NM1 - / 03

PERMITS, RENEWALS, & MODS

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire
Division Director
Oil Conservation Division



July 28, 2008

Mr. Jake Hatcher
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Minor Modification Request to Permit NM-1-0010B

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm: Permit # NM-1-0010B

NW/4, SE/4, Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Mr. Hatcher:

The New Mexico Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ's) request, dated May 15, 2008, to modify a condition to JFJ's surface waste management facility permit NM-1-0010B. OCD understands that the request is to omit the condition "no drilling mud may be accepted at the facility without the generator's written authorization from the District office to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) well name and location; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chemicals added); and 5) exact cell location where the material is to remediated."

OCD accepts JFJ's justification that the comprehensive revised C-138 form, promulgated under 19.15.36 NMAC, provides the information required for the operator to determine if the drilling mud is acceptable. JFJ must also comply with the transitional provision of Subsection A of 19.15.36.20 NMAC which states "existing surface waste management facilities shall comply with the operational, waste acceptance and closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility." Based upon the information provided, OCD hereby approves the minor modification request to omit the condition due to the JFJ's regulator obligation to comply with the operational and waste acceptance requirements of 19.15.36 NMAC.



Mr. Hatcher JFJ Landfarm, LLC NM-1-0010B JFJ Landfarm July 28, 2008 Page 2 of 2

Please be advised that approval of this request does not relieve the JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions regarding this matter, please contact Brad A Jones of my staff at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Wayne Price

Environmental Bureau Chief

LWP/baj

cc: OCD District III Office, Aztec



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876

#49 CR 3150 Aztec, NM 87410

May 15, 2008

Brad Jones EMNRD Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Minor Modification - Permit # NM01-0010B

Dear Brad:

This letter is being sent to request a "minor modification" to our permit regarding drill mud acceptance. In our permit (Page 4, Drill Mud Acceptance, No. 1) it states, "No mud may be accepted at the facility without the generator's written authorization from the District to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) well name and location from which the mud was transported; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chemicals added); and 5) exact cell location where the material is to be remediated.

I am requesting a minor modification to our permit to allow Industrial Ecosystems, Inc. to utilize the C-138 (Request for Approval to Accept Solid Waste) form along with drill mud reports and biopiles records to meet this requirement. The C-138 form provides all of the required information along with certification that the sample of waste conforms to the paint filter and chloride content requirements. The drill mud report will be obtained from the generator and attached to the C-138 and the cell location will be documented in the biopile record(s).

Please let me know if you have any questions or if additional information is needed.

Sincerely,

Marcella Marquez

MarcellaMarquez

Administrative Officer



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

September 25, 2007

Mr. Jake Hatcher
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Minor Modification - Operational Plan
July 31, 2007 Complaint (Private Citizen)
JFJ Landfarm, LLC - Industrial Ecosystems Inc.
JFJ Landfarm - Permit # NM01-0010B
NW/4, SE/4, Section 2, Township 29 North, Range 12 West, NMPM,
San Juan County, New Mexico

Dear Mr. Hatcher:

The New Mexico Oil Conservation Division (OCD) appreciates JFJ Landfarm, LLC's (JFJ) effort and timely response in providing an operational plan amendment that addresses the issue of fugitive soils and dust blowing off-site and into the surrounding residential areas. OCD has reviewed the initial response dated August 29, 2007 and the clarification response dated September 6, 2007. OCD accepts the weekly inspection log provided in the August 29, 2007 submittal and the revised operational plan amendment provided in the September 6, 2007 submittal as a minor modification to JFJ's surface waste management facility permit.

In accordance with the provisions of Subsection C of Section 12 of 19.15.36 NMAC, the OCD imposes additional conditions to the existing surface waste management facility permit based upon the approved operational plan for adding moisture to enhance the bioremediation process and control blowing dust. JFJ shall implement the provisions and protocols of the approved operational plan in order to control blowing dust and reduce the potential of fugitive dust emissions from leaving the surface waste management facility. Please place the attached copy in your operating records.

Mr. Hatcher September 25, 2007

Page 2 of 2

The OCD has provided a copy of the original complaint for your file, as requested in your September 13, 2007 correspondence. If you have any questions regarding this matter, please contact of Brad A. Jones at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Wayne Price

Environmental Bureau Chief

LWP/baj

Attachments: Operational Plan Amendment

Inspection Log

July 31, 2007 Complaint

cc: OCD District III Office, Aztec

Ms. Marcella Marquez, JFJ Landfarm, LLC, Industrial Ecosystems Inc., Farmington, NM

Ms. McNall, Aztec, NM

Industrial Ecosystems, Inc. Operational Plan for Adding Moisture to Enhance the Bioremediation Process and to Control Blowing Dust (Pursuant to Paragraph 6 of Subsection C of Section 15 of 19.15.36 NMAC)

| Purpose:

The major function of adding moisture to the biopiles on the landfarm is to enhance the bioremediation process. A secondary function of adding moisture to the biopiles and to the unpaved roadways on the landfarm is to help control blowing dust. The following procedures, when applied, will enhance the bioremediation process and reduce the potential of fugitive dust emissions from leaving the landfarm.

Il Scope:

Best management practices, including "trenching" the biopiles and "spraying" the roadways, shall be utilized to enhance the bioremediation process and to control fugitive dust emissions.

III Protocols:

To enhance the bioremediation process biopiles shall be kept moist, but not saturated by means of "trenching". Trenching is defined as: Use of excavator(s) to cut a trench into the top of the pile, adding water, and then mixing the water into the pile by "rolling" it.

To reduce the potential of fugitive dust emissions, unpaved roadways on the landfarm shall be "sprayed" with water as needed.

IV Procedures:

Biopiles will be "trenched" on a regular, on-going basis.

The Facility Manager will utilize the "Weekly Inspection Log" (see attached) on a daily basis to determine the need to "spray" unpaved roadways on the landfarm to help control fugitive dust emissions.

V Methods:

Heavy equipment (i.e., track hoes and loaders) will be utilized to "trench" the biopiles on a regular, on-going basis.

Water trucks will be utilized to "spray" unpaved roadways on the landfarm.



Industrial Ecosystems Inc Soil Reclamation Center

NM 87499

Phone: 505-632-1782 Fax: 505-632-1876

Aztec NM 87410 #49 CR 3150

WEEKLY INSPECTION LOG

For the week of	
ek of	PO Box 20. Farmington

General Information	
Was the facility illegally entered after hours	
Condition of fencing	

Condition of gate

Is there any freestanding water within the facility Did the facility receive any moisture within the last 24 hours Condition of equipment Specify: ___ Rain, ___ Snow, _

Is there any trash or loose material in the facility Do the unpaved roadways need to be sprayed for dust control What is the condition of the stormwater prevention

l	1	ī	1	-		 1	1		-
Mo	Yes _	_ Good _	Good	Good	Yes	Yes_	Good	Yes	Yes
.	No	Poor	Poor	Poor	8	8	Poor	 	8
Tues	Yes	Good_		Good L		Yes	Good _	Yes	Yes
S	No	Poor		Poor		8	Poor	8	8
Wed	Yes _	Good	Good	Good 	Yes _	Yes _	Good	Yes	Yes
	No			Poor	8	N 0	Poor	8	No
Thurs	Yes _	Good		000 000		Yes	Good	Yes	Yes
เช	No	Poor	Poor	Poor	N _O	8	Poor	No.	N _O
3.		Good	Good	Good		Yes	Good	Yes	Yes
	[[Poor	Poor	Poor	No.	S	Poor	8	N _O
Sat/Su	Yes _	Good		Good I	Yes	Yes _	Good L	Yes _	Yes _
Sun	No	Poor	Poor	Poor	8	8	Poor	8	

Comments:

Has any material been spilled outside the concrete pit Are there any visible leaks or cracks in any of the walls Are there any visible leaks cracks in the concrete floor

Concrete Washout/Unloading Pit

Condition of burms

Comments:

						-
		Good	Yes	Yes No	Yes	Mon
		Poor	No	No	No	
-		Good	Yes		Yes	Tues
		_ Poor	No	_ No	_No	
		Good	Yes _	Yes	Yes _	Wed
		Poor	No	No	No	Ö.
		Good	Yes	Yes _	Yes	Thurs
		Poor	No	No	No	∖ญ
	-	Good _	Yes	Yes	Yes	Fri
		Poor	No	No	No.	
		Good	Yes	Yes	Yes	Sat/Sun

Mixing Area

Fluid Supply Are there any visible cracks or leaks in the mixing chamber Pug Mill

Are there any visible leaks in the tank containment area Are all hoses in good usable conditions Are there any visible leaks on or around the supply pump

Signature

Comments:

- 11		Yes				Mon
	N _O	8	No		No	
	Yes	Yes)		Yes	Tues
	8	No	No		No	
	Yes	Yes	Yes		Yes	Wed
	20	No	No	i	No	
- li	ļ	Yes			Yes	Thurs
	20	NO O	No		No	103
	- 1	Yes1	Yes No		ι	F.
	8	No	6		No	
	Yes	Yes	Yes		Yes	Sat/Sun
	No.	No .	8		N _O	_

Santa Fe, NM 87505 RECEIVED.
Attention: Wayne Price

RE: Crouch Mesa Soil Reclamation Center operated by Industrial Ecosystem, Inc. NMOCD Permit # NM-01-00108(or B?) JFJ Landfarm LLC NW/4/SE/4, Sec. 2 T 29N, R12W

Dear Mr. Price

I have several questions about the Soil Reclamation Center (dirt farm) located in a housing area on Crouch Mesa. For your convenience, I have numbered the questions:

On Thursday, June 21st, 2007, I drove to Crouch Mesa with my friend Amy. My family once owned over 740 acres of Crouch Mesa land, but sold it in the 70's. I remember when there was absolutely nothing there but our cattle, our windmill and a few antelope. My, how times have changed.

