

STATE OF
COLORADO

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

COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #4015617657 messages

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

Mon, May 7, 2018 at 10:10 AM

To: Kelsi Welch <kwelch@extractionog.com>

Kelsi,

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

- 1) In the Cultural Setback Distance section Extraction has indicated the distance to the nearest Public Road is 2,750 feet from the nearest proposed well and 2,618 feet from the nearest proposed production facility. During my review it appears the nearest Public Road (Barn Owl Court) is approximately 1,820 feet southeast of the nearest proposed well and approximately 1,650 feet southeast of the nearest proposed production facility. Therefore, I would like to revise these two distances on the Form 2A.
- 2) Please provide additional siting rationale as to why Extraction did not amend their existing Raindance pad to the south to drill these six wells from.
- 3) Extraction has provided a Traffic Control BMP that indicates "*If required by the local government, a traffic plan shall be coordinated with the local jurisdiction...*" Please modify this BMP to indicate whether or not the Town of Windsor requires a traffic plan for this location.
- 4) Extraction has provided a Visual Impact mitigation BMP that meets the minimum COGCC requirements. The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the Conditional Use Grant (CUG), landscape screening is being proposed. The Town of Windsor has also indicated that "*Given the close proximity to residential neighbors, the Drilling and Site Improvement Plans shall depict proposed long-term screening materials including landscaping, earth berms and any other screening methods to mitigate visual impacts.*" However, your Visual Impact mitigation BMP does not address any landscape screening. Please revise the Visual Impact mitigation BMP to include the landscape screening referenced by the Town of Windsor's public comment.
- 5) Extraction has provided a Light impact mitigation BMP that indicates "*Permanent lighting shall be mounted at compressor stations on a pole or building and directed downward to illuminate key areas within the facility, while minimizing the amount of light projected outside the facility.*" As no compressors are proposed for this location, this BMP should be modified and include specific details as to how any lighting on the proposed Oil & Gas Location will not be a nuisance to the nearby Building Unit owner (e.g. shielding, automatic cut-offs, etc.).
- 6) Extraction has provided a Noise mitigation BMP that indicates "*Sound walls and/or hay bales will be installed on north and east edges of the pad to mitigate impacts to s recreational trail to the north and building unit to the east.*" The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the CUG, "*The temporary buffer/sound walls shall enclose the drilling operations to provide screening and noise mitigation barriers in the direction of nearby homes, as appropriate.*" Please revise your Noise mitigation BMP to conform to the requirements of the the Town Of Windsor's requirements to enclose the drilling operations.

7) Extraction has provided an Emissions mitigation BMP that indicates "*Operator will bring a new or expand existing gas sales lines, in a timely manner, to send salable quality gas immediately down the sales line.*" The phrase "in a timely manner" is too ambiguous and open ended to accept. As at least one of the wells on Extraction's nearby Raindance pad is selling gas, it would seem that Extraction should be able to connect to a gas sales line at the first sign of salable quality gas. Please revise the Emissions mitigation BMP to more specifically address when Extraction will connect these wells to a gas sales line.

8) Extraction has provided Planning BMP that indicates they will host a neighborhood meeting prior to public hearings. Has this neighborhood meeting been held? If yes, please provide the Rule 306.e. certification letter detailing the outcome of the neighborhood meeting. If this neighborhood meeting has not yet happened, please wait until it does before sending the Rule 306.e. certification letter.

9) As we discussed in our telephone conversation last week, the attachment labelled Exception Location Request is not required on this Form 2A and I would like to remove it to eliminate any possible confusion.

Please reply to this correspondence by June 7, 2018. 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
doug.andrews@state.co.us | <http://cogcc.state.co.us/>

Kelsi Welch <kwelch@extractionog.com>

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

Cc: Bonnie Lamond <blamond@extractionog.com>

Mon, May 7, 2018 at 10:19 AM

Hey Doug!

Bonnie will be taking over this pad for so I've looped her in – she can answer all the questions you have regarding the Merlin pad.

Thank you!

Kelsi

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, May 7, 2018 10:10 AM
To: Kelsi Welch <kwelch@extractionog.com>
Subject: COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #401561765

[Quoted text hidden]

Bonnie Lamond <blamond@extractionog.com>
To: "doug.andrews@state.co.us" <doug.andrews@state.co.us>

Thu, May 17, 2018 at 8:09 AM

Hi Doug,

Please see my responses in blue listed below.

Please do not hesitate to give me a call if you have any questions or concerns.

Thank you,

Bonnie Lamond

Extraction Oil & Gas

370 17th Street, Suite 5300

Denver, CO 80202



Direct: (303) 250-9383

www.extractionog.com

From: Kelsi Welch
Sent: Monday, May 7, 2018 10:20 AM
To: Andrews - DNR, Doug <doug.andrews@state.co.us>
Cc: Bonnie Lamond <blamond@extractionog.com>
Subject: RE: COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #401561765

Hey Doug!

Bonnie will be taking over this pad for so I've looped her in – she can answer all the questions you have regarding the Merlin pad.

Thank you!

Kelsi

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, May 7, 2018 10:10 AM
To: Kelsi Welch <kwelch@extractionog.com>
Subject: COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #401561765

Kelsi,

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

- 1) In the Cultural Setback Distance section Extraction has indicated the distance to the nearest Public Road is 2,750 feet from the nearest proposed well and 2,618 feet from the nearest proposed production facility. During my review it appears the nearest Public Road (Barn Owl Court) is approximately 1,820 feet southeast

of the nearest proposed well and approximately 1,650 feet southeast of the nearest proposed production facility. Therefore, I would like to revise these two distances on the Form 2A.

OK

2) Please provide additional siting rationale as to why Extