Watershed Sub-Basin Name:			
Street or P. O. Box:			
(City) (County)( State)( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

This site is located in the following District of the U.S. Army Corps of Engineers:			
<input type="checkbox"/> Albuquerque, NM	<input type="checkbox"/> Ft. Worth, TX	<input type="checkbox"/> Galveston, TX	<input type="checkbox"/> Tulsa, OK

**C. Maps (Not Applicable)**

General

For permits, registrations, and amendments only, submit a topographic map, ownership map, county highway map, or a map prepared by a registered professional engineer or a registered surveyor which shows the facility and each of its intake and discharge structures and any other structure or location regarding the regulated facility and associated activities. Maps must be of material suitable for a permanent record, and shall be on sheets 8-1/2 inches by 14 inches or folded to that size, and shall be on a scale of not less than one inch equals one mile. The map shall depict the approximate boundaries of the tract of land owned or to be used by the applicant and shall extend at least one mile beyond the tract boundaries sufficient to show the following:

each well, spring, and surface water body or other water in the state within the map area;

the general character of the areas adjacent to the facility, including public roads, towns and the nature of development of adjacent lands such as residential, commercial, agricultural, recreational, undeveloped, etc;

the location of any waste disposal activities conducted on the tract not included in the application; and

the ownership of tracts of land adjacent to the facility and within a reasonable distance from the proposed point or points of discharge, deposit, injection, or other place of disposal or activity.

#### General location maps

For permits, registrations, and amendments only, submit at least one general location map at a scale of one-half inch equals one mile. This map shall be all or a portion of a county map prepared by Texas Department of Transportation (TxDOT). If TxDOT publishes more detailed maps of the proposed facility area, the more detailed maps shall also be included in Part I. Use the latest revision of all maps.

#### Land ownership map

Provide a map that locates the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 1/4 mile of the facility, on-site facility easement holders, and all mineral interest ownership under the facility.

#### Landowners list

Provide the adjacent and potentially affected landowners' list, keyed to the land ownership map with each property owner's name and mailing address. The list shall include all property owners within 1/4 mile of the facility, easement holders, and all mineral interest ownership under the facility. Provide the property, easement holders', and mineral interest owners' names and mailing addresses derived from the real property appraisal records as listed on the date that the application is filed. Provide the list in electronic form, as well.

#### **D. Property owner information (Not Applicable)**

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operator only, provide the following:

- (1) the legal description of the facility;
  - (A) the abstract number as maintained by the Texas General Land Office for the surveyed tract of land;
  - (B) the legal description of the property and the county, book, and page number or other generally accepted identifying reference of the current ownership record;
  - (C) for property that is platted, the county, book, and page number or other generally accepted identifying reference of the final plat record that includes the acreage encompassed in the application and a copy of the final plat, in addition to a written legal description;
  - (D) a boundary metes and bounds description of the facility signed and sealed by a registered professional land surveyor;
  - (E) on-site easements at the facility, and
  - (F) drawings of the boundary metes and bounds description; and
- (2) a property owner affidavit signed by the owner.

#### **E. Legal authority (Not Applicable)**

Provide verification of the legal status of the owner and operator, such as a one-page certificate of incorporation issued by the secretary of state. List all persons having over a 20% ownership in the proposed facility.

Indicate Ownership status of the facility:									
<input type="checkbox"/>	Private	<input type="checkbox"/>	Corporation	<input type="checkbox"/>	Partnership	<input type="checkbox"/>	Proprietorship	<input type="checkbox"/>	Non-Profit Organization
<input type="checkbox"/>	Public	<input type="checkbox"/>	Federal	<input type="checkbox"/>	Military	<input type="checkbox"/>	State	<input type="checkbox"/>	Regional
<input type="checkbox"/>	County	<input type="checkbox"/>	Municipal	<input type="checkbox"/>	Other (Specify)				

Does the operator own the facility units and the facility property?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
---	------------------------------	-----------------------------

If "No," for permits, registrations, amendments, and modifications that changes the legal description, a change in owner, or a change in operators submit a copy of the lease for the use of or the option to buy the facility units or facility property, as appropriate, and identify:

Owner Name:				
Street or P. O. Box:				
(City) (County)( State)( Zip Code):				
(Area Code) Telephone Number:				
(Area Code) FAX Number:				
Charter Number:				

**F. Evidence of competency (Not Applicable)**

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operators submit a list of all Texas solid waste sites that the owner and operator have owned or operated within the last ten years.

