NM1 - ___11_____

GENERAL CORRESPONDENCE

YEAR(S):

__2010 - 2012___

envirotech

May 30, 2012

Mr. Brad Jones
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: REMOVAL OF REMEDIATED BIOPILE FROM CELL 20 IN LANDFARM 2 UNIT 5

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for the removal of the biopile located on Envirotech's Land Farm #2 Unit 5, Cell 20. Envirotech's Landfarm 2 is located at #43 Road 7175, South of Bloomfield, New Mexico. The area being submitted is shown on the attached map, marked by green crosshatch design. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2002, contaminated soil must pass laboratory analysis with results of less than 100 ppm TPH, 50 ppm BTEX and 10 ppm benzene in order to be considered remediated and eligible for removal. In addition to the constituents listed above, Envirotech sampled for chlorides. Envirotech's sample was composed of an eight (8)-point composite from the interior of the biopile (see attached sampling diagram).

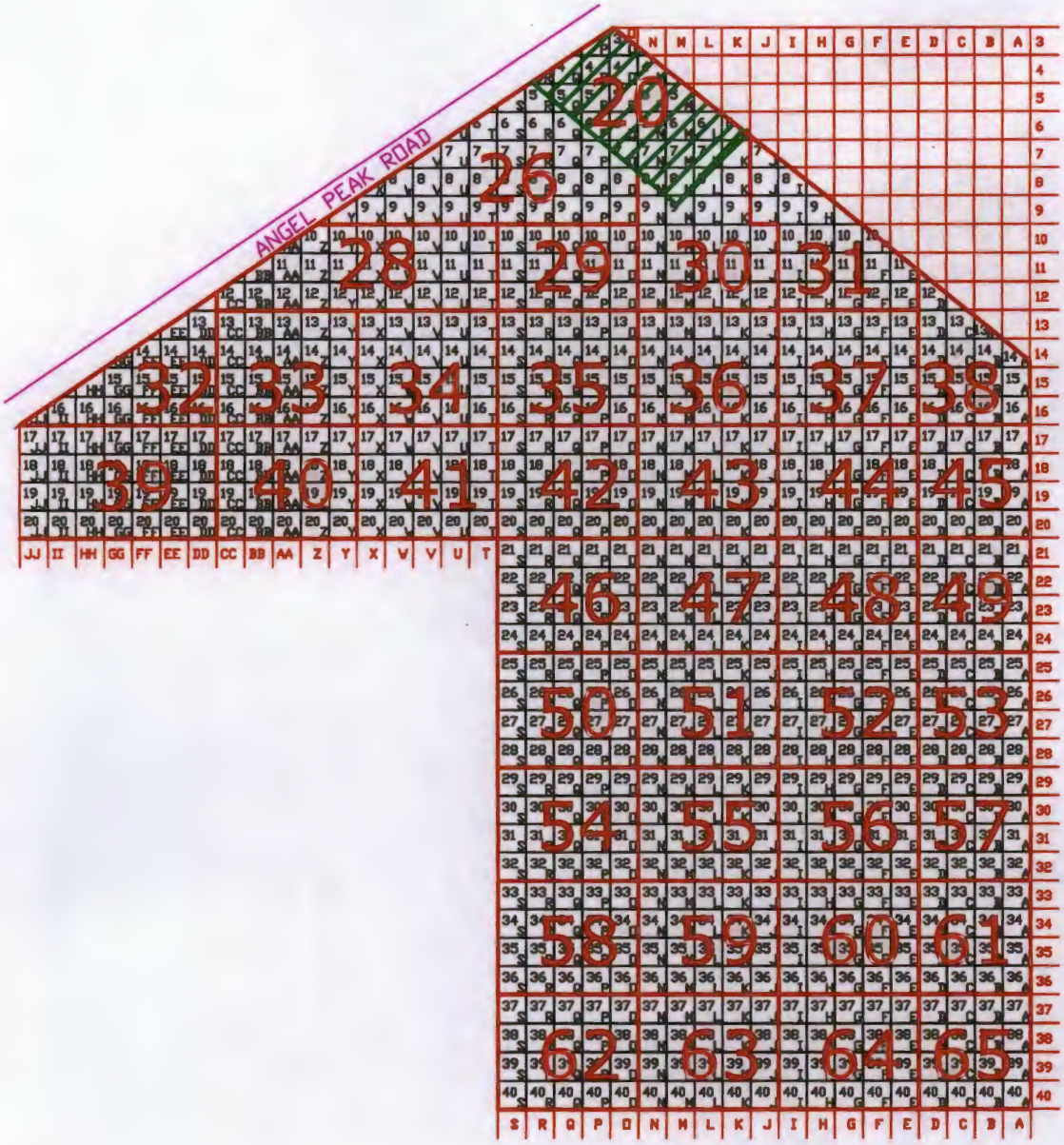
The biopile located in Cell 20 passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes as well as chlorides (see attached laboratory results). The BTEX and benzene results are reported in parts per billion (ug/Kg), TPH and chlorides are in parts per million (mg/Kg). Envirotech hereby requests permission to remove the biopile from Cell 20 and relocate the remediated soil to the blending facility. Additionally, Envirotech would like to notify the NMOCD that it will no longer continue the remediation of soil through biopiles and instead will convert Cell 20 back to traditional landfarming methods.

