From: Yu, Olivia, EMNRD

To: "Tavarez, Ike"; Tucker, Shelly (stucker@blm.gov)
Cc: Zane Kurtz@eogresources.com; Gonzales, Clair

Subject: RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

**Date:** Monday, April 2, 2018 1:01:00 PM

Attachments: Approved\_1May2017\_RP4294\_EOG - RHNU #102 Revised Final Work Plan.pdf

deferral\_Closure Report - EOG RHNU #102-1 RP-4294.pdf

#### Mr. Tavarez/Kurtz:

Thank you for your prompt response. NMOCD will defer the closure of 1RP-4294 due to the unremediated areas, as indicated in the below email until site abandonment/retrofit or reclamation. The approved delineation plan from May 1, 2017 is attached for evidence of bottom confirmation sample requirement. See page 2. Also, uploaded on OCD online.

Thanks, Olivia

From: Tavarez, Ike < Ike. Tavarez@tetratech.com>

**Sent:** Monday, April 2, 2018 12:00 PM

**To:** Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Tucker, Shelly (stucker@blm.gov) <stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair <Clair.Gonzales@tetratech.com> **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Olivia,

Hope this helps you. We will defer the areas of BH-10 (pasture) and BH-5 (pad) due to safety concerns. Let me know if you need additional information, thanks

#### <u>Pasture</u>

- According to the work plan, the area of BH-3 was proposed to be excavated down to 6-7'.
   However, after field screening the bottom hole sample, we decided to include the area for capping.
- In the area of BH-10, there were several flow lines in the area (attached photo). Due to access issues and safety concerns, we made an attempt to remove the impacted soil down to 3.0' below surface to cap but the lines in the area hindered the excavation. Due to the depth excavation (1.5'), the area was not lined. According to the assessment data, some of the surface impact was removed from the area. The impact at 2-3 ' of 1,720 mg/kg significantly declined to 101 mg/kg at 4-5' below surface. The chlorides spiked at 9-10' (1,420 mg/kg) and 14-15' (1,540 mg/kg) but declined with depth at 19-20'. According to groundwater depth, the impact does not appear to an environmental concern. However, this area will need to be deferred until abandonment.
- Neither the work plan or your email approval mentioned confirmation bottom hole samples.

# Pad Area

• The impacted area of BH-5 (pad) was around multiple active lines in the area. We deferred this area in the approved work plan.

## Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

#### Ike.Tavarez@tetratech.com

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From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]

**Sent:** Monday, April 02, 2018 9:25 AM

**To:** Tavarez, Ike < <a href="mailto:lke.Tavarez@tetratech.com">lke.Tavarez@tetratech.com</a>; Tucker, Shelly (<a href="mailto:stucker@blm.gov">stucker@blm.gov</a>)

<stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com > **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Mr. Tavarez:

These are the points of confusion for the 1RP-4294 report:

## <u>Pasture</u>

- If 6-7 ft. of soil was removed for the area represented by BH-3 and verified by bottom confirmation samples, why was a liner emplaced? According to Table 1, 6-7 ft. excavation should have removed all the chloride- impacted soil.
- On the approved workplan, and as reiterated on page 3 of the report, BH-10 was to be lined. However, neither Table 1 nor Figure 4 indicated a liner was emplaced at the base of the 1.5 ft. excavation.
- The approved delineation workplan specifically noted that bottom confirmation samples are required.

#### <u>Pad</u>

• There is no mention of deferral for area represented by BH-5.

Please be advised that since there are sections of the release on the pad that are un-remediated, 1RP-4294 will remain open.

Thanks, Olivia **From:** Tavarez, Ike [mailto:Ike.Tavarez@tetratech.com]

**Sent:** Friday, March 16, 2018 11:42 AM

To: Yu, Olivia, EMNRD < Olivia. Yu@state.nm.us >; Tucker, Shelly (stucker@blm.gov)

<stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com > **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Olivia,

As shown on Figure 4, Text and Table, the lined areas of BH-2 and BH-3 in the pasture were excavated down to approximately 6-7' below surface and the liner installed at 4.0' below surface. The area on the pad (BH-1) was excavated down to 2-3' and lined at 3.0'. Let know if you see different.