Site Name	Site Type	Permit/Reg. No.	County	Dates of Operation

Submit a list of all solid waste sites in all states, territories, or countries in which the owner and operator have a direct financial interest.

Site Name	Location	Dates of Operation	Regulatory Agency (Name & Address)

A licensed solid waste facility supervisor, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations will be employed before commencing facility operation.

Provide the names of the principals and supervisors of the owner's and operator's organization, together with previous affiliations with other organizations engaged in solid waste activities.

Name	Previous Affiliation	Other Organization

For landfill permit applications only, evidence of competency to operate the facility shall also include landfilling and earthmoving experience if applicable, and other pertinent experience, or licenses as described in 30 TAC Chapter 30 possessed by key personnel. The number and size of each type of equipment to be dedicated to facility operation will be specified in greater detail on Part IV of the application within the site operating plan.

Landfilling/Earthmoving Equipment Types	Personnel Experience or Licenses

For mobile liquid waste processing units, submit a list of all solid waste, liquid waste, or mobile waste units that the owner and operator have owned or operated within the past five years. Submit a list of any final enforcement orders, court judgments, consent decrees, and criminal convictions of this state and the federal government within the last five years relating to compliance with applicable legal requirements relating to the handling of solid or liquid waste under the jurisdiction of the commission or the United States Environmental Protection Agency. Applicable legal requirement means an environmental law, regulation, permit, order, consent decree, or other requirement.

Solid waste, liquid waste, or mobile waste units owned or operated within past 5 years	Texas and federal final enforcement orders, court judgments, consent decrees, and criminal convictions

**G. Appointments (Not Applicable)**

Provide documentation that the person signing the application meets the requirements of 30 TAC §305.44, Signatories to Applications. If the authority has been delegated, provide a copy of the document issued by the governing body of the owner or operator authorizing the person that signed the application to act as agent for the owner or operator.

**H. Application Fees**

For a new permit, registration, amendment, modification, or temporary authorization, submit a \$150 application fee.

For authorization to construct an enclosed structure over an old, closed municipal solid waste landfill in accordance with 30 TAC 330 Subchapter T, submit a \$2,500 application fee.

If paying by check, send payment to:

Texas Commission on Environmental Quality  
 Financial Administration Division, MC 214  
 P. O. Box 13087  
 Austin, Texas 78711-3087

Payment maybe made online using TCEQ e-pay at <a href="http://www.tceq.state.tx.us/e-services/">www.tceq.state.tx.us/e-services/</a>	
E-pay confirmation number	582EA000087819

**PROPERTY OWNER AFFIDAVIT**

"I, \_\_\_\_\_,  
(property owner)

acknowledge that the State of Texas may hold me either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the facility. For a facility where waste will remain after closure, I acknowledge that I have a responsibility to file with the county deed records an affidavit to the public advising that the land will be used for a solid waste facility prior to the time that the facility actually begins operating as a municipal solid waste landfill facility, and to file a final recording upon completion of disposal operations and closure of the landfill units in accordance with Title 30 Texas Administrative Code §330.19, Deed Recordation. I further acknowledge that I or the operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance."

