ConocoPhillips

INFORMATION ONLY

Mitigation Deferment Request

Same report for 1RP-4262.

ConocoPhillips Buck Federal CTB (RP- 4431)

August 2, 2017

By Joseph McLaughlin & Bryan Clay

Deferment letter

Ms. Yu

ConocoPhillips (CoP) has been evaluating the Spill site on our Buck Federal Tank Battery for remediation and have conclude that to perform this remediation fully would take more work and resources then the impact to the environment. Therefore, we would like to request a deferment of remediation until abandonment of the site.

Background

On Tuesday the 6th, 2016 at 12:00 am, a release of produced water occurred due to a faulty T joint resulting in the release of 240 BBLs of produced water with 235 BBLs of water recovered. Immediate action was to shut down and replace the T joint. NMOCD was notified of the release on September 6, 2016, and an initial C-141 was submitted.

Justification of Deferment

After following the CAP for the remediation efforts on this site the lab results came back higher then recommended. This resulted in further testing for the depths below grade inside the secondary containment. Sampling took place at 4', 5', and 7' below grade to get a representative of the ground penetration of the spill. At 4' the chloride levels are at 148, at 5' the chloride levels are at 320, and at 7' the chloride levels are at 213. At 7 feet below grade the chloride levels are just above what the minimal acceptable level is for the soil at 250 ppm.

After determining the possible depth of the remediation this spill would take to remediate we looked at ground water depth. The New Mexico Office of the State Engineering determined that the average depth of water to be 240 feet below grade. After verifying the water depth, we have ruled out any potential ground water contamination from this spill.

Once determining that ground water was not in danger of contamination a work plan was estimated of what the cost and impact the remediation would entail for the site vs environmental impact. All infrastructure inside the secondary containment would need to be removed and facility shut down. Once infrastructure was moved line finding would need to take place with excavation following to below 8 or 9 feet. Once soil was removed new soil will need to be brought on site and compacted to strength levels for infrastructure. Infrastructure will be set back in place and facility will have to go through retesting and start up fazes. This project will take roughly 2 weeks to complete if all goes according to plan.

Cost estimates of this Project will be determined by loss of production, heavy equipment usage, soil cost, technical testing, and man power. Cost of the project if the site goes until abandonment will be significantly reduced and the impact to the environment will be the same as if we remediate now.

Thank you for considering this request,

Joseph McLaughlin
ConocoPhillips HSE Specialist
Office: 1(432) 688-9062
Cell: (806) 567-2790

Original CAP

Mr. Keyes:

ConocoPhillips (CoP) has prepared this Corrective Action Plan (CAP) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

On Tuesday the 6th, 2016 at 12:00 am, a release of produced water occurred due to a faulty T joint resulting in the release of 240 BBLs of produced water with 235 BBLs of water recovered. Immediate action was to shut down and replace the T joint. NMOCD was notified of the release on September 6, 2016, and an initial C-141 was submitted (Appendix A).

COP personnel were on site to visually assess the release on September 6th. The release was mapped and photographed (Appendix B). Based on the assessment, the release will be excavated down 6 inches bgs. Once the excavation is completed, discrete samples will be taken and field tested for chlorides and organic vapors. If the field data indicates that the composite will not achieve chloride, Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings below regulatory standards, the excavation will be deepened until field testing indicates that all constituents from bottom discrete samples will return values below regulatory standards. 5 discrete samples will be collected in total. 4 surface samples will be collected just outside the berm on all four sides. The 5th will be from the center of the spill and will go down as deep as the spill penetrated. The samples will then be taken to a commercial laboratory to confirm that chloride, GRO, DRO and BTEX readings are below regulatory standards.
All excavated soils will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to serve as backfill and contoured to the surrounding location
Once these activities have been completed, a report will be sent to NMOCD requesting 'remediation termination' and site closure.
Please call me if you have any questions or wish to discuss the site. Sincerely,

Joseph McLaughlin
HSE Specialist
(806) 567-2790

Field notes

STINGRAY
Environmental and Construction, LLC

11420 W. County Rd 33 Midland, Texas 79710

ANALYTICAL REPORT FORM

CLIENT: ConocoPhillips

SITE: Buck Federal CTB

ANALYST: Derek Robinson **CONTACT #** 432-438-9534

SAMPLE ID	SAMPLE DATE	DEPTH	Chlorides/ppm	SAMPLE NOTE
TP 1	4-26-2017	12"	956	
		18"	1192	
TP 2	4-26-2017	12"	1192	
		18"	1192	
TP3	4-26-2017	12"	+2512	
		18"	2324	
TP4	4-26-2017	12"	+2512	
		18"	+2512	
TP5	4-26-2017	12"	1108	
		18"	1028	
TP6	4-26-2017	12"	+2512	
		18"	340	

ANALYST NOTES:

Lab results

Stingray Environmental & Construction	Project: Concho Phillips Buck Federal CTB	Fax:
11420 W County Rd 33	Project Number: Conoco Phillips Buck Federal CTB	
Midland TEXAS, 79707	Project Manager: Von Norman	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP1 5'	7E03004-01	Soil	05/02/17 10:00	05-02-2017 17:00
TP2 4'	7E03004-02	Soil	05/02/17 10:10	05-02-2017 17:00
TP3 7'	7E03004-03	Soil	05/02/17 10:48	05-02-2017 17:00

TP2 4'

7E03004-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**148**	1.12	mg/kg dry	1	P7E0904	05/05/17	05/09/17	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P7E0503	05/05/17	05/05/17	% calculation	

TP1 5'

7E03004-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**320**	1.14	mg/kg dry	1	P7E0904	05/05/17	05/09/17	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P7E0503	05/05/17	05/05/17	% calculation	

TP3 7'

7E03004-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**213**	1.16	mg/kg dry	1	P7E0904	05/05/17	05/09/17	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P7E0503	05/05/17	05/05/17	% calculation	

Water Depth

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW###### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02271	R		LE		2	3	21	26S	32E	624449	3544111*	2700	150	125	25
C 03595 POD1		CUB	LE	4	2	3	21	26S	32E	624423	3544045	2770	280	180	100
C 02271 POD2		CUB	LE	3	2	3	21	26S	32E	624348	3544010*	2830	270	250	20
C 02323		C	LE	3	2	3	21	26S	32E	624348	3544010*	2830	405	405	0
C 03537 POD1		C	LE	3	2	3	21	26S	32E	624250	3543985	2888	850		

Average Depth to Water: **240 feet**
Minimum Depth: **125 feet**
Maximum Depth: **405 feet**

Record Count: 5

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 625335.24 Northing (Y): 3546662.24 Radius: 5000

Well C 02271 indicates a depth to water of 150 feet and then 250 feet in replacement POD number C 02271 POD2.

Well C 03595 POD1 indicates depth to water at 180 feet.

Well 02323 indicates a depth to water at 405 feet.

The minimum depth to water is 125 feet.

The average depth to water is 240 feet.

*UTM location was derived from PLSS - see Help

5/10/17 10:24 AM Page 1 of 1 WATER COLUMN/ AVERAGE DEPTH TO WATER

Site Picture