We drove by the dirt farm (Industrial Ecosystem, Inc. JFJ Landfarm LLC) The odor from the contaminated soils stored there was nauseating. We noted that about 35 homes are in the immediate vicinity & wondered how those poor people can stand to live there. A little boy came running out of his house which is only about 200 feet from the east fence of the dirt farm. He had his swimming trunks on & hopped into his little swimming pool and was happily playing in the water. All of a sudden a gust of wind came up and Amy & I suddenly found ourselves choking in a thick cloud of dirt blowing from the dirt farm. Luckily we were parked at the time, because CR 3148 disappeared in the thick cloud of dirt. We could faintly see headlights from two cars coming toward us. They had to be blinded by the blowing dirt too. We managed to take some photos of the dirt storm. We couldn't see the little boy who was blasted by that contaminated dirt.

I cannot get that little boy out of my mind. What is he being exposed to?? What about other children and their families ?? I dont know which came first, the dirt farm or the families, but the fact is that people live there and they are being blasted by uncontrolled dirt and whatever it is contaminated with. The stench of that place alone would gag a maggot.

#1. It is my understanding that the dirt farm covers about 55 acres and it looks like another dirt farm adjacent is being developed to the North? Is this dirt farm acreage being expanded?

A friend who owns land on the North end of Crouch Mesa told me that recently, a Mr. Finney had approached him about leasing or buying land for another "dirt farm".

#2 Is there any State of NM consideration for the health and safety of the residents living in the area? What about the health and safety of the employees of the trucking firms and also the employees of Industrial Ecosystem? The fumes from the contaminated soil is worrisome as are the horrendous clouds of dust.

July 31, 2007

#3. There is a definite traffic safety problem when the unmitigated dust clouds boil across the public roads. In addition to several county roads to the east, there is a major highway (350) to the west. A few months ago, I had to pull off Highway 350 in that area because of a blinding dust storm, but I did not realize where the dirt was coming from. Now I know! Will your department address traffic safety due to the uncontrolled dust from the dirt farm?

It seems to me that at the very least, the owners of the land farm (JFJ Landfarm, LLC) should be required to sprinkle the piles of dirt to keep the dust down.

#4 Why is NM OCD Rule 19.15.36.15 (C)(6) that states "The operator shall add moisture, as necessary, to enhance bioremdiation and to control blowing dust" not being applied and enforced at this facility?

There is no evidence of any sprinkling system at this facility & if there were, the contaminated waters would flow downhill into the gullies and arroyos which feed into the San Juan River. A couple of weeks ago I returned to the area with my husband, Warren. He noted that the landfarm is sloped downhill toward several ephemeral arroyos in the San Juan River drainage. He noted that there are no obvious catch basins to impound any effluent runoff. Water contamination is another of our major concerns about this facility.

#5. Please address our observations about contaminated runoff into the many gullies and ephemeral arroys that flow from the area of the dirt piles?

#6 In addition, the contaminated dirt coats the vegetation and soils when the wind blows. Has the soil in the nearby areas been tested for contamination?

#7 I have information that Wyoming has a mile setback requirement for "dirt farms". Does the State of New Mexico have setback requirements, especially from homes?

Obviously no one is monitoring the serious dust problem!!

Please note that Amy and I both developed sore throats and sore burning eyes directly after our exposure to the blowing dirt.

The dirt storm we endured was just about five minutes of wind gusts.....recently our area had a couple of 50 mph windy days.....I cannot imagine what that neighborhood as well as the people who work at the dirt farm went through, can you?

If you will send your e-mail address to <u>simcnall@yahoo.com</u> I can forward some of the photos that Amy and I took the day we were swallowed up in the dirt storm.

I thank you in advance for your attention to this matter.

Thanks

Shirley L (Sug) McNall

900 Sabena, Aztec, NM 87410



Industrial Ecosystems Inc. Sciffectamation Center

2007 Septem: 750.5 632-1876

#49 CR 3150 Aztec, NM 87410

P.O. Box 2043 Farmington, NM 87499

September 13, 2007

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

Complaint from Private Citizen

Dear Brad:

This letter is being sent to you as a request to provide Industrial Ecosystems, Inc. (IEI) with a *copy* of the complaint from a "private citizen regarding blowing dust". We would like to keep a copy of the actual complaint on file along with the correspondence between OCD and IEI regarding this issue.

I understand the need to keep the complainant's information confidential, therefore please feel free to "mark out" any personal information prior to sending us a copy.

If you have any questions or problems with this request, please contact me directly at the above listed telephone number.

Sincerely,

Marcella Marquez Administrative Officer



Industrial Ecosystems Inc. **Soil Reclamation Center**

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876

#49 CR 3150 Aztec, NM 87410

August 29, 2007

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe. NM 87505

Re:

Complaint Letter Dated 08/15/07

Dear Brad:

As per our telephone conversation today, I am sending this reply to your letter dated August 15, 2007. The letter states that OCD has received a complaint against the JFJ Landfarm. from a private citizen in regards to fugitive soils and dust blowing off-site and into the surrounding residential areas thus creating reduced visibility and safety issues. Also sited in your letter is Paragraph (6) of Subsection C of Section 15 of 19.15.36 NMAC, operational requirements for landfarms, "The operator shall add moisture, as necessary, to enhance bioremediation and to control blowing dust."

Thank you for bringing these concerns to our attention. Industrial Ecosystems, Inc. continually strives to take proactive measures pertaining to environmental and safety issues which could potentially impact our employees, customers and local residents.

With the complaint you received from the "private citizen" you may not have been made aware that there are numerous sites in the surrounding area currently under new construction. These sites are directly to the North and West of CR 3148, which was specifically noted as having blowing dust and visibility issues. These construction sites are "large" in size and have most certainly added to issues with "blowing dust". With that being said, Industrial Ecosystems would like to assure you that as required by our permit, we are doing our part to help "control" blowing dust from our landfarm. Biopiles are "trenched" on a regular on-going basis, and roadways are "sprayed" with water to help control fugitive dust emissions.

As per your request, attached please find the operational plan, which includes proposed protocols, procedures and methods used to help prevent fugitive soil and dust from leaving the landfarm.

If you should have any questions or concerns with this matter, please feel free to contact me at the above listed telephone number.

Sincerely,

Marcella Marquez Administrative Officer

Industrial Ecosystems, Inc. Operational Plan for Adding Moisture to

Enhance the Bioremediation Process and to Control Blowing Dust (Pursuant to Paragraph 6 of Subsection C of Section 15 of 19.15.36 NMAC)

I Purpose:

The major function of adding moisture to the biopiles on the landfarm is to enhance the bioremediation process. A secondary function of adding moisture to the biopiles and to the unpaved roadways on the landfarm is to help control blowing dust. The following procedures, when applied, will enhance the bioremediation process and reduce the potential of fugitive dust emissions from leaving the landfarm.

II Scope:

Best management practices, including "trenching" the biopiles and "spraying" the roadways, shall be utilized to enhance the bioremediation process and to control fugitive dust emissions.

III Protocols:

To enhance the bioremediation process biopiles shall be kept moist, but not saturated by means of "trenching".

To reduce the potential of fugitive dust emissions, unpaved roadways on the landfarm shall be "sprayed" with water as needed.

IV Procedures:

Biopiles will be "trenched" on a regular, on-going basis.

The Facility Manager will utilize the weekly inspection log (see attached "Weekly Inspection Log") to determine the need to "spray" unpaved roadways on the landfarm to help control fugitive dust emissions.

V Methods:

Heavy equipment (i.e., track hoes and loaders) will be utilized to "trench" the biopiles on a regular, on-going basis.

Water trucks will be utilized to "spray" unpaved roadways on the landfarm.



