

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: BP	Contact: Steve Moskal
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-330-9179
Facility Name: Northeast Blanco Unit 032A	Facility Type: Natural gas well
Surface Owner: Federal	Mineral Owner: Federal
API No. 3004524991	

LOCATION OF RELEASE

Unit Letter H	Section 7	Township 30N	Range 07W	Feet from the 1450	North/South Line North	Feet from the 990	East/West Line East	County: San Juan
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Latitude 36.830422° Longitude -107.606863°

NATURE OF RELEASE

Type of Release: Produced water, oil and other hydrocarbon	Volume of Release: Est. 15 bbls	Volume Recovered: none
Source of Release: Compressor pit; 45 bbl BGT	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: July 31, 2018; 9:40AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* During the closure of a below grade tank sampling indicates impacts of hydrocarbon to the soil, associated with the former compressor pit.

Describe Area Affected and Cleanup Action Taken.* BP proposes to employ soil shredding to remediate hydrocarbon impacted soils at the location. The areas of concern will be excavated, treated and backfilled according to the attached remediation plan, pending approval.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: <u>8/10/18</u>	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: <u>Complete Remediation</u>	Attached <input checked="" type="checkbox"/>
Date: August 7, 2018	Phone: 505-330-9179	

* Attach Additional Sheets If Necessary

#NCS 1822228702

NMOCD

By, OCT 6, 2018

Submit closure Report No

AUG 08 2018

Later than

DISTRICT III

1/2/19

8

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Friday, August 10, 2018 8:10 AM
To: 'Steven Moskal'
Cc: Fields, Vanessa, EMNRD; Abiodun Adeloje
Subject: RE: [EXTERNAL] NEBU 032A BGT Remediation

Steve,

OCD has approved BP remediation plan with the following Conditions of Approval:

- Sample excavation and treated piles for TPH, BTEX, Benzene.
- Schedule with OCD District 3 for all confirmation closure samples.
- BP must complete remediation no later than October 6, 2018
- BP must submit a final C-141 no later than January 1, 2019

If you have any questions please give me a call

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Steven Moskal <Steven.Moskal@BPX.COM>
Sent: Wednesday, August 8, 2018 1:53 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: [EXTERNAL] NEBU 032A BGT Remediation

Thank you Cory. I did drop it by yesterday afternoon. Vanessa stamped it in.

From: Smith, Cory, EMNRD [<mailto:Cory.Smith@state.nm.us>]
Sent: Wednesday, August 08, 2018 1:51 PM
To: Abiodun Adeloje; Steven Moskal
Cc: Fields, Vanessa, EMNRD; Leigh Thomas; Vance Hixon; Powell, Ross L (MBF SERVICES); Jody Gonzales
Subject: RE: [EXTERNAL] NEBU 032A BGT Remediation

Steve,

BP has OCD verbal approval for the remediation plan. I will get it signed and uploaded as soon as we received it.

Thanks,

Cory Smith

Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Abiodun Adeloje <aadeloje@blm.gov>
Sent: Wednesday, August 8, 2018 9:27 AM
To: Steven Moskal <Steven.Moskal@bpx.com>
Cc: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Leigh Thomas <l1thomas@blm.gov>; E Hixon (VANCE.HIXON@BPX.COM) <VANCE.HIXON@bpx.com>; Powell, Ross L (MBF SERVICES) <ross.powell@bp.com>; Jody Gonzales (JODY.GONZALES@BPX.COM) <JODY.GONZALES@bpx.com>
Subject: Re: [EXTERNAL] NEBU 032A BGT Remediation

Great, thank you.

On Wed, Aug 8, 2018 at 9:24 AM Steven Moskal <Steven.Moskal@bpx.com> wrote:

I did not know the C-141 was required for the Sundry submission on BGT closures. I will get it to you later this afternoon

Steve Moskal
Environmental Coordinator
BP San Juan
(505) 330-9179
steven.moskal@bpx.com

Sent from my mobile device

From: Abiodun Adeloje <aadeloje@blm.gov>
Sent: Wednesday, August 8, 2018 9:13 AM
To: Steven Moskal
Cc: Fields, Vanessa, EMNRD; Smith, Cory, EMNRD; Leigh Thomas; Vance Hixon; Powell, Ross L (MBF SERVICES); Jody Gonzales
Subject: Re: [EXTERNAL] NEBU 032A BGT Remediation

Steve, can you please send the hard copy of Form C-141 to the BLM. I did not see it with Sundry if you have not send it yet.

