

**AP – 001**

**2015 WP-14  
EXCAVATION**

**02 / 08 / 2016**



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February 8, 2016

Mr. Glenn Von Gonten  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Subject: WP-14 Limited Excavations Field Activities Report  
Former Brickland Refinery Site  
Sunland Park, New Mexico  
(Abatement Plan AP-001) – New Mexico Oil Conservation Division Approval Correspondence

Dear Mr. Von Gonten:

Huntsman is providing this letter to the NMOCD to report the Well Point WP-14 Limited Excavation Field Activities at the Former Brickland Refinery Site. This report includes a description of the field work performed, photographic documentation, and waste characterization and transportation documents.

#### **New Mexico One-Call Services and Utility Checklists**

On November 2, 2015, ARCADIS submitted a New Mexico 811 (NM811) ticket to ensure utilities were marked out prior to the mobilization date of November 11, 2015. NM811 ticket number was submitted as part of ARCADIS policy to identify three lines of evidence prior to performing any intrusive work at project sites. Other lines of evidence used were client / owner interviews and map as well as visual surveys once onsite. All areas of excavations were cleared by utility companies with services in the area prior to beginning excavation activities. ARCADIS' checklist for utility clearance and the NM811 ticket are included as an attachment in Appendix D.

#### **Field Activities**

On November 11, 2015, ARCADIS mobilized a backhoe with operator to the site to begin excavation around WP-14. Initial excavation activities were directly on top of the location of former WP-14 to determine if the "tar" material seen during groundwater gauging event was pooling around the WP-14 location. A seam of "tar" material was observed on the second bucket removed at approximately 2.5 feet below ground surface which happened to coincide with a location of a heavily corroded metal pipe. The "tar" material was immediately removed and placed into lined 20 cubic yard (cyd) roll off bins that were staged onsite to minimize mixing of surrounding soils with the "tar" material within the excavation. ARCADIS then excavated in all directions to ensure all tar material and impacted soil was removed.

During excavation activities to the east of the WP-14 location additional corroded pipe was observed to make a "T" into the area of the "tar" impacted material at WP-14. Excavations continued along this pipe run as it was a possible source area of the "tar" material. Approximately 10 feet of 3 to 4 inch diameter corroded metal pipe was found, removed from the ground, and placed into the roll off bin. Visual evidence of staining likely from "tar" material that once passed through this pipe was removed and also placed into roll offs. Excavations extended approximately 10 feet each direction from WP-14 to ensure no other "tar" material was found away from the WP-14 area.

No further impacts of "tar" material were observed away from the pipe run to the east or directly underneath WP-14; therefore ARCADIS stopped the excavation to limit soil volumes generated. The total volume removed for the excavation was approximately 50-60 cubic yards which was stored in

three 20 cyd roll off bins. In an abundance of caution, more soil was removed than initially expected for the limited excavation to ensure that all "tar" material and tar impacted soils once related to WP-14 were addressed.

Once all soil was removed from the excavation and stored in roll off bins the excavation was backfilled with material that had been historically stockpiled on-site to the north of WP-14, outside of the known lead impacted area to the south of WP-14. Backfill material was compacted as it was introduced to the excavation to limit future settlement of soils and the surface of the excavation backfill was levelled to the existing grade surrounding the excavation.

### **Waste Management**

ARCADIS handled the waste management of the roll off bins which included the sampling and profiling of the waste to obtain approvals for transportation and disposal. Once roll off bins were covered and secured they were moved to an area inside the site security fence closer to the front of the facility to allow for easier access for waste characterization sampling and loading for transport to the licensed facility for disposal. ARCADIS collected one composite sample per bin to be representative of the material within each bin, which was analyzed for volatile organic compounds, Toxicity Characterization Leachate Procedure (TCLP) benzene, TCLP11 metals, polychlorinated biphenyls, gasoline range organics and diesel range organics by ALS Laboratories. Once all analytical results were received, the waste streams were profiled and sent to US Ecology in Robstown, Texas for classification and approval for disposal.

Based on the analytical results for the roll off bins one roll off bin (Bin #942) was classified as hazardous waste due to the TCLP analysis of 12.7 mg/l for lead exceeding the EPA threshold of 5.0 mg/L for characteristic hazardous waste, and two of the roll off bins (Bin # 1168 and 1171) were classified as non-hazardous waste. We believe the lead detected in the soil sample from bin 942 is due to the proximity of well point WP-14 to the known surface impacts of lead in the soil to the south of the location, based on an historical investigation and subsequent clay cap placement reports.

On January 25 and 26, 2016, the three roll off bins were removed from the site under uniform hazardous waste manifests by Chemical Transportation Inc., a licensed waste hauler. The three bins were transported to US Ecology in Robstown, Texas for disposal. Waste profiles and manifest documentation are attached as Appendix B of this report.

This letter report for WP-14 Limited Excavation will also be provided to the NMOCD with the Annual Groundwater Report due on or before April 1, 2016.

If you have any questions or require additional information on our addendum, please contact me at 281-719-3039 or via email at [ed\\_l\\_gunderson@huntsman.com](mailto:ed_l_gunderson@huntsman.com).

