

From: [Yu, Olivia, EMNRD](#)
To: "Tavarez, Ike": [Tucker, Shelly](#)
Cc: [Oberding, Tomas, EMNRD](#); [Zane Kurtz@eogresources.com](mailto:Zane_Kurtz@eogresources.com); [Gonzales, Clair](#)
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Site Remediation Notification
Date: Monday, May 1, 2017 2:51:00 PM
Attachments: [Approved_1May2017_RP4294_EOG - RHNU #102 Revised Final Work Plan.pdf](#)

Mr. Tavarez:

Thank you for update. Please see the attachment for your records.

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

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.

From: Tavarez, Ike [mailto:Ike.Tavarez@tetrattech.com]
Sent: Monday, May 1, 2017 1:42 PM
To: Tucker, Shelly <stucker@blm.gov>; Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com;
Gonzales, Clair <Clair.Gonzales@tetrattech.com>
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Site Remediation Notification

Olivia and Shelly,

Thanks for your response. EOG will be performing Option 1 as stated below. We will start the proposed remediation on Wednesday (5-3-17) and performed according to the approved work plan. We will notify you on any schedule changes or have any delays on the project. Call me if you have any questions, thanks

Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavarez@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetrattech.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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Tucker, Shelly [<mailto:stucker@blm.gov>]
Sent: Monday, May 01, 2017 1:39 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Tavarez, Ike <Ike.Tavarez@tetrattech.com>; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com; Gonzales, Clair <Clair.Gonzales@tetrattech.com>
Subject: Re: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

BLM approves revised delineation workplan.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist
O&G Spill/Release Coordinator

Bureau of Land Management
620 E. Greene St
Carlsbad, NM 88220

575.234.5905 - Direct
575.361.0084 - Cellular
575.234.6235 - Emergency Spill Number

stucker@blm.gov

The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

Confidentiality Warning: This message along with any attachments are intended only for use of the individual or entity to which it is addressed and may contain information that is privileged or confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

On Tue, Apr 25, 2017 at 4:59 PM, Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us> wrote:

Dear Mr. Tavarez:

NMOCD approves of the revised delineation workplan for 1RP-4294 from April 4, 2017 with a comment about the proposed remediation. The Responsible Operator has two options:

1. Excavated to specified depths with the placement of a liner for the areas around BH 2 & BH 10 on the pasture and BH 1 on the pad. These are spots where chlorides still exceed the permissible level even with excavation.
2. Excavate uniformly to 4 ft. bgs and set a liner down for the entire affected area in the pasture and on the pad.

Please inform of the chosen remediation procedure.

Thanks,
Olivia

From: Tavaréz, Ike [mailto:Ike.Tavaréz@tetrattech.com]
Sent: Tuesday, April 4, 2017 11:40 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com; Gonzales, Clair <Clair.Gonzales@tetrattech.com>; Tucker, Shelly (stucker@blm.gov) <stucker@blm.gov>
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Olivia,

Here is the Revised Work Plan for the EOG Red Hills North located in Lea County, New Mexico. As requested, I have included the additional drilling data from the pad assessment into the original submitted work plan. EOG/Tetra Tech will be setting up the proposed remediation and notify you on the startup of the remediation. Let me know if you have any questions or comments on the Revised Work Plan, thanks

Ike Tavaréz, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavaréz@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetrattech.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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Thursday, March 23, 2017 2:03 PM
To: Tavaréz, Ike <Ike.Tavaréz@tetrattech.com>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com; Gonzales, Clair <Clair.Gonzales@tetrattech.com>; Tucker, Shelly (stucker@blm.gov) <stucker@blm.gov>
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Dear Mr. Tavaréz:

Thank you for the provided information. Please submit a summary of proposed remediation mentioned below to NMOCD with the additional information provided by the soil boreholes in the pad.

Thanks,
Olivia

From: Tavarez, Ike [<mailto:Ike.Tavarez@tetrattech.com>]
Sent: Friday, March 3, 2017 1:00 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com; Gonzales, Clair <Clair.Gonzales@tetrattech.com>; Tucker, Shelly (stucker@blm.gov) <stucker@blm.gov>
Subject: FW: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Olivia,

As requested, here are the sample results for the boreholes installed on the facility pad. Boreholes (BH-1, BH-4 and BH-5) did show a shallow chloride impact to the soils. The remaining boreholes (BH-2 and BH-3) did not show a significant impact to the soils. Based on the results, EOG will make an attempt to scrape these shallow impacted areas to remove the elevated chloride, if feasible or accessible. The area of BH-5 has multiple poly lines in the area and only limited to no excavation will be performed in this area. If it's a safety concern, the impact or any remaining impact will be defer until abandonment.