\_\_\_\_\_  
(Owner signature)

\_\_\_\_\_  
(Date)

Signature Page

I, John Gustafson  
(Operator)

Vice President of IESI TX GP Corporation, the  
General Partner of IESI TX Landfill LP  
(Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: *John Gustafson*

Date: 2/10/11

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, \_\_\_\_\_, hereby designate \_\_\_\_\_  
(Print or Type Operator Name) (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

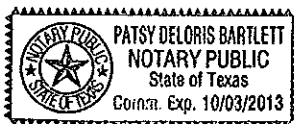
\_\_\_\_\_  
Printed or Typed Name of Operator or Principal Executive Officer

\_\_\_\_\_  
Signature

SUBSCRIBED AND SWORN to before me by the said John Gustafson

On this 10 day of February, 2011

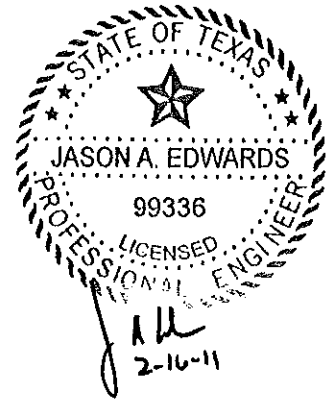
My commission expires on the three day of October, 2013



Patsy Deloris Bartlett  
Notary Public in and for  
Collin County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)

APPENDIX E  
LANDOWNER LIST AND MAP



## INTRODUCTION

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The following list and figure (Figure 1) lists the names, mailing addresses, and location of the "Adjacent and Potentially Affected Landowners" within ¼ mile of the site. Refer to Figure 1, Land Ownership Map, for location of the properties. The numbering on the land ownership list corresponds to the numbers listed on Figure 1. Additionally, pre-printed mailing labels of the landownership list are included. The list is based on records of the Johnson County Central Appraisal District. In accordance with Title 30 Texas Administrative Code §330.59(c)(3), the availability of mineral ownership beneath the facility has been investigated. Based on a conversation with the Johnson County Central Appraisal District, they do not maintain mineral ownership records.

## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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- |  |   |
|--|---|
| 1. PETER J DELUTIS AND<br>DAVID J BRACK<br>PO BOX 800306<br>HOUSTON TX 77280       | 12. JOHN G ANDRLE<br>601 CLOVER PARK DR<br>ARLINGTON TX 76013                                   |
| 2. FRANCES COMPTON GRUBBS<br>2215 32 <sup>ND</sup> ST<br>LUBBOCK TX 79411          | 13. JIMMY J ATLAS<br>ET UX CLAUDIA WORLEY<br>4920 CR 401<br>GRANDVIEW TX 76050                  |
| 3. JAMES EDWARD KALE AND LESLIE<br>RENEE KALE<br>8132 CR 313<br>GRANDVIEW TX 76050 | 14. BLAIRTOWN ENERGY LLC<br>1993 DEWAR DR, #1-291<br>ROCK SPRINGS WY 82901-5780                 |
| 4. JASON ARTHUR WEIGLER<br>8100 CR 313<br>GRANDVIEW TX 76050                       | 15. MARC STEVEN VANLIERE<br>7600 CR 313<br>GRANDVIEW TX 76050                                   |
| 5. ENRIQUE OJEDA<br>PO BOX 638<br>GRANDVIEW TX 76050                               | 16. ABEL P OVIEDO ET UX STACEY L<br>7512 CR 313<br>GRANDVIEW TX 76050-2906                      |
| 6. DEAN JOHNSON ET UX LORA<br>8016 CR 313<br>GRANDVIEW TX 76050                    | 17. JERRY D SHERRARD<br>921 ROGERS HILL SPUR<br>WACO TX 76705-5722                              |
| 7. RONALD AND JUNE CONNOLLY<br>8023 CR 313<br>GRANDVIEW TX 76050                   | 18. JAMES F MARTIN ET UX FONDA<br>JANELL<br>PO BOX 1462<br>ALVARADO TX 76009-1462               |
| 8. BILLY E LUSK ET UX PATRICIA A<br>8032 CR 313<br>GRANDVIEW TX 76050              | 19. UNION PACIFIC RAILROAD<br>MIKE PASSO<br>1400 DOUGLAS ST<br>STOP 1690<br>OMAHA NE 68179-1690 |
| 9. JIMMY L WATSON ET UX PATRICIA L<br>8000 CR 313<br>GRANDVIEW TX 76050            | 20. WILLIAM J GONYEA<br>286 CR 1388<br>YANTIS TX 75497  |
| 10. RICHARD P HANKS ET UX DEBORAH K<br>7964 CR 313<br>GRANDVIEW TX 76050           | 21. JOANN C GRIFFIN<br>3590 ROUND BOTTOM RD<br>CINCINNATI OH 45244                              |
| 11. WILLIAM E GLASS<br>7025 CR 313<br>GRANDVIEW TX 76050                           | 22. B M WEST<br>7140 CR 313<br>ALVARADO TX 76009  |

**PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\***  
**(Continued)**

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|--|---|
| 23. ORTEGA TRINIDAD AND BLANCA E<br>GOMEZ<br>7416 GREENFIELD DR<br>ALVARADO TX 76009 | 34. MIKE KERBY<br>7713 GREENFIELD CT<br>ALVARADO TX 76009                                 |
| 24. JIM GRIMLAN ET UX CHERYL<br>7500 GREENFIELD DR<br>ALVARADO TX 76009              | 35. ALEXANDER SHERRIN<br>7705 GREENFIELD CT<br>ALAVARADO TX 76009                         |
| 25. LOLA T GONZALEZ<br>7504 GREENFIELD DR<br>ALVARADO TX 76009                       | 36. JOANNA E FALLS AND<br>DIANA G ANKNEY<br>7701 GREENFIELD CT<br>ALVARADO TX 76009       |
| 26. VERONICA COOLEY<br>7512 GREENFIELD DR<br>ALVARADO TX 76009                       | 37. STEVEN A WEBB ET UX LORA<br>DENISE<br>7708 GREENFIELD DR<br>ALVARADO TX 76009         |
| 27. DANA CURTIS<br>7520 GREENFIELD DR<br>ALVARADO TX 76009                           | 38. CINDY RHYS<br>7409 GREENFIELD DR<br>ALVARADO TX 76009                                 |
| 28. ANTONIO BOTELLO ET UX MONETTE<br>7600 GREENFIELD DR<br>ALVARADO TX 76009         | 39. RICHARD G SHOEMAKE<br>ET UX JO E<br>712 HOLIDAY DR<br>PONDER TX 76259                 |
| 29. RENE OMAR ALAVA<br>7608 GREENFIELD DR<br>ALVARADO TX 76009                       | 40. NELLIE CASTLEBERRY<br>7417 GREENFIELD DR<br>ALVARADO TX 76009                         |
| 30. JOSE ALBERTO DUENEZ<br>7616 GREENFIELD DR<br>ALVARADO TX 76009                   | 41. JEREMY L PEREZ<br>7421 GREENFIELD DR<br>ALVARADO TX 76009                             |
| 31. ROBERT ORSO<br>7700 GREENFIELD CT<br>ALVARADO TX 76009                           | 42. DUSTA L OTTS<br>3944 CR 401B<br>ALVARADO TX 76009                                     |
| 32. DOYLE D TAYLOR<br>7712 GREENFIELD CT<br>ALVARADO TX 76009                        | 43. GENE EARL RUSSELL JR AND<br>SHEILA ANNETTE<br>7709 GREENFIELD DR<br>ALVARADO TX 76009 |
| 33. STEPHEN J AND KATHY C HEINLEIN<br>7716 GREENFIELD CT<br>ALVARADO TX 76009        | 44. DANNY POWERS<br>PO BOX 255<br>ALVARADO TX 76009                                       |