Industrial Ecosystems Inc Soil Reclamation Center

Farmington NM 87499 PO Box 2043

Phone: 505-632-1782

#49 CR 3150 Aztec NM 87410

Fax: 505-632-1876
WEEKLY INSPECTION LOG

For the week of

General Information	Mon		Tues	5	Wed		Thur		
Was the facility illegally entered after hours	Yes	No	Yes _	 	Yes	 	Yes	No	
Condition of fencing		Poor	 Good 	l Poor ─	 Good 	Poor	Good	l Poor -	
Condition of gate	 -	l Poor	 Good 	Poor		Poor	Good	Poor	
Condition of equipment	Good Poo	l Poor	Poor Good	ρ	 Good	Poor	Good	Por	
any moisture within the last 24 hours	Yes No	l ₹	Yes	8	Yes No	 	l	 	

Is there any trash or loose material in the facility	Do the unpayed roadways need to be sprayed for dust control	What is the condition of the stormwater prevention	Is there any freestanding water within the facility	Specify:Rain,Snow,Ice	Did the facility receive any moisture within the last 24 hours	Condition of equipment	Condition of gate	Condition of fencing	Was the facility illegally entered after hours
Yes	Yes _	Good	Yes _		Yes No	Good Poor	Good Poor	Good	sə,
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Yes	Yes	Good	Yes _		Yes No	Good	Good	Good	Yes
No	8	Poor	8	·	 	Poor	Poor	Poor	8
Yes	Yes	Good	Yes		 Yes 	Good	Good	Good	Yes _
No	8	Poor	N N		No No	Poor	Poor	l Poor	No
Yes	Yes _	Good	Yes _		Yes _	Good	Good	Good	Yes
No	 	Poor	 - -		No	Poor	Poor	Poor	No.
	1	Good Poor	1			-	Good Poor		Yes No

Comments:

Concrete Washout/Unloading Pit

Has any material been spilled outside the concrete pit Are there any visible leaks or cracks in any of the walls Are there any visible leaks cracks in the concrete floor

Condition of burms

Comments:

 		 .		ı
G00d	Yes	Yes	Yes _	Mon
Poor	No	No.	No	
Good	Yes	Yes _	Yes _	Tues
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Good	Yes _	Yes_	Yes _	Wed
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Good Poor	ı I	Yes _	ļ l	Fri
Poor	No	No	No	
Good	Yes	Yes	Yes _	Sat/Su
Poor	No	No	No No	ű

Mixing Area

Are there any visible cracks or leaks in the mixing cl Fluid Supply Pug Mill

Comments:

Signature

	Mon	Tues	Wed	Thurs	 37.	Sat/Sun
chamber	Yes No	Yes No	Yes No	Yes No	YesNo	Yes No
y pump	Yes No		Yes No	Yes No	Yes No	
	Yes No	YesNo	Yes No	Yes No	Yes No	YesNo
t area				Yes No	Yes No	1



Industrial Ecosystems Inc. **Soil Reclamation Center**

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876

#49 CR 3150 Aztec, NM 87410

September 6, 2007

Brad Jones, Environmental Engineer **NM** Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

Request for Clarification of Operational Plan

Dear Brad:

This letter is being sent to you as a reply to your request for clarification of information contained in the operational plan recently submitted to you.

Attached please find the "revised" operational plan which clarifies the following:

- Meaning of the word "trenching". Trenching is defined as: Use of excavator(s) to cut a trench into the top of the biopile, adding water, and then mixing the water into the pile by "rolling" it.
- > Frequency of inspections of unpaved roadways on the landfarm. The "Weekly Inspection Log" is completed daily by the Facility Manager.

These changes should provide you with the clarification you requested. If you have any additional concerns with this matter, please feel free to contact me at the above listed telephone number.

Sincerely.

eleaMarquey

Administrative Officer

Industrial Ecosystems, Inc. Operational Plan for Adding Moisture to

Enhance the Bioremediation Process and to Control Blowing Dust (Pursuant to Paragraph 6 of Subsection C of Section 15 of 19.15.36 NMAC)

I Purpose:

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To reduce the potential of fugitive dust emissions, unpaved roadways on the landfarm shall be "sprayed" with water as needed.

IV Procedures:

Biopiles will be "trenched" on a regular, on-going basis.

The Facility Manager will utilize the "Weekly Inspection Log" (see attached) on a daily basis to determine the need to "spray" unpaved roadways on the landfarm to help control fugitive dust emissions.

V Methods:

Heavy equipment (i.e., track hoes and loaders) will be utilized to "trench" the biopiles on a regular, on-going basis.

Water trucks will be utilized to "spray" unpaved roadways on the landfarm.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor Joanna Prukop Cabinet Secretary

February 3, 2004

Lori Wrotenbery
Director
Oil Conservation Division

Mr. James Hatcher
JFJ Landfarm L.L.C.
P.O. Box 2043
Farmington, NM 87499

RE:

Modification to NMOCD Rule 711 Permit (NM-01-0010B)

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Mr. Hatcher:

The application to modify permit NM-01-0010B for the JFJ Landfarm L.L.C. (JFJ) commercial surface waste management facility **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. Currently JFJ has financial assurance in the amount of \$25,000. The modification will add composting to the land farm facility. The application consists of the permit application Form C-137 dated January 2, 2004 and application dated September 16, 2002 and the transfer application dated July 10, 2002. This modification supercedes Permit NM-01-0010B approved December 2, 2002.

All construction, operation, monitoring and reporting shall be as proposed in the C-137 application and as specified in the enclosed attachment. All modifications and alternatives to the approved landfarm and compost methods must receive prior OCD approval. JFJ is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve JFJ Landfarm L.L.C. of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve JFJ Landfarm L.L.C. of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The JFJ Commercial Surface Waste Management Facility Permit NM-01-0010B will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 476-3488.

Sincerely,

Roger C. Anderson

Environmental Bureau Chief

RCA/mjk

xc with attachments:

Aztec OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL PERMIT NM-01-0010B

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico February 3, 2003

LANDFARM AND COMPOSTING OPERATION

- 1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least fifty feet and contain the following information: a) name of the facility; b) location by section, township and range, c) emergency phone number and d) OCD permit number.
- 2. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 3. Soils and stabilized tank bottoms, sludge and mud that are landfarmed must be spread within 72 hours on the surface in ten (10) inch lifts or less. Materials to be composted must be placed into bio piles within 24 hours of receipt or stabilization.
- 4. Landfarm soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils to reduce the occurrence of natural wind erosion.
- 5. Moisture may be added to contaminated soils received at the facility to (1) prevent emissions of volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action.
- 6. The compost piles will be prepared and mixed at a ratio of one (1) part organic amendment of straw, wood chips and animal manure to four (4) parts hydrocarbon contaminated soil. The carbon/nitrogen ratio of the mix will be adjusted to 30:1 by adding organic nitrogen and the moisture content will be adjusted to 25% by adding water. Microbes will be added to the compost pile at a rate of two (2) gallons per cubic yard of material. The temperature of the compost piles will be monitored to prevent over heating and the pile will be turned as needed to provide air/oxygen.
- 7. Hydrocarbon contaminated soil, sludge or drilling mud may be mixed using a pug mill as outlined in the application for permit modification dated January 2, 2004. Material mixed by the pug mill must be moved to a landfarm or compost cell in a timely manner not to exceed 24 hours.
- 8. The pug mill must be maintained in such a manner that there will be no over spray of liquids or fluid leaks from the equipment to the ground surface. The equipment shall be inspected daily and if repairs are needed to prevent liquid leaks and spills the equipment

must be repaired. A record of inspections and repairs must be kept and made available for OCD review.

- 9. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within 72 hours of discovery.
- 10. The portion of the facility containing contaminated soils must be bermed to prevent runoff and run-on. A perimeter berm must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells within the facility must be contained with two (2) foot berms.
- 11. All above-ground tanks must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks. All tanks must be labeled as to contents and hazards
- 12. All new or replacement above-ground tanks to be used longer than six (6) months containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 13. All temporary frac tanks installed at the facility for less than six (6) months containing materials other than fresh water must be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 14. The OCD Santa Fe and Aztec District office must be notified within 24 hours of discovery of a spill or leak.
- 15. Exempt contaminated soils must be placed in the facility so that they are physically separate (i.e., bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt contaminated soils.
- 16. In the landfarm, successive lifts of contaminated soils or stabilized material may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 or reuse of the remediated soils.
- 17. Compost piles may not be dismantled until a laboratory measurement of total petroleum hydrocarbons (TPH) in the compost pile is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 dismantling of the compost pile and/or removal or reuse of the remediated soils.

- 18. Any enhanced bioremediation through the application of microbes (bugs) and/or fertilizers in addition to what is described herein is permitted only after prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.
- 19. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the facility. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
- 20. Any design changes to the landfarm/compost piles and bottoms/sludge/mud holding and treatment area must submitted to the OCD Santa Fe office for approval and a copy must be sent to the Aztec District office.
- 21. Facility inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm or compost piles, additional wastes may not be placed into the facility until repairs have been completed.
- 22. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

CONCRETE IMPOUNDMENT CONSTRUCTION AND MAINTANANCE

- 1. The existing concrete impoundment will be reconstructed reducing the size to approximately 26.5 feet in length and adding a new reinforced end wall as outlined in the January 2, 2004 request for modification.
- 2. All existing cracks will be located, chiseled out and sealed.
- 3. The exterior of the concrete impoundment will be coated with a waterproofing compound to eliminate seepage and the impoundment will be hydrostaticly tested for leaks by filling it with fresh water. The fresh water will be allowed to set for a minimum of 24 hours during the test.
- 4. The exterior of the impoundment will be left uncovered to allow for weekly inspections. The concrete impoundment must be inspected inside and outside weekly for containment leaks and overall integrity. Records of such inspections must be made available to the OCD upon request.

