From: Littrell, Kyle
To: Eads, Cristina, EMNRD
Cc: Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Venegas, Victoria, EMNRD
Subject: [EXT] RE: Poker Lake Unit 18 BD #123 , nAB1912738712 (Site name is Poker Lake Unit 18 BD #104H)
Date: Thursday, April 9, 2020 2:08:01 PM
Attachments: 012919079_FIG01_SL_SITES_2020.pdf

Afternoon Cristina,

Thank you for your response to this closure request. NMOCD's Spill Rule Procedures (Guidelines) indicate it is preferable for referenced water wells to be situated within ½ mile of the release and that NMOCD may require borings for verification. If the operator has applicable information, it can be reviewed to determine if it is acceptable. Can you please review the following and attached information to determine if it can be accepted as backup for determining depth to water at this location?

- Please see attached Figure 1. The map shows nearby XTO release locations for which NMOCD has approved the depth to water determinations based on the depth to water associated with the nearest NMOSE (dark blue) or USGS (light blue) wells identified. For all of these locations, except Corral Canyon Fed 212H, depth to water was estimated to be greater than 100 feet deep. All estimates referenced water wells that were greater than ½ mile away.
- The regional trend does not support shallow groundwater less than 50 feet deep at this site. Depth to water data identified on the map illustrates the documented trend of increasing depth to water with increased distance from the Pecos River. When viewed regionally, the data support a depth to water estimate of greater than 100 feet bgs at the site, with the 100-foot contour falling between water wells C 02371 (60 feet to water) and both C01360 and 320857103553301 (173 feet and 264 feet bgs, respectively). Due to the proximity of that estimated contour to the site in question, there may be some concern that depth to water is between 51 and 100 feet bgs. However, the report already documents compliance with the Closure Criteria for Soils Impacted by a Release for groundwater at 51-100 feet.
- There are no regional or site-specific hydrological conditions that suggest the site is more conducive to shallow groundwater. The nearest surface water feature is a significant watercourse greater than ½ mile away. The nearest named draws are well to the north and south as seen on the regional topographic map. There are no wetlands or vegetation on site suggesting presence of shallow groundwater.
- The release was not significantly large in volume or impact compared to other releases in the area. It consisted of 6 bbls of produced water that was restricted to the well pad. Of six samples collected during delineation, the highest TPH concentration was 73.2 mg/kg, which meets the strictest NMOCD Closure Criteria. Chloride concentrations ranged from 13 mg/kg to 5,400 mg/kg, with the highest concentrations occurring within the top ½ foot of the well pad surface. At 2' bgs, the highest detected concentration of chloride was 1,180 mg/kg. Chloride concentrations decrease significantly within 2 feet and chloride resulting from the release is unlikely to migrate to groundwater due to the vertical distance and generally low concentrations.

In summary, it is XTO's experience that depth to groundwater in this area is accepted by NMOCD to

be greater than 100 feet bgs based on the number of nearby site characterizations already approved using a similar approach. The regional depth to water data support that estimate demonstrating increasing depth to water with increasing distance from the Pecos River. A data point (C 02371) documenting depth to water greater than 50 feet exists 2.5 miles to the east of the site (toward the Pecos). There does not appear to be more sensitive receptors specific to this site that require additional investigation when the closure criteria applicable to a setting with depth to water between 51 and 100 feet bgs has already been met.

We appreciate your consideration of additional information and please reach out if you have additional questions or concerns. Thanks. --Kyle

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From: Eads, Cristina, EMNRD [mailto:Cristina.Eads@state.nm.us]
Sent: Tuesday, February 25, 2020 12:26 PM
To: Littrell, Kyle <Kyle_Littrell@xtoenergy.com>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>
Subject: Poker Lake Unit 18 BD #123, nAB1912738712

External Email - Think Before You Click

Kyle,
The OCD has denied the submitted Closure Plan C-141 for incident # nAB1912738712 for the following reason:

- Depth to groundwater has not been adequately identified.

  The well referenced in the closure report is well over ½ mile away from the release site. As the analytical data meets Closure Criteria for Soils Impacted by a Release for groundwater at 51-100 feet below ground surface (bgs), XTO will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of groundwater after 24 hours, the OCD will approve the closure report with a copy of the driller's log. If XTO chooses not to drill a borehole to confirm depth to groundwater, and is unable to provide reasonable evidence of depth to groundwater within a ½ mile radius, the impacted area will need to be remediated to meet closure criteria for water at a depth of <50' bgs.

Please let me know if you have any questions.

Thanks,
Cristina Eads
Environmental Bureau
EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3084
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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.