Sincerely,

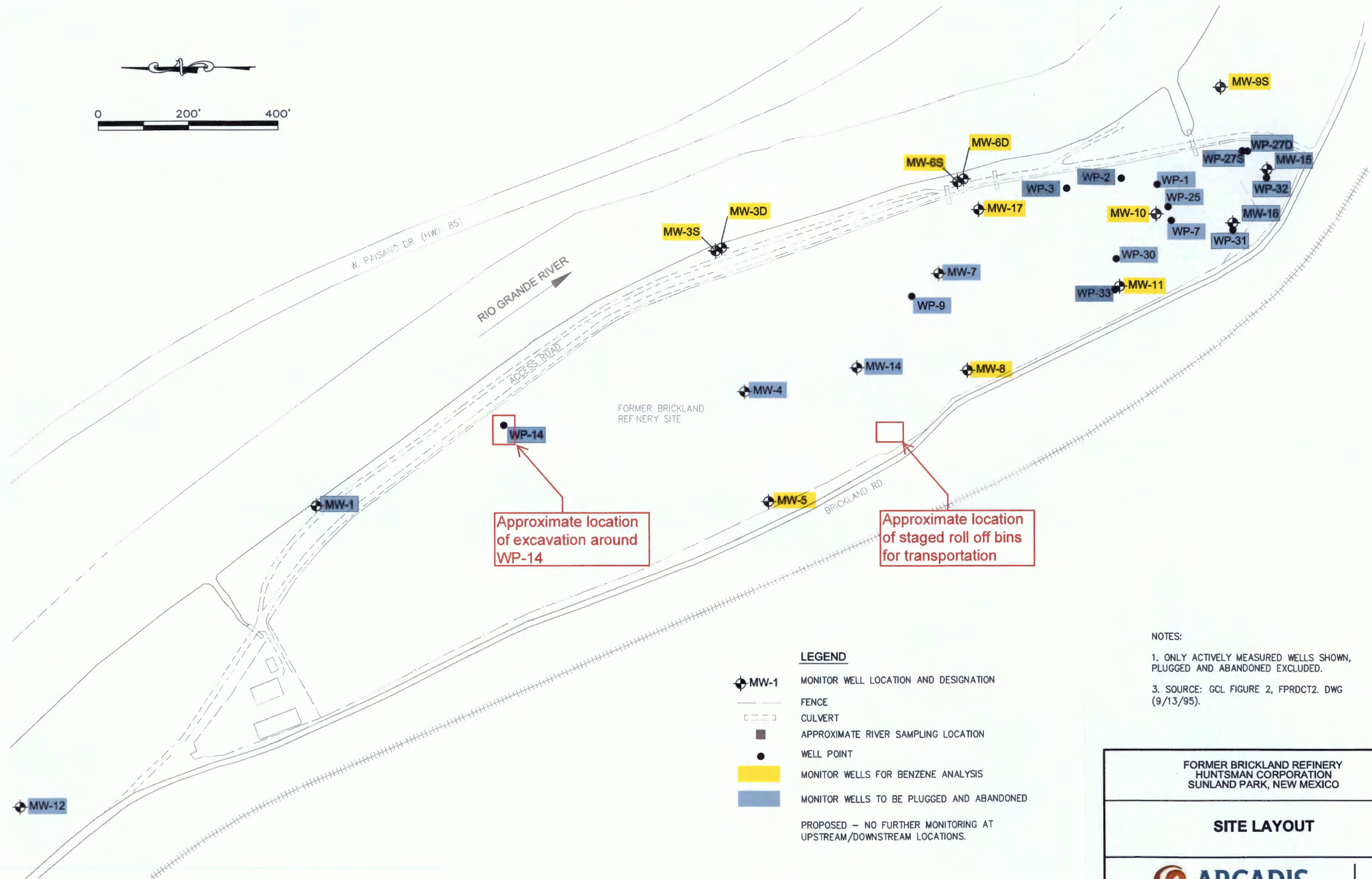
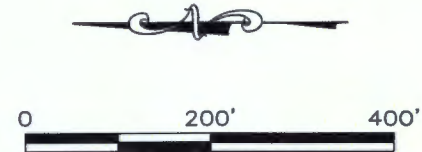


Edward L. Gunderson  
Senior Manager, EHS Legal and Regulatory Compliance

Attachment A

Site Map

DRAWN BY: S. MEN CHECKED BY: TDR PROJECT MANAGER: DRE  
G:\PROJECT\HUNTSMAN\LA03185\_0001\Figures\3185-01-028.dwg PLOTTED: 10/22/2014 9:50 AM BY: MEN, SOTHON



#### LEGEND

- MW-1 MONITOR WELL LOCATION AND DESIGNATION
- FENCE
- - - CULVERT
- APPROXIMATE RIVER SAMPLING LOCATION
- WELL POINT
- MONITOR WELLS FOR BENZENE ANALYSIS
- MONITOR WELLS TO BE PLUGGED AND ABANDONED
- PROPOSED — NO FURTHER MONITORING AT UPSTREAM/DOWNSTREAM LOCATIONS.

#### NOTES:

1. ONLY ACTIVELY MEASURED WELLS SHOWN, PLUGGED AND ABANDONED EXCLUDED.
3. SOURCE: GCL FIGURE 2, FPRDCT2. DWG (9/13/95).

FORMER BRICKLAND REFINERY  
HUNTSMAN CORPORATION  
SUNLAND PARK, NEW MEXICO

#### SITE LAYOUT



FIGURE  
2

Attachment B

Waste Profiles and Approval documentation including Analytical Results

and

Uniform Hazardous Waste Manifests



US Ecology Nevada (Beatty) 800-239-3943  
 US Ecology Idaho (Grand View) 800-274-1516  
 US Ecology Texas (Robstown) 800-242-3209  
 US Ecology Michigan (Detroit) 800-396-3265

PROFILE # \_\_\_\_\_

<b>A. GENERATOR INFORMATION</b>					
1. Generator: HUNTSMAN INTERNATIONAL, LLC			<input type="checkbox"/> Billing information is same		<input checked="" type="checkbox"/> P.O. required for payment
2. Facility Address: 3010 OLD McNUTT ROAD SUNLAND PARK, NM 88063			12. Billing Company: ARCADIS		
3. Mailing Address: 8800 GOSLING ROAD			13. Billing Address: 630 PLAZA DRIVE		
4. City/State/Zip: THE WOODLAND / TEXAS / 77381			14. City/State/Zip: HIGHLANDS RANCH / COLORADO /		
5. Technical Contact: EDWARD L. GUNDERSON			15. Billing Contact: ACCOUNTS PAYABLE - PO# - LA003185.2015		
6. Phone: 281-719-3039		7. Fax:	16. Phone: 720-344-3500		17. Fax:
			18. Email: ACCOUNTSPAYABLE.ADMINISTRATION@ARCADIS.COM		
8. Generator Status: <input type="checkbox"/> CESQG <input type="checkbox"/> SQG <input checked="" type="checkbox"/> LQG					
9. EPA ID #: NMR000022293			10. State ID #: D0035		
11. SIC Codes:		2911			
<b>B. SHIPPING INFORMATION</b>					
1. US DOT Shipping name: Hazardous Waste Solid, n.o.s. (Lead)					
2. Hazard Class: 9		3. UN/NA #: NA3077		4. Packaging Group: III	
5. RQ:					
6. Container Type: <input checked="" type="checkbox"/> Bulk <input type="checkbox"/> Totes <input type="checkbox"/> Pallet <input type="checkbox"/> Boxes <input type="checkbox"/> Drums <input type="checkbox"/> Other, Describe:					
7. Frequency: <input type="checkbox"/> Year <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> 1 time <input type="checkbox"/> Other, Describe:					
8. Shipment:		Size: Tons		Quantity: 17	
				9. Waste Import: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete Waste Import Supplement)	
<b>C. GENERAL MATERIAL &amp; REGULATORY INFORMATION</b>					
1. Common name for this waste: Lead Impacted Soil					
2. Process generating the material: EXCAVATION OF SOILS NEAR A MONITORING WELL THAT SHOWED EVIDENCE OF VISCOUS MATERIAL INSIDE WELL. REMOVAL OF SOIL WAS TO LIMIT FUTURE IMPACTS TO THE SITE. (See ALS Environmental analysis, Work Order: HS15110639, results for bin 942 only)					
3. Describe physical appearance and odor of the waste: BROWN SANDY CLAY SOIL WITH INCLUSIONS OF GRAY CLAYEY SOILS AND MINOR AMOUNTS OF BLACK VISCOUS MATERIAL. STRONG HYDROCARBON ODOR WHEN MATERIAL IS DISTURBED.					
4. Odor of the waste: <input type="checkbox"/> None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Strong		5. Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge/Slurry <input checked="" type="checkbox"/> Solid			
6. Describe Color: BROWN		7. Liquid phases: <input type="checkbox"/> Single <input type="checkbox"/> Double Layer <input type="checkbox"/> Multi-layer			
8. Knowledge is from: <input checked="" type="checkbox"/> Lab analysis <input type="checkbox"/> MSDS <input type="checkbox"/> Process/generator knowledge					
9. Waste Type (US Ecology Texas customers only): <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Non-Industrial					
10. Is the waste restricted under EPA Land Disposal Restrictions (§268)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
11. If LDR "Yes", is waste: <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-wastewater <input type="checkbox"/> Debris (§268.2)					
12. Alt. Standards for soil? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
13. Is the waste RCRA hazardous waste containing benzene and originating at a Petroleum Refinery (SIC 2911), Chemical Manufacturing Plant (SIC 2800 thru 2899) or Coke by-Product Recovery Plant (SIC 3312)? (If yes, complete Benzene Waste Operations Supplement Form and Thermal Supplement Form): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
14. VO Conc. (§264.1083): <input checked="" type="checkbox"/> <500 ppmw <input type="checkbox"/> ≥500ppmw		15. Has waste been treated after point of generation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
16. CERCLA Regulated (Superfund) Waste: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		17. Butadiene waste regulated by §63 Subpart XX: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
18. Waste contains UHC constituent(s) (§268.48), above a treatment standard, other than those for which the waste exhibits a characteristic. (If yes, list all UHC's in Section D): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
19. Waste exempt from definition of "solid waste" or "hazardous waste" (If yes, list reference 40CFR _____): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
20. State Waste Codes:		OUTS301H			
21. RCRA Waste Codes:		D008			
22. Source Code: G19 (		23. Form Code: W301 (		24. Management Code: H 132 (USE only)	