5. If any leaks are detected from the impoundment JFJ Landfarm will stop using the impoundment, empty it and identify the location of the leak and repair the impoundment. The impoundment will be hydrostatically tested for leaks prior to use by filling it with fresh water. The fresh water will be allowed to set for a minimum of 24 hours during the test.

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- 6. Slop over of contaminated material outside the impoundment must be removed on a daily basis and placed into a landfarm or compost cell for remediation.
- 7. The impoundment may be used for unloading liquid or sludge from trucks that are unable to pump into tanks.

TANK BOTTOM & SLUDGE ACCEPTANCE

- 1. All loads of tank bottoms or sludge will be pre-screened for H₂S before they are unloaded from the truck.
- 2. All tank bottoms and sludge must be accepted into either the concrete impoundment or frac tanks for settling prior to landfarm or compost application.
- 3. The concrete impoundment may be used for the temporary holding of tank bottoms and sludge received by the facility. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. Material received at the impoundment must be removed in a timely manner not to exceed 24 hours.
- 4. Water removed from tank bottoms and sludge may be stored in above-ground closed-top tanks and after appropriate screening may be spread on the landfarm or compost piles for dust control and to enhance bioremediation. The water must be screened for hydrogen sulfide (H₂S), oils, total dissolved solids (TDS), and pH. Water with H₂S must be treated to remove all traces of H₂S prior to application. Water with free oil, TDS greater than 1000 ppm, or a pH less than 6 or greater than 9 must be disposed of at an OCD-approved disposal facility. The source, amount, and test results of each load of water must be recorded and made available to the OCD upon request.

DRILLING MUD ACCEPTANCE

- 1. No mud may be accepted at the facility without the generator's written authorization from the District to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) well name and location from which the mud was transported; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chemicals added); and 5) exact cell location where the material is to be remediated.
- 2. Un-used drilling mud may be used to line the two run-off retention impoundments as long as the impoundments retain the required 100-year flood capacity.

- 3. Used drilling mud must be received directly into the concrete impoundment or into frac tanks for oil and water separation prior to application to the landfarm or compost piles. Any water removed must be disposed of at an OCD-approved disposal facility. Any oil removed must be handled in accordance with OCD rules.
- 4. OCD-approved remediated soil may be mixed with the drilling mud to stabilize the mud after the removal of free oil and free water. The tank bottoms and sludge accepted into the concrete impoundment that contains freestanding water will be netted until the freestanding water is removed. Material received at the impoundment removed in a timely manner not to exceed 24 hours.
- 5. Loads of drilling mud that contain miscellaneous hydrocarbons exceeding 2/10 of 1% of the total volume of mud must be accompanied by an OCD-approved Form C-117A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported monthly on Form C-118.

TREATMENT ZONE MONITORING

- 1. A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile 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 quarterly for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis must be conducted for TPH and volatile aromatic organics (BTEX) using EPA-approved methods.
- 3. The soil samples must be analyzed annually using EPA-approved methods for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission Regulations (WQCC) NMAC 20.6.2.3103 metals.
- 4. After obtaining the soil samples the boreholes must be filled with an impermeable material such as cement or bentonite.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:

- a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. All loads of these wastes received at the facility must be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
- b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the non-hazardous classification of the waste.
- c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
- 2. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
- 3. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

REPORTING AND RECORD KEEPING

Bright State & State

- 1. Results of the daily inspections of the facility and pug mill and weekly inspections of the concrete impoundment must be recorded and maintained for OCD review. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted.
- 2. Analytical results from the quarterly treatment zone monitoring must be submitted to the OCD Santa Fe office within 30 days of receipt from the laboratory or within 30 days of the field testing. A sample location map must be included with the analysis report.

- 3. Analytical results regarding remediated soil must be submitted to the OCD Santa Fe office with a copy to the Aztec District office, along with any request to close the cell, dismantle a compost pile, apply successive lifts or remove the remediated material.
- 4. Landfarm and compost pile monitoring and maintenance must be recorded and maintained for OCD review.
- 5. Results of screening of free water from tank bottoms or sludge must be recorded and maintained for OCD review.
- 6. JFJ Landfarm L.L.C. must notify the **OCD Aztec District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
- 7. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.
- 8. Comprehensive records of all material disposed of at the facility must be maintained at the facility. The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of waste status as exempt or non-exempt with any necessary supporting documentation to certify non-hazardous status for non-exempt waste; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, etc.
- 9. All records of testing and monitoring must be retained for a period of five (5) years.

FINANCIAL ASSURANCE

- 1. Financial assurance in the amount of \$25,000 in the form of a cash bond has been received and approved by the Division,
- 2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed by the OCD no later than five (5) years from the date of this approval. In addition the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -8-

to dismantle the facility, the operator must submit a closure plan to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

- 2. A closure plan to include the following closure procedures will be submitted to the OCD for approval:
 - a. When the facility is to be closed no new material will be accepted.
 - b. The soils beneath the bottoms/sludge/mud receiving and treatment area and the landfarm/compost pile areas will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - c. All above and below grade tanks will be emptied and any waste will be hauled to an OCD-approved facility. The empty tanks will be removed.
 - d. Contaminated soils or existing landfarm or compost pile soils will be remediated until they meet the OCD standards in effect at the time of closure or removed to an OCD-approved facility.

- e. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses, the structures, berms, or fences may be left in place.
- f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

<u>CERTIFICATION</u>

JFJ Landfarm L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. JFJ Landfarm L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

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Accepted:		•	*.*			
JFJ Landfarm L.L.C.		. ,		egit te ve sk	\$ · •	
Signature	Title				Date	
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NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor
Joanna Prukop
Cabinet Secretary

February 3, 2004

Lori Wrotenbery
Director
Oil Conservation Division

RECEIVED

Mr. James Hatcher JFJ Landfarm L.L.C. P.O. Box 2043 Farmington, NM 87499

FEB 1 2 2004
OIL CONSERVATION
DIVISION

RE: Modification to NMOCD Rule 711 Permit (NM-01-0010B)

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Mr. Hatcher:

The application to modify permit NM-01-0010B for the JFJ Landfarm L.L.C. (JFJ) commercial surface waste management facility **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. Currently JFJ has financial assurance in the amount of \$25,000. The modification will add composting to the land farm facility. The application consists of the permit application Form C-137 dated January 2, 2004 and application dated September 16, 2002 and the transfer application dated July 10, 2002. This modification supercedes Permit NM-01-0010B approved December 2, 2002.

All construction, operation, monitoring and reporting shall be as proposed in the C-137 application and as specified in the enclosed attachment. All modifications and alternatives to the approved landfarm and compost methods must receive prior OCD approval. JFJ is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve JFJ Landfarm L.L.C. of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve JFJ Landfarm L.L.C. of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

Mr. James Hatcher February 3, 2004 Page -2-

The JFJ Commercial Surface Waste Management Facility Permit NM-01-0010B will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 476-3488.

Sincerely,

Roger C. Anderson

Environmental Bureau Chief

RCA/mjk

xc with attachments:

Aztec OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL PERMIT NM-01-0010B

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico February 3, 2003

LANDFARM AND COMPOSTING OPERATION

- 1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least fifty feet and contain the following information: a) name of the facility; b) location by section, township and range, c) emergency phone number and d) OCD permit number.
- 2. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 3. Soils and stabilized tank bottoms, sludge and mud that are landfarmed must be spread within 72 hours on the surface in ten (10) inch lifts or less. Materials to be composted must be placed into bio piles within 24 hours of receipt or stabilization.
- 4. Landfarm soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils to reduce the occurrence of natural wind erosion.
- 5. Moisture may be added to contaminated soils received at the facility to (1) prevent emissions of volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action.
- 6. The compost piles will be prepared and mixed at a ratio of one (1) part organic amendment of straw, wood chips and animal manure to four (4) parts hydrocarbon contaminated soil. The carbon/nitrogen ratio of the mix will be adjusted to 30:1 by adding organic nitrogen and the moisture content will be adjusted to 25% by adding water. Microbes will be added to the compost pile at a rate of two (2) gallons per cubic yard of material. The temperature of the compost piles will be monitored to prevent over heating and the pile will be turned as needed to provide air/oxygen.
- 7. Hydrocarbon contaminated soil, sludge or drilling mud may be mixed using a pug mill as outlined in the application for permit modification dated January 2, 2004. Material mixed by the pug mill must be moved to a landfarm or compost cell in a timely manner not to exceed 24 hours.
- 8. The pug mill must be maintained in such a manner that there will be no over spray of liquids or fluid leaks from the equipment to the ground surface. The equipment shall be inspected daily and if repairs are needed to prevent liquid leaks and spills the equipment

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -2-

must be repaired. A record of inspections and repairs must be kept and made available for OCD review.

