

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: 380 Airport Road, Suite A, Durango, CO 81303	Telephone No.: 505-330-9179
Facility Name: Dryden 001E	Facility Type: Natural gas well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004526655
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LOCATION OF RELEASE

30-045-25566

Unit Letter I	Section 28	Township 28N	Range 08W	Feet from the 1905	North/South Line South	Feet from the 580	East/West Line East	County: San Juan
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Latitude 36.63044° Longitude -107.67960°

NATURE OF RELEASE



Type of Release: unknown hydrocarbons	Volume of Release: unknown	Volume Recovered: none
Source of Release: Historical impacts, possible former earthen pit	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: December 26, 2017; 12:50 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? NMOC	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	APR 03 2018

If a Watercourse was Impacted, Describe Fully.*	DISTRICT III
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Describe Cause of Problem and Remedial Action Taken.* During BGT closure activities, impacts were identified beneath the 45 bbl tank. Lab analysis confirms the impacts are above the BGT closure standards and spill and release guidelines with a site ranking of 20.

Describe Area Affected and Cleanup Action Taken.* The area has not been fully delineated and will be delineated via excavation in the coming weeks. Attached is a proposed workplan to perform soil shredding to remediate impacted soils on site.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: 4/23/18	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: April 3, 2018	Phone: 505-330-9179	

* Attach Additional Sheets If Necessary

Provide OCD 24 hour notice
prior to any sampling.
Sample for 805 / 8021 (17R0)
NVF 1811641153

BP Remediation Plan

To: Cory Smith, Vanessa Fields(NMOCD), Whitney Thomas (BLM),
From: Steve Moskal (BP)
CC: Jeff Blagg (Blagg Engineering), Emmanuel Adeloye (BLM)
Date: 4/3/2018
Re: Dryden 001E - Ex-situ Soil Remediation – Soil Shredding (I) S-28, T28N,
R08W; API #~~30-045-26655~~; Serial No.:NM-012200

30-045 25566

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

The Dryden 001E 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 Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production and some recreation.

Background

Historical impacts were identified at the location on December 26, 2017 during the closure of a below grade tank (BGT), Tank A. The impacts are likely the result of earthen pits formerly used on the location. No historical documentation is available regarding this pit. Initial site investigation determined additional delineation was required to define the extents of impacts. Vertical 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 <100' (10 points)
- Nearest surface water source <1,000' (10 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 perform the remediation of hydrocarbon impacts by the means of soil shredding. A conservative estimate of approximately 500 cubic yards of soil will be treated through the soil shredding process. 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, 24-48 hours if possible.

BP is currently anticipates mobilizing to the location within the next 2-3 weeks. 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. 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.