

NM1 - __10 B__

SOIL
REUSE
APPROVAL

__Sept. 23, 2020__

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Wednesday, September 23, 2020 4:27 PM
To: 'Marcella Marquez'
Subject: RE: [EXT] Request to reuse treated soils
Attachments: 2020 0923 Reuse for stabilization request approval piles 1183, 1206, and 1188 signed.pdf

Marcella,

Please see the attached approval letter. A hardcopy will not be placed in the mail. If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us

Office/Mobile: (505) 469-7486

From: Marcella Marquez <marcella@industrialecosystems.com>
Sent: Wednesday, September 23, 2020 3:53 PM
To: Jones, Brad A., EMNRD <brad.a.jones@state.nm.us>
Subject: [EXT] Request to reuse treated soils
Importance: High

Brad:

Please see the attached request to reuse treated soils along with the corresponding analytical report.

Thanks,
Marcella Marquez
Phone: (505) 632-1782
Fax: (505) 632-1876





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State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Division Director
Oil Conservation Division



September 23, 2020

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
P.O. Box 1202
Flora Vista, New Mexico 87415

RE: Request for Approval to Reuse Remediated Biopile Soils for the Stabilization/Solidification of Drilling Mud, Tank Bottoms, and Sludge
JFJ Landfarm, LLC - Industrial Ecosystems Inc.
JFJ Landfarm – Permit # NM1-010-B
Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,
San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, emailed to OCD on September 23, 2020 and associated analytical results to reuse the remediated soils for the stabilization and/or solidification of incoming drilling mud, tank bottoms, and sludge from following biopile(s): **1183, 1206, and 1188.**

Based upon the information provided in the request, the above-referenced biopiles are hereby approved for the stabilization and/or solidification of incoming drilling mud and tank bottoms and sludge.

Please be advised that approval of this request does not relieve 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 there are any questions regarding this matter, please do not hesitate to contact me at (505) 469-7486 or brad.a.jones@state.nm.us.

Respectfully,

Brad Jones
Environmental Engineer

BAJ

Jones, Brad A., EMNRD

From: Marcella Marquez <marcella@industrialecosystems.com>
Sent: Wednesday, September 23, 2020 3:53 PM
To: Jones, Brad A., EMNRD
Subject: [EXT] Request to reuse treated soils
Attachments: 092420 Request to Reuse Soil.pdf

Importance: High

Brad:

Please see the attached request to reuse treated soils along with the corresponding analytical report.

Thanks,
Marcella Marquez
Phone: (505) 632-1782
Fax: (505) 632-1876



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Main Address: 49 Road 3150 * Aztec, NM 87410
Remit to Address: P.O. Box 1202 * Flora Vista, NM 87415
P.O. Box: P.O. Box 2043 * Farmington, NM 87499
Phone: (505) 632-1782
Fax: (505) 632-1876 or (505) 334-1003

September 24, 2020

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

RE: Use of reclaimed soil

Dear Brad:

Recent analytical results show that the following biopiles(s) have reached acceptable levels as required by our NMOCD permit.

Pile #

1183 DRO, GRO, BTEX & Chlorides Passed 09/23/20
1206 DRO, GRO, BTEX & Chlorides Passed 09/23/20
1188 DRO, GRO, BTEX & Chlorides Passed 09/23/20

We are seeking NMOCD approval to recycle this soil by using it to mix/solidify incoming liquid waste.

Respectfully Submitted,

Marcella Marquez
Regulatory/Compliance/HR

Attachments/Enclosure – Analytical Reports

Analytical Results For:

 INDUSTRIAL ECOSYSTEMS
 49 CR 3150
 AZTEC NM, 87410

 Project: JFJ
 Project Number: 8156
 Project Manager: MARCELLA MARQUEZ
 Fax To: (505) 632-1876

 Reported:
 23-Sep-20 08:58

PILE # 1183
H002479-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories
Inorganic Compounds

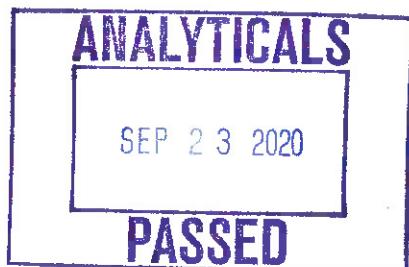
Chloride	16.0	16.0	mg/kg	4	0091811	GM	21-Sep-20	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B
Toluene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B
Ethylbenzene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B
Total Xylenes*	<0.150	0.150	mg/kg	50	0091810	MS	18-Sep-20	8021B
Total BTEX	<0.300	0.300	mg/kg	50	0091810	MS	18-Sep-20	8021B
Surrogate: 4-Bromofluorobenzene (PID)		99.9 %	73.3-129		0091810	MS	18-Sep-20	8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B
Surrogate: 1-Chlorooctane		90.6 %	44.3-144		0091808	MS	18-Sep-20	8015B
Surrogate: 1-Chlorooctadecane		98.7 %	42.2-156		0091808	MS	18-Sep-20	8015B



Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC NM, 87410

Project: JFJ
Project Number: 8156
Project Manager: MARCELLA MARQUEZ
Fax To: (505) 632-1876

Reported:
23-Sep-20 08:58

PILE # 1206
H002479-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories
Inorganic Compounds

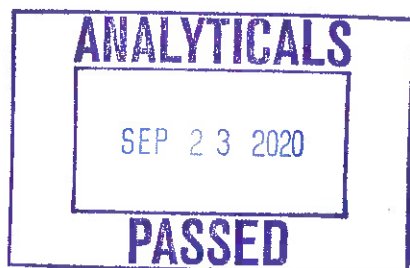
Chloride	32.0	16.0	mg/kg	4	0091811	GM	21-Sep-20	4500-Cl-B		
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B		
Toluene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B		
Ethylbenzene*	<0.050	0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B		
Total Xylenes*	<0.150	0.150	mg/kg	50	0091810	MS	18-Sep-20	8021B		
Total BTEX	<0.300	0.300	mg/kg	50	0091810	MS	18-Sep-20	8021B		
Surrogate: 4-Bromofluorobenzene (PID)		100 %	73.3-129		0091810	MS	18-Sep-20	8021B		

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B		
DRO >C10-C28*	<10.0	10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B		
Surrogate: 1-Chlorooctane		87.3 %	44.3-144		0091808	MS	18-Sep-20	8015B		
Surrogate: 1-Chlorooctadecane		96.3 %	42.2-156		0091808	MS	18-Sep-20	8015B		



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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

INDUSTRIAL ECOSYSTEMS	Project: JFJ	Reported:
49 CR 3150	Project Number: 8156	23-Sep-20 08:58
AZTEC NM, 87410	Project Manager: MARCELLA MARQUEZ	
	Fax To: (505) 632-1876	

PILE # 1188
H002479-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

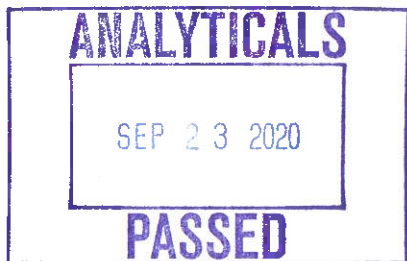
Chloride	192		16.0	mg/kg	4	0091811	GM	21-Sep-20	4500-CL-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B	
Toluene*	<0.050		0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	0091810	MS	18-Sep-20	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	0091810	MS	18-Sep-20	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	0091810	MS	18-Sep-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		0091810	MS	18-Sep-20	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0091808	MS	18-Sep-20	8015B	
Surrogate: 1-Chlorooctane			95.2 %	44.3-144		0091808	MS	18-Sep-20	8015B	
Surrogate: 1-Chlorooctadecane			102 %	42.2-156		0091808	MS	18-Sep-20	8015B	



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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC NM, 87410

Project: JFJ
Project Number: 8156
Project Manager: MARCELLA MARQUEZ
Fax To: (505) 632-1876

Reported:
23-Sep-20 08:58

Inorganic Compounds - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 0091811 - 1:4 DI Water									
Blank (0091811-BLK1)									
					Prepared & Analyzed: 18-Sep-20				
Chloride	ND	16.0	mg/kg						
LCS (0091811-BS1)									
					Prepared & Analyzed: 18-Sep-20				
Chloride	416	16.0	mg/kg	400	104	80-120			
LCS Dup (0091811-BSD1)									
					Prepared & Analyzed: 18-Sep-20				
Chloride	400	16.0	mg/kg	400	100	80-120	3.92	20	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC NM, 87410

Project: JFJ
Project Number: 8156
Project Manager: MARCELLA MARQUEZ
Fax To: (505) 632-1876