D. MATERIAL COMPOSITION (use additional form if necessary)						
Constituent	Units	TCLP	Totals	Range total ≥ 100%		
				Typical	Min	Max
Soil	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	100		
Lead	mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12.7		
2-Butanone	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.019		
Acetone	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.10		
Benzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0054		
Chloroform	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.045		
Ethylbenzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0081		
Isopropylbenzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0047		
Xylenes, Total	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.032		
Methylcyclohexane	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.013		
Toluene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.021		

E. WASTE CHARACTERISTICS			
1. Oxidizer	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Reactive sulfides _____ ppm
2. Explosive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Reactive cyanides _____ ppm
3. Organic peroxide	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Water/air reactive
4. Shock sensitive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Thermally unstable
5. Tires	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. TSCA regulated PCB waste (control sheet required with shipment)
6. Pyrophoric	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Medical/infectious waste
7. Compressed gas	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Radioactive (if yes, complete Profile Supplement for Radioactive Waste)
8. Halogenated organics	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
16. Possibility of incidental liquids from transportation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
17. Is waste a solid using the paint filter test? <input checked="" type="checkbox"/> Yes (solid) <input type="checkbox"/> No (not solid)			
18. pH: (if solid, what is pH if mixed with water?) Range <u>4</u> to <u>10</u> Typical _____ <input type="checkbox"/> ≤ 2 <input checked="" type="checkbox"/> 2 < 12.5 <input type="checkbox"/> ≥ 12.5			
19. Flash Point: <u>&gt;212</u> °F <input type="checkbox"/> < 140 °F			
20. Is the waste oil bearing waste from Petroleum Refining, Production or Transportation practices? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

F. GENERATOR'S CERTIFICATION	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
I certify this material may be disposed without further treatment.	
<p>I authorize US Ecology to correct inconsistencies on the waste profile form that impact waste management decisions with my oral or written authorization. US Ecology will require re-submittal of the waste profile information if substantial changes are determined necessary. I understand material that does not conform to specifications described in this profile may be rejected by US Ecology unless other contractual arrangements have been agreed to by both parties. I certify, under penalty of law, that I am familiar with this waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, that all known or suspected hazards have been disclosed, and that this form was completed in accordance with the instructions provided.</p>	
Print Name	Signature
Edward L. Gunderson	Edward L. Gunderson
Title	Date
Senior Mgr., EHS Legal	11/7/15



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US Ecology Texas, Inc.  
P.O. Box 307  
3277 County Road 69  
Robstown, TX 78380

Phone: (800) 242 3209  
(361) 387-3518  
Fax: (361) 387 0794  
(361) 387-0577

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## US Ecology Texas, Inc.

a US Ecology Inc. company

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January 14, 2016

GARETT FERGUSON  
ARCADIS- US  
211 N. FLORENCE STREET STE. 202  
EL PASO, TX 79901

RE: Generator : **HUNTSMAN INTERNATIONAL, LLC**  
Mailing Address : **3010 OLD MCNUTT ROAD, SUNLAND PARK, NM 88063**  
US Ecology WS # : **090094510-0**  
Waste Stream Name : **LEAD IMPACTED SOIL**  
Expiration Date : **01/11/2017**  
Process : **Stabilization**

Dear Garrett Ferguson,

Your Waste Stream Disposal Information form for the above waste stream has been approved.

Under conditions of our operating permit, US Ecology Texas, Inc. is required to inform you that we have all the appropriate permits in order to manage your waste stream. We have received the requisite permits to operate a TSD facility. Our TCEQ permit was renewed on March 25, 2013 and our permit number is HW-50052.

The EPA Uniform Hazardous Waste Manifest (EPA Form 8700-22), appropriate LDR form/certification and Truck Inventory Sheet (if shipping in drums) must accompany each shipment. To obtain manifest, Please visit the EPA website for an approved vendor list

Please notify the Texas facility at (800) 242-3209 at least 48 hours prior to shipment and provide the facility with the following information:

- Date of Shipment
- Date of Delivery
- U.S. EPA Generator ID Number
- Waste Stream Number(s)
- Total quantity of each waste stream number being shipped

Any shipment arriving at the facility without prior scheduling and/or all the appropriate paperwork will be subject to rejection.

Should you have any questions, please contact your US Ecology Texas, Inc. Technical Sales Representative at (800) 242-3209. Please refer to the US Ecology Texas, Inc. waste stream number above when making inquiries.