Thanks

On Tue, Aug 7, 2018 at 1:50 PM Steven Moskal <Steven.Moskal@bpx.com> wrote:

All,

Attached is the remediation plan to perform a pilot test for soil shredding at the subject location. I have included the C-141 and Sundry accordingly. These will be delivered to the regulatory offices later today.

Please provide some indication of the timeline for approval.

Thank you,

Steve Moskal

BP Lower 48 – San Juan

Field Environmental Coordinator

Phone: (505) 330-9179

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Abiodun Adeloje (Emmanuel)

Natural Resource Specialist

6251 College Blvd. Suite A

BLM - FFO

Phone: 505-564-7665

Cell #: 505-635-0984

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Abiodun Adeloje (Emmanuel)

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BP Remediation Plan

To: Cory Smith, Vanessa Fields(NMOCD), Emmanuel Adeloje (BLM)
From: Steve Moskal (BP)
CC: Jeff Blagg (Blagg Engineering)
Date: 8/7/2018
Re: Northeast Blanco Unit 032A - Ex-situ Soil Remediation – Soil Shredding
(H) S-7, T30N, R07W; API #30-045-24991;

Dear Mr. Smith, Mrs. Fields and Mr. Adeloje,

The Northeast Blanco Unit (NEBU) 032A site is an active natural gas production well location within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on land managed by the Bureau of Reclamation and Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production and limited recreation access.

Background

Historical impacts were identified at the location on July, 31, 2018 during the closure of a 45 bbl below grade tank (BGT). The impacts are the result of pits overflows and spills associated with the former compressor on the location. BP estimates 15 bbls of fluids likely were released from the pit during its use. Initial site investigation determined additional delineation is required to define the extents of impacts. Vertical and lateral delineation of the site has not yet been performed. The well site is operated by BP Production.

Site Ranking

Following the NMOCD site ranking criteria, the site closure standard is 100 ppm TPH, 50 ppm BTEX and 10 ppm benzene:

- Depth to groundwater <50' (20 points)
- Nearest surface water source <200' (20 points)
- Distance to nearest water well or water source <1,000' (0 points)

Proposed Remediation – Soil Shredding

Based on recent success of soil shredding technologies performed on BP remediation sites, BP proposes to use this technology at the subject site. To date, BP has successfully contracted soil shredding of nearly 150,000 cubic yards of soil to meet site closure standards.

Soil shredding involves the excavation of the impacted soil which is then placed in processing equipment, such as a hammer mill or pug mill, to mechanically process and break-up the soil. The soil becomes more uniform and is aerated during the mechanical processing. The soil is then ejected from the processing equipment and a chemical oxidizer is applied, in this case, a 35% solution of hydrogen peroxide and water. The applied concentration of hydrogen peroxide typically ranges from 3-8%. The hydrogen peroxide quickly oxidizes the hydrocarbon impacts (reagents), resulting in soil, water and carbon dioxide (products). Once the soil is processed, it is stockpiled and allowed to sit for approximately 2-5 days of residence time. A composite soil sample is collected from each segregated stockpile and submitted for laboratory analysis to determine the effectiveness of the ex-situ remediation process. If the laboratory results are of acceptable levels, the soil will be used as backfill to the excavation; if results are unsatisfactory, the soil is passed through the process once more and a

subsequent laboratory sample will be collected for laboratory confirmation as described before. Typically, 24 hours of notice is provided to the regulatory agencies for the opportunity to observe and witness the stockpile sampling.

BP proposes to excavate and implement a pilot test for soil shredding to remediate approximately 1,000 cubic yards of hydrocarbon impacted soil. BP will perform shredding on approximately 300 cubic yards to determine the effectiveness of the technology. If successful, soil shredding will continue. BP proposes to treat the impacted soil and segregate windrow stockpiles broken into 100 cubic yard increments. A single, five-point composite, soil sample will be collected to represent each 100 cubic yard stockpile. If necessary, once a baseline of approximately 1,000 cubic yards of soil is consistently and successfully treated, BP will propose to decrease the sampling frequency to 500 cubic yard stockpile segments. The 500 cubic yard sampling modification will be discussed with the NMOCD and BLM for approval and input prior to implementation. BP would expect to have a sampling modification approval from the agencies within 48 working hours from the time of request. The remediation will then continue until complete and sampling will be based on the regulatory agencies approved sampling plan.

Excavation sampling will be in accordance with a typical dig and haul. The sidewalls and base of the excavation will be sampled in a frequency based on the size and progress of the excavation. Agency notification of excavation sampling will also be issued in advanced, 24 hours if possible.

BP is currently anticipates mobilizing to the location on August 10, 2018. BP plans to shut the well in and remove all necessary surface equipment.

It is understood, that if soil remediation is not successful via the soil shredding, an alternative method such as a dig and haul or soil vapor extraction will be necessary. If soil shredding is not effective, BP will elect to perform an alternative type of remediation such as dig and haul, soil vapor extraction or other approved methods. BP will be in close communications with the agencies in the event an alternative remediation method is required.

Site Closure and Reporting

Once the soil shredding process is complete, the excavated area will be fully backfilled and compacted, and surface equipment will be re-set. Any necessary interim reclamation will be performed. Final reclamation of the well pad will occur at a later date, once the natural gas production well is plugged and abandoned.

A final remediation report will be delivered to NMOCD and BLM for approval of final site closure regarding the excavation and soil shredding activities within 60 days of the end of remediation.

Analytical Report

Lab Order 1808001

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 3' (45)

Project: NEBU 32A

Collection Date: 7/31/2018 9:40:00 AM

Lab ID: 1808001-001

Matrix: SOIL

Received Date: 8/1/2018 7:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	1.5		mg/Kg	1	8/1/2018 10:00:00 AM	39532
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	4800	86		mg/Kg	20	8/1/2018 10:46:12 AM	R53126
Surr: BFB	92.2	70-130		%Rec	20	8/1/2018 10:46:12 AM	R53126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: irm
Diesel Range Organics (DRO)	460	9.8		mg/Kg	1	8/1/2018 11:02:49 AM	39527
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/1/2018 11:02:49 AM	39527
Surr: DNOP	92.2	50.6-138		%Rec	1	8/1/2018 11:02:49 AM	39527
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.43		mg/Kg	20	8/1/2018 10:46:12 AM	R53126
Toluene	24	0.86		mg/Kg	20	8/1/2018 10:46:12 AM	R53126
Ethylbenzene	3.2	0.86		mg/Kg	20	8/1/2018 10:46:12 AM	R53126
Xylenes, Total	190	1.7		mg/Kg	20	8/1/2018 10:46:12 AM	R53126
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	20	8/1/2018 10:46:12 AM	R53126
Surr: Toluene-d8	102	70-130		%Rec	20	8/1/2018 10:46:12 AM	R53126

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified at t

PRELIMINARY

Analytical Report

Lab Order **1808001**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 5' (45)

Project: NEBU 32A

Collection Date: 7/31/2018 9:45:00 AM

Lab ID: 1808001-002

Matrix: SOIL

Received Date: 8/1/2018 7:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	ND	1.5		mg/Kg	1	8/1/2018 10:00:00 AM	39532
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	11000	850		mg/Kg	200	8/1/2018 12:20:56 PM	R53126
Surr: BFB	101	70-130		%Rec	200	8/1/2018 12:20:56 PM	R53126
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	590	97		mg/Kg	10	8/1/2018 11:35:49 AM	39527
Motor Oil Range Organics (MRO)	ND	480		mg/Kg	10	8/1/2018 11:35:49 AM	39527
Surr: DNOP	0	50.6-138	S	%Rec	10	8/1/2018 11:35:49 AM	39527
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	4.2		mg/Kg	200	8/1/2018 12:20:56 PM	R53126
Toluene	98	8.5		mg/Kg	200	8/1/2018 12:20:56 PM	R53126
Ethylbenzene	13	8.5		mg/Kg	200	8/1/2018 12:20:56 PM	R53126
Xylenes, Total	440	17		mg/Kg	200	8/1/2018 12:20:56 PM	R53126
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	200	8/1/2018 12:20:56 PM	R53126
Surr: Toluene-d8	106	70-130		%Rec	200	8/1/2018 12:20:56 PM	R53126

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified at t