If the work plan is approved, EOG will move forward to start the setup process to implement the proposed remediation. We will notify you on the startup date. Please let me know if you need additional information, thanks

Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavarez@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetrattech.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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]
Sent: Friday, January 13, 2017 5:31 PM
To: Tavarez, Ike <Ike.Tavarez@tetrattech.com>
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Dear Ike:

OCD will give a conditional approval under these conditions:

Sample at a minimum of 5 locations on the pad. OCD think this is feasible given that there are borehole locations between pipelines on the pasture and hand-augering is a possible option. Optimally, these boreholes on the pad will be located:

- 1 between BH-12 and vertical rectangle (heater and separator)
- 2 along the north of the battery (horizontal rectangle)
- 2 clustered around the vent

Please confirm your agreement, so that I can note that in my database. Let me know if you have questions or require clarification.

Thanks,
Olivia

From: Tavarez, Ike [<mailto:Ike.Tavarez@tetrattech.com>]
Sent: Friday, January 13, 2017 12:32 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Olivia,

The released occurred on a 4" poly line located behind or west of the heater and separator (vessels) area. The produced water migrated southwest across the lease road in the area of AH-11 and AH-12 and fluids then migrated east across the pad/lease road into the south pasture area.

I had mention in the work plan that EOG propose to defer the impacted areas on the pad until abandonment of the facility. According to EOG, multiple lines are located on the pad, which may be a safety concern to assess the soils or to perform any removal of the impacted soils. In addition, the lease road from the area runs south of the facility pad (north of TB) and currently is used as the main lease road for the area. However, if we can identify all of the lines on the pad and perform the assessment safely, we could probably install few backhoe trenches to perform the assessment to defer the soils on the pad.

Let me know if you have any other questions or need additional information, thanks

Ike Tavarez, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavarez@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetrattech.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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]
Sent: Thursday, January 12, 2017 5:53 PM
To: Tavaréz, Ike <Ike.Tavaréz@tetrattech.com>
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Dear Ike:

Please clarify these questions for us:

1. Where was the original source of the release? I ask this because BH-9 have lower chloride concentrations compared to BH-8, BH-2, and BH-3, even though BH-8 is at the same distance from the Plains pipeline and BH-2 and 3 are farther away.
2. Why are samples not taken from the pad?

Thanks,
Olivia

From: Tavaréz, Ike [<mailto:Ike.Tavaréz@tetrattech.com>]
Sent: Wednesday, January 11, 2017 12:15 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Zane_Kurtz@eogresources.com
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Olivia,

SESI performed a limited assessment and provided the data to EOG. The initial assessment (performed using a backhoe) had impacted areas that were not assessed or vertically defined. After review their findings, Tetra Tech performed the investigation to properly assess the spill area. Let me know if need additional information or if you have any questions, thanks

Ike Tavaréz, PG | Senior Project Manager

Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878

Ike.Tavaréz@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetrattech.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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]
Sent: Wednesday, January 11, 2017 9:59 AM
To: Tavarez, Ike <Ike.Tavarez@tetratech.com>
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: RE: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Good morning Ike:

I am reviewing your workplan for RP 4294. Do you have a copy of the original delineation report from SESI on June 15, 2016? If so, please send me the document.

Thanks,

Olivia Yu
Environmental Specialist; District 1
OCD-EMNRD
575-393-6161 x 113
Olivia.yu@state.nm.us

From: Tavarez, Ike
Sent: Thursday, December 22, 2016 2:14:55 PM (UTC-07:00) Mountain Time (US & Canada)
To: Lynch, Kristen, EMNRD; Tucker, Shelly (stucker@blm.gov)
Cc: Oberding, Tomas, EMNRD; Zane.Kurtz@eogresources.com; Kennedy, James
Subject: EOG- Red Hills North Unit #102 - 1 RP 4294 - Work Plan Approval Request

Kristen and Shelly,
Please find the enclosed EOG - Work Plan for the above reference spill site located in Lea County, New Mexico. Once approved, Tetra Tech will schedule the soil remediation and notify you prior to implementing the work plan. Shelly let me know if you the work plan without the lab. Please let me know if you need additional information or call me if you have any questions, thanks

Ike Tavarez, PG | Senior Project Manager
Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878
Ike.Tavarez@tetratech.com
Tetra Tech | Complex World, Clear Solutions™
4000 North Big Spring, Suite 401 | 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 not the intended recipient, please notify the sender by replying to this message and then delete it from your system.