Thank you for your time and consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Keith Johnson
General Manager
kjohnson@envirotech-inc.com

Kendra Runung
Waste Coordinator
krunung@envirotech-inc.com



ENVIROTECH
NMOCD PERMITED
LANDFARM # 2
UNIT 5
CELL 20 BIOPILE

SCALE: 1=100'	FIGURE NO.	REV 1
PROJECT NO.		

REVISIONS

NO.	DATE	BY	DESCRIPTION
	5-22-12	BWW	CLOSED CELLS
MAP DRWN	JMK	12-7-09	BASE DRWN

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5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

CHAIN OF CUSTODY RECORD

12838

Client:	Project Name / Location: Closures Landfarm 4/4 quarter / Landfarm Unit 5	ANALYSIS / PARAMETERS
E-Tech		
Client Address:	Sampler Name: F. Aragon	
Client Phone No.:	Client No.: 1-02-60002	

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative: HgCl	Preservative: HCl	Preservative: Cool	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Cell 20 Bottle	10-28-11	10:43	60137	Soil Solid Sludge Aqueous	1-4oz			X	X	X								X				Y	X
Cell 44		12:22	60138	Soil Solid Sludge Aqueous																		Y	X
Cell 32		12:45	60139	Soil Solid Sludge Aqueous																		Y	X
Cell 45		12:30	60140	Soil Solid Sludge Aqueous																		Y	X
Cell 42		12:35	60141	Soil Solid Sludge Aqueous																		Y	X
Cell 29		10:52	60142	Soil Solid Sludge Aqueous																		Y	X
Cell 31		11:22	60143	Soil Solid Sludge Aqueous																		Y	X
Cell 36		11:49	60144	Soil Solid Sludge Aqueous																		Y	X
Cell 38		11:11	60145	Soil Solid Sludge Aqueous																		Y	X
Cell 35		12:01	60146	Soil Solid Sludge Aqueous																		Y	X

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
F. Aragon	10-28-11	14:10	Jennell Winters	10-28-11	2:10
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1101BBLK QA/QC	Date Reported:	11-02-11
Laboratory Number:	60156	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-01-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.4198E+006	2.4247E+006	0.2%	ND	0.1
Toluene	2.7138E+006	2.7192E+006	0.2%	ND	0.1
Ethylbenzene	2.5188E+006	2.5239E+006	0.2%	ND	0.1
p,m-Xylene	7.0404E+006	7.0545E+006	0.2%	ND	0.1
o-Xylene	2.4542E+006	2.4592E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	230	241	5.1%	0 - 30%	0.9
Toluene	1,660	1,730	4.2%	0 - 30%	1.0
Ethylbenzene	348	373	7.1%	0 - 30%	1.0
p,m-Xylene	750	817	8.9%	0 - 30%	1.2
o-Xylene	303	331	9.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	230	500	784	107%	39 - 150
Toluene	1,660	500	2,180	101%	46 - 148
Ethylbenzene	348	500	877	103%	32 - 160
p,m-Xylene	750	1000	1,800	103%	46 - 148
o-Xylene	303	500	835	104%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References:
Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Sample 60137-60146, 60156.**

