Creating Solutions, Building Trust.

July 31, 2018

Job No. 18-07-101-13107

New Mexico EMNRD District I 1625 North French Drive Hobbs, New Mexico 88240

Attn: Ms. Oliva Yu

Re: Initial C-141 Report, Estimated 100-Barrel Crude Oil Spill, Pilot Crude Hauling, NM 21/Delaware Basin

Road, Jal, New Mexico 88252

Broadbent & Associates, Inc. (Broadbent) is pleased to present this Initial C-141 Report for the estimated 100-barrel surface spill of crude oil on NM 21/Delaware Basin Road, Jal, New Mexico 88252 (Site). The New Mexico Energy, Minerals, and Natural Resources Division (EMNRD) C-141 form is attached.

On July 16, 2018, approximately 100 barrels of crude oil was spilled onto the highway's asphalt surface and the adjacent soil surface due to a vehicle accident, which caused the truck hauling the crude to catch fire. The incident was reported to the Oil Conservation Division (OCD) on July 16, 2018.

Beginning on July 16, 2018 and continuing to date, Environmental Emergency Services (EES) responded to abate the spill. Broadbent personnel mobilized to the Site to observe, document, and collect confirmation soil samples. The New Mexico one-call, NM811, was notified of proposed excavation activities. Additionally, a private line locator service was dispatched to clear the impacted area. Once the on-call clearance was completed, two backhoes were utilized to excavate the impacted area. Excavation activities are ongoing. The excavated soil is being stockpiled onsite and subsequently hauled away using dump trailers, as needed.

The excavated area to date measures 350 feet long by 15 feet wide and varied in depth from 5 feet on the south end, to 8 feet on the north end of the impacted area. Confirmation soil samples are being collected and submitted to Cardinal Laboratories in Hobbs, NM. Backfilling of the excavated area will be completed upon receipt of laboratory analytical results indicating COC concentrations below NMED Soil Screening Levels. Site drawings, laboratory analytical results, and disposal documentation will be provided to the EMNRD in the final C-141 report.

If you have any questions or require additional information, please do not hesitate to contact us at (830) 816-5434.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Nathan Dunn Project Geologist

Attachments: New Mexico EMNRD C-141 Form

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

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

Form C-141

Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Release Notification and Corrective Action													
					OPERA	l Report		Final Report					
		ilot Transpo	25000		Contact: David Dippel								
Address: 55 Facility Nar		Drive Knoxy	37909		Telephone No.: (865) 474-2725 Facility Type: N/A								
Surface Ow	ner: N/A		Owner:	r: N/A API No.: N/A									
				LOCA	N OF REI	LEASE							
Unit Letter	Section 7	Township 24S	Range 34E	Feet from the 1,793.83		South Line South	Feet from the 2.085.85	East/West Line West		County Lea		-	
	Latitude: 32.229769 Longitude: -103.510804												
NATURE OF RELEASE													
Type of Rele	ase: Surfac	e 4 :1 1-:-	-4 1 £		Volume of Release: 100 bbl. Volume Recovered:								
Source of Release: Tanker trailer vehicle accident and fire						Date and Hour of Occurrence: July 16, 2018 @ 0411 Date and Hour of Discovery July 16, 2018 @ 0411 July 16, 2018 @ 0411							
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required						If YES, To Whom? Jim Griswold							
By Whom? J	ason Petty			Date and Hour: July 16, 2018 @ 1300									
Was a Water	course Read	ched?] No		If YES, Volume Impacting the Watercourse.								
N/A RECEIVED By Olivia Yu at 3:26 pm, Aug 02, 2018 Describe Cause of Problem and Remedial Action Taken.* The tanker was involved in a vehicle accident that caused the trailer to ignite and release 100 bbls of crude oil onto the roadside and ground surface.													
Describe Area Affected and Cleanup Action Taken.* Estimated spill was approximately 350 feet by 15 feet on the shoulder of the roadside. Spill area was partially located on private property. Spill abatement activities are ongoing.													
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.													
	Nath	Dung		OIL CONSERVATION DIVISION									
Signature:	y Nothan D	NI PP			- Approved by Environmental Specialist:								
Printed Name: Nathan Dunn Title: Project Geologist						Approval Dat	8/2/2018	8	Expiration I	Date:			
E-mail Address: ndunn@broadbentinc.com						Conditions of Approval: Attached					-		
	Date: 7/31/18 Phone: (830) 816-5434 see attached directive Attach Additional Sheets If Necessary												

1RP-5144

fOY1821455943

nOY1821456053

pOY1821456534

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _7/31/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5144__ has been assigned. Please refer to this case number in all future correspondence.

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _9/2/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us