Yes, we haven't been mentioning confirmation sampling in our work plan. Typically, if the assessment was performed and the assessment showed good depths of delineation, the OCD (Eddy and Lea office) would not have a problem excavation to that point/depth. Not unless, the OCD or BLM requested confirmation sampling. However, I understand there are new requirements and moving forward we will adding confirmation samplings to our work plans. Please call me if we need to discuss further, thanks

Ike Tavarez, PG | Senior Project Manager

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From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]

**Sent:** Friday, March 16, 2018 9:17 AM

**To:** Tavarez, Ike < <a href="mailto:lke.Tavarez@tetratech.com">! Tucker, Shelly (<a href="mailto:stucker@blm.gov">stucker@blm.gov</a>)

<stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com > **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Good morning Mr. Tavarez:

Thank you for the additional information below. However, some of the provided information conflicts with what is written in the closure report for 1RP-4294. Furthermore, there are inconsistencies in depth excavated and depth of lined areas among the text, tables, and figures. Please verify which reflects the remedial work completed.

Please be advised that NMOCD requires confirmation laboratory analyses of bottom(s) of excavation and sidewalls to verify that the remedial activities removed the impacted soil to permissible levels of

contaminants. I have noticed that most Tetratech reports do not mention confirmation samples.

Thanks, Olivia

**From:** Tavarez, Ike [mailto:Ike.Tavarez@tetratech.com]

**Sent:** Wednesday, March 14, 2018 12:38 PM

**To:** Yu, Olivia, EMNRD < Olivia. Yu@state.nm.us>; Tucker, Shelly (stucker@blm.gov)

<stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com > **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Olivia,

I reviewed the submitted work plan there is no mention on collecting confirmation bottom hole samples. We excavated the impacted areas to the depths as determined during the assessment. Also, the area of borehole (BH-1) in the pasture was excavated to depth of 6-7' below surface (Figure 4). The areas of boreholes (BH-5 and BH-9) were not excavated due to safety concerns for multiple flowlines and underground lines in the area. In addition, the proposed excavation depths of (2-3') for the area of borehole (BH-10) was not achieved due to the multiple surface flowlines in the area. These areas will be deferred until abandonment. Please let me know if you need addition information, thanks

#### Ike Tavarez, PG | Senior Project Manager

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From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]

**Sent:** Tuesday, March 13, 2018 1:13 PM

**To:** Tavarez, Ike < <a href="mailto:lke.Tavarez@tetratech.com">! Tucker, Shelly (<a href="mailto:stucker@blm.gov">stucker@blm.gov</a>)

<<u>stucker@blm.gov</u>>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com > **Subject:** RE: EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Mr. Tavarez:

Were confirmation samples taken for 1RP-4294? At a minimum, bottom confirmation samples were stipulated on the approved delineation workplan dated May 1, 2017.

Please be advised as BH-1 in the pasture and BH-5 on the pad could not be remediated, a full closure will not be granted.

Thanks, Olivia

**From:** Tavarez, Ike [mailto:Ike.Tavarez@tetratech.com]

Sent: Friday, June 30, 2017 1:39 PM

To: Yu, Olivia, EMNRD < Olivia. Yu@state.nm.us >; Tucker, Shelly (stucker@blm.gov)

<stucker@blm.gov>

**Cc:** Zane\_Kurtz@eogresources.com; Gonzales, Clair < Clair.Gonzales@tetratech.com> **Subject:** EOG - Red Hills North Unit #102, Lea County - Closure Report - 1 RP # 4294

Olivia and Shelly,

Here is a EOG - Closure Report for the above mention site. Please review and call me if you have any questions or comments on the report, thanks

### Ike Tavarez, PG | Senior Project Manager

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