



STATE OF
COLORADO

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

COGCC Form 2A review of Extraction's Hergert 35-L Pad - Doc #401396924

4 messages

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Alyssa Andrews <aandrews@extractionog.com>

Fri, Oct 6, 2017 at 1:58 PM

Alyssa,

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

- 1) Please provide a revised Rule 604.c.(2)N - Control of Fire Hazards BMP to also include the requirements of if Rule 606A.d.
- 2) The Storm Water/Ersion Control BMP states that Extraction will co-locate gas and water gathering lines whenever feasible. There is no pipeline description for any gathering lines coming from this proposed Oil & Gas Location. Therefore, I would like to remove this phrase from the BMP.
- 3) Extraction has included a Rule 604.c.(2)F - Leak Detection BMP. This Rule addresses leak detection plans associated with production facilities. As no production facilities are listed in the Facilities section, I would like to remove this BMP.
- 4) Extraction has included a Rule 604.c.(2)K - Pit level indicators BMP that indicates pit level indicators will be used for tanks on locations. As no tanks are listed in the Facilities section, I would like to remove this BMP.
- 5) Extraction has included a Rule 604.c.(2)O - Loadlines BMP. This Rule addresses loadlines associated with production facilities. As no production facilities are listed in the Facilities section, I would like to remove this BMP.
- 6) Extraction has indicated this proposed Oil & Gas Location is within a floodplain. Therefore, please provide a BMP that addresses the requirements of Rule 603.h. for wells in a floodplain.
- 7) One of the NRCS Map Unit Description attachments was for the wrong NRCS Map Unit (41-Nunn clay loam). Please send me the NRCS Map Unit Description for the 40-Nunn loam, 1-3% slopes and I will swap it out on the Form 2A.
- 8) The Location Drawing depicts an irrigation ditch running east-west through the center of the proposed Oil & Gas Location. Please provide an operator comment explaining what Extraction's intentions are regarding this irrigation ditch (filled in, re-located, etc.) and if the Surface Owner is aware of these plans.

Please respond to this correspondence by November 6, 2017. If you have any questions, please contact me. Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

303.894.2100 Ext. 5180

1120 Lincoln St., Suite 801, Denver, CO 80203

doug.andrews@state.co.us | <http://cogcc.state.co.us/>

Alyssa Andrews <aandrews@extractionog.com>

Tue, Oct 10, 2017 at 8:43 AM

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

Cc: Blane Thingelstad <BThingelstad@extractionog.com>, Jeffrey Annable <jannable@ascentgeomatics.com>

Hi Doug,

Please see my responses in red below. Let me know if you have any more questions.

Thanks!

Alyssa Andrews

Regulatory Analyst



Direct: (720) 481-2379

Cell: (425) 652-2811

aandrews@ExtractionOG.com

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

Sent: Friday, October 6, 2017 1:59 PM

To: Alyssa Andrews <aandrews@extractionog.com>

Subject: COGCC Form 2A review of Extraction's Hergert 35-L Pad - Doc #401396924

Alyssa,

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

1) Please provide a revised Rule 604.c.(2)N - Control of Fire Hazards BMP to also include the requirements of if Rule 606A.d. **Please add the following:**

Flammable liquids shall not be stored within fifty (50) feet of the wellbore, except for the fuel in the tanks of operating equipment or supply for injection pumps. Where terrain and location configuration do not permit maintaining this distance, equivalent safety measures should be taken.

2) The Storm Water/Ersion Control BMP states that Extraction will co-locate gas and water gathering lines whenever feasible. There is no pipeline description for any gathering lines coming from this proposed Oil & Gas Location. Therefore, I would like to remove this phrase from the BMP. **Yes, please remove.**

3) Extraction has included a Rule 604.c.(2)F - Leak Detection BMP. This Rule addresses leak detection plans associated with production facilities. As no production facilities are listed in the Facilities section, I would like to remove this BMP. **Yes, please remove.**

4) Extraction has included a Rule 604.c.(2)K - Pit level indicators BMP that indicates pit level indicators will be used for tanks on locations. As no tanks are listed in the Facilities section, I would like to remove this BMP. **Yes, please remove.**

5) Extraction has included a Rule 604.c.(2)O - Loadlines BMP. This Rule addresses loadlines associated with production facilities. As no production facilities are listed in the Facilities section, I would like to remove this BMP. **Yes, please remove.**

6) Extraction has indicated this proposed Oil & Gas Location is within a floodplain. Therefore, please provide a BMP that addresses the requirements of Rule 603.h. for wells in a floodplain. **Please add the following Construction BMPs:**

Rule 603.h.(1)B. Operational system will be automated to allow remote shut in, remote monitoring, and off-site response to emergencies.

