NM OIL CONSERVATION ARTESIA DISTRICT

State of New Mexico Energy Minerals and Natural Resources

MAY 11 2017

Form C-141 Revised August 8, 2011

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

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

Release Notification and Corrective Action

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

NABI 113235838						OPERATOR					Final Report	
Name of Co	mpany Ll	NN Operati		Contact Aaron Hickert								
		der Blvd Ho		Telephone No. 432-363-9496								
Facility Nar	ne Hudso	n Federal T		Facility Type Tank Battery, closest well - Hudson Federal #011								
Surface Own	ner Feder	al	wner l	Federal			API No. 30-015-28962					
				LOCA	TIO	N OF REI	FASE					
Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County												
A	18	17S	31E	1150	North	ı	1310 East			Eddy		
Latitude 32.839107 Longitude -103.902429												
NATURE OF RELEASE Type of Release Crude Oil Volume of Release 85 Bbl Volume Recovered 70 Bbl												
Source of Rel		Volume of Release 85 Bbl Volume Recovered 70 Bbl Date and Hour of Occurrence Date and Hour of Discovery										
Source of Re		5/7/17 at 9		5/7/17 at 9:40am								
Was Immedia	ite Notice (If YES, To Whom?										
By Whom?		Date and Hour										
Was a Watero	course Read	If YES, Volume Impacting the Watercourse.										
		····	New forms can be found in the									
If a Watercou	rse was Im	pacted, Descri	ibe Fully.*	ı		New Mexico State Website in forms:						
http://www.emnrd.state.nm.us/												
OCD/forms.html												
Describe Cause of Problem and Remedial Action Taken.* 4" nipple on production tanks circulating line failed due to corrosion releasing crude oil inside containment. Shut in production, called Vac truck to recover crude oil, fixed piping. Describe Area Affected and Cleanup Action Taken.* Initial cleanup started, and delineation in progress to develop work plan.												
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 DIVISION										
Signature: A A						Signed By M/4 Semular Approved by Environmental Specialist:						
Printed Name	: Aaron Hi	ickert		Approve of Environmental operation.								
Title: Sr. EH	&S Repres	Approval Date: 5/12/17 Expiration Date: N/A										
E-mail Address: ahickert@linnenergy.com						Conditions of Approval: See Attache			ed Attached			
Date: 5-//-20/7 Phone: 432-363-9496												
Attach Addit	ional Shee	ets If Necessa	ary							å	RP.	420Ce

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/11/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 3004300 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 $\frac{2}{2}$ office in $\frac{ARTESIA}{ARTESIA}$ on or before $\frac{6/11/2017}{ARTESIA}$. 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

Bratcher, Mike, EMNRD

From: Hickert, Aaron <AHickert@linnenergy.com>

Sent: Thursday, May 11, 2017 9:45 AM

To: Tucker, Shelly; Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD **Cc:** Potter, Dennis; Butters, Thomas; Haines, Jeff; Rambur, Allan

Subject: Hudson Federal Tank Battery Spill

Attachments: Linn Energy Hudson Federal Tank Battery Initial C-141.pdf

All,

Attached is the Initial C-141 for the Hudson Federal Tank Battery spill. The spill was contained inside the secondary containment of the tank battery, initial cleanup has been completed. Spill delineation is in progress with a work plan to follow. Let me know if you have any questions.

Thank you,

Aaron Hickert

Sr. EH&S Representative 6010 E. Highway 191, Suite 130 | Odessa, Texas 79762 T: 432.363.9496 | F: 432.366.1574 | C: 620.353.4960

This electronic message, together with any attachments, contains information from LINN Energy that may be confidential and intended solely for the use of the addressee only. If you are not the intended recipient, please note that any disclosure, dissemination, distribution or copying of this message, or any attachment, is strictly prohibited. Also, please notify the original sender by return e-mail and delete the message, along with any attachments, from your computer. Finally, the recipient should check this email and any attachments for the presence of viruses. The organization accepts no liability for any damage caused by any virus transmitted by this email.