Sincerely,



MYKAYLA SCHMIDGALL  
CUSTOMER SERVICE SPECIALIST



US Ecology Nevada (Beatty) 800-239-3943  
 US Ecology Idaho (Grand View) 800-274-1516  
 US Ecology Texas (Robstown) 800-242-3209  
 US Ecology Michigan (Detroit) 800-396-3265

PROFILE # \_\_\_\_\_

<b>A. GENERATOR INFORMATION</b>					
1. Generator: HUNTSMAN INTERNATIONAL, LLC			<input type="checkbox"/> Billing information is same		<input checked="" type="checkbox"/> P.O. required for payment
2. Facility Address: 3010 OLD McNUTT ROAD SUNLAND PARK, NM 88063			12. Billing Company: ARCADIS		
3. Mailing Address: 8800 GOSLING ROAD			13. Billing Address: 630 PLAZA DRIVE		
4. City/State/Zip: THE WOODLAND / TEXAS / 77381			14. City/State/Zip: HIGHLANDS RANCH / COLORADO /		
5. Technical Contact: EDWARD L. GUNDERSON			15. Billing Contact: ACCOUNTS PAYABLE - PO# - LA003185.2015		
6. Phone: 281-719-3039		7. Fax:	16. Phone: 720-344-3500		17. Fax:
18. Email: ACCOUNTSPAYABLE.ADMINISTRATION@ARCADIS.COM					
8. Generator Status: <input type="checkbox"/> CESQG <input type="checkbox"/> SQG <input checked="" type="checkbox"/> LQG					
9. EPA ID #: NMR000022293			10. State ID #: D0035		
11. SIC Codes:					
<b>B. SHIPPING INFORMATION</b>					
1. US DOT Shipping name: Non-Hazardous, Non-DOT Regulated					
2. Hazard Class:		3. UN/NA #:		4. Packaging Group:	
5. RQ:					
6. Container Type: <input checked="" type="checkbox"/> Bulk <input type="checkbox"/> Totes <input type="checkbox"/> Pallet <input type="checkbox"/> Boxes <input type="checkbox"/> Drums <input type="checkbox"/> Other, Describe:					
7. Frequency: <input type="checkbox"/> Year <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly <input checked="" type="checkbox"/> 1 time <input type="checkbox"/> Other, Describe:					
8. Shipment: Size: Tons Quantity: 34				9. Waste Import: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete Waste Import Supplement)	
<b>C. GENERAL MATERIAL &amp; REGULATORY INFORMATION</b>					
1. Common name for this waste: Lead Impacted Soil (Non-Hazardous)					
2. Process generating the material: EXCAVATION OF SOILS NEAR A MONITORING WELL THAT SHOWED EVIDENCE OF VISCOUS MATERIAL INSIDE WELL. REMOVAL OF SOIL WAS TO LIMIT FUTURE IMPACTS TO THE SITE. (See ALS Environmental analysis, Work Order: HS15110639, results for bin 942 only)					
3. Describe physical appearance and odor of the waste: BROWN SANDY CLAY SOIL WITH INCLUSIONS OF GRAY CLAYEY SOILS AND MINOR AMOUNTS OF BLACK VISCOUS MATERIAL. STRONG HYDROCARBON ODOR WHEN MATERIAL IS DISTURBED.					
4. Odor of the waste: <input type="checkbox"/> None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Strong			5. Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge/Slurry <input checked="" type="checkbox"/> Solid		
6. Describe Color: BROWN			7. Liquid phases: <input type="checkbox"/> Single <input type="checkbox"/> Double Layer <input type="checkbox"/> Multi-layer		
8. Knowledge is from: <input checked="" type="checkbox"/> Lab analysis <input type="checkbox"/> MSDS <input type="checkbox"/> Process/generator knowledge					
9. Waste Type (US Ecology Texas customers only): <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Non-Industrial					
10. Is the waste restricted under EPA Land Disposal Restrictions (§268)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
11. If LDR "Yes", is waste: <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-wastewater <input type="checkbox"/> Debris (§268.2)				12. Alt. Standards for soil? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
13. Is the waste RCRA hazardous waste containing benzene and originating at a Petroleum Refinery (SIC 2911), Chemical Manufacturing Plant (SIC 2800 thru 2899) or Coke by-Product Recovery Plant (SIC 3312)? (If yes, complete Benzene Waste Operations Supplement Form and Thermal Supplement Form): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
14. VO Conc. (§264.1083): <input checked="" type="checkbox"/> <500 ppmw <input type="checkbox"/> ≥500ppmw			15. Has waste been treated after point of generation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
16. CERCLA Regulated (Superfund) Waste: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			17. Butadiene waste regulated by §63 Subpart XX: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
18. Waste contains UHC constituent(s) (§268.48), above a treatment standard, other than those for which the waste exhibits a characteristic. (If yes, list all UHC's in Section D): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
19. Waste exempt from definition of "solid waste" or "hazardous waste" (If yes, list reference 40CFR _____): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
20. State Waste Codes:		OUTS3011			
21. RCRA Waste Codes:					
22. Source Code: G19 (		23. Form Code: W301 (		24. Management Code: H 132 (USE only)	

D. MATERIAL COMPOSITION (use additional form if necessary)						
Constituent	Units	TCLP	Totals	Range total ≥ 100%		
				Typical	Min	Max
Soil	%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	100		
Lead	mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>		0.00868	0.0558
2-Butanone	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0	0.013
Acetone	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0024	0.064
Benzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0022	0.0024
Chloroform	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0033	0.053
Ethylbenzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0031	0.0051
Isopropylbenzene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0053	0.0077
Xylenes, Total	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.013	0.018
Methylcyclohexane	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.013	0.018
Toluene	mg/Kg	<input type="checkbox"/>	<input checked="" type="checkbox"/>		0.0026	0.0053

E. WASTE CHARACTERISTICS			
1. Oxidizer	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Reactive sulfides _____ ppm
2. Explosive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Reactive cyanides _____ ppm
3. Organic peroxide	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Water/air reactive
4. Shock sensitive	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Thermally unstable
5. Tires	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. TSCA regulated PCB waste (control sheet required with shipment)
6. Pyrophoric	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Medical/infectious waste
7. Compressed gas	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Radioactive (If yes, complete Profile Supplement for Radioactive Waste)
8. Halogenated organics	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
16. Possibility of incidental liquids from transportation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
17. Is waste a solid using the paint filter test? <input checked="" type="checkbox"/> Yes (solid) <input type="checkbox"/> No (not solid)			
18. pH: (If solid, what is pH if mixed with water?) Range <u>4</u> to <u>10</u> Typical _____ <input type="checkbox"/> ≤ 2 <input checked="" type="checkbox"/> 2 < 12.5 <input type="checkbox"/> ≥ 12.5			
19. Flash Point: <u>&gt;212</u> °F <input type="checkbox"/> < 140 °F			
20. Is the waste oil bearing waste from Petroleum Refining, Production or Transportation practices? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