Analyst

Review

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Chloride

Client:	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 20 Bio. Pile	Date Reported:	10-31-11
Lab ID#:	60137	Date Sampled:	10-28-11
Sample Matrix:	Soil	Date Received:	10-28-11
Preservative:	Cool	Date Analyzed:	10-31-11
Condition:	Intact	Chain of Custody:	12838

Parameter	Concentration (mg/Kg)
Total Chloride	**540**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Landfarm 4th Quarter Closures/ Landfarm 2 Unit 5**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 20 Bio Pile	Date Reported:	11-07-11
Laboratory Number:	60137	Date Sampled:	10-28-11
Chain of Custody:	12838	Date Received:	10-28-11
Sample Matrix:	Soil	Date Analyzed:	11-02-11
Preservative:	Cool	Date Extracted:	11-02-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**80.7 %**
	1,4-difluorobenzene	**85.7 %**
	Bromochlorobenzene	**82.2 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm 4th Quarter Closures/ Landfarm 2 Unit 5**

Analyst

Review

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EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-01-11 QA/QC	Date Reported:	11-07-11
Laboratory Number:	60156	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-01-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	40848	1.005E+03	1.005E+03	**0.04%**	**0 - 15%**
Diesel Range C10 - C28	40848	9.996E+02	1.000E+03	**0.04%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**2.9**	**0.2**
Diesel Range C10 - C28	**3.2**	**0.1**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Range
Gasoline Range C5 - C10	**20.4**	**21.0**	**3.1%**	**0 - 30%**
Diesel Range C10 - C28	**10.1**	**8.6**	**15.1%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**20.4**	**250**	**273**	**101%**	**75 - 125%**
Diesel Range C10 - C28	**10.1**	**250**	**262**	**101%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 60156, 60137-60146.**

Analyst

Review

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 20 Bio. Pile	Date Reported:	11-07-11
Laboratory Number:	60137	Date Sampled:	10-28-11
Chain of Custody No:	12838	Date Received:	10-28-11
Sample Matrix:	Soil	Date Extracted:	10-31-11
Preservative:	Cool	Date Analyzed:	11-01-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm 4th Quarter Closures/ Landfarm 2 Unit 5**

Analyst

Review

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ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT No:
C.O.C #: 12838

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 03037-0007
PAGE No: 1 of

FACILITY LOCATION: Envirotech Landfarm
SOURCE LOCATION: Bio-P.Le / Cell 20
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: PIT TYPE:

DATE STARTED: 10-28-11
DATE FINISHED:

ENVIRONMENTAL SPECIALIST: F. Arago

SOIL REMEDIATION: QUANTITY: # OF COMP. SAMPLES: 1
DIMENSIONS: Approx 50' x 20' x 15' tall
VISIBLE OBSERVATIONS: Dark Brown / Black Soil
SAMPLING PLAN:

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX _____ YARDS _____ FROM WELLHEAD.

