NM OIL CONSERVATION

ARTESIA DISTRICT

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 DEC 1 4 2017

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 RECEIVED accordance with 19.15.29 NMAC

Release Notification and Corrective Action												
NAB1735335003						OPERATOR			☐ Initial Report ☐ Final Report			
Name of Company: COG Operating LLC 224/37						Contact: Robert McNei						
Address:	600 West III		Telephone No. 432-683-7443									
Facility Nar	ne: PINE	SPRING	S 2 STA	ΓE SWD #001	Facil	Facility Type: Tank Battery						
Surface Owner: State Mineral Owner:						State API No. 30-015-42348)15-42348	
LOCATION OF RELEASE												
Unit Letter K	Section To	ownship 26S	Range 25E	Feet from the 2500'		h/South Line Feet from the South Feet from the					County Eddy	
Latitude 32.071434 Longitude 104.3667831												
NATURE OF RELEASE												
Type of Release:						Volume of Release: Volume Recovered:						
Produced Water						6 bbls PW				0 bbls PW Date and Hour of Discovery:		
Source of Release: Valve											7 7:00 AM	
Was Immediate Notice Given?						If YES, To Whom?						
			Yes 🖂	No 🛛 Not Requi	red							
By Whom?			Date and Hour:									
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.						
If a Watercou	ırse was Impact	ted. Descril	be Fully.*									
		,	· •									
Describe Cause of Problem and Remedial Action Taken.*												
This release was caused by a valve being left in the wrong position on the trucking load lane. The valve was placed in the correct position.												
Describe Are	a Affected and	Cleanup A	ction Tak	en.*								
This release of	occurred on the	location in	front of t	he facility. Concho v	vill have t	he spill	area evaluated fo	r any poss	ible impa	ct from the	release and will	
				for approval prior to				• •	•			
I hereby certi	ify that the info	rmation giv	en above	is true and complete	to the bes	st of my	knowledge and u	nderstand	that purs	uant to NM	IOCD rules and	
regulations a	ll operators are	required to	report an	d/or file certain relea	se notifica	ations ar	nd perform correc	ctive action	ns for rele	ases which	may endanger	
				e of a C-141 report b								
or the enviro	operations nave nment. In addit	tion. NMO	gequatery CD accen	investigate and reme tance of a C-141 repo	ort does no	ıamınaıı ot reliev	on that pose a thi e the operator of	eat to grot responsibi	una water ility for co	, surrace w ompliance v	with any other	
	, or local laws a											
							OIL CON	SERVA	TION	<u>DIVISI</u>	<u>ON</u>	
Signature:						Approved by Environmental Specialist:						
												Printed Name
Title:	HSE	Coordinate	or		Appre	oval Dat	e: 12 18 17	Ex	epiration	Date: N	IA	
E-mail Addre	ess:	dneel2@c	oncho.coi	n	Cond	litions of	f Approval:	0		Attacha	1 7	
Date: December 14, 2017 Phone: 575-746-2010 Conditions of Approval: Attached											382-4523	
Date. De	COMPONE 17, 201	,	i none.	373-770-2010	1 0	$\overline{\smile}$				<u> </u>		

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 12/14/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 220-4523 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 II office in Artesia on or before 1/14/18. 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

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