F. GENERATOR'S CERTIFICATION	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No I certify this material may be disposed without further treatment.
<p>I authorize US Ecology to correct inconsistencies on the waste profile form that impact waste management decisions with my oral or written authorization. US Ecology will require re-submittal of the waste profile information if substantial changes are determined necessary. I understand material that does not conform to specifications described in this profile may be rejected by US Ecology unless other contractual arrangements have been agreed to by both parties. I certify, under penalty of law, that I am familiar with this waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, that all known or suspected hazards have been disclosed, and that this form was completed in accordance with the instructions provided.</p>	
Print Name	Signature
Title	Date
<div style="display: flex; justify-content: space-between;"> <span>Edward L. Gunderson</span> <span>Edward L. Gunderson</span> <span>Sr Mgr, EHS legal</span> <span>1/7/15</span> </div>	

US Ecology Texas, Inc.  
P.O. Box 307  
3277 County Road 69  
Robstown, TX 78380

Phone: (800) 242 3209  
(361) 387-3518  
Fax: (361) 387 0794  
(361) 387-0577

## US Ecology Texas, Inc.

a US Ecology Inc. company

January 14, 2016

GARETT FERGUSON  
ARCADIS- US  
211 N. FLORENCE STREET STE. 202  
EL PASO, TX 79901

RE: Generator : **HUNTSMAN INTERNATIONAL, LLC**  
Mailing Address : **3010 OLD MCNUTT ROAD, SUNLAND PARK, NM 88063**  
US Ecology WS # : **090094506-0**  
Waste Stream Name : **LEAD IMPACTED SOIL (NON HAZARDOUS)**  
Expiration Date : **01/11/2017**  
Process : **Direct Landfill**

Dear Garrett Ferguson,

Your Waste Stream Disposal Information form for the above waste stream has been approved.

Under conditions of our operating permit, US Ecology Texas, Inc. is required to inform you that we have all the appropriate permits in order to manage your waste stream. We have received the requisite permits to operate a TSD facility. Our TCEQ permit was renewed on March 25, 2013 and our permit number is HW-50052.

The EPA Uniform Hazardous Waste Manifest (EPA Form 8700-22), appropriate LDR form/certification and Truck Inventory Sheet (if shipping in drums) must accompany each shipment. To obtain manifest, Please visit the EPA website for an approved vendor list

Please notify the Texas facility at (800) 242-3209 at least 48 hours prior to shipment and provide the facility with the following information:

- Date of Shipment
- Date of Delivery
- U.S. EPA Generator ID Number
- Waste Stream Number(s)
- Total quantity of each waste stream number being shipped

Any shipment arriving at the facility without prior scheduling and/or all the appropriate paperwork will be subject to rejection.

Should you have any questions, please contact your US Ecology Texas, Inc. Technical Sales Representative at (800) 242-3209. Please refer to the US Ecology Texas, Inc. waste stream number above when making inquiries.

Sincerely,



MYKAYLA SCHMIDGALL  
CUSTOMER SERVICE SPECIALIST

**WASTE PROFILE FORM**

PROFILE # \_\_\_\_\_

**BENZENE WASTE OPERATIONS SUPPLEMENT (BWON 40 CFR Part 61 Subpart FF)**  
(Former Attachment 4)

This form must be completed for all hazardous waste containing benzene originating at a Petroleum Refinery (SIC 2911), Chemical Manufacturing Plant (SIC 2800 thru 2899) or Coke by-Product Recovery Plant (SIC 3312).

<b>A. GENERATOR INFORMATION</b>			
Name of Facility where Waste Originated:		HUNTSMAN INTERNATIONAL, LLC	
Common Name for this Waste:		Lead Impacted Soil	
Process generating the material:		Excavation of soils near monitoring well that showed evidence of viscous material inside well.	
Type of Facility:	<input checked="" type="checkbox"/> Refinery (SIC 2911)	<input type="checkbox"/> Coke by-products recovery (SIC 3312)	<input type="checkbox"/> Chemical manufacturing (SIC 2800 thru 2899)
Facility Total Annual Benzene Status (TAB):	<input checked="" type="checkbox"/> < 1 Megagram (2,204 lbs)	<input type="checkbox"/> ≥1 but <10 Megagram	<input type="checkbox"/> ≥10 Megagram
Is the waste being transferred to US Ecology for offsite treatment compliance with 40 CFR Part 61.342(f)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No*	
By indicating "Yes", notice is provided that the waste referenced in this profile is subject to 40 CFR Part 61 Subpart FF (National Emission Standards for Benzene Waste Operations). All shipments of waste under this profile are being transferred to US Ecology for the destruction or removal of benzene in accordance with 40 CFR Part 61.342 (C)(1)(i).			
<b>B. WASTE CHARACTERISTICS</b>			
The flow-weighted annual average benzene content by weight or process turnaround total concentration of this waste is: <u>0.10</u> ppmw (Benzene concentration data must be total concentration by weight. DO NOT USE TCLP CONCENTRATIONS.)			
The weighted average water content is?		<input checked="" type="checkbox"/> ≤10% <input type="checkbox"/> >10%	
Is the waste Process Unit Turnaround waste?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
*Only if you answered "No" for offsite treatment compliance above, please supply the following: Range of benzene total concentration: <u>0</u> to <u>0.10</u> ppmw			
This waste is classified as:		<input type="checkbox"/> Process wastewater stream <input type="checkbox"/> Product tank drawdown <input type="checkbox"/> Landfill leachate <input checked="" type="checkbox"/> None of the three	
<b>C. CERTIFICATION</b>			
I certify under penalty of law that I am familiar with the waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, and that this form was completed in accordance with the instructions provided.			
Print Name	Signature	Title	Date
Edward L. Gauderson	Edward L. Gauderson	Senior Mgr., EHS Legal	11/2/15

Revised 11/2014



# US Ecology, Inc. Land Disposal Restriction Form

Generator: HUNTSMAN INTERNATIONAL, LLC

EPA ID Number: NMR000022293

Waste Stream or Profile Number:

Manifest Doc. No.

Line No.

Waste is a: ☐ Wastewater (<1% TSS and TOC) ☒ Non-wastewater ☐ Debris

Notification Frequency: ☐ One Time ☒ Required with Each Shipment

Shipment EPA Waste Codes (from 40 CFR 268.40) D008

UHC's (Underlying Hazardous Constituents 40 CFR 268.48)? ☐ Yes ☒ No

If yes, list:

Does a subcategory apply per 40 CFR 268.40? ☐ Yes ☒ No

If yes, list:

Constituents requiring treatment in F001-5, F039, debris, and alternate soils? ☐ Yes ☒ No

If yes, list:

☐ See Profile for analysis (if any).

A. ☐ Restricted Waste Meets Treatment Standards (40 CFR 268.7(a) (3))

The restricted waste identified above meets the treatment standards in 40 CFR 268.40 or Alternative LDR treatment standards for contaminated soil 40 CFR 268.49 and can be landfilled disposed without further treatment.

If applicable, under 268.49, this contaminated soil ☐ does or ☐ does not contain listed hazardous waste and ☐ does or ☐ does not exhibit a characteristic of hazardous waste and complies with the soil treatment standards as provided by 268.49 (c) or the universal treatment standards.

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

B. ☐ Restricted Waste Treated To Treatment Standards (40 CFR 268.7(b) (1) & 268.7 (b) (2))

The treatment residue, or extract of such residue, or the restricted waste identified above has been tested to assure that the treatment residues or extract meet all applicable treatment standards in 40 CFR 268.40 and/or performance standards in 40 CFR 268.45.

I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

C. ☐ Restricted Waste Soil treated to alternative standards (40 CFR 268.7 (b) (4))

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

D. ☐ Restricted Waste Decharacterized But Requires Treatment For UHC (40 CFR 268.7 (b) (4) (iv))

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains Underlying Hazardous Constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

E. ☒ Restricted Waste Subject To Treatment (40 CFR 268.7(a) (2))

The restricted waste identified above must be treated to the applicable treatment standards in 40 CFR 268.40, or treated to comply with applicable prohibitions set forth in Part 268.32 or RCRA Section 3004(d) and 268.49 (c).

If applicable, under 268.49, this contaminated soil ☐ does or ☐ does not contain listed hazardous waste and ☐ does or ☐ does not exhibit a characteristic of hazardous waste and is subject to the soil treatment standards as provided by 268.49 (c) or the universal treatment standards.

F. ☐ Hazardous Debris Subject To Treatment (40 CFR 268.45)

This hazardous debris identified above must be treated to the alternative treatment standards in 40 CFR 268.45.

I certify and warrant that the information that appears on this form, and appended documents, is true and correct. I have correctly indicated how my waste is to be managed in accordance with 40 CFR 268. My certification is based on personal examination of the information submitted, or is based on my inquiries of those individuals responsible for obtaining the information.

Authorized Signature:

*Edward J. Henderson*

Title:

*Senior Manager, EHS Legal*

Date:

*1/7/15*

UHC and Subcategory list from 40 CFR Part 268.48 and 268.40 available upon request.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number		2. Page 1 of		3. Emergency Response Phone		4. Manifest Tracking Number <b>014813782 JJK</b>									
		5. Generator's Name and Mailing Address  Generator's Site Address (if different than mailing address)  Generator's Phone:															
<b>GENERATOR</b>		6. Transporter 1 Company Name						U.S. EPA ID Number									
		7. Transporter 2 Company Name						U.S. EPA ID Number									
<b>DESIGNATED FACILITY</b>		8. Designated Facility Name and Site Address						U.S. EPA ID Number									
		Facility's Phone:															
<b>INTL</b>		9a. HM				9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity		12. Unit Wt./Vol.		13. Waste Codes			
						No.		Type									
		1.															
		2.															
		3.															
<b>TRANSPORTER</b>		4.															
		14. Special Handling Instructions and Additional Information															
<b>DESIGNATED FACILITY</b>		15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.															
		Generator's/Offor's Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____ <i>Scott F. ...</i>															
<b>TRANSPORTER</b>		16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ Transporter signature (for exports only): _____															
		17. Transporter Acknowledgment of Receipt of Materials															
<b>DESIGNATED FACILITY</b>		Transporter 1 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____															
		Transporter 2 Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____															
<b>DESIGNATED FACILITY</b>		18. Discrepancy															
		18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number _____															
<b>DESIGNATED FACILITY</b>		18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____															
		Facility's Phone: _____															
<b>DESIGNATED FACILITY</b>		18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____															
		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)															
<b>DESIGNATED FACILITY</b>		1.				2.				3.				4.			
		20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a															
<b>DESIGNATED FACILITY</b>		Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____															



<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number		2. Page 1 of		3. Emergency Response Phone		4. Manifest Tracking Number <b>014813828 JJK</b>	
		5. Generator's Name and Mailing Address  Generator's Site Address (if different than mailing address)  Generator's Phone: _____							
6. Transporter 1 Company Name <i>Chemical Transport Services, Inc. 4001 Westchase Lane, Suite 100, 77026 TX</i>		U.S. EPA ID Number <i>TXA000000001</i>							
7. Transporter 2 Company Name		U.S. EPA ID Number							
8. Designated Facility Name and Site Address		U.S. EPA ID Number							
Facility's Phone: _____									
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol	13. Waste Codes	
	1.					16	Y		
	2.								
	3.								
	4.								
14. Special Handling Instructions and Additional Information									
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Officer's Printed/Typed Name <i>Garrett F. ...</i>				Signature <i>[Signature]</i>				Month Day Year <i>01 26 16</i>	
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
	17. Transporter Acknowledgment of Receipt of Materials								
TRANSPORTER	Transporter 1 Printed/Typed Name				Signature				Month Day Year
	Transporter 2 Printed/Typed Name				Signature				Month Day Year
DESIGNATED FACILITY	18. Discrepancy								
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
	Manifest Reference Number: _____								
	18b. Alternate Facility (or Generator) U.S. EPA ID Number								
	Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1.		2.		3.		4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name				Signature				Month Day Year	

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number		2. Page 1 of		3. Emergency Response Phone		4. Manifest Tracking Number					
								<b>014813776 JJK</b>					
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)											
Generator's Phone:		6. Transporter 1 Company Name											
7. Transporter 2 Company Name		U.S. EPA ID Number											
8. Designated Facility Name and Site Address		U.S. EPA ID Number											
Facility's Phone:		9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))											
9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity		12. Unit Wt./Vol.		13. Waste Codes					
10. Containers		11. Total Quantity		12. Unit Wt./Vol.		13. Waste Codes		14. Special Handling Instructions and Additional Information					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.		Generator's/Offoror's Printed/Typed Name		Signature		Month		Day		Year			
16. International Shipments		Transporter signature (for exports only):		Port of entry/exit:		Date leaving U.S.:		Month		Day		Year	
17. Transporter Acknowledgment of Receipt of Materials		Transporter 1 Printed/Typed Name		Signature		Month		Day		Year			
18. Discrepancy		Transporter 2 Printed/Typed Name		Signature		Month		Day		Year			
18a. Discrepancy Indication Space		Quantity		Type		Residue		Partial Rejection		Full Rejection			
18b. Alternate Facility (or Generator)		Manifest Reference Number:		U.S. EPA ID Number		Month		Day		Year			
18c. Signature of Alternate Facility (or Generator)		Month		Day		Year		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a		Printed/Typed Name		Signature		Month		Day		Year			

Attachment C

Photographic Documentation



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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14 Limited  
Excavation

Photo No.