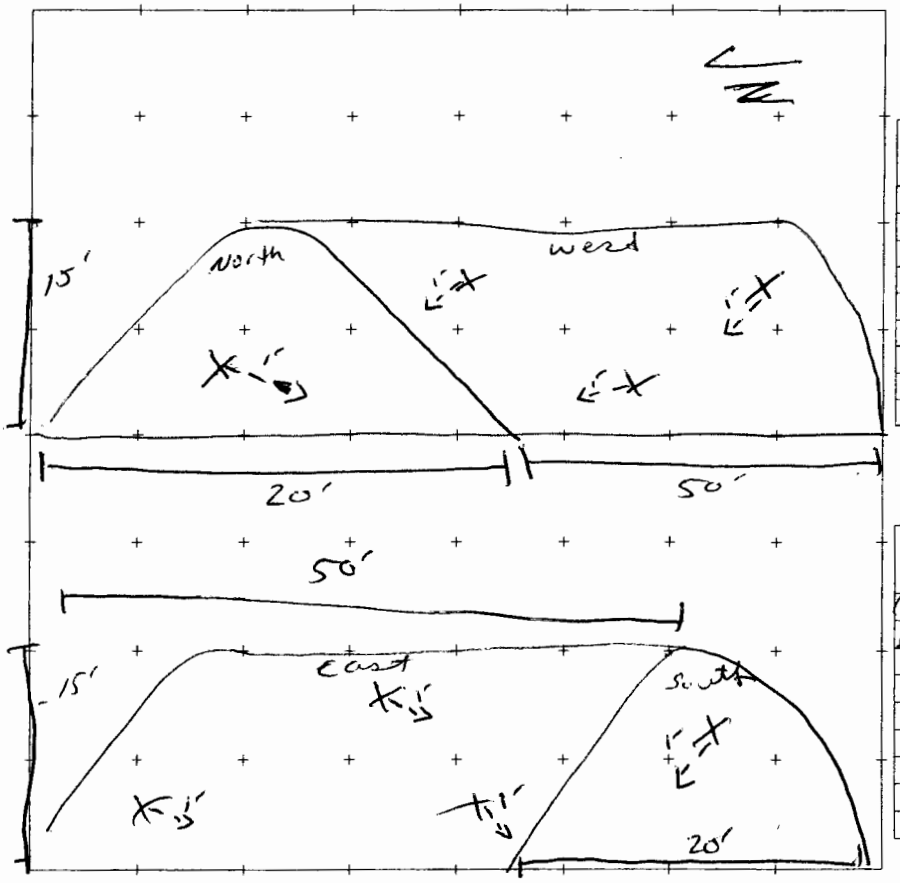
DEPTH TO GROUNDWATER:
NEAREST WATER SOURCE/TYPE:
NEAREST SURFACE WATER:
MAX TPH PER NMOCD:

No. OF 5-POINT COMPOSITE SAMPLES: YARDAGE--#
0-200=1
201-400=2
401-1000=3
>1000=5

Samples collected Approximately 1' into p.le

FACILITY DIAGRAM

GRID SCALE: NTS



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
Cell 20		
Bottle	8015	ND
	8021	ND

NORTH

WELLHEAD

SURFACE FLOW DIR.

ESTIMATED GROUNDWATER FLOW DIR.

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

June 30, 2011

Kyle P. Kerr
Envirotech, Inc.
5796 US Highway 64
Farmington, New Mexico 87401

RE: Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms
Envirotech, Inc.
Commercial Landfarm #2: Permit NM-1-011
Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM
San Juan County, New Mexico

Dear Owner/Operator:

The Oil Conservation Division (OCD) has received several landfarm monitoring reports which indicate Owner/Operators are not conducting the required sampling and assessment of the monitoring data required by existing permit conditions and the applicable requirements of the Surface Waste Management Facilities rule 19.15.36 NMAC (Rule 36). OCD wishes to remind such Owner/Operators that the requirements of Rule 36 have been in effect since February 14, 2007 and compliance is required. This letter is provided to help Owner/Operators understand the most common deficiencies regarding compliance in general operations, sampling of landfarms at existing surface waste management facilities, and the reporting of such results.

I. Transitional Provisions, Existing Surface Waste Management Facilities:
The transitional provision of Rule 36.20.A states that existing surface waste management facilities *shall comply with the operational, waste acceptance, and closure requirements* provided in the new rule, unless specifically addressed in the current permit, order, waiver, exception, or agreement granted in writing from OCD. Where the language in the existing permit is silent (i.e., where a specified requirement of Rule 36 is not addressed within the existing permit or in writing from OCD), the operational, waste acceptance, and closure provisions of Rule 36 apply and

supplement the conditions of the existing permit. Examples of how this transitional provision would be applied to Owner/Operators of existing landfarms are as follows:

A. Treatment Zone Monitoring (contaminated soils being remediated):
Most Owner/Operators of existing landfarms have common language or conditions specified within their permits. For this example, two of the following common permit conditions demonstrate how an Owner/Operator would request the necessary modification of their existing permit.

