eived by OCD: 1	10/18/2019 10:13:1 10/21/2019 8:31:48 A						
		SIT		<b>IATION</b>	Incid	ent # nA	B1911242727
	Report <sup>-</sup>	Type: Wo	rk Plan Ad	ldendum	2R	P-5360	
General Site In	formation:						
Site:			Unit Satellite	G CTB			
Company:		COG Operati			<u> </u>		
	ship and Range	Unit L	Sec. 19	T 17S	R 30E		
Lease Number	:		-				
County: GPS:		Eddy County	32.81624			_10/	.01595
Surface Owner	<i></i>	Fee	52.01024			-104	.01333
Mineral Owner							
			south side of the				
Release Data:							
Date Released:		3/27/2019					
Type Release:		Oil & Produced Water					
Source of Contamination:		Flowline					
Fluid Released:		8 bbl oil & 9 bbls water					
Fluids Recovere		2 bbls oil & 3	bbis water				
Official Comm					1		
Name:	Ike Tavarez				Clair Gonz		
Company:	COG Operating, LL	C			Tetra Tech		
	One Concho Cente					Wall Street	
Address:	600 W. Illinois Ave.				Suite 100		
Address: City:	600 W. Illinois Ave. Midland Texas, 797				Suite 100 Midland, T	exas	
Address: City: Phone number:	600 W. Illinois Ave. Midland Texas, 797 (432) 686-3023				Suite 100	exas	
Address: City:	600 W. Illinois Ave. Midland Texas, 797	701			Suite 100 Midland, T (432) 687-	exas	

Site Characterization	
Depth to Groundwater:	Greater than 100' below surface

Recommended Remedial Action Levels (RRALs)					
Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides	
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	20,000 mg/kg	



October 11, 2019

Mr. Mike Bratcher District Supervisor Oil Conservation Division, District 2 811 S. First Street Artesia, New Mexico 88210

#### Re: Addendum Report COG Operating, LLC, Burch Keely Unit Satellite G CTB Unit L, Section 19, Township 17 South, Range 30 East, Eddy County, New Mexico. 2RP-5360

#### Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to assess a release that occurred at the Burch Keely Unit Satellite G CTB, Unit L, Section 19, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.81624°, -104.01595°.

COG submitted a work plan, dated August 6, 2019, detailing the proposed remediation activities for the site. According to the proposed plan, COG proposed a (passive) soil vapor extraction (SVE) to remediate the impacted soils. Based on discussions with the NMOCD, additional information and extraction points (vent wells) were requested to properly capture the extents to remediate of the subsurface impact.

#### Addendum Proposal

#### Active - Soil Vapor Extraction (SVE)

Upon further review, COG is proposing an aggressive approach on remediating the site. Instead of the passive SVE remediation technology, COG will be performing active SVE remediation technology to remediate the site in a timely manner. Prior to implementing the remediation system, SVE wells will be installed to perform a SVE pilot test to evaluate the subsurface permeability, determine the effectiveness of removing the Volatile Organic Compounds (VOC) from the subsurface soils and well spacing between extraction wells.



COG proposes to perform the following activities:

- COG will install boreholes around the perimeter using an air rotary rig to define the horizontally extents. Soil samples will be field screened with a PID and selected samples will be analyzed for TPH, BTEX and chlorides. These boreholes are proposed to determine the horizonal aerial extents of impacted soils for the implementation of the SVE system and design.
- For the initial phase, a total of five (5) 4-inch SVE wells will be installed at the site to perform the SVE pilot study. The proposed well locations are shown on Figure 4. Three (3) shallow wells will be installed to a total depth of 40-50' below surface and screened from approximately 5.0' to 50' below surface. Two (2) deep SVE wells will be installed to a total depth of approximately 100' below surface and constructed of 4" PVC and screened from approximately 50' to 100' below surface.
- The pilot SVE study will be performed utilizing the wells onsite to evaluate the effectiveness of the proposed remediation and determine adequate well spacing.
- As discussed in the submitted work plan, dated August 6, 2019, COG proposed to excavate the impacted soils to a depth of 4.0' below surface and cap the area with a 20-mil liner. Due to the surface lines, underground lines and safety concerns, the proposed liner will not be installed in the area. However, COG will perform some removal to the impacted soils to the maximum extent practicable.

#### Conclusion

Prior to implementing the remediation, COG will submit a summary of the pilot SVE results and proposed remediation plan for the site. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted, TETRA TECH

Clair Gonzales, P.G. Project Manager

cc: Ike Tavarez - COG

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# Figures

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## **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:	
COG OPERATING LLC	229137	
600 W Illinois Ave	Action Number:	
Midland, TX 79701	1953	
	Action Type:	
	[C-141] Release Corrective Action (C-141)	

CONDITIONS

Created By	Condition	Condition Date
bbillings	Consider decreased slotted length, with possible multi-slotted pipe in each boring, sealed off. Eval and note both radius of influence and effective radius	7/2/2021
-		

CONDITIONS

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Action 1953