

STATE OF
COLORADO

Andrews - DNR, Doug <doug.andrews@state.co.us>

Kerr-Mcgee's PROWANT 4-18HZ PAD Form 2A questions

2 messages

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: andy_lytle@oxy.com, djregulatory@anadarko.com

Mon, Dec 16, 2019 at 11:32 AM

Andy,

I was looking through the PROWANT 4-18HZ PAD Form 2A this morning and I see a few more things I need addressed.

* This location meets Objective Criteria 5.c. Please provide a BMP that describes how a spill/release of fluids during the drilling and completion operations will be contained so as to not impact groundwater. Also, will these wells have remote monitoring and shut-in capabilities. If so, please provide a BMP that addresses this also.

* Please provide updates to the date planned to commence construction and begin interim reclamation. They are currently listed as 6/1/19 and 12/1/19.

* The Dust mitigation BMP states: "Water will be placed on dirt access roads to mitigate dust as needed. *If feasible*, magnesium chloride will also be used as needed on access roads to further abate dust." The "*If feasible*" qualifier is a little more open ended than we'd like. Can this be removed?

* The Odor mitigation BMP states: "KMG will comply with the provisions of 805b *as deemed applicable*. Additional BMPs for the Prowant 4-18HZ location ...". The "*as deemed applicable*" qualifier is a little more open ended than we'd like. Can this be removed?

* There are a few homes in the Indian Head subdivision east of this location that are within 1,500 feet of the location. Will KMG revise the 604.c.(2)A - Noise mitigation BMP to also include installing sound mitigation barriers (e.g. straw bales, sound walls) along the east side of the pad?

* I see that the nearest Building Unit is owned by Anadarko. Please confirm if the nearest Building Unit is currently unoccupied and if it will remain so during well drilling and completion operations.

* This location is within 1,500 feet of Windsor, Johnstown, and Larimer County. I have an earlier correspondence with KMG that indicates Larimer County was notified during the WOGLA process and had no comments. Has KMG been in contact with Johnstown and Windsor to see if they had any concerns with this oil and gas location in proximity to them?

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado

**COLORADO**
Oil & Gas Conservation
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Andy_Lytle@oxy.com <Andy_Lytle@oxy.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>
Cc: John_Piekara@oxy.com

Tue, Dec 17, 2019 at 6:01 PM

Doug,**Please see below and let me know if you have any questions.**

-AL

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, December 16, 2019 11:32 AM
To: Lytle, Andy <andy_lytle@oxy.com>; DJ Regulatory <DJRegulatory@anadarko.com>
Subject: [EXTERNAL] Kerr-Mcgee's PROWANT 4-18HZ PAD Form 2A questions

Andy,

I was looking through the PROWANT 4-18HZ PAD Form 2A this morning and I see a few more things I need addressed.

* This location meets Objective Criteria 5.c. Please provide a BMP that describes how a spill/release of fluids during the drilling and completion operations will be contained so as to not impact groundwater. Also, will these wells have remote monitoring and shut-in capabilities. If so, please provide a BMP that addresses this also.

Material Handling and Spill Prevention:

- During the construction phase, will ensure that on pad compaction is adequate as to serve as a secondary barrier to protect shallow groundwater and prevent the migration of spills or leaks to shallow groundwater. In order to prevent incidental spills from impacting groundwater a liner will be placed beneath the rig during drilling. During completions secondary containment (liners) will be in place for heavy equipment, transfer manifolds and tanks (excluding fresh water tanks).

Material Handling and Spill Prevention:

- Leak Detection Plan: Automation technology will be utilized at this facility. This technology includes the use of fluid level monitoring for the tanks and produced water sumps, high-level shut offs, and electronic sensors to monitor the interstitial space of double-walled produced water sumps. All automation is monitored by Kerr-McGee's Integrated Operations Center (IOC), which is manned 24 hours per day, 7 days per week.

* Please provide updates to the date planned to commence construction and begin interim reclamation. They are currently listed as 6/1/19 and 12/1/19.

Doug, please enter these dates on the Form 2A - Construction start approximately 1/15/2020 and Interim Reclamation start approximately 4/1/2021

Operator Comment:

As of the current date and corresponding schedules, pad construction to commence following the approval of the Form 2A but no later than 1/15/2020. This will be followed by Production Drilling to commence approximately late March 2020. The approximate completions start date is mid December 2020 followed by an early February 2021 completions finished date. Interim reclamation to commence within three months post-completion operations due to this location being sited on irrigated crop land.

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Yes, please remove

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Yes, please remove

* There are a few homes in the Indian Head subdivision east of this location that are within 1,500 feet of the location. Will KMG revise the 604.c.(2)A - Noise mitigation BMP to also include installing sound mitigation barriers (e.g. straw bales, sound walls) along the east side of the pad?

604.c.(2) Sound surveys have been conducted on each rig type and are utilized to anticipate any additional effective noise mitigation once a drilling rig is determined. At a minimum, and pending a safety review after construction of the location, sound mitigation barriers (sound walls) will be placed around the well pad with the exception of the very southwestern portion of pad location to dampen noise and minimize impact to the nearby residences and to Weld County Road 13 / Larimer County Road 1 and Highway 34 during drilling and completions. Should technological advancements allow for better noise mitigation at the time of drilling and completion operations on this location, Kerr-McGee will re-evaluate the most effective method at that time.

* I see that the nearest Building Unit is owned by Anadarko. Please confirm if the nearest Building Unit is currently unoccupied and if it will remain so during well drilling and completion operations.

The nearest building unit is currently vacant and remain vacant until development is finished

* This location is within 1,500 feet of Windsor, Johnstown, and Larimer County. I have an earlier correspondence with KMG that indicates Larimer County was notified during the WOGLA process and had no comments. Has KMG been in contact with Johnstown and Windsor to see if they had any concerns with this oil and gas location in proximity to them?

The Town of Johnstown was contacted on 11/5/2018 via a "Notice of Intent to Submit Weld County Oil and Gas Location Assessment (WOGLA)." No comments received from the Town of Johnstown

The Town of Windsor was contacted on 11/5/2018 via a "Notice of Intent to Submit Weld County Oil and Gas Location Assessment (WOGLA)." No comments received from the Town of Windsor

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