In an existing landfarm permit:

1. Soils will be spread on the surface in six-inch lifts or less.

2. Successive lifts of contaminated soils may not be spread until a laboratory measurement of:
   a. total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm);
   b. the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm; and
   c. benzene is less than 10 ppm.
   d. Comprehensive records of the laboratory analyses and the sampling locations must be maintained at the facility. Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of the remediated soils.

In addition to the above permit conditions, an Owner/Operator also has to implement the following additional requirements of Rule 36:

- Chloride testing and limits (See 19.15.36.15.D NMAC)

If ground water is between 50' and 100' below the bottom of the oil field waste:	**If ground water is more than 100' below the bottom of the oil field waste:**
Chloride concentration cannot exceed **500** mg/kg	Chloride concentration cannot exceed **1000** mg/kg

- The following test methods would have to be utilized: TPH concentration of each lift determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division, and chloride concentration, determined by EPA method 300.1. (See 19.15.36.15.D NMAC)

- The sampling protocol and frequency: "*The operator shall collect and analyze at least one composite soil sample, consisting of four discrete samples, from the treatment zone at least semi-annually using the methods specified below for TPH and chlorides.*" (See 19.15.36.15.D NMAC)

- The maximum thickness of remediated soils for closure: "*The maximum thickness of treated soils in a landfarm cell shall not exceed two feet or approximately 3000 cubic yards per acre. When that thickness is reached, the operator shall not place additional oil field waste in the*

landfarm cell until it has demonstrated by monitoring the treatment zone at least semi-annually that the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC or the contaminated soils have been removed to a division-approved surface waste management facility." (See 19.15.36.15.D NMAC)

Therefore, in order to remain in compliance with existing permit conditions and Rule 36 the Owner/Operator shall ensure that:

1. Soils will be spread on the surface in **six**-inch lifts or less, and the addition of any remediated soils is not allowed until:
   a. TPH concentration of each lift, as determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division, does not exceed **100** mg/kg (ppm),
   b. the sum of all aromatic hydrocarbons (BTEX) is less than **50** ppm,
   c. benzene is less than **10** ppm, and
   d. the chloride concentration, as determined by EPA method 300.1, does not exceed **500** mg/kg or 1000 mg/kg. (See depth to ground water restrictions above.)
2. The Owner/Operator shall collect and analyze at least **one** composite soil sample, consisting of **four** discrete samples, from the treatment zone at least **semi-annually** using the methods specified above for TPH and chlorides.
3. The maximum thickness of treated soils in a landfarm cell shall not exceed **two feet** or approximately **3000 cubic yards per acre**. When that thickness is reached, the Owner/Operator shall not place additional oil field waste in the landfarm cell until it has demonstrated by monitoring the treatment zone at least semi-annually that the contaminated soil has been treated to the standards specified in Rule 36.15.F or the contaminated soils have been removed to a division-approved surface waste management facility. Owner/Operators **must** obtain authorization from the OCD prior to application of successive lifts and/or removal of the remediated soils.

The requirements of Rule 36 that would require an Owner/Operator to submit a modification request regarding treatment zone monitoring to an existing landfarm are as follows:

- "*The operator shall spread contaminated soils on the surface in **eight**-inch or less lifts or approximately 1000 cubic yards per acre per eight-inch lift.*" (See 19.15.36.15.D NMAC)

- "*TPH concentration of each lift, as determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division, does not exceed **2500** mg/kg.*" (See 19.15.36.15.D NMAC)

B. Vadose Zone Monitoring (native soils beneath the contaminated soils being remediated):

In regards to vadose zone monitoring (commonly referred to by the misnomer of "Treatment Zone Monitoring" within existing landfarm permits), most Owner/Operators of existing surface waste management facilities that operate landfarms have common language or conditions specified within their permits. For this example two of the most common permit conditions regarding the

vadose zone will be used to demonstrate how an Owner/Operator would comply with the transitional provision of Rule 36.20.A, and what requirements of the rule would require an Owner/Operator to submit a request to modify an existing permit.