- 9. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within 72 hours of discovery.
- 10. The portion of the facility containing contaminated soils must be bermed to prevent runoff and run-on. A perimeter berm must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells within the facility must be contained with two (2) foot berms.
- 11. All above-ground tanks must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks. All tanks must be labeled as to contents and hazards
- 12. All new or replacement above-ground tanks to be used longer than six (6) months containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 13. All temporary frac tanks installed at the facility for less than six (6) months containing materials other than fresh water must be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 14. The OCD Santa Fe and Aztec District office must be notified within 24 hours of discovery of a spill or leak.
- 15. Exempt contaminated soils must be placed in the facility so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt contaminated soils.
- 16. In the landfarm, successive lifts of contaminated soils or stabilized material may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 or reuse of the remediated soils.
- 17. Compost piles may not be dismantled until a laboratory measurement of total petroleum hydrocarbons (TPH) in the compost pile is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 dismantling of the compost pile and/or removal or reuse of the remediated soils.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -3-

- 18. Any enhanced bioremediation through the application of microbes (bugs) and/or fertilizers in addition to what is described herein is permitted only after prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.
- 19. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the facility. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
- 20. Any design changes to the landfarm/compost piles and bottoms/sludge/mud holding and treatment area must submitted to the OCD Santa Fe office for approval and a copy must be sent to the Aztec District office.
- 21. Facility inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm or compost piles, additional wastes may not be placed into the facility until repairs have been completed.
- 22. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

CONCRETE IMPOUNDMENT CONSTRUCTION AND MAINTANANCE

- 1. The existing concrete impoundment will be reconstructed reducing the size to approximately 26.5 feet in length and adding a new reinforced end wall as outlined in the January 2, 2004 request for modification.
- 2. All existing cracks will be located, chiseled out and sealed.
- 3. The exterior of the concrete impoundment will be coated with a waterproofing compound to eliminate seepage and the impoundment will be hydrostaticly tested for leaks by filling it with fresh water. The fresh water will be allowed to set for a minimum of 24 hours during the test.
- 4. The exterior of the impoundment will be left uncovered to allow for weekly inspections. The concrete impoundment must be inspected inside and outside weekly for containment leaks and overall integrity. Records of such inspections must be made available to the OCD upon request.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -4-

- 5. If any leaks are detected from the impoundment JFJ Landfarm will stop using the impoundment, empty it and identify the location of the leak and repair the impoundment. The impoundment will be hydrostatically tested for leaks prior to use by filling it with fresh water. The fresh water will be allowed to set for a minimum of 24 hours during the test.
- 6. Slop over of contaminated material outside the impoundment must be removed on a daily basis and placed into a landfarm or compost cell for remediation.
- 7. The impoundment may be used for unloading liquid or sludge from trucks that are unable to pump into tanks.

TANK BOTTOM & SLUDGE ACCEPTANCE

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- 4. Water removed from tank bottoms and sludge may be stored in above-ground closed-top tanks and after appropriate screening may be spread on the landfarm or compost piles for dust control and to enhance bioremediation. The water must be screened for hydrogen sulfide (H₂S), oils, total dissolved solids (TDS), and pH. Water with H₂S must be treated to remove all traces of H₂S prior to application. Water with free oil, TDS greater than 1000 ppm, or a pH less than 6 or greater than 9 must be disposed of at an OCD-approved disposal facility. The source, amount, and test results of each load of water must be recorded and made available to the OCD upon request.

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- 2. Un-used drilling mud may be used to line the two run-off retention impoundments as long as the impoundments retain the required 100-year flood capacity.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -5-

- 3. Used drilling mud must be received directly into the concrete impoundment or into frac tanks for oil and water separation prior to application to the landfarm or compost piles. Any water removed must be disposed of at an OCD-approved disposal facility. Any oil removed must be handled in accordance with OCD rules.
- 4. OCD-approved remediated soil may be mixed with the drilling mud to stabilize the mud after the removal of free oil and free water. The tank bottoms and sludge accepted into the concrete impoundment that contains freestanding water will be netted until the freestanding water is removed. Material received at the impoundment removed in a timely manner not to exceed 24 hours.
- 5. Loads of drilling mud that contain miscellaneous hydrocarbons exceeding 2/10 of 1% of the total volume of mud must be accompanied by an OCD-approved Form C-117A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported monthly on Form C-118.

TREATMENT ZONE MONITORING

- 1. A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile 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 quarterly for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis must be conducted for TPH and volatile aromatic organics (BTEX) using EPA-approved methods.
- 3. The soil samples must be analyzed annually using EPA-approved methods for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission Regulations (WQCC) NMAC 20.6.2.3103 metals.
- 4. After obtaining the soil samples the boreholes must be filled with an impermeable material such as cement or bentonite.

WASTE ACCEPTANCE CRITERIA

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JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -6-

- a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. All loads of these wastes received at the facility must be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
- b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the non-hazardous classification of the waste.
- c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
- 2. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
- 3. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

REPORTING AND RECORD KEEPING

- 1. Results of the daily inspections of the facility and pug mill and weekly inspections of the concrete impoundment must be recorded and maintained for OCD review. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted.
- 2. Analytical results from the quarterly treatment zone monitoring must be submitted to the OCD Santa Fe office within 30 days of receipt from the laboratory or within 30 days of the field testing. A sample location map must be included with the analysis report.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B February 3, 2004 Page -7-

- 3. Analytical results regarding remediated soil must be submitted to the OCD Santa Fe office with a copy to the Aztec District office, along with any request to close the cell, dismantle a compost pile, apply successive lifts or remove the remediated material.
- 4. Landfarm and compost pile monitoring and maintenance must be recorded and maintained for OCD review.
- 5. Results of screening of free water from tank bottoms or sludge must be recorded and maintained for OCD review.
- 6. JFJ Landfarm L.L.C. must notify the **OCD Aztec District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
- 7. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.
- 8. Comprehensive records of all material disposed of at the facility must be maintained at the facility. The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of waste status as exempt or non-exempt with any necessary supporting documentation to certify non-hazardous status for non-exempt waste; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, etc.
- 9. All records of testing and monitoring must be retained for a period of five (5) years.

FINANCIAL ASSURANCE

- 1. Financial assurance in the amount of \$25,000 in the form of a cash bond has been received and approved by the Division,
- 2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed by the OCD no later than five (5) years from the date of this approval. In addition the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding

to dismantle the facility, the operator must submit a closure plan to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

- 2. A closure plan to include the following closure procedures will be submitted to the OCD for approval:
 - a. When the facility is to be closed no new material will be accepted.
 - b. The soils beneath the bottoms/sludge/mud receiving and treatment area and the landfarm/compost pile areas will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - c. All above and below grade tanks will be emptied and any waste will be hauled to an OCD-approved facility. The empty tanks will be removed.
 - d. Contaminated soils or existing landfarm or compost pile soils will be remediated until they meet the OCD standards in effect at the time of closure or removed to an OCD-approved facility.
 - e. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses, the structures, berms, or fences may be left in place.
 - f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

JFJ Landfarm L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. JFJ Landfarm L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:

JFJ Landfarm L.L.C.

Signature Manager Date 2-10-04



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

December 2, 2002

Lori Wrotenbery
Director
Oil Conservation Division

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO. 7001-1940-0004-3929-8225</u>

Mr. James Hatcher JFJ Landfarm L.L.C. P.O. Box 2043 Farmington, NM 87499

RE: Modification to NMOCD Rule 711 Permit (NM-01-0010B)

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Mr. Hatcher:

The application to modify permit NM-01-0010B for the JFJ Landfarm L.L.C. (JFJ) commercial surface waste management facility **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. Currently JFJ has financial assurance in the amount of \$25,000. The modification will add composting to the land farm facility. The application consists of the permit application Form C-137 dated September 16, 2002 and the transfer application dated July 10, 2002. This modification supercedes Permit NM-01-0010B approved August 7, 2002.

All construction, operation, monitoring and reporting shall be as proposed in the C-137 application and as specified in the enclosed attachment. All modifications and alternatives to the approved landfarm and compost methods must receive prior OCD approval. JFJ is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve JFJ Landfarm L.L.C. of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve JFJ Landfarm L.L.C. of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory

Mr. James Hatcher December 2, 2002 Page -2-

birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The JFJ Commercial Surface Waste Management Facility Permit NM-01-0010B will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

Fosi Wrotenbery

Lori Wrotenbery

Director

LW/mjk

xc with attachments:

Aztec OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL PERMIT NM-01-0010B WELL and form J. J. C.

JFJ Landfarm L.L.C.

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico (December 2, 2002)

LANDFARM AND COMPOSTING OPERATION

- 1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least fifty feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
- 2. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 3. All contaminated soils received at the facility must be spread and disked within 72 hours of receipt or placed in compost piles. Soils and stabilized tank bottoms, sludges and muds that are landfarmed must be spread on the surface in ten (10) inch lifts or less.
- 4. Landfarm soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils to reduce the occurrence of natural wind erosion.
- 5. Moisture may be added to contaminated soils received at the facility to (1) prevent emissions of volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action.
- 6. The compost piles will be prepared and mixed at a ratio of one (1) part organic amendment of straw, wood chips and animal manure to four (4) parts hydrocarbon contaminated soil. The carbon/nitrogen ratio of the mix will be adjusted to 30:1 by adding organic nitrogen and the moisture content will be adjusted to 25% by adding water. Microbes will be added to the compost pile at a rate of two (2) gallons per cubic yard of material. The temperature of the compost piles will be monitored to prevent over heating and the pile will be turned as needed to provide air/oxygen.
- 7. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within 72 hours of discovery.
- 8. The portion of the facility containing contaminated soils must be bermed to prevent runoff and run-on. A perimeter berm must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells within the facility must be contained with two (2) foot berms.
- 9. All above-ground tanks must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks. All tanks must be labeled as to contents and

hazards

- 10. All new or replacement above-ground tanks to be used longer than six (6) months containing materials other than fresh water must be placed on an impermeable pad and be berned so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 11. All temporary frac tanks installed at the facility for less than six (6) months containing materials other than fresh water must be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 12. The OCD Santa Fe and Aztec District office must be notified within 24 hours of discovery of a spill or leak.
- 13. Exempt contaminated soils must be placed in the facility so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt contaminated soils.
- 14. In the landfarm, successive lifts of contaminated soils or stabilized material may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 or reuse of the remediated soils.
- 15. Compost piles may not be dismantled until a laboratory measurement of total petroleum hydrocarbons (TPH) in the compost pile is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 dismantling of the compost pile and/or removal or reuse of the remediated soils.
- 16. Any enhanced bioremediation through the application of microbes (bugs) and/or fertilizers in addition to what is described herein is permitted only after prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.
- 17. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the facility. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
- 18. Any design changes to the landfarm/compost piles and bottoms/sludges/muds holding and treatment area must submitted to the OCD Santa Fe office for approval and a copy

must be sent to the Aztec District office.

- 19. Facility inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm or compost piles, additional wastes may not be placed into the facility until repairs have been completed.
- 20. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

CONCRETE MIXING IMPOUNDMENT CONSTRUCTION AND MAINTANANCE

1. Two (2) concrete mixing impoundments must be constructed of reinforced concrete with a 30 mm plastic secondary liner. The seams on the concrete impoundment will be sealed. The impoundments must be maintained in accordance with the as-built designs previously submitted. Spills and slop-over that occur outside the impoundments must be cleaned up on a regular basis and placed into a landfarm or compost cell.

TANK BOTTOM & SLUDGE ACCEPTANCE

- 1. All loads of tank bottoms or sludge will be pre-screened for H₂S before they are unloaded from the truck.
- 2. All tank bottoms and sludge must be accepted into either the concrete mixing impoundment or frac tanks for settling prior to landfarm or compost application.
- 3. The concrete mixing impoundment may be used for the stabilization of tank bottoms and sludge received by the facility. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete mixing impoundment that contains freestanding water will be netted until the freestanding water is removed. OCD-approved remediated soil may be mixed with the tank bottoms and sludge to stabilize the material. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours. If separation of tank bottoms and sludge is expected to take longer than 24 hours the material must be held in a closed tank system for settling.
- 4. Water removed from tank bottoms and sludge may be stored in above-ground closed-top tanks and after appropriate screening may be spread on the landfarm or compost piles for dust control and to enhance bioremediation. The water must be screened for hydrogen sulfide (H₂S), oils, total dissolved solids (TDS), and pH. Water with H₂S must be treated to remove all traces of H₂S prior to application. Water with free oil, TDS greater than

1000 ppm, or a pH less than 6 or greater than 9 must be disposed of at an OCD-approved disposal facility. The source, amount, and test results of each load of water must be recorded and made available to the OCD upon request.

5. The concrete mixing impoundment must be inspected inside and outside weekly for containment leaks and overall integrity. Records of such inspections must be made available to the OCD upon request.

DRILLING MUD ACCEPTANCE

- 1. No mud may be accepted at the facility without the generator's written authorization from the District to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) well name and location from which the mud was transported; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chemicals added); and 5) exact cell location where the material is to be remediated.
- 2. Un-used drilling mud may be used to line the two run-off retention impoundments as long as the impoundments retain the required 100-year flood capacity.
- 3. Used drilling mud must be received directly into the concrete mixing impoundments or into frac tanks for oil and water separation prior to application to the landfarm or compost piles. Any water removed must be disposed of at an OCD-approved disposal facility. Any oil removed must be handled in accordance with OCD rules.
- 4. OCD-approved remediated soil may be mixed with the drilling mud to stabilize the mud after the removal of free oil and free water. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete mixing impoundment that contains freestanding water will be netted until the freestanding water is removed. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours.
- 5. Loads of drilling mud that contain miscellaneous hydrocarbons exceeding 2/10 of 1% of the total volume of mud must be accompanied by an OCD-approved Form C-117A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported monthly on Form C-118.

TREATMENT ZONE MONITORING

1. A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile 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

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B November 22, 2002 Page -5-

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 quarterly for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis must be conducted for TPH and volatile aromatic organics (BTEX) using EPA-approved methods.
- 3. The soil samples must be analyzed annually using EPA-approved methods for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission Regulations (WQCC) NMAC 20.6.2.3103 metals.
- 4. After obtaining the soil samples the boreholes must be filled with an impermeable material such as cement or bentonite.

WASTE ACCEPTANCE CRITERIA

- 1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. All loads of these wastes received at the facility must be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the non-hazardous classification of the waste.
 - c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to

accepting the wastes.

- 2. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
- 3. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

REPORTING AND RECORD KEEPING

- 1. Results of the daily inspections of the facility and weekly inspections of the concrete mixing impoundment must be recorded and maintained for OCD review. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted.
- 2. Analytical results from the quarterly treatment zone monitoring must be submitted to the OCD Santa Fe office within 30 days of receipt from the laboratory or within 30 days of the field testing. A sample location map must be included with the analysis report.
- 3. Analytical results regarding remediated soil must be submitted to the OCD Santa Fe office with a copy to the Aztec District office, along with any request to close the cell, dismantle a compost pile, apply successive lifts or remove the remediated material.
- 4. Landfarm and compost pile monitoring and maintenance must be recorded and maintained for OCD review.
- 5. Results of screening of free water from tank bottoms or sludges must be recorded and maintained for OCD review.
- 6. JFJ Landfarm L.L.C. must notify the **OCD Aztec District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
- 7. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.
- 8. Comprehensive records of all material disposed of at the facility must be maintained at the facility. The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of waste status as exempt or non-exempt with any necessary supporting documentation to certify non-hazardous status for non-exempt waste; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, etc.
- 9. All records of testing and monitoring must be retained for a period of five (5) years.

FINANCIAL ASSURANCE

- 1. Financial assurance in the amount of \$25,000 in the form of a cash bond has been received and approved by the Division,
- 2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed by the OCD no later than five (5) years from the date of this approval. In addition the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

- 1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility, the operator must submit a closure plan to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.
- 2. A closure plan to include the following closure procedures will be submitted to the OCD for approval:
 - a. When the facility is to be closed no new material will be accepted.
 - b. The soils beneath the bottoms sludges/muds receiving and treatment area and the landfarm/compost pile areas will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - c. All above and below grade tanks will be emptied and any waste will be hauled to an OCD-approved facility. The empty tanks will be removed.
 - d. Contaminated soils or existing landfarm or compost pile soils will be remediated until they meet the OCD standards in effect at the time of closure or removed to an OCD-approved facility.
 - e. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses, the structures, berms, or fences may be left in place.
 - f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B November 22, 2002 Page -8-

CERTIFICATION

JFJ Landfarm L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. JFJ Landfarm L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:	·	
JFJ Landfarm L.L.C.		
Signature	Title	Date



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

August 7, 2002

Lori Wrotenbery
Director
Oil Conservation Division

<u>CERTIFIED MAIL</u> RETURN RECEIPT NO. 7001-1940-0004-3929-9550

Mr. Kevin M. Connor JFJ Landfarm L.L.C. c/o Seigfreid, Bingham, Levy, Selzer & Gee 911 Main Street, Suite 2800 Kansas City, MO 64105

RE: OCD Rule 711 Permit NM-01-0010B Transfer Tract "B", Tierra Environmental Landfarm

NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Mr. Connor:

The transfer application for the JFJ Landfarm L.L.C. (JFJ), Tract "B", Tierra Environmental Landfarm, a commercial surface waste management facility located in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico is hereby approved in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. The application consists of the transfer application dated July 10, 2002 and the \$25,000 cash bond received July 30, 2002.

All construction, operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved treatment, evaporation and landfill methods must receive prior OCD approval. JFJ is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve JFJ Landfarm L.L.C. of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve JFJ Landfarm L.L.C. of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory

Mr. Kevin Conner August 7, 2002 Page -2-

birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The JFJ Commercial Surface Waste Management Facility Permit NM-01-0010B will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

Josi Wrotenbery

Lori Wrotenbery

Director

LW/rca

xc with attachments:
Aztec OCD Office

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B August 7, 2002 Page -1-

ATTACHMENT TO OCD 711 PERMIT APPROVAL PERMIT NM-01-0010B JFJ Landfarm L.L.C. TRACT "B", TIERRA ENVIRONMENTAL LANDFARM NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico (August 7, 2002)

LANDFARM OPERATION

- 1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
- 2. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 3. All contaminated soils received at the landfarm must be spread and disked within 72 hours of receipt.
- 4. Soils and stabilized bottoms, sludge and mud must be spread on the surface in ten (10) inch lifts or less.
- 5. Soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils to reduce the occurrence of natural wind erosion.
- 6. Moisture may be added to contaminated soils received at the facility to (1) prevent emissions of volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action.
- 7. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within 72 hours of discovery.
- 8. The portion of the facility containing contaminated soils must be bermed to prevent run-off and run-on. A perimeter berm must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region.

JFJ Landfarm L.L.C. 711 Permit NM-01-0010B August 7, 2002 Page -2-

- 9. All above-ground tanks must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks. All tanks must be labeled as to contents and hazards.
- 10. All new or replacement above-ground tanks to be used longer than six (6) months containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 11. All temporary frac tanks installed at the facility for less than six (6) months containing materials other than fresh water must be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 12. The OCD Santa Fe and Aztec District office must be notified within 24 hours of discovery of a spill or leak.
- 13. Exempt contaminated soils must be placed in the landfarm so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt contaminated soils.
- 14. Successive lifts of contaminated soils or stabilized material may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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.
- 15. Enhanced bioremediation through the application of microbes (bugs) and/or fertilizers is permitted only after prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.
- 16. Contaminated soils may not be placed within twenty (20) feet of any pipelines crossing the landfarm. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
- 17. Any design changes to the landfarm and tank bottom/sludge holding and treatment area must submitted to the OCD Santa Fe office for approval and a copy must be sent to the Aztec District office.

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- 18. Landfarm inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm additional wastes may not be placed into the landfarm until repairs have been completed.
- 19. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

CONCRETE MIXING IMPOUNDMENT CONSTRUCTION

- 1. Two (2) concrete mixing impoundments must be constructed of reinforced concrete with a 30 mm plastic secondary liner. The seams on the concrete impoundment will be sealed. The new construction must be completed in accordance with the designs submitted as part of the application. However, to minimize the potential for leaks between old and new concrete slabs, the concrete mixing impoundments may not be connected or share a wall with the existing concrete mixing pad.
- 2. Upon completion of construction, "as built" diagrams of the concrete mixing impoundment shall be submitted to and approved by the Director prior to commencement of operations.
- 3. Construction must commence on the concrete mixing impoundments within one (1) year of the permit approval date.

TANK BOTTOM & SLUDGE ACCEPTANCE

- 1. All loads of tank bottoms or sludge will be pre-screened for H_2S before they are un-loaded from the truck.
- 2. All tank bottoms and sludge must be accepted into either the concrete mixing impoundment or frac tanks for settling prior to landfarm application.
- 3. The concrete mixing impoundment may be used for the stabilization of tank bottoms and sludge received by the landfarm facility. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete mixing impoundment that contain freestanding water will be netted until the

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freestanding water is removed. OCD-approved remediated soil may be mixed with the tank bottoms and sludge to stabilize the material. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours. If separation of tank bottoms and sludge is expected to take longer than 24 hours the material must be held in a closed tank system for settling.

- 4. Water removed from tank bottoms and sludge may be stored in above-ground closed-top tanks and after appropriate screening may be spread on the landfarm for dust control and to enhance bioremediation. The water must be screened for hydrogen sulfide (H₂S), oils, total dissolved solids (TDS), and pH. Water with H₂S must be treated to remove all traces of H₂S prior to application. Water with free oil, TDS greater than 1000 ppm, or a pH less than 6 or greater than 9 must be disposed at an OCD-approved disposal facility. The source, amount, and test results of each load of water must be recorded and made available to the OCD upon request.
- 5. The concrete mixing impoundment must be inspected inside and outside weekly for containment leaks and overall integrity. Records of such inspections must be made available to the OCD upon request.

DRILLING MUD ACCEPTANCE

- 1. No mud may be accepted at the facility without the generator's written authorization from the District to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) the well name and location from which the mud was transported; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chemicals added); and 5) exact cell location where the material is to be remediated.
- 2. Un-used drilling mud may be used to line the two run-off retention impoundments as long as the impoundments retain the required 100-year flood capacity.
- 3. Used drilling mud must be received directly into the concrete mixing impoundment or into frac tanks for oil and water separation prior to application to the landfarm. Any water removed must be disposed of at an OCD-approved disposal facility. Any oil removed must be handled in accordance with OCD rules.
- 4. OCD-approved remediated soil may be mixed with the drilling mud to stabilize the mud after the removal of free oil and free water. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete

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mixing impoundment that contain freestanding water will be netted until the freestanding water is removed. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours.

5. Loads of drilling mud that contain miscellaneous hydrocarbons exceeding 2/10 of 1% of the total volume of mud must be accompanied by an OCD-approved Form C-117A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported monthly on Form C-118.

TREATMENT ZONE MONITORING

- 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 quarterly for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis must be conducted for TPH and volatile aromatic organics (BTEX) using EPA-approved methods.
- 3. The soil samples must be analyzed annually using EPA-approved methods for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission (WQCC) metals.
- 4. After obtaining the soil samples the boreholes must be filled with an impermeable material such as cement or bentonite.

WASTE ACCEPTANCE CRITERIA

- 1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. All loads of these wastes received at the facility must be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These

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wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:

- i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
- ii. A "Generator Certificate of Waste Status" signed by the generator.
- iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the non-hazardous classification of the waste.
- 3. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
- 2. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
- 3. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

REPORTING AND RECORD KEEPING

- 1. Results of the daily inspections of the facility and weekly inspections of the concrete mixing impoundment must be recorded and maintained for OCD review. The OCD Santa Fe and Aztec District office must be notified with in 48 hours if any defect is noted.
- 2. Analytical results from the quarterly treatment zone monitoring must be submitted to the OCD Santa Fe office within thirty (30) days of receipt from the laboratory or within thirty (30) days of the field testing. A sample location map must be included with the analysis report.
- 3. Analytical results regarding remediated soil must be submitted to the OCD Santa Fe office with a copy to the Aztec District office, along with any request to close the cell, apply

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successive lifts or remove the remediated material.

- 4. Results of screening of free water from tank bottoms or sludge must be recorded and maintained for OCD review.
- 5. JFJ Landfarm L.L.C.must notify the OCD Aztec District office within 24 hours of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
- 6. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.
- 7. Comprehensive records of all material disposed of at the facility must be maintained at the facility. The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of waste status as exempt or non-exempt with any necessary supporting documentation to certify non-hazardous status for non-exempt waste; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, etc.
- 8. All records of testing and monitoring must be retained for a period of five (5) years.

FINANCIAL ASSURANCE

- 1. Financial assurance in the amount of \$25,000 in the form of a cash bond has been received and approved by the Division,
- 2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed by the OCD no later than five (5) years from the date of this approval. In addition the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Upon cessation of operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six

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(6) months, unless an extension of time is granted by the Director.

- 2. A closure plan to include the following closure procedures will be submitted to the OCD for approval:
 - a. When the facility is to be closed no new material will be accepted.
 - 2. The soils beneath the sludge/mud receiving and treatment area and landfarm will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - 3. All above and below grade tanks will be emptied and any waste will be hauled to an OCD-approved facility. The empty tanks will be removed.
 - d. Contaminated soils or existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure or removed to an OCD-approved facility.
 - e. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.
 - f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

JFJ Landfarm L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. JFJ Landfarm L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

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Accepted:				
JFJ Landfarm L.L.C.			v.	
Signature	Title	AMERICA		Date
				•

JFJ Landfarm L.L.C. 2040 West Broadway Bloomfield N.M. 87413 (505) 632- 1786

August 9, 2002

Ms Martyne J. Kieling Environmental Geologist New Mexico Oil Conservation Division 1220 South ST Francis Drive Santa Fe, New Mexico 87505

RE: Attachment to OCD 711 Permit Approval

Dear Ms Kieling:

Please find enclosed the signed attachment for Permit NM -01-0010B (JFJ Landfarm L.L.C.)