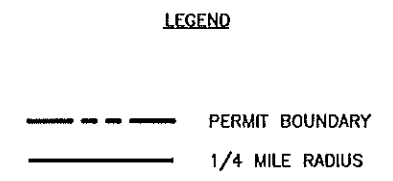
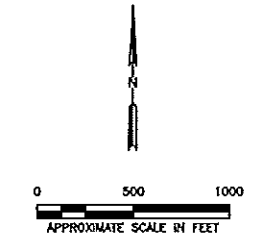
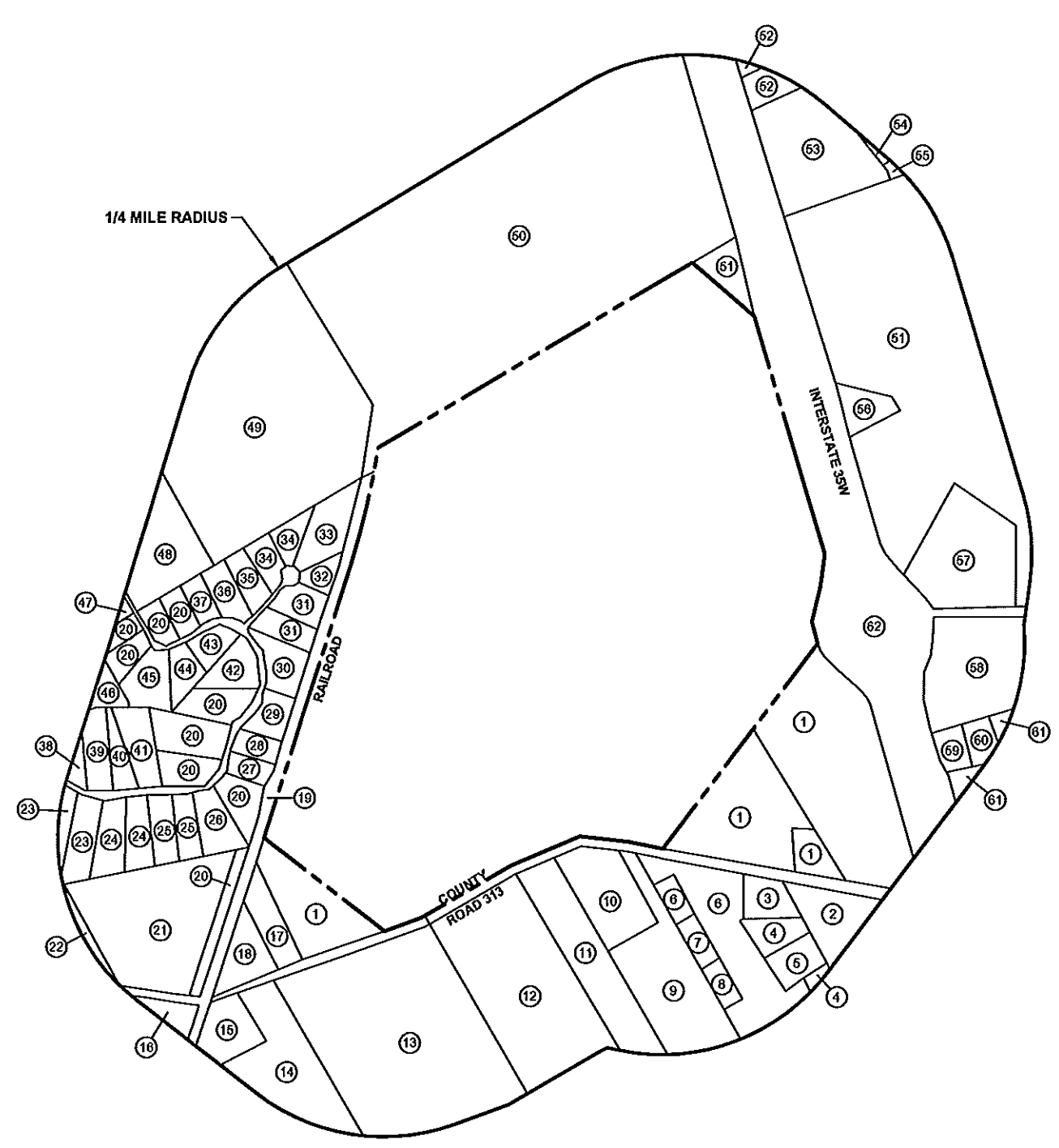
**PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\***  
**(Continued)**