Two of the most common conditions in an existing landfarm permit are as follows:

1. A treatment zone not to exceed **three (3) feet** beneath the landfarm native ground surface must be monitored. A minimum of one random soil sample must be taken from each individual cell, with no cell being larger than five (5) acres, **six (6) months** after the first contaminated soils are received in the cell and then **quarterly** thereafter. The sample must be taken at two (2) to three (3) feet below the native ground surface.

2. The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) **quarterly** and for major cations/anions and Water Quality Control Commission (WQCC) metals **annually**.

Based upon the transitional provision of Rule 36.20.A, an Owner/Operator would have to implement and integrate the following **additional requirements** while complying with the conditions specified above.

- The testing for chlorides and the comparison of the results to background: "*The operator shall collect and analyze a minimum... using the methods specified below for TPH, BTEX and* ***chlorides*** *and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.*" (See 19.15.36.15.E(2) NMAC).

    i. *Note*: The "methods specified below for TPH, BTEX and chlorides" are those identified in Subsection F of 19.15.36.15 NMAC: "Total BTEX, as determined by *EPA SW-846 method 8021B or 8260B...*" (See 19.15.36.15.F(2) NMAC); "TPH, as determined by *EPA method 418.1* or other EPA method approved by the division..." (See 19.15.36.15.F(3) NMAC); and "Chlorides, as determined by *EPA method 300.1...*" (See 19.15.36.15.F(3) NMAC).

- The five year monitoring program: "*The operator shall collect and analyze a minimum of* ***four*** *randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.**3103** NMAC at least* ***every five years*** *and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.*" (See 19.15.36.15.E(3) NMAC).

    ii. *Note:* The "*methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC*" are those identified in Subsection F of 19.15.36.15 NMAC: "The concentration of constituents listed in Subsections A and B of 20.6.2.3103

NMAC shall be determined by *EPA SW-846 methods 6010B or 6020* or other methods approved by the division." (See 19.15.36.15.F(5) NMAC)

- The release response: *"If vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations, then the operator shall notify the division's environmental bureau of the exceedance, and shall* ***immediately collect and analyze*** *a minimum of* ***four*** *randomly selected, independent samples for TPH, BTEX, chlorides and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a response action plan for the division's approval within 45 days of the initial notification. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediating existing contamination."* (See 19.15.36.15.E(5) NMAC

The requirements of Rule 36 that would require an Owner/Operator to submit a modification request regarding vadose zone monitoring to an existing landfarm are as follows:

- *"The operator shall take the vadose zone samples from soils between three and four feet below the cell's original ground surface."* (See 19.15.36.15.E(1) NMAC)

- *"The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone at least* ***semi-annually****..."* (See 19.15.36.15.E(2) NMAC)

C. Transitional Provisions, New Landfarm Cells Constructed at an Existing Surface Waste Management Facility:

The transitional provision, Rule 36.20.B, states "Major modification of an existing surface waste management facility and new landfarm cells constructed at an existing surface waste management facility shall comply with the requirements provided in 19.15.36 NMAC." In this case, an Owner/Operator is required to consider the siting criteria and operational requirements regarding landfarms specified in Rule 36.13; the specific requirements applicable to landfarms specified in Rule 36.15; and the closure and post closure requirements regarding landfarms of Rule 36.18. The existing permit conditions would not be applicable to new landfarm cells at the existing facility, but would continue to apply to landfarm cells that were constructed prior to the February 14, 2007 effective date of Rule 36.

