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

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 Corr	ective A	ction
ILLICASE	ITOUILLAUOIL	and Coll		

						OPERATOR							
Name of Company: COG Operating LLC						Contact:			Robert McNeill				
Address: 600 West Illinois Avenue, Midland TX 79701					- 7				2-683-7443				
Facility Name: Sneed 9 Federal Com #002H]]	Facility Type: Tank Battery							
Surface Owner: Federal Mineral Owner:									API No	. 30-02:	5-4140)9	
LOCATION OF RELEASE													
								East/West Line County			ty		
D	09	17S	32E	990	1	North	150	ν	West Lea				
Latitude 32.8536568 Longitude -103.7796249													
NATURE OF RELEASE													
Type of Release:						Volume of Release: Volume Recovered:						. DW	
Oil and Produced Water Source of Release:										bbls Oil & 4 bbls PW			
Bource or ree	16036:	Free Water K	nock Out			Date and Hour of Occurrence: March 19, 2017 7:00 am Date and Hour of Discover March 19, 2017 7:00 am March 19, 2017 7							
Was Immedia	ate Notice (Given?				If YES, To				,			
		×	Yes	No Not R	equired	Ms. Yu – NMOCD & Ms. Tucker - BLM							
	By Whom? Rebecca Haskell						Date and Hour: March 20, 2017 Time of this Email						
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.							
				·									
If a Watercou	urse was Im	pacted, Descr	ibe Fully.			R	CEIVED						2000
By Olivia Yu at 7:43 am, Mar 22, 2017													
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken.*		Ву	Olivia Tu	at 7.	45 am	i, ividi 2			
The release u	vas due to a	nressure incr	ease in the	FWKO which ca	used the	non off to e	naare						
		and Cleanup			idoed tile	pop on to e	.gage.						\neg
													.
The release of	occurred wit	hin a lined fac	cility and o	on the pad location	n. A vacı	uum truck wa	s dispatched to re	emove al	ll freestand	ing fluids. (oncho	will have	e the
spin area san			siole imp	ict from the releas	se and w	e wiii presen	t a remediation w	ork pian	to the NiMi	OCD for ap	provai	prior to a	ıny
			ven above	is true and comp	lete to th	ne best of my	knowledge and u	nderstar	d that purs	uant to NM	OCD r	ules and	\neg
regulations a	ll operators	are required t	o report ar	d/or file certain i	elease no	otifications a	nd perform correc	tive acti	ons for rele	eases which	may er	ndanger	
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													
should their	operations h	ave failed to	adequately	investigate and r	emediate	contaminati	on that pose a thr	eat to gr	ound water	, surface wa	iter, hu	man heal	ith
federal state	nment. In a or local las	ws and/or regi	ilations	nance of a C-141	героп а	oes not retiev	e the operator of	responsi	onity for co	ompiiance v	ziin any	y otner	
					T	-	OIL CON	SFRV	ΔΤΙΩΝ	DIVISIO)N		$\neg \neg$
Signature: 1	Whico	- Hoske					OIL COIN	<u>JLIC V</u>	1111011	DIVIOIC	<u> </u>		
Printed Nam	e:	Rebecca	Haskell			Approved by	Environmental S	pecialist	<u>. 9</u>	N			
Title:		Senior HS	SE Coordi	nator		Approval Da	3/22/201	7	Expiration 1	Date:			
E-mail Addr	ess:	rhaskell@	concho.c	om		Conditions of Approval:							
Date: March	20, 2017	Phone:	432-683	-7443		see attached directive							

* Attach Additional Sheets If Necessary

1RP-4648

nOY1708128133

pOY1708128544

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/20/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4648__ 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 _4/22/2017_. 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