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 NMOCD

MAY 0 9 2018

Form C-141 Revised April 3, 2017

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

			Rele	ease Notific	ation	and Co	rrective A	ction					
						OPERA	OR		al Report		Final Report		
Name of Co	mpany LC	OGOS Opera		Contact Larissa Farrell									
		lace Farming	7	Telephone No. (505)419-1100									
Facility Nar	ne: Nordh	aus 713	Facility Type: Well										
Surface Owner: Federal Mineral Owner: F							Federal API No. 30-045-27655						
LOCATION OF RELEASE													
Unit Letter L	Section 11	Township 31N	Range 9W	Feet from the 1855		South Line outh	Feet from the 1040		est Line West	County San Juan (County	County	
Latitude_36.9102554Longitude107.7553329NAD83 NATURE OF RELEASE													
Type of Release Gas							Volume of Release 150 MCF Volume Recovered 0						
Source of Release Flowline							Date and Hour of Occurrence			Date and Hour of Discovery			
COMPANY OF FEMALES.											8 10:00 am		
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required						If YES, To Whom?							
By Whom?						Date and Hour							
Was a Watercourse Reached? ☐ Yes ☒ No							If YES, Volume Impacting the Watercourse.						
Describe Cau Flowline leak Describe Are	se of Problems; shut in we	and Cleanup A	dial Action	n Taken.*	ed.								
regulations al public health should their co or the environ	or the environment. In a	are required to ronment. The lave failed to a	o report ar acceptance adequately OCD accep	e is true and complete of a C-141 report investigate and restance of	elease no rt by the emediate	otifications are NMOCD made contamination	nd perform correct arked as "Final Roon that pose a thro	tive action eport" do eat to gro	ons for rele oes not reli ound water	eases which ieve the ope r, surface wa	may en rator of ater, hur	danger liability man health	
Signature: (Lan	made	OIL CONSERVATION DIVISION Approved by Environmental Specialists										
Printed Name	e: Larissa F	arrell	Approved by Environmental Specialist:										
Title: Environmental/Regulatory Technician						Approval Date: 5/10/18 Expiration Date:							
E-mail Address: lfarrell@logosresourcesllc.com						Conditions of Approval: Sample Thought Area For 104, Attached							
Date: 5/9/20	18		Phone: (4	505) 419-1100	I	mpadral	Hran tol	TP	m,		^		

* Attach Additional Sheets If Necessary

NCS 1813037884

Blex Benzene. Provide 24HR Notic Prior to Saufly



Smith, Cory, EMNRD

From:

Smith, Cory, EMNRD

Sent:

Thursday, May 10, 2018 10:41 AM 'lfarrell@logosresourcesllc.com'

To: Cc:

Fields, Vanessa, EMNRD

Subject:

Nordhaus #713 (30-045-27655

Attachments:

C-141 Conditions Nordhaus #713.pdf

Follow Up Flag: Flag Status:

Follow up Flagged

Categories:

DEADLINES

Larissa,

OCD has received the initial C-141 at the Nordhaus #713 submitted on 5/9/2018. OCD has reviewed the C-141 and has approved it with the attached and below conditions of approval:

- Logos will sampled the impacted area for TPH (DRO+GRO+MRO/ORO), BTEX and Benzene.
- Logos will schedule final closure confirmation sampling with District III Environmental.
- Logos will notify OCD District III at least 72 hours but no more than 1 week prior to the start of remediation.
- Logos will commence remediation activity no later than August 10, 2018

If you have any additional 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

Operator/Responsible Party,

The OCD has received the form C-141 you provided on $\frac{5/9/16}{16}$ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number $\frac{16.1303}{16.1303}$ 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 III office in Aztec on or before $\frac{N}{K}$. 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 Environme

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