From:	<u>Venegas, Victoria, EMNRD</u>
To:	<u>Sanjari, Melodie (MRO); Hamlet, Robert, EMNRD; Bratcher, Mike, EMNRD; blm_nm_cfo_spill@blm.gov; Eads, Cristina, EMNRD</u>
Cc:	Castro, Isaac (MRO); Johnson, Misti M. (MRO)
Subject:	RE: [External] Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624),
Date:	Wednesday, January 22, 2020 10:33:30 AM
Attachments:	image001.png

Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624),

Ms. Sanjari,

OCD understand that, due to infrastructure problems in the vicinity of sample point L1, limitation on excavations activities exist. However, the rule is clear regarding to deferral requests: *"The deferral may be granted so long as the contamination is <u>fully delineated</u> and does not cause an imminent risk to human health, the environment or ground water". OCD requests sample point L1 to be delineate to 100 mg/kg for TPH . Additionally, the lateral extension of the release has not been addressed. Fully horizontal delineation is also needed before to apply for a deferral.*

Regarding the depth to groundwater: If Marathon believes that DWG > 50' a borehole will need to be drilled onsite at 55' and leave it open for at least 72 hours. If there is no evidence of water after 72 hours, the OCD will accept this as evidence. We will need a copy of the driller's log. If Marathon chooses not to drill a borehole to confirm the depth to groundwater, the site must be fully delineated to the stringent cleanup levels in Table 1.

For further clarifications regarding the implementation of the spill rule, visit the OCD website: <u>http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf</u> Regards,

Victoria Venegas EMNRD OCD-District II Artesia NM <u>Victoria.Venegas@state.nm.us</u>

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 groundwater, 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, or local laws and/or regulations.

From: Sanjari, Melodie (MRO) <msanjari@marathonoil.com>

Sent: Wednesday, January 22, 2020 9:29 AM

To: Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>; Bratcher, Mike, EMNRD

<mike.bratcher@state.nm.us>; Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>;

blm_nm_cfo_spill@blm.gov; Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>

Cc: Castro, Isaac (MRO) <icastro@marathonoil.com>

Subject: [EXT] [External] Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624),

Good Morning Ms. Venegas,

I hope to address your concerns below that lead to the denial of the Queenie 15 Federal #001H Deferral. I have reattached the deferral report for your reference.

The complete vertical delineation of sample location L1 was prevented due to safety reasons and limitations on hand digging. Sample location L1 was collected by hand, at the source, to the depth of 1 foot bgs. Underneath the overlain gravel, there is an indurated Mescalero Caliche layer; an impermeable layer which is extremely difficult to penetrate using hand tools. Sample location L1's proximity to the production tanks, the presence of above ground pipelines and the catwalk above, all posed safety hazards and prevented an auger drill to advance the same borehole location.

Sample locations BHL1 and BHL2 were established because of their accessibility for equipment and proximity to the source to successfully and accurately delineate the release vertically. The presence of active oil and gas production equipment and above ground pipelines prevented additional placement of any other borehole locations that were within the release area.

You referenced the depth to groundwater data pulled from the near well is 39.83 ft bgs. The report that SMA referenced to determine their depth to groundwater was completed by the Eddy and Lea Energy Alliance (ELEA) in 2007 and submitted to the Department of Energy concerning a potential nuclear recycling site in the area. I know this is a lengthy document, but I have attached Section 2.4 (Groundwater Investigation) which details water resources and groundwater research in the area. I have also attached the analytical results of the groundwater samples that were collected from the wells in this study just northeast of the Queenie, and have highlighted the Queenie Fed Location on the map for reference. The water quality data from the surrounding wells show that the groundwater level that you're referencing is not protectable due to the elevated TDS levels (when applying the >10,000 ppm TDS guidance). These are the same wells that can be seen east of the site on SMA's Figure 1. All of the water samples that were collected from these wells were highly mineralized and exceeded the WQCC standards for chloride, sulfate and TDS. The ELEA concluded that "the most alluvial groundwater in the vicinity of the Site has been impacted by bring disposals, or originated from brine disposal" (Groundwater Quality Summary 2.4.3.3). This leads us to believe that the protectable depth to groundwater in the area is much deeper than 100 feet bgs; the report references depths from 300 to 400 feet bgs.

I hope this clarifies why the sampling regime was chosen and details the site characterization a little further. Please feel free to reach out if you would like to discuss this remediation permit further.

Melodie Sanjari

Environmental Professional Marathon Oil Company – Permian Asset 4111 S. Tidwell Road Carlsbad, NM 88220



Begin forwarded message:

From: "Venegas, Victoria, EMNRD" <<u>Victoria.Venegas@state.nm.us</u>>
Date: January 6, 2020 at 3:04:08 PM MST
To: "Castro, Isaac (MRO)" <<u>icastro@marathonoil.com</u>>, "CFO_Spill, BLM_NM"
<<u>blm_nm_cfo_spill@blm.gov</u>>, "Bratcher, Mike, EMNRD"
<<u>mike.bratcher@state.nm.us</u>>, "Hamlet, Robert, EMNRD"
<<u>Robert.Hamlet@state.nm.us</u>>
Cc: "Johnson, Misti M. (MRO)" <<u>mjohnson4@marathonoil.com</u>>, "Eads, Cristina,
EMNRD" <<u>Cristina.Eads@state.nm.us</u>>

Subject: [External] Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624),

Beware of links/attachments.

Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624),

Mr. Castro,

OCD has received your deferral request for Deferral Request Report for the Queenie 15 Federal #001H Release (1RP-5624), thank you. This deferral request is denied for the following:

- The release has not been fully delineated. Sample point L1 needs to be delineate to 100 mg/kg for TPH. As shown in Figure 3, the depth to groundwater in the nearest well to the release is 39.83'. Please, use DWG<50' as a closure criteria for this site.
- OCD requires that more samples be taken to fully delineate the entire affected area shown in Figure 3 -Site and Sample Location Map- .

Regards, Victoria Venegas EMNRD OCD-District II Artesia NM <u>Victoria.Venegas@state.nm.us</u>

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 groundwater, 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, or local laws and/or regulations.