From:	Weaver, Crystal, EMNRD
To:	"Sheldon Hitchcock"; Bratcher, Mike, EMNRD; Naranjo, Mark
Cc:	Dakota Neel; Robert McNeill; Rebecca Haskell
Subject:	RE: URGENT: (Backfill Request) COG GJ West Coop Unit #210 (2RP-4487)
Date:	Tuesday, March 6, 2018 9:58:00 AM

RE: COG * G J West Coop Unit #210 * 30-015-36703 * 2RP-4487

Hello Sheldon,

Thanks for providing the data that was requested for the area around the original BH-2 and for getting your bottom hole and side walls for all other areas that you have listed below. It looks like we are just waiting for the data to come back for the area around the original BH-1 at the 4ft- 2" depth and confirmation sidewall samples on that spot as well. So as you have requested, you are approved to backfill the area around S-2 all the way to the northeastern sidewall. We look forward to seeing the last bit of data for the BH-1 area and a Final C-141 so that we can close this case out. Glad to hear an upgrade to the containment for this location is being installed. OCD appreciates COG's efforts for this location.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact Mike Bratcher and/or myself in the District II Office.

Thank you again,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210 Office: 575-748-1283 ext. 101 Cell: 575-840-5963 Fax: 575-748-9720 To: Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>; Bratcher, Mike, EMNRD
<mike.bratcher@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Dakota Neel <DNeel2@concho.com>; Robert McNeill <RMcNeill@concho.com>; Rebecca Haskell
<RHaskell@concho.com>
Subject: URGENT: (Backfill Request) COG GJ West Coop Unit #210 (2RP-4487)

Importance: High

Ms. Weaver,

I have attached a site diagram and lab reports for the northern (more northeastern) portion of the GJ 210 confirmation sampling. I have also included a data table for convenience. We are still waiting on lab data for the remainder of the confirmation sampling. We have crews scheduled to begin construction of the new falcon style containment on Monday so I would like your permission to backfill the S-2 to S-4 area of the excavation so they can begin work. I appreciate your assistance with this process. Please let me know if you have any questions or concerns.

GJ West Coop Unit # 210 November 13, 2017					
C-16-17S-29E					
	Chloride	Benzene	BTEX	ТРН	
Sample ID	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
S-2 Bttm	588.0	<0.0202	<0.0202	33.0	
S-2 E. Sidewall	19.6	<0.00200	<0.00200	<15.0	
S-2 W.					
Sidewall	10.7	<0.00200	<0.00200	<15.0	
S-3 BTTM	13.7	<0.00200	0.0289	<14.9	
S-3 E. Sidewall	22.8	<0.00199	<0.00199	<15.0	
S-3 W.					
Sidewall	47.0	<0.00199	<0.00199	<15.0	
S-4 Bttm	153.0	<0.00199	0.00414	<15.30	
S-4 E. Sidewall	68.3	<0.00199	0.0170	<15.0	
S-4 W.					
Sidewall	<4.95	<0.00200	<0.00200	<15.0	
N. Sidewall	<4.95	<0.00202	<0.00202	<15.0	

Thank you,

Sheldon L. Hitchcock HSE Coordinator COG Operating LLC 2407 Pecos Avenue | Artesia, NM 88210 Cell: 575-703-6475 | Office: 575-746-2010 slhitchcock@concho.com



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From: Weaver, Crystal, EMNRD [mailto:Crystal.Weaver@state.nm.us]
Sent: Friday, March 02, 2018 4:45 PM
To: Rebecca Haskell; Gonzales, Clair; Bratcher, Mike, EMNRD; Naranjo, Mark
Cc: Dakota Neel; Sheldon Hitchcock; Aaron Lieb; Robert McNeill; Tavarez, Ike
Subject: [External] RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

RE: COG * G J West Coop Unit #210 * 30-015-36703 * 2RP-4487

Rebecca,

Thank you for your response and for answering all of my questions. I will try to reply to your questions and answer your requests within my response below.

Your proposal for remediation of the above referenced release is approved with the following statements/conditions:

- To respond to your comment regarding the sampling hold times being lapsed, by the time Xenco's testing error was discovered, I will say this, OCD is fine with moving on from the sampling error because you all are offering to perform confirmation samples for both side walls and bottom holes during the excavation process and you mentioned that COG also offered to Mike at the in person meeting to collect samples at 4ft again in order to rectify the lab's mistake.
- Thank you for the explanation of the page in Xenco's report that mentions what they refer to as "Analytical non conformances and comments," and for explaining the Terracore Kit stuff in relation to TCEQ. Good to know.
- Thank you for agreeing to delineate for chlorides even though it was stated that for this specific release oil was the production fluid of concern.
- On your question regarding the SM4500 vs. EPA 300.0 both are used in soil and I asked for the EPA Method 300.0 because OCD is trying to keep consistent and it was agreed during other projects/discussions that until things with the new Part 29 Rule get finalized that OCD

would currently accept SM4500 during assessment phase of projects but for confirmation testing OCD still wanted to see EPA Method 300.0 exclusively. I do know of one lab for sure that is in Albuquerque, NM that is able to do Method 300.0. I included their address and contact number for your reference.

