<u>District I</u> 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**

Revised August 8, 2011

Form C-141

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

					OPERATOR			☐ Initial Report ☐ Final Report					
Name of Company: COG Operating LLC OGRID # 229137						Contact:			Robert McNeill				
Address:			iland TX 79701		Telephone No. 432-683-7443								
Facility Nan	ne: Federa	I 19 #001]]	Facility Type: Wellhead							
Surface Own	ner: Sta	ite	Mineral Ov	vner: I	: Federal			API No. 30-025-24676					
				LOCA	ΓΙΟΝ	OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/\	West Line	County		ty	
Α	A 19 23S 34E 660				1	Vorth	660	East		Lea			
Latitude 32.2955856 Longitude -103.5027542													
NATURE OF RELEASE													
Type of Relea	ise:	.		Volume of Release: Volume Recovered:									
Source of Rel	onco.	Produced		20 bbls Date and Hour of Occurrence:			19 bbls Date and Hour of Discovery:						
Source of Rei	casc,	Wellho		May 31, 2017 5:00 pm			May 31, 2017 5:00 pm						
Was Immedia	te Notice C	Given?			If YES, To Whom?								
			Yes 🗵	No 🖾 Not Req	uired								
			Date and Hour:										
Was a Watero	ourse Read	_	Lar		If YES, Volume Impacting the Watercourse.								
		Ц	Yes 🗵	No									
If a Watercou	rse was lm	pacted, Descri	ibe Fully.	*			RECEIVE	ED				1.3	
									4 0.20		· 02	2047	
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken *	By Olivia Yu at 8:20 am, Jun 02, 2017								
Describe Cause of Problem and Remedial Action Taken.*													
				broke. The wellhea	id was	changed out.							
Describe Are	a Affected	and Cleanup A	Action Tal	ren.*									
The release o	ccurred on	the nad. A vac	enum truc	k was dispatched to	remou	e all freestan	ding fluids Conc	ho will	have the sn	ill area samı	nled to	delineate	
				l present a remedia									
activities.													
				is true and comple									
				nd/or file certain rel									
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 environ	ıment. İn a	ddition, NMC	CD accer	tance of a C-141 re									
		ws and/or regu											
Signature: 1	Men	in Ho			OIL CONSERVATION DIVISION								
Digitature. 7	400-00	V 6) U			i M_								
Printed Name: Rebecca Haskell						Approved by Environmental Specialist:							
Title:	itle: Senior HSE Coordinator						Approval Date: 6/2/2017 Expiration Date:						
E-mail Address: rhaskell@concho.com						Conditions of Approval:						,	
							••			Attached 🔽			
Date: June 1.	2017	Phone:	-7443		see attached directive								

* Attach Additional Sheets If Necessary

1RP-4712

nOY1715329950

pOY1715330523

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _6/1/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4712_ 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 _7/2/2017_. 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