

STATE OF  
COLORADO

Andrews - DNR, Doug &lt;doug.andrews@state.co.us&gt;

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**COGCC Form 2A review of Bayswater Exploration's Kaiser 10-D Pad - Doc #400564232**2 messages

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

Tue, Apr 29, 2014 at 3:26 PM

To: Regulatory members &lt;regulatory@petro-fs.com&gt;

Jennifer &amp; Ann,

I have reviewed the referenced Form 2A Oil & Gas Location Assessment and have the following comments.

1) A review of your Location Drawing indicates that the existing production facilities on the southern end of this oil and gas location serve the existing Bayswater Kaiser 41-10 & 17-10 wells to the west (Location ID #310452) and the existing Bayswater Kaiser 42-10 well to the south (Location ID #310454). Therefore, I will update the Related Remote Location section to indicate the production facilities at this oil and gas location will also serve these two remote locations.

2) A review of your Facility Layout Drawing indicates there will be 20 new tanks (16 oil tanks and 4 water tanks) along with 3 existing tanks and 8 new separators along with one existing separator at this oil and gas location. Comparing the Facility Layout Drawing with what is listed in the Facilities section, it appears the Facilities section was completed listing only the new additional production facilities, not the total number of all production facilities (both new and existing). Please review the Facilities section for this Form 2A and confirm (or update if necessary) the listing of both existing and new additional production facilities. Be sure to also review the pipeline description to confirm it includes both the existing and new additional pipelines.

3) In the Water Resources section you have indicated this oil and gas location is not a Sensitive Area. Due to the proximity of a nearby irrigation ditch to the east that will be close to the production facilities, I would like to change the Sensitive Area designation to YES.

4) In the Designated Setback Location Exceptions section you have checked the Rule 604.a.(1)A - Exception Zone box. While this oil and gas location is within an Exception Zone, Rule 604.a.(1)A concerns Exception Zone locations that are also within an Urban Mitigation Area. This oil and gas location is not within an Urban Mitigation Area, so I will uncheck that box.

5) Due to the proximity of the irrigation ditch to the east being in close proximity to the production facilities, I would like to add the following Condition of Approval:  
"Operator must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect the irrigation ditch located 383 feet east of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products."

6) While you have included several Best Management Practices (BMPs) concerning the drilling, construction, and operation of this oil and gas location, you have also identified the nearest Building Unit to be 173 feet from the nearest Well or Production Facility. Therefore, please provide **site specific** BMPs addressing the following additional mitigation measures:  
Rule 604.c.(2)C - Green Completions Emission Control Systems  
Rule 604.c.(2)F - Leak Detection Plan

Rule 604.c.(2)H - Blowout Preventer Equipment  
Rule 604.c.(2)N - Control of Fire Hazards  
Rule 604.c.(2)R - Tank Specifications  
Rule 604.c.(3) - Location Specific Requirements within an Exception Zone Setback  
Rule 804 - Visual Impact Mitigation  
Rule 805 - Odors and Dust

Please respond to this correspondence with the requested items by May 30, 2014. If you have any questions, please feel free to contact me. Thank you.

—

*Doug Andrews*

Oil & Gas Location Assessment Specialist - Northeast Area



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Denver, CO 80203  
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**Jennifer Grosshans** <[jgrossshans@petro-fs.com](mailto:jgrossshans@petro-fs.com)>  
To: "Andrews - DNR, Doug" <[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)>  
Cc: Ann Stephens <[astephens@petro-fs.com](mailto:astephens@petro-fs.com)>

Fri, May 9, 2014 at 2:16 PM

Again, see my responses in **red** below.

Jennifer Grosshans

Regulatory Technician

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**From:** Andrews - DNR, Doug [<mailto:doug.andrews@state.co.us>]

**Sent:** Tuesday, April 29, 2014 3:27 PM

**To:** Regulatory members

**Subject:** COGCC Form 2A review of Bayswater Exploration's Kaiser 10-D Pad - Doc #400564232

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**THIS IS FINE**

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3) In the Water Resources section you have indicated this oil and gas location is not a Sensitive

Area. Due to the proximity of a nearby irrigation ditch to the east that will be close to the production facilities, I would like to change the Sensitive Area designation to YES. **THIS IS FINE**

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#### Rule 604.c.(2)C - Green Completions Emission Control Systems

**Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for at least the first 90-days of production pursuant to CDPHE rules.**

#### Rule 604.c.(2)F - Leak Detection Plan

**Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.**

#### Rule 604.c.(2)H - Blowout Preventer Equipment

**A double ram and annular preventer will be used during drilling. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.**

#### Rule 604.c.(2)N - Control of Fire Hazards

**All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with the current national electrical code.**

#### Rule 604.c.(2)R - Tank Specifications

**Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and**

**recorded inspections are conducted once a month.**Rule 604.c.(3) - Location Specific Requirements within an Exception Zone Setback

**Containment berms shall be constructed of steel rings with a synthetic or engineered liner and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed as required for Production Facilities within 500 feet. All berms will be visually checked periodically to ensure proper working condition.**

Rule 804 - Visual Impact Mitigation

**All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public. Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately.**

Rule 805 - Odors and Dust

**Bayswater will regulate odors in accordance with COGCC Rule 805. The production facilities will have VOC Combustors with emission control devices to comply with the Department of Public Health and Environment, Air Quality Control Commission. Traffic dust control will be done using water on all county roads leading up to the pad site. Fugitive dust will be controlled by speed restrictions on all neighboring roads, regular road maintenance and repair, and avoiding construction activity during high wind days. If technologically and economically feasible, additional management practices may also be required to minimize fugitive dust, as well as to control silica dust while handling sand during frac'ing operations.**

**ADD Rule 604.c.(2)A. Noise**

**A baseline noise survey will be performed prior to the start of drilling and completion operations. Some type of sound wall mitigation will be implemented based on the study results to insure that noise levels are maintained below the permissible level for Light Industrial Zones, as measured at the nearest Building Unit.**

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*Doug Andrews*

Oil & Gas Location Assessment Specialist - Northeast Area



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