Reported:
23-Sep-20 08:58

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0091810 - Volatiles										
Blank (0091810-BLK1)				Prepared & Analyzed: 18-Sep-20						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.7	73.3-129			
LCS (0091810-BS1)				Prepared & Analyzed: 18-Sep-20						
Benzene	2.16	0.050	mg/kg	2.00		108	72.2-131			
Toluene	2.19	0.050	mg/kg	2.00		109	71.7-126			
Ethylbenzene	2.16	0.050	mg/kg	2.00		108	68.9-126			
Total Xylenes	6.21	0.150	mg/kg	6.00		104	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0515		mg/kg	0.0500		103	73.3-129			
LCS Dup (0091810-BSD1)				Prepared & Analyzed: 18-Sep-20						
Benzene	2.17	0.050	mg/kg	2.00		108	72.2-131	0.206	14.6	
Toluene	2.20	0.050	mg/kg	2.00		110	71.7-126	0.323	17.4	
Ethylbenzene	2.16	0.050	mg/kg	2.00		108	68.9-126	0.376	18.9	
Total Xylenes	6.23	0.150	mg/kg	6.00		104	71.4-125	0.366	18.5	
Surrogate: 4-Bromofluorobenzene (PID)	0.0512		mg/kg	0.0500		102	73.3-129			

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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager

Analytical Results For:

 INDUSTRIAL ECOSYSTEMS
 49 CR 3150
 AZTEC NM, 87410

 Project: JFJ
 Project Number: 8156
 Project Manager: MARCELLA MARQUEZ
 Fax To: (505) 632-1876

 Reported:
 23-Sep-20 08:58

Petroleum Hydrocarbons by GC FID - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0091808 - General Prep - Organics
Blank (0091808-BLK1)

Prepared & Analyzed: 18-Sep-20

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	50.9		mg/kg	50.0		102	44.3-144			
Surrogate: 1-Chlorooctadecane	59.5		mg/kg	50.0		119	42.2-156			

LCS (0091808-BS1)

Prepared & Analyzed: 18-Sep-20

GRO C6-C10	179	10.0	mg/kg	200		89.3	78.8-127			
DRO >C10-C28	182	10.0	mg/kg	200		91.2	80-132			
Surrogate: 1-Chlorooctane	51.4		mg/kg	50.0		103	44.3-144			
Surrogate: 1-Chlorooctadecane	61.6		mg/kg	50.0		123	42.2-156			

LCS Dup (0091808-BSD1)

Prepared & Analyzed: 18-Sep-20

GRO C6-C10	176	10.0	mg/kg	200		88.1	78.8-127	1.27	15.1	
DRO >C10-C28	182	10.0	mg/kg	200		90.8	80-132	0.509	17.1	
Surrogate: 1-Chlorooctane	51.1		mg/kg	50.0		102	44.3-144			
Surrogate: 1-Chlorooctadecane	61.3		mg/kg	50.0		123	42.2-156			

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Celey D. Keene, Lab Director/Quality Manager

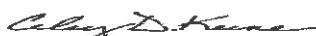
Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Analytical

service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

ANALYSIS REQUEST

Company Name: Industrial Ecosystems, Inc.							
Project Manager:							
Address: 49 Road 3150						P.O. #:	Bill to (if different): 8156
City: Aztec						State: NM	Zip: 87410
Phone #: 505-632-1782						Email: marcella@industrialecosystems.com	
Additional Report To:							
Project Name: JFJ							
Project Number:							
Sampler Name (Print): Marcelle							
FOR LAB USE ONLY							
Lab I.D.							
Sample Name or Location							
H002479	PILE # 1183	Date: 9/17	Time: 7:40	GROUNDWATER	MATRIX (check one)	# of containers	DRO (8015B) ✓
	PILE # 1206		8:12	SURFACEWATER			GRO (8015B) ✓
	PILE # 1188	✓	8:50	WASTEWATER			BTEX (8021B) ✓
	PILE #			PRODUCED WATER			CHLORIDE (8001) ✓
	PILE #			SOIL			
	PILE #			OTHER :			
	PILE #			No preservation (general)			
	PILE #			HNO ₃			
	PILE #			HCl			
	PLEASE NOTE: GAL's liability and clients' exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL, within 30 days after completion. In no event shall GAL be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder.			H ₂ SO ₄			
	Requisitioned By: M. Morgan	Date: 9/17/20	Received By: Rhonda Clark	Other:			
	Relinquished By: Justin Clark	Date: 9/17/20	Received By: Chad Ex	Other:			
	Relinquished By:	Date: 9-18-20	Received By: Monica Delgado	Temperature at receipt: 9.9°C on 9/18	CHECKED BY: [Signature]		
	Delivered By: (Circle One) UPS - FedEx - Bangaroo - Other:						
Report to State? (Circle) Yes No							

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.