District | 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 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.

						,	-						
			Rele	ase Notific	ation	and Co	rrective A	ction					
						OPERATOR			Initia	al Report		Final Repor	
Name of Company: COG Operating LLC						Contact: Robert McNeill							
						Telephone No. 432-230-0077							
Facility Name: GC FEDERAL #031						Facility Type: Wellhead							
Surface Owner: Federal Mineral Owner: F						Federal A				API No. 30-025-39266			
				LOCA	OF RE	LEASE			71.				
Unit Letter	Section	Township					st/West Line County						
N						South 1960			West Lea			•	
32.8142929,-103.7908478 NATURE OF RELEASE													
Type of Release: Oil and Produced Water							Volume of Release: Volume Recovered: 5bbls Oil & 5bbls PW 4.5bbls Oil & 4.5bbl						
Source of Release: Wellhead							lour of Occurrence	4.5bbls Oil & 4.5bbls PW Date and Hour of Discovery:					
						March 01, 2017 Unknown			March 01, 2017 11:00AM				
Was Immedi	ate Notice (lar Maria	If YES, To	Whom?							
			Yes	No 🛛 Not Re	quired								
By Whom? Was a Watercourse Reached?						Date and Hour: If YES, Volume Impacting the Watercourse.							
was a water	course Reac		Yes 🗵	No		II YES, VO	nume impacting t	ine Water	course.				
If a Waterco	ırse was Im	pacted, Descri	be Fully.*	:			·						
						RECEIVED By Olivia Yu at 4:04 pm, Mar 03, 2017							
Describe Cau	ise of Proble	em and Remed	lial Actior	ı Taken.*									
This release occurred due to a hole in a nipple on the pumping tee. The damaged nipple was replaced with a new nipple.													
Describe Are	a Affected	and Cleanup A	ction Tak	en.				The said					
This release is sampled to de remediation a	elineate any	location arou possible impa	nd the wel	Ilhead. A vacuum te release and we v	truck w vill pres	as dispatched sent a remedi	I to remove all fre ation work plan to	eestanding the NM	g fluids. C OCD for a	oncho will approval pr	have th	ie spill area ny significant	
regulations a public health should their o or the environ	I operators or the envir operations h nment. In a	are required to conment. The ave failed to a	report an acceptanc dequately CD accept	is true and comple d/or file certain re e of a C-141 repor investigate and re tance of a C-141 re	lease no it by the mediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final Ro on that pose a thro	tive action eport" do eat to gro	ns for rele es not reli und water	eases which eve the ope , surface w	may er rator of ater, hu	ndanger f liability ıman health	
Signature:						OIL CONSERVATION DIVISION Approved by Environmental Specialists							
Printed Name: Aaron Lieb							Approved by Environmental Specialist:						
Title: Senior HSE Coordinator						pproval Date: 3/3/2017 Expiration Date:							
E-mail Address: alieb@concho.com						Conditions of Approval:							

* Attach Additional Sheets If Necessary

Date: March 01, 2017

1RP-4629

Phone: 575-748-1553

nOY1706257746

see attached directive

pOY1706257998

Attached \

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/1/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4629__ 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 _3/3/2017__. 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