If your need additional information or assistance in this matter, please contact me at: James Hatcher, 2040 West Broadway, Bloomfield N.M.87413 or (970) 254-1641. Thanks for your help.

James Hatcher

gent for JFJ Landfarm L.L.C.

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ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-01-0010B
JFJ Laudfarm L.L.C.
TRACT "B", TIERRA ENVIRONMENTAL LANDFARM
NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,
San Juan County, New Mexico
(August 7, 2002)

LANDFARM OPERATION

- 1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
- Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 3. All contaminated soils received at the landfarm must be spread and disked within 72 hours of receipt.
- 4. Soils and stabilized bottoms, sludge and mud must be spread on the surface in ten (10) inch lifts or less.
- 5. Soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils to reduce the occurrence of natural wind erosion.
- 6. Moisture may be added to contaminated soils received at the facility to (1) prevent emissions of volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action,
- 7. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within 72 hours of discovery.
- 8. The portion of the facility containing contaminated soils must be berned to prevent run-off and run-on. A perimeter berm must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region.

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- 9. All above-ground ranks must be berned to contain one and one-third the volume of the largest tank or all interconnected tanks. All tanks must be labeled as to contents and hazards.
- 10. All new or replacement above-ground tanks to be used longer than six (6) months containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 11. All temporary frac tanks installed at the facility for less than six (6) months containing materials other than fresh water must be benned so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks.
- 12. The OCD Santa Fe and Aztec District office must be notified within 24 hours of discovery of a spill or leak.
- 13. Exempt contaminated soils must be placed in the landfarm so that they are physically separate (i.e., bernod) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt contaminated soils.
- 14. Successive lifts of contaminated soils or stabilized material may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. 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 life and/or removal of the remediated soils.
- 15. Enhanced bioremediation through the application of microbes (bugs) and/or fertilizers is permitted only after prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.
- 16. Contaminated soils may not be placed within twenty (20) feet of any pipelines crossing the landfarm. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
- 17. Any design changes to the landfarm and tank bottom/sludge holding and treatment area must submitted to the OCD Santa Fe office for approval and a copy must be sent to the Aztec District office.

- 18. Landfarm inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Aztec District office must be notified within 48 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm additional wastes may not be placed into the landfarm until repairs have been completed.
- 19. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

CONCRETE MIXING IMPOUNDMENT CONSTRUCTION

- Two (2) concrete mixing impoundments must be constructed of reinforced concrete with a 30 mm plastic secondary liner. The seams on the concrete impoundment will be scaled. The new construction must be completed in accordance with the designs submitted as part of the application. However, to minimize the potential for leaks between old and new concrete slabs, the concrete mixing impoundments may not be connected or share a wall with the existing concrete mixing pad.
- 2. Upon completion of construction, "as built" diagrams of the concrete mixing impoundment shall be submitted to and approved by the Director prior to commencement of operations.
- 3. Construction must commence on the concrete mixing impoundments within one (1) year of the permit approval date.

TANK BOTTOM & SLIDGE ACCEPTANCE

- 1. All loads of tank bottoms or sludge will be pre-screened for H₂S before they are un-loaded from the truck.
- 2. All tank bottoms and sludge must be accepted into either the concrete mixing impoundment or frac tanks for settling prior to landfarm application.
- 3. The concrete mixing impoundment may be used for the stabilization of tank bottoms and sludge received by the landfarm facility. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete mixing impoundment that contain freestanding water will be netted until the

freestanding water is removed. OCD-approved remediated soil may be mixed with the tank bottoms and sludge to stabilize the material. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours. If separation of tank bottoms and sludge is expected to take longer than 24 hours the material must be held in a closed tank system for settling.

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- 4. Water removed from tank bottoms and sludge may be stored in above-ground closed-top tanks and after appropriate acreening may be spread on the landfarm for dust control and to enhance bioremediation. The water must be screened for hydrogen sulfide (H₂S), oils, total dissolved solids (TDS), and pH. Water with H₂S must be treated to remove all traces of H₂S prior to application. Water with free oil. TDS greater than 1000 ppm, or a pH less than 6 or greater than 9 must be disposed at an OCD-approved disposal facility. The source, amount, and test results of each load of water must be recorded and made available to the OCD upon request.
- 5. The concrete mixing impoundment must be inspected inside and outside weekly for containment leaks and overall integrity. Records of such inspections must be made available to the OCD upon request.

DRILLING MUD ACCEPTANCE

- No mud may be accepted at the facility without the generator's written authorization from the District to move the mud from the drilling location. Authorization will include the following information: 1) well operator name; 2) the well name and location from which the mud was transported; 3) transporter; 4) description of mud program (i.e., mud composition including volume and type of chamicals added); and 5) exact cell location where the material is to be remediated.
- 2. Un-used drilling mud may be used to line the two nun-off retention impoundments as long as the impoundments retain the required 100-year flood capacity.
- 3. Used drilling mud must be received directly into the concrete mixing impoundment or into frac tanks for oil and water separation prior to application to the landfarm. Any water removed must be disposed of at an OCD-approved disposal facility. Any oil removed must be handled in accordance with OCD rules.
- 4. OCD-approved remediated soil may be mixed with the drilling mud to stabilize the mud after the removal of free oil and free water. Adequate freeboard must be maintained to prevent any overtopping or slop over of material. The tank bottoms and sludge accepted into the concrete

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mixing impoundment that contain freestanding water will be netted until the freestanding water is removed. Material received at the impoundment must be mixed and stabilized in a timely manner not to exceed 24 hours.

5. Loads of drilling mud that contain miscellaneous hydrocarbons exceeding 2/10 of 1% of the total volume of mud must be accompanied by an OCD-approved Form C-117A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported monthly on Form C-118.

TREATMENT ZONE MONITORING

- 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 quarterly for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis must be conducted for TPH and volatile aromatic organics (BTEX) using EPA-approved methods.
- 3. The soil samples must be analyzed annually using EPA-approved methods for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission (WQCC) metals.
- 4. After obtaining the soil samples the borcholes must be filled with an impermeable material such as coment or bentonite.

WASTE ACCEPTANCE CRITERIA

- 1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. All loads of these wastes received at the facility must be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardout" non-exempt oilfield wastes that do not contain NORM. These

wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:

- An approved OCD Form C-138 "Request For Approval To Accept Solid Waste." Ĺ
- A "Generator Cardificate of Waste Status" signed by the generator. ii.

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- A verification of waste status issued by the appropriate agency, for wastes generated ili. outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the non-hazardous classification of the waste.
- Non-oilfield wastes that are non-hexardous if ordered by the Department of Public 3. Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
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- Analytical results from the quarterly treatment zone monitoring must be submitted to the 2. OCD Santa Fe office within thirty (30) days of receipt from the laboratory or within thirty (30) days of the field testing. A sample location map must be included with the analysis TOPOIT.
- Analytical results regarding remediated soil must be submitted to the OCD Santa Fe office 3. with a copy to the Aztec District office, along with any request to close the cell, apply

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successive lifts or remove the remediated material.

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- 4 Results of screening of free water from tank bottoms or sludge must be recorded and maintained for OCD review.
- 5. JFJ Landfarm L.L.C.must notify the OCD Astec District office within 24 hours of any fire, break, leak, spiil. blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
- The OCD must be notified prior to the installation of any pipelines or wells or other б. structures within the boundaries of the facility.
- 7. Comprehensive records of all material disposed of at the facility must be maintained at the facility. The records for each load must include: 1) generator, 2) origin; 3) date received: 4) quantity; 5) certification of waste status as exempt or non-exempt with any necessary supporting documentation to certify non-hazardous status for non-exempt waste; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, etc.
- 8. All records of testing and monitoring must be retained for a period of five (5) years.

FINANCIAL ASSURANCE

- 1. Financial assurance in the amount of \$25,000 in the form of a cash bond has been received and approved by the Division,
- 2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed by the OCD no later than five (5) years from the date of this approval. In addition the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

The OCD Santa Fe and Aziec offices must be notified when operation of the facility is 1. discontinued for a period in excess of six (6) months or when the facility is to be dismantied. Upon constion of operations for six (5) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six

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- (6) months, unless an extension of time is granted by the Director.
- 2. A closure plan to include the following closure procedures will be submitted to the OCD for approval:
 - When the facility is to be closed no new material will be accepted. a.
 - 2. The soils beneath the sludge/mud receiving and treatment area and landfarm will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - 3. All above and below grade tanks will be emptied and any waste will be hauled to an OCD-approved facility. The empty tanks will be removed.
 - d. Contaminated soils or existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure or removed to an OCD-approved facility.
 - e, The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.
 - f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

JFJ Landfarm L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions commained herein. IFI Landfarm L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:

JFJ Landfarm L.L.C.

Title IFJ AGENT/MANAGER Date 8-9-02 Signature