Hall Environmental Analysis Laboratory, Inc. 4901 Hawkins NE Albuquerque, NM 87109 505.345.3975

• When COG does come back to do the 4ft follow up sampling and bottom hole confirmation efforts could you all try to place your follow up and confirmation samples as often as possibly in the areas where the liner breaches occurred now that the battery has been moved. If it will still be moved by the time you all get to that stage of effort.

State Land Office sites will require like approval from SLO. Please advise once remedial activities have been scheduled.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact Mike Bratcher and/or myself in the District II Office.

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210 Office: 575-748-1283 ext. 101 Cell: 575-840-5963 Fax: 575-748-9720 To: Weaver, Crystal, EMNRD <<u>Crystal.Weaver@state.nm.us</u>>; Gonzales, Clair <<u>Clair.Gonzales@tetratech.com</u>>; Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Naranjo, Mark <<u>MNaranjo@slo.state.nm.us</u>>

Cc: Dakota Neel <<u>DNeel2@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Aaron Lieb <<u>ALieb@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Tavarez, Ike <<u>Ike.Tavarez@tetratech.com</u>>

Subject: RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

RE: COG * G J West Coop Unit #210 * 30-015-36703 * 2RP-4487

Ms. Weaver,

I apologize for the delay in my response but it took me a while to go through each bullet point and I was out of the office yesterday. Below in black are your questions and blue is my response.

OCD has reviewed this work plan and has a few questions:

• For BH-1 where did the data come from for the sample analysis at 4-5ft, 6-7ft., and 9-10ft.? Cause in Xenco's lab data they list depths for boreholes that were not analyzed by their lab and all three of those depths are stated as "Not analyzed" and when I went thru the Xenco report I couldn't find any data for those depths followed up on later dates or anything else.

I apologize for the inconvenience but Tetra Tech included an incorrect laboratory report. That being said there was a mistake at the laboratory as well. Tetra Tech put on the Chainof-Custody (COC) to "Run deeper samples if benzene exceeds 10 mg/kg, Total BTEX exceeds 50 mg/kg or TPH exceeds 1,000 mg/kg". However the lab failed to do so and stopped when TPH levels were below 5,000 mg/kg but higher than 1,000 mg/kg. By the time this mistake was caught the samples were out of hold time. The lab was still instructed to run the deeper samples for TPH even though out of hold time. This is why in the work plan we agreed to collect confirmation bottom samples to ensure the removal of hydrocarbon impacted soils. I am including the correct laboratory report for your review.

We did discuss this site with Mike during our last meeting and let him know that the samples were ran out of hold time and let him know we were going to collect samples at four (4) feet to rectify this mistake by the laboratory.

• Same for BH-2 at 4-5ft., 6-7ft., and 9-10ft.So where did the additional data that is in Table 1 come from for those depths of BH-1 and BH-2, that I just mentioned, that Xenco states were "Not analyzed"?

Please see above for explanation.

• OCD would like to see lab data that verifies depths at which delineation numbers are RRAL and COA compliant. So during confirmation sampling, since that is what is proposed to be done during the excavation process, OCD requests side wall and bottom holes will need to go

an additional 2inches in from where the excavation is dug to in order to get confirmation samples that are not at the surface of the exposed excavation.

It is typical that confirmation samples are not collected directly from the surface of an excavation and that you must dig into the excavation floor or sidewall in order to collect a confirmation sample.

• What is the "Analytical non conformances and comments" section regarding on page 4 of Xenco's report? Does it mean they ran the samples under protocol for EPA 8021B but had to prep the samples under protocol method 5030? Could that be explained please?

Yes in Texas when working with the Texas Commission on Environmental Quality (TCEQ) in a TRRP or PST program you are required to collect samples with a Terracore kit rather than a glass jar. The collection of the sample requires a different method than that of samples collected in New Mexico and with other Texas agencies. Both sampling protocols are ran under Method EPA 8021B however the sampling preparation is different. Standard preparation for samples collected in New Mexico is method 5030 and the method for Terracore collection is 5035. Xenco puts this Sample receipt non conformances and comments per sample on every report where the Terracore collection method is not used so the if the project is under a TCEQ PST or TRRP program it is know that method was not used.

• Even though this was reported as an oil spill, verification of chloride concentrations via Method 300 lab data should be conducted. Especially since it is state that this location is being investigated due to a liner breach. For all side wall and bottom hole confirmation samples OCD would like to request that chlorides via Method 300 be tested for.

