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

Form C-141 Revised April 3, 2017 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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

			Kele	ease Notifica	ation	and Co	orrective A	ction					
						OPERATOR							
						Contact: Stephen Richards, Completions Foreman							
Address: PO Box 250, Artesia, NM 88211							Telephone No. (575)252-3717						
Facility Name: Seawolf 1 12 Federal 91H						Facility Type: Oil							
Surface Owner: Federal Mineral Owner: F							Federal API No. 30-025-43768						
				LOCA	TION	OF RE	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/W	est Line	County			
D	1	26S	33E							Lea			
	,												
Latitude_32.079227 NLongitude103.532492 WNAD83													
NATURE OF RELEASE													
Type of Release: Produced Water											Recovered: 0		
Source of Release: Frac tank overflow							Date and Hour of Occurrence:			Date and Hour of Discovery:			
Was Immediate Notice Given?						4/29/18, 11:30 PM MST 4/29/18, 11:30 PM MST If YES, To Whom?							
☐ Yes ☐ No ☒ Not Required							l N/A						
By Whom? N/A						Date and Hour N/A							
Was a Watercourse Reached?  ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse. N/A  RECEIVED							
If a Watercourse was Impacted, Describe Fully.* N/A													
							By Olivia Yu at 10:23 am, May 14, 2018						
and the tanks	failed to shu ran over. (	ut down the w Jpon discover	ater transf y the pum	fer pump at the Icha ps were immediate	ibod Fr ly shut	resh Water po down.	ond. The employe	e on loc	ation did r	ot verify that	water wa	as shut off	
Describe Area Affected and Cleanup Action Taken.*  Approximately 10 barrels of produced water ran over the tanks and was released to the pad surface. No produced water was recovered. All released fluids stayed on the well pad location. An environmental contractor will be contacted to assist with delineation and remediation efforts.													
regulations al public health should their o	l operators or the envir operations h nment. In a	are required to conment. The ave failed to a ddition, NMO	report ar acceptance dequately CD accep	e is true and comple ad/or file certain rel ce of a C-141 report investigate and rer stance of a C-141 re	ease not by the nediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final Re on that pose a thre	tive action eport" do eat to gro	ons for rele oes not reli ound water	eases which mileve the operates.	nay endar tor of liab er, humar	nger bility health	
						OIL CONSERVATION DIVISION							
Signature:	Denise I	Menoud		Approved by Environmental Specialist:									
Printed Name: Denise Menoud							U						
Title: Admin Field Support					I	Approval Date: 5/14/2018 Expiration Date:							
E-mail Address: denise.menoud@dvn.com						Conditions of Approval:							
Date: 5/11/2018 Phone: (575)746-5544						see attached directive  Attached							
Attach Addit	ional Shee	ets If Necessa	ary		P	1RP-505	7 nOY1	81343	37455				

pOY1813437677

## Operator/Responsible Party,

The OCD has received the form C-141 you provided on \_5/11/2018\_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number \_1RP-5057\_\_ 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 \_6/14/2018\_. 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; C<sub>6</sub> thru C<sub>36</sub>), 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; C<sub>6</sub> thru C<sub>36</sub>), 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