II. Compliance with Additional Operational Requirements:

Other regulatory requirements that Owner/Operators of existing surface waste management facilities that operate landfarms should be aware of and consider when operating its facility are as follows:

A. Reuse of remediated soils:

Most existing surface waste management facility permits regarding landfarming do not specify the constituents and concentrations that must be achieved for reuse of treated or remediated soils. Rule 36 has a provision that specifically addresses the conditions of approval for reuse of treated

soils. Rule 36.15.G(1), disposition of treated soils, states "*If the operator achieves the closure performance standards specified in Subsection F of 19.15.36 NMAC, then the operator may either leave the treated soils in place, or, with prior division approval, dispose or reuse of the treated soils in an alternative manner.*"

In accordance with the treatment zone closure performance standards of Rule 36.15.F, "*the operator shall continue treatment until the contaminated soil has been remediated to the higher of the background concentrations or the following closure performance standards. The operator shall demonstrate compliance with the closure performance standards by collecting and analyzing a minimum of one composite soil sample, consisting of four discrete samples.*

*(1) Benzene, as determined by EPA SW-846 method 8021B or 8260B, shall not exceed **0.2 mg/kg**.*

*(2) Total BTEX, as determined by EPA SW-846 method 8021B or 8260B, shall not exceed **50 mg/kg**.*

*(3) The gasoline range organics (GRO) and diesel range organics (DRO) combined fractions, as determined by EPA SW-846 method 8015M, shall not exceed **500 mg/kg**. TPH, as determined by EPA method 418.1 or other EPA method approved by the division, shall not exceed **2500 mg/kg**.*

*(4) Chlorides, as determined by EPA method 300.1, shall not exceed **500 mg/kg if** the landfarm is located where ground water is less than **100** feet but at least **50** feet below the lowest elevation at which the operator will place oil field waste or **1000 mg/kg if** the landfarm is located where ground water is **100** feet or more below the lowest elevation at which the operator will place oil field waste.*

*(5) The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division. If the concentration of those constituents exceed the PQL or background concentration, the operator shall **either** perform a site specific risk assessment using EPA approved methods and shall propose closure standards based upon individual site conditions that protect fresh water, public health, safety and the environment, which shall be subject to division approval **or** remove pursuant to Paragraph (2) of Subsection G of 19.15.36.15 NMAC."*

B. Waste Acceptance:

Based upon conversations with several landfarm Owner/Operators, it has come to OCD's attention that the proper waste acceptance protocol is not being implemented at all applicable facilities. In accordance with Rule 36.15.A, "*Only soils and drill cuttings predominantly contaminated by petroleum hydrocarbons shall be placed in a landfarm. The division may approve placement of tank bottoms in a landfarm if the operator demonstrates that the tank bottoms do not contain economically recoverable petroleum hydrocarbons. Soils and drill cuttings placed in a landfarm shall be sufficiently free of liquid content to pass the paint filter test, and shall not have a chloride concentration exceeding **500 mg/kg if** the landfarm is located where ground water is less than **100 feet but at least 50 feet** below the lowest elevation at which the operator will place oil field waste or exceeding **1000 mg/kg if** the landfarm is located where ground water is **100** feet or more below the lowest elevation at which the operator will place oil field waste. The person tendering oil field waste for treatment at a landfarm shall **certify,** on form C-138, that representative samples of the*

oil field waste have been subjected to the paint filter test and tested for chloride content, and that the samples have been found to conform to these requirements. The landfarm's operator shall not accept oil field waste for landfarm treatment unless accompanied by this certification."

All landfarm Owner/Operators should be implementing the above referenced requirements in order to ensure compliance to the transitional and waste acceptance provisions of Rule 36. Please note that pursuant to Rule 36.7.A(3), a landfarm "*means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings.*" Landfarm Owner/Operators should ensure that the waste material accepted for remediation at their facilities contains petroleum hydrocarbons. Acceptance of any other waste material could be considered disposal.

Please note that if you are currently implementing the protocols identified above, OCD appreciates your efforts to continually remain in compliance with the regulations. As for Owner/Operators that are not currently in compliance, the goal of OCD is to get you back on track and in compliance. OCD anticipates observing the changes identified above in the submittal of the results of the next sampling event. If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Jami Bailey
Division Director
Oil Conservation Division

JB/baj

cc: OCD District III Office, Aztec