I would first like to state that the spill was only an oil spill so chloride is not a constituent of concern is this particular instance. Also, a question, why is method SM4500 a method that cannot be used? Typically Method E300 is a method used for water and the SM4500 is a soil method.

There isn't a lab that we know about that can run the E300 method in the area of New Mexico where we operate that we can take samples to; to have them rushed using the E300 method. Any samples that have to be run under E300 have to be shipped either to Texas or the Colorado to be analyzed. This is a very limiting factor when we have an emergency situation, have equipment on location waiting for sample results, or in this particular case.

Sheldon is currently delineating the chlorides at the site.

• Also one final question, in the written portion of the report it is stated that bore holes were chosen at the locations they were conducted at due to limitations on access. OCD would like to inquire as to whether or not the bore holes are within the area where the liner breaches were discovered or if there was limitations on conducting delineation at the breach areas please explain.

The boreholes were placed as close to where the breaches were as possible due to equipment and safety concerns. When the boreholes where installed it was not know that the battery would be moved. The decision to move the battery came subsequent to drilling and data collection.

Please let me know if you have any additional questions.

Thank you,

Becky Haskell Senior HSE Coordinator COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-818-2372 | Main: 432.683.7443 Cell: 432-556-5130 rhaskell@concho.com



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From: Weaver, Crystal, EMNRD [mailto:Crystal.Weaver@state.nm.us]
Sent: Tuesday, February 27, 2018 4:04 PM
To: Rebecca Haskell; Gonzales, Clair; Bratcher, Mike, EMNRD; Naranjo, Mark
Cc: Dakota Neel; Sheldon Hitchcock; Aaron Lieb; Robert McNeill; Tavarez, Ike
Subject: [External] RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

RE: COG * G J West Coop Unit #210 * 30-015-36703 * 2RP-4487

Rebecca/Clair,

OCD has reviewed this work plan and has a few questions:

- For BH-1 where did the data come from for the sample analysis at 4-5ft, 6-7ft., and 9-10ft.? Cause in Xenco's lab data they list depths for boreholes that were not analyzed by their lab and all three of those depths are stated as "Not analyzed" and when I went thru the Xenco report I couldn't find any data for those depths followed up on later dates or anything else.
- Same for BH-2 at 4-5ft., 6-7ft., and 9-10ft.So where did the additional data that is in Table 1 come from for those depths of BH-1 and BH-2, that I just mentioned, that Xenco states were "Not analyzed"?
- OCD would like to see lab data that verifies depths at which delineation numbers are RRAL and COA compliant. So during confirmation sampling, since that is what is proposed to be

done during the excavation process, OCD requests side wall and bottom holes will need to go an additional 2inches in from where the excavation is dug to in order to get confirmation samples that are not at the surface of the exposed excavation.

- What is the "Analytical non conformances and comments" section regarding on page 4 of Xenco's report? Does it mean they ran the samples under protocol for EPA 8021B but had to prep the samples under protocol method 5030? Could that be explained please?
- Even though this was reported as an oil spill, verification of chloride concentrations via Method 300 lab data should be conducted. Especially since it is state that this location is being investigated due to a liner breach. For all side wall and bottom hole confirmation samples OCD would like to request that chlorides via Method 300 be tested for.
- Also one final question, in the written portion of the report it is stated that bore holes were chosen at the locations they were conducted at due to limitations on access. OCD would like to inquire as to whether or not the bore holes are within the area where the liner breaches were discovered or if there was limitations on conducting delineation at the breach areas please explain.

Upon receipt of answers to these questions OCD will review said answers and at that time provide an approval or denial of this work plan.

Thank you,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210 Office: 575-748-1283 ext. 101 Cell: 575-840-5963 Fax: 575-748-9720

From: Rebecca Haskell [mailto:RHaskell@concho.com]
Sent: Thursday, February 22, 2018 4:00 PM
To: Weaver, Crystal, EMNRD <<u>Crystal.Weaver@state.nm.us</u>>; Gonzales, Clair
<<u>Clair.Gonzales@tetratech.com</u>>; Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Naranjo,
Mark <<u>MNaranjo@slo.state.nm.us</u>>
Cc: Dakota Neel <<u>DNeel2@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Aaron

Lieb <<u>ALieb@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Tavarez, Ike <<u>Ike.Tavarez@tetratech.com</u>>

Subject: RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

Mr. Bratcher / Ms. Weaver,

We have started remediation at this site because all of the equipment has been removed. We have excavated the area where the area of the new battery will go and have collected samples. The samples are going to the lab and will be rushed. We would like to backfill as soon as we get the results so the new battery can be constructed.

Thank You,

Becky Haskell Senior HSE Coordinator COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-818-2372 | Main: 432.683.7443 Cell: 432-556-5130 rhaskell@concho.com



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From: Weaver, Crystal, EMNRD [mailto:Crystal.Weaver@state.nm.us]
Sent: Friday, February 16, 2018 2:19 PM
To: Rebecca Haskell; Gonzales, Clair; Bratcher, Mike, EMNRD; Naranjo, Mark
Cc: Dakota Neel; Sheldon Hitchcock; Aaron Lieb; Robert McNeill; Tavarez, Ike
Subject: [External] RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

Rebecca,

So sorry. I have been reading all day and I think my eyes mistook that paragraph in her email for one of those "if you are not the authorized recipient of this message blahh blahh..."

Again really sorry. Thanks for sending this originally and again. I see that your request is valid for us to consider it urgent and I will do my best to move it up to be looked at ASAP.

Thanks and again I apologize,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210 Office: 575-748-1283 ext. 101 Cell: 575-840-5963 Fax: 575-748-9720

From: Rebecca Haskell [mailto:RHaskell@concho.com]
Sent: Friday, February 16, 2018 1:05 PM
To: Weaver, Crystal, EMNRD <<u>Crystal.Weaver@state.nm.us</u>>; Gonzales, Clair
<<u>Clair.Gonzales@tetratech.com</u>>; Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Naranjo,
Mark <<u>MNaranjo@slo.state.nm.us</u>>
Cc: Dakota Neel <<u>DNeel2@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Aaron
Lieb <<u>ALieb@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Tavarez, Ike
<<u>Ike.Tavarez@tetratech.com</u>>
Subject: RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

Crystal,

There is a blub on why it is urgent below but here it is again:

COG is currently in the process of removing equipment from this battery to allow for remediation. The battery will be moved to another location on the same well pad, however part of the new battery will overlap the existing battery placement. The area of overlap will be on the southwest end of the current battery placement. Remediation activities on that end need to be completed as soon as possible to allow for construction of the new battery and for production to be turned back on.

I know you are very busy which is why the blub was included in the original email. We did discuss this site with Mike, however, plans have changed since then. We discussed the possibilities of maybe getting a deferment for this spill. COG has decided to move the battery so that a full remediation can be completed on this particular release. However, things are already in motion and we need to be able to conduct the remediation as soon as the equipment is done being removed. We would really appreciate your assistance with this.

Thank You,

Becky Haskell Senior HSE Coordinator COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-818-2372 | Main: 432.683.7443 Cell: 432-556-5130 rhaskell@concho.com



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From: Weaver, Crystal, EMNRD [mailto:Crystal.Weaver@state.nm.us]
Sent: Friday, February 16, 2018 1:58 PM
To: Gonzales, Clair; Bratcher, Mike, EMNRD; Naranjo, Mark
Cc: Rebecca Haskell; Dakota Neel; Sheldon Hitchcock; Aaron Lieb; Robert McNeill; Tavarez, Ike
Subject: [External] RE: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487)

**** External email. Use caution. **** Clair,

When you send something as urgent can you please write a blurb on why it is considered to be urgent by COG/Tetra Tech. Cause OCD is very behind right now and we have to gage what is urgent and not by our method of assessment in order to allow for the possible placement of it ahead of others. Mike is out of the office right now and I know there was a discussion with him on a number of sites and I think this one is one of them but I was not present for that conversation.

Thank you in advance,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210 Office: 575-748-1283 ext. 101 Cell: 575-840-5963 Fax: 575-748-9720 To: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Weaver, Crystal, EMNRD <<u>Crystal.Weaver@state.nm.us</u>>; Naranjo, Mark <<u>MNaranjo@slo.state.nm.us</u>> Cc: Rebecca Haskell <<u>RHaskell@concho.com</u>>; Dakota Neel <<u>DNeel2@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Aaron Lieb <<u>ALieb@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Tavarez, Ike <<u>Ike.Tavarez@tetratech.com</u>> Subject: URGENT: COG GJ West Coop Unit #210 Work Plan Approval Request (2RP-4487) Importance: High

Good Afternoon,

Attached is the work plan for the above referenced site located in Eddy County, New Mexico. Once approved, COG will implement the proposed work plan.

COG is currently in the process of removing equipment from this battery to allow for remediation. The battery will be moved to another location on the same well pad, however part of the new battery will overlap the existing battery placement. The area of overlap will be on the southwest end of the current battery placement. Remediation activities on that end need to be completed as soon as possible to allow for construction of the new battery and for production to be turned back on.

Let me know if you have any questions or concerns.

Thank you, *Clair Gonzales* Clair Gonzales | Project Manager Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946 clair.gonzales@tetratech.com Tetra Tech | Complex World, CLEAR SOLUTIONS™ 4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are

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