OIL CONS. DIV DIST, 3

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 Subsequent Report Final Report Contact: Steve Moskal Name of Company: BP Telephone No.: 505-330-9179 Address: 200 Energy Court, Farmington, NM 87401 Facility Name: Mudge LS 007 Facility Type: Natural gas well Mineral Owner: Fee API No. 30-045-10431 Surface Owner: Fee LOCATION OF RELEASE East/West Line County: San Juan Unit Letter Section Township Range Feet from the North/South Line Feet from the 980 West 23 31N 11W 798 South M **Latitude** 36.879347° Longitude -107.966223° NATURE OF RELEASE Type of Release: Hydrocarbon - Suspected Historical drilling pit Volume of Release: unknown Volume Recovered: none Date and Hour of Discovery: November Source of Release: Flowline Date and Hour of Occurrence: 17, 2013 Unknown Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ Not Required By Whom? Date and Hour: Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ⊠ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* During trenching for the installation of a flowline, hydrocarbon impacted soils were encountered. Impacts are suspected to be a historical drilling pit as contents appear to resemble drilling mud. The area was excavated to approximately 20 feet deep. Soil vapor extraction points were installed to further remediate due to the close proximity of pipelines and the depth of impacts exceeding 35 feet deep. A soil vapor extraction unit has been in operation since February of 2015. Describe Area Affected and Cleanup Action Taken.* The vertical and lateral extents of the impacted soil were identified via a soil boring investigation. Soil vapor extraction points were installed and the system became operational in November 2015. The SVE system has demonstrated effective via monitoring and field sampling of the vacuum exhaust. Attached is a proposed sampling plan for site closure. 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. OIL CONSERVATION DI Signature: Approved by Environmental Specialist: Printed Name: Steve Moskal

Approval Date:

Conditions of Approval:

Expiration D

Attached 🕽

Date: January 19, 2018

Title: Field Environmental Coordinator

E-mail Address: steven.moskal@bp.com

Phone: 505-326-9429 * Attach Additional Sheets If Necessary HNCS 16286 498 23



Smith, Cory, EMNRD

From:

Smith, Cory, EMNRD

Sent:

Tuesday, February 13, 2018 7:31 AM

To:

'Moskal, Steven'

Cc:

Blagg, Jefferey; Fields, Vanessa, EMNRD

Subject:

RE: Mudge LS 007 Data

Steve,

As discussed yesterday OCD has approved BP closure plan with the following conditions:

- BP will field screen each flight below the original excavation for OVM and observation and document the finding on Bore logs.
- Any flight that is greater than 100PPM or exhibits signs of impacts (Discoloring, saturation, odor etc.) will be collected as a grab sample.
- BP will collect Bottom hole samples at 40' for each borehole.
- IF the borehole does not have any flights above 100PPM BP will collect a representative composite sample between 20'-30' within the previous excavation.
- For samples that may be outside of the excavation, BP will collect at a minimum Bottom hole(at least 40'), and Highest OVM.

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: Moskal, Steven [mailto:Steven.Moskal@bp.com]

Sent: Monday, February 12, 2018 1:54 PM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Cc: Blagg, Jefferey <jeffcblagg@aol.com>

Subject: Mudge LS 007 Data

Cory – The attached data and figures are in regards to the SVE closure plan I have presented to you. Please note, BH-1 through BH-15 were drilled in 2013. The attached "Drilling Overhead – Updated 10-13-2016" indicates the locations of the SVE points in the boring logs.

Steve Moskal

BP Lower 48 – San Juan Field Environmental Coordinator

Phone: (505) 330-9179



BP Remediation Plan

To:

Cory Smith & Vanessa Fields (NMOCD)

From:

Steve Moskal (BP)

CC:

Jeff Blagg (Blagg Engineering)

Date:

1/19/2017

Re:

Mudge LS 007 - Soil Vapor Extraction (SVE) Closure Plan

API#30-045-10431; ULSTR: (M) S23, T31N, R11W;

Lat. 36.879347, Long. -107.966223

Dear Mr. Smith, Mrs. Fields,

The Mudge LS 007 site is an active natural gas production pad within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on private land. The well pad is located in a remote area with easy access approximately 4.5 miles north of Aztec, NM on County Road 2900. Depth to groundwater is unknown, but expected to be greater than 50' below ground surface (bgs). Soil conditions are sandy to silty sand to silty clay.

BACKGROUND

A historical release of natural gas liquids from production and process equipment was identified during trenching in 2014. The impacts were initially remediated in 2014 by excavation, however, the size and depth of the impacts became problematic to continue the excavation. The remaining impacts have been left in place and treated using a soil vapor extraction system. To date, approximately 20 soil borings have been advanced at the site with a total of 10 SVE points.

The SVE system began operation in 2015 and has remained in near constant operation since startup. Confirmation sampling for closure was attempted in October of 2016, but due to a lack of time and planning, the full scope of closure sampling could not be executed.

CONFIRMATION SAMPLING PLAN

BP proposes to advance up to 15 soil boring to determine the vertical and lateral extents of any remaining contamination. Total depth is not to exceed 40 feet bgs.

The borings will be advanced using either 2" direct push or rotary auger minimum 4" (ID) hollow stem auger or comparable tooling. The wells will not be permitted through the New Mexico Office of the State Engineer Aztec Office and no groundwater is expected to be encountered and there is no intent to install groundwater monitoring wells.

During advancement of the well borings, soil samples will be collected for confirmation, beginning at approximately 20' bgs to total depth around 35-40' bgs. Soil samples will be collected and composited every 4-5', depending on direct push or auger lengths. The composite soil samples will be field screened using a calibrated photoionization detector via an approved field headspace method. A minimum of one soil sample will be submitted for laboratory analysis, following handling and chain of custody protocols, for analysis of EPA Methods 8015 TPH (GRO, DRO and MRO), 8021 BTEX and 6010 chlorides. The soil samples with the PID reading greater than 100 ppm from each boring. The upper 20 feet or so of soil is

not impacted by the pit and will be thin spread on site. If any contaminated soil is encountered, it will be collected and containerized for offsite disposal.

REPORTING

Once laboratory results are received for soil and groundwater samples, BP will furnish a report to the NMOCD detailing drilling activities, laboratory results and status of closure. All these activities will be performed by a third party contractor. The report will be delivered to the NMOCD within 60 days of the final laboratory report.

Regards,

Steve Moskal

BP America Production Co.

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