OCD Rec'd:08/06/18

District 1
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

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Release Notification and Corrective Action													
						OPERATOR						Final Report	
Name of Company Fasken Oil and Ranch 15/4/10						Contact Aaron Pachlhofer							
Address 610			Telephone No. 432-687-1777										
Facility Name Shell Federal No.2 SWD							Facility Type Salt Walter Disposal Battery						
Surface Owner: Federal Mineral Owner:						Federal API No.: 30-015-22717							
					TION	OF RE	LEASE						
Unit Letter M	Section 5	Township T21S	Range 24E	Feet from the 3,300		South Line South	Feet from the 660		Vest Line West	County Eddy			
Latitude <u>32.510319°</u> Longitude <u>-104.527606°</u>													
	NATURE OF RELEASE												
Type of Release: Oil and produced water							Volume of Release: 1190 water, Volume Recovered: 721 water, 10 (270 oil						
Source of Release: SWD Battery							Date and Hour of Occurrence: 8/3/18 10:30 P.M. MDT Date and Hour of Discovery: 10:30 P.M. MDT					8/3/18	
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required							If YES, To Whom? Mark Whittacker, OCD						
By Whom? Vince Hancock, Fasken							Date and Hour 8/4/18 6:15 a.m. MDT						
Was a Watercourse Reached? ☐ Yes ☑ No							If YES, Volume Impacting the Watercourse.						
If a Watercou	rse was Im	pacted, Descr	ibe Fully.	N/A		1							
Describe Cause of Problem and Remedial Action Taken.* At approximately 10:30 p.m. on 8/3/18 a tank low level alarm was received by Odie Roberts with Fasken. The lightning stick likely occurred just before the alarm notification was sent by the system. A pumper was dispatched to address the problem. When the contractor arrived, the Artesia Fire Department was on location bringing the fire under control. The fire chief told the pumper that the fire was from a lightning strike. The area received approximately 1 inch of rain during this event. The battery was destroyed, the tanks were reduced to about ½ their original height. The lined firewall contained approximately 80 to 85% of the spilled fluids, and the liner bottom appears intact. Some fluids flowed across the pad but was further contained by a tertiary berm around the pad. Fluids on the pad appears to be only oil that has been burned. A small overspray of oil was observed													
					pad app	ears to be on	ly oil that has bee	n burne	xd. A small	overspray o	I OII W	as observed	
to the south of the battery, with some scorched vegetation. Describe Area Affected and Cleanup Action Taken. Fluids and wreckage are being removed. Recovered volumes above are preliminary and will be revised after fluid recovery is completed. Remains of tanks were still holding fluid. Almost all oil appears to have burned. A work plan to remediate the spill will be prepared and submitted after an onsite meeting with Fasken, OCD and BLM on 8/7/18.													
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 CON	SERV	<u>'ATION</u>	DIVISIO	<u>)N</u>		
							Approved by Environmental Specialist: Maria Pruell						
							Approval Date: 8718 Expiration Date: NIA						
E-mail Address: aaronp@forl.com						Conditions of Approval; Attached Attached Attached							
Date: 8/6/18	Phone: 4	32-687-1777				500 attiched 272-4901							

Operator/Responsible Party,

The OCD has received the form C-141 you provided on ___08/06/18______ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _______ 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 _2_ office in Artesia_ on or before _09/06/18______. 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