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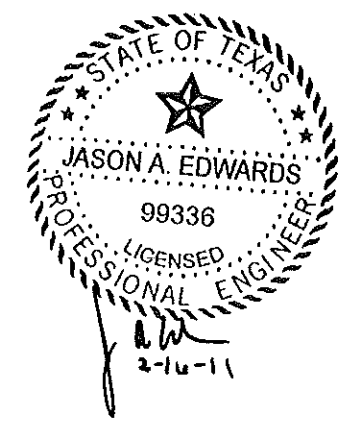
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| 45. DARRELL MILLER AND CARLA<br>PO BOX 876<br>ALVARADO TX 76009                            | 54. MICHAEL HANKS RAYBURNE<br>6108 ED COADY RD<br>FORT WORTH TX 76134  |
| 46. TITAN OPERATING LLC<br>111 W 4 <sup>TH</sup> ST, SUITE 300<br>FORT WORTH TX 76102-3951 | 55. TOMMY AND JANET STEPPICK<br>3456 CR 204<br>ALVARADO TX 76009   |
| 47. GLENORA G WHITEHEAD<br>PO BOX 1142<br>ALVARADO TX 76009                                | 56. DAVID M OVERTURF<br>9101 S IH 35W<br>GRANDVIEW TX 76050  |
| 48. R M VARDEMAN<br>3709 CR 401<br>ALVARADO TX 76009                                       | 57. C GLENN THURMAN<br>PO BOX 29246<br>PHOENIX AZ 85038  |
| 49. NELDA LEE VARDEMAN<br>3709 CR 401<br>ALVARADO TX 76009                                 | 58. CRISP FAMILY LIMITED PART<br>5201 SAUNDERS RD<br>FORT WORTH TX 76119   |
| 50. HALLIBURTON<br>PO DRAWER 1431<br>DUNCAN OK 73536-0222                                  | 59. BONNIE J SMITH<br>8001 HARVEST DR<br>GRANDVIEW TX 76050  |
| 51. LESI TX LANDFILL<br>PO BOX 29246<br>PHOENIX AZ 85038                                   | 60. PAULA SIMS AND CHARLES C DEAN<br>JR<br>8009 HARVEST DR<br>GRANDVIEW TX 76050                                       |
| 52. JOHN D BACON ET UX MONICA<br>8733 S IH 35W<br>ALVARADO TX 76009                        | 61. WELDON A CRISP<br>5201 SAUNDERS RD<br>FORT WORTH TX 76119  |
| 53. SCHERRY CHAIRMAINE<br>8825 S IH 35W<br>ALVARADO TX 76009                               | 62. TEXAS DEPARTMENT OF<br>TRANSPORTATION<br>ENVIRONMENTAL AFFAIRS<br>DOUGLAS MACK<br>125 E 11TH ST<br>AUSTIN TX 78701 |

\*In accordance with 330.59(c)(3), the availability of mineral ownership beneath the facility has been investigated. Based on conversations with the Johnson County Central Appraisal District, their records do not include mineral ownership.

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- NOTES:
- ① REFERS TO THE ATTACHED LANDOWNERS LIST.
  - LANDOWNERS LIST FROM 2011 JOHNSON COUNTY APPRAISAL DISTRICT RECORDS.



<input type="checkbox"/> 90X SUBMITTAL <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR	<b>1/4 MILE RADIUS LAND OWNERSHIP MAP</b> TURKEY CREEK LANDFILL JOHNSON COUNTY, TEXAS																					
	IESI TX LANDFILL LP																						
DATE: 01/2011 FILE: 0120-72-11 CAD: FIG 1-PROPERTY OWNERS.DWG	DRAWN BY: SRF DESIGN BY: DOL REVIEWED BY: NT	<b>Weaver Boos Consultants</b> <small>CHICAGO, IL    FORT WORTH, TX    GRIFFITH, IN          INDIANAPOLIS, IN    SOUTH BEND, IN          COLUMBUS, OH    (817) 735-9770    SPRINGFIELD, IL          DOWEN, CO    ST. LOUIS, MO</small>																					
REUSE OF DOCUMENTS <small>THIS DOCUMENT, AND THE DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF TURKEY CREEK LANDFILL TX, LP AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF TURKEY CREEK LANDFILL TX, LP.</small>																							
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