1

Date:

11-11-2015

Direction Photo Taken:

Close up

Description:

"Tar" material encountered  
approximately 1.5 feet deep  
below ground surface.  
Appears to be a seam of "tar"  
material.



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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14  
Limited Excavation

Photo No.

2

Date:

11-11-2015

Direction Photo Taken:

Close up

Description:

Close up of "tar" material. All  
"tar" material was removed  
and placed into Bin # 942.





**HUNTSMAN**

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**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
Excavation**Photo No.****3****Date:**

11-11-15

**Direction Photo Taken:**

Northeast

**Description:**Excavating to remove all "tar"  
material near/at WP-14 well  
was located.**HUNTSMAN**

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**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14  
Limited Excavation**Photo No.****4****Date:**

11-11-15

**Direction Photo Taken:**

Close up

**Description:**

Decontamination station.







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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14 Limited  
Excavation

Photo No.

5

Date:

11-11-15

Direction Photo Taken:

Close up

Description:

Roll off bin containing  
excavated material.



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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14  
Limited Excavation

Photo No.

6

Date:

11-11-15

Direction Photo Taken:

Northeast

Description:

Excavation area was  
temporarily fenced for the  
over nights.



**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
Excavation**Photo No.****7****Date:**

11-12-15

**Direction Photo Taken:**

Close up

**Description:**

Two extra roll offs were dropped at the site and used to continue the excavation.

**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14  
Limited Excavation**Photo No.****8****Date:**

11-12-15

**Direction Photo Taken:**

Close up

**Description:**

The source of the contamination was found. A damaged pipe that contained the contaminated material found on well.







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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14 Limited  
Excavation

Photo No.

9

Date:

11-12-15

Direction Photo Taken:

Southeast

Description:

Continue excavating.



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## PHOTOGRAPHIC LOG

Former Huntsman Refinery - WP 14 Limited  
Excavation

Photo No.

10

Date:

11-12-15

Direction Photo Taken:

East

Description:

Excavation backfilling  
completed using onsite soils  
that were stockpiled to the  
north of the excavation area.





**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
Excavation**Photo No.**  
**11****Date:**  
11-12-15**Direction Photo Taken:**

Northwest

**Description:**

Roll off bin sampling using a hand auger. Auger was decontaminated between bin samples.

**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
Excavation**Photo No.**  
**12****Date:**  
11-12-15**Direction Photo Taken:**

Northwest

**Description:**

Sampling roll off bins.





**HUNTSMAN**

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**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
ExcavationPhoto No.  
**13**Date:  
1-26-16**Direction Photo Taken:**

West

**Description:**Bin # 1171 – non-hazardous  
leaving the site.**HUNTSMAN**

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**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
ExcavationPhoto No.  
**14**Date:  
1-27-16**Direction Photo Taken:**

West

**Description:**Bin # 942 – Hazardous  
leaving the site.

**PHOTOGRAPHIC LOG**Former Huntsman Refinery - WP 14 Limited  
Excavation**Photo No.****15****Date:**

1-27-16

**Direction Photo Taken:**

West

**Description:**Bin # 1168 – non-hazardous  
leaving the site.

Attachment D

Utility Clearance Information

# Utilities and Structures Checklist

**THIS FORM MUST BE COMPLETED IN ENTIRETY PRIOR TO BEGINNING ANY INTRUSIVE WORK**

Project: Huntsman Buckland Refinery  
 Project Number: 24003185.2015  
 Form Completion Date: Nov 10, 2015 Form Expiration Date: Nov 25, Dec 1, 2015  
 (15 business days post form completion date)

**Pre-Field Work**

Required: One Call or "811" notified 48-72 hours in advance of work? # 2015 450364  
 Ticket Expiration Date Nov 24, 2015 (Review State Requirements)  
 Utility companies notified during the One Call process ☒ See attached ticket

List any other utilities requiring notification: ☒ None

Private Locator Contacted ☐ Yes ☒ No

Plan private utility clearance subcontractor assignments, areas, required clearance equipment, depth of clearance needed, types of utilities. When possible re-clear 811 markings to confirm utility locations.

Client provided utility maps or "as built" drawings showing utilities? ☒ Yes ☐ No

**Field Work** - This must be completed on site, by staff who have a minimum of one year of field experience in identifying utilities. Review Check list with PM or designee prior to beginning intrusive work.

**List Soil Boring / Well IDs or Excavation Locations applicable to this clearance checklist:**

area immediately around corner WP-17 location which has been Id by rebar placed into plug + abandoned location

**3 Reliable Lines of Evidence Required Prior to Starting any Subsurface Intrusive Work**

☒ One Call/"811" (Reliable as a line of evidence when working in public right of way or easement)

Utility Markings Present: ☐ Paint ☐ Pin flags/stakes ☐ Other ☐ None

☐ Client Provided Maps/Drawings **OR** ☐ Maps/Drawings requested but not provided

☒ Client Clearance Name(s)/Affiliation(s)

☒ Interview(s): Name(s)/Affiliation(s) ED GUNDERSON - Huntsman Int'l, LLC

Did person(s) interviewed indicate depths of any utilities in the subsurface?

☐ Yes, depths provided: ☐ Did not know or refused to answer

Additional Comments:

☒ Site Inspection (Complete Page 2 & Photo Document Marked Utilities & Utility Structures)

☐ Public Records / Maps / Asbuilts

☐ Private Locator: (Name and Company)

☐ Ground Penetrating Radar (GPR)

☐ Radiofrequency (RFLoc)

☐ Electromagnetic (EM)

☐ Metal Detector

**Soft Dig Methods**

☐ Termination Depth \_\_\_\_\_ ft. bgs

☐ Potholing / Vacuum Extraction

☐ Air-Knife ☐ Hydro-Knife

☐ Probing

☐ Hand Auguring

☐ Other:

☐ Marine Locator: (Name and Company)

**Tips for Successful Utility Location:**

1. Don't forget to look up
2. Be on site with Private Utility Locators
3. Ask Private Locators to "confirm" other's markings
4. Select alternate/backup locations during clearance process
5. Mark out all known utilities. Leave nothing to question
6. No hammering - no pickaxes - no digging bars - no shortcutting
7. No excessive turning or downward force of hand augers/shovels
8. Utilities may run in or directly under asphalt/concrete



# Utilities and Structures Checklist

During the site inspection look for the following: ("YES" requires additional investigation and the utility must be marked properly prior to beginning subsurface intrusive work):

Site Inspection	Utility Color Codes	Present
a) Natural gas line present (evidence of a gas meter)?	Yellow	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i) Feeder Lines to buildings or homes?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b) Evidence of electric lines:	Red	
i) Conduits to ground from electric meter or along wall?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii) Conduits from power poles running into ground?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Light poles, electric devices with no overhead lines?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii) Overhead electric lines present? (See Section I)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c) Evidence of sewer drains:	Green	
i) Restrooms or kitchen on site?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Sewer cleanouts present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii) Combined sewer /storm lines or multiple sewer lines?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
d) Evidence of water lines:	Blue	
i) Water meter on site or multiple water lines?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Fire hydrants in vicinity of work?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii) Irrigation systems? (Sprinkler heads, valve boxes, controls in building)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
e) Evidence of storm drains:	Green	
i) Open curbside or slotted grate storm drains		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Gutter down spouts going into ground		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
f) Evidence of telecommunication lines:		
i) Fiber optic warning signs in areas?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iv) Aboveground cable boxes or housings or wires in work area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
g) Underground storage tanks:		
i) Tank pit present, tank vent present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Product lines running to dispensers/buildings?		<input type="checkbox"/> Yes <input type="checkbox"/> No
h) Do utilities enter or exit existing structures/buildings?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, confirm the utility markings outside of structure/building match up.		
i) Proposed excavation marked in white?	White	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
j) Unclassed utilities / anomalies marked in pink?	Pink	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
k) Overhead Utilities/Communication Lines - Look Up:		
i) Overhead electrical conduit, pipe chases, cable trays, product lines?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ii) Overhead fire sprinkler system?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
l) Overhead Power lines in or near the work area:		
i) < 50 kV within 10 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
ii) >50 - 200 kV within 15 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iii) >200-350 kV within 20 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iv) >350-500 kV within 25 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
v) >500-750 kV within 35 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
vi) >750-1000 kV within 45 ft. of work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>Service lines overhead - Unknown Voltage but greater than 15 feet from excavation area.</i>		
m) Other:		
i) Evidence of linear asphalt or concrete repair?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii) Evidence of linear ground subsidence or change in vegetation?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii) Unmarked manholes or valve covers in work area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iv) Warning signs ("Call Before you Dig", etc.) on or adjacent to site?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
v) Utility color markings not illustrated in this checklist?	i.e. Purple	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
n) Has the Utilities & Structures Checklist been reviewed by the PM or Designee		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PM or Designee Name: <u>G. Ferguson</u>		

Name and Signature of person completing the checklist:

Date: 10/10/2015

Gareth Ferguson - CTH

Do not perform mechanized intrusive work within 30 inches of a utility marking without receiving pre-approval by Corporate H&S.



**From:** [eticket@nm811.org](mailto:eticket@nm811.org)  
**To:** [Ferguson, Garrett](#)  
**Subject:** DO NOT REPLY: Request 2015450364  
**Date:** Monday, November 2, 2015 2:11:52 PM

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New Mexico One Call

Locate Request Confirmation Header Code: STANDARD LOCATE

Request Type:

Ticket No: 2015450364 Seq. No: 0

Update of:

Original Call Date: 11/02/2015 Time: 02:05:04 PM OP: 240

Transmit Date: 11/02/2015 Time: 02:11:39 PM

Work to Begin Date: 11/04/2015 Time: 02:05:00 PM

Company: ARCADIS

Contact Name: GARETT FERGUSON Contact Phone: (915)433-1761

Alternate Contact: Alternate Phone:

Best Time to Call: Fax No:

Cell Phone: (915)433-1761 Pager No:

Email: [garrett.ferguson@arcadis.com](mailto:garrett.ferguson@arcadis.com)

State: NM County: DONA ANA City: SUNLAND PARK

Address: , BRICKLAND RD

To Address:

Nearest Intersecting Street: MCNUTT RD (NM-273)

2nd Intersecting Street:

Subdivision:

Latitude: 31.79605300 Longitude: -106.53542700

Zip Code:

Grid:

Township: 29S Range: 04E Section 1/4: 09 SW

Location of Work: FROM ANAPRA RD AND BRICKLAND ROAD TRAVEL SOUTH ON  
BRICKLAND TO ENTRY GATE APPROXIMATELY 0.5MI, FROM  
ANAPRA RD TO RIGHT FORK IN RD. DIG SITE IS LOCATED  
WITHIN FENCE ALONG EAST FENCELINE. 100' X 100'  
AREA. SPOT AREAS MARKED IN WHITE.

Remarks: PLEASE CALL GARETT FERGUSON AT 915-433-1761 FOR  
ACCESS AND DIRECTION TO EXCAVATION LOCATION AS  
FENCE IS LOCKED - HAZARDS - POSS. SNAKES/BEEES

Type of Work: SOIL REMEDIATION

Private Property: Y Street: Overhead Lines: Blasting:

Easement: Mechanical Boring: Premarked: Y

Work Being Done For: CLIENT

The following utility owners have been notified:

QEST NML3 EP24 ELEL ATT1

COSP TWCAB

#### IMPORTANT CONFIRMATION NOTICE

Your fax request has been received and processed. It is your

responsibility to review the information provided on this faxback confirmation ticket and ensure it has been correctly interpreted from your request. Notify us immediately of any corrections or errors. Acceptance of this faxback confirmation ticket means you accept responsibility for the accuracy of the information contained in the ticket and you agree to indemnify New Mexico One Call Systems, Inc. of all liability, claims, fees, or damages, including reasonable attorney fees arising from or resulting from the use of the information provided on this confirmation ticket.

New Mexico Law requires you to wait two working days from the date and time of this confirmation notice before you begin excavation. This request is valid for ten working days. Only the facility owners listed on this ticket will be notified.

You can check the Locate Status of this ticket and request other tickets by visiting the our website at [www.nmonecall.org](http://www.nmonecall.org).

<b>Caller info</b>	
Contractor code: 61406	<b>Caller</b> Caller name: GARETT FERGUSO      Title: PROJECT GEOLOGIST Alternate contact:      Phone #:
<b>Communication</b> Phone #: (915) 433-1761 Fax #: Cell phone #: (915) 433-1761 Pager: Email: gareth.ferguson@arcadis.com Best time to call back:	<b>Contractor</b> Company name: ARCADIS Address: 401      Suite: 400 Street: EAST MAIN Street type: ST      Direction: City: EL PASO State: TX      Zip code: 79901 Type: CONTRACTOR

Ticket #	City or County	Address	Street/Well/Location Name	Intersection 1	Intersection 2
Notifications					
2015450364	SUNLAND PARK, DONA ANA M		MCNUTT RD (NM-273)	ANAPRA RD	BRICKLAND RD
Suspended					