Rule 603.h.(1)C./ Rule 603.h.(2)C. Extraction will install an engineered containment system around the tank battery. The containment system is constructed of a perimeter of walls that are post driven into the ground around a flexible geotextile base. All components are then sprayed with a polyurea liner technology. This liner technology maintains impermeability and puncture resistance under exposure to UV rays, weather extremes, and chemicals commonly encountered in oil and natural gas production, and provides seamless protection. In addition to the engineered containment system, Extraction will install bollards on the upstream end of the tank battery as an added safety measure. The bollards will provide added protection to the tank battery in the event of a flood in which objects and debris may be floating downstream. The bollards will be constructed of steel pipe filled with concrete and will protect the containment system from being struck and compromised by floating debris.

Rule 603.h.(2)A. Extraction maintains a current inventory of all existing Wells, Tanks, and separation equipment in a defined Floodplain. Extraction ensures that a list of all such Wells, tanks, and separation equipment is filed with the Director. As part of this inventory, Extraction maintains a current and documented plan describing how Wells within a defined Floodplain will be timely shut-in. This list is available upon request.

Rule 603.h.(2)B. Tanks, including partially buried tanks, and separation equipment must be anchored to the ground. Anchors must be engineered to support the Tank and separation equipment and to resist flotation, collapse, lateral movement, or subsidence. Extraction has an engineered Tank Anchorage design available upon request.

Rule 603.h.(2)D. Production Pits, Special Purpose Pits (other than Emergency Pits), and flowback pits containing E&P waste will not be on location.

7) One of the NRCS Map Unit Description attachments was for the wrong NRCS Map Unit (41-Nunn clay loam). Please send me the NRCS Map Unit Description for the 40-Nunn loam, 1-3% slopes and I will swap it out on the Form 2A. **Attached to this email.**

8) The Location Drawing depicts an irrigation ditch running east-west through the center of the proposed Oil & Gas Location. Please provide an operator comment explaining what Extraction's intentions are regarding this irrigation ditch (filled in, re-located, etc.) and if the Surface Owner is aware of these plans. **The irrigation ditch will be relocated. The surface owner is aware of these plans.**

Please respond to this correspondence by November 6, 2017. If you have any questions, please contact me. Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



303.894.2100 Ext. 5180

1120 Lincoln St., Suite 801, Denver, CO 80203

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20171009_10363010120_18_Map_Unit_Description_Nunn_loam_1_to_3_percent_sl....pdf
126K

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

Tue, Oct 10, 2017 at 2:15 PM

To: Alyssa Andrews <aandrews@extractionog.com>

Cc: Blane Thingelstad <BThingelstad@extractionog.com>, Jeffrey Annable <jannable@ascentgeomatrics.com>

Alyssa,

Since the Hergert 35-L Pad Form 2A is not proposing any production facilities, the BMP for Rule 603.h.(1)C/Rule 603.h.(2)C and 603.h.(2)B are not applicable and do not need to be placed on this Form 2A.

Now that the Public Comment period has ended, please send me a letter certifying Extraction's compliance with Rule 306.e. If any meetings/consultations were held, please also include their outcome.

Thanks.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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1120 Lincoln St., Suite 801, Denver, CO 80203

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Jeffrey Annable <jannable@ascentgeomatics.com>

Wed, Oct 11, 2017 at 7:53 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Alyssa Andrews <aandrews@extractionog.com>

Cc: Blane Thingelstad <BThingelstad@extractionog.com>

Hey Doug,

Attached please find the operator certification letter.

Let me know if you need anything else.

Thanks,

Jeff Annable

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: [303.928.7128](tel:303.928.7128)

7535 Hilltop Circle

Denver, CO 80221

TBPLS Firm Registration No. 10194000

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

Sent: Tuesday, October 10, 2017 2:15 PM

To: Alyssa Andrews

Cc: Blane Thingelstad; Jeffrey Annable

Subject: Re: COGCC Form 2A review of Extraction's Hergert 35-L Pad - Doc #401396924

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 **Hergert35-L_306.e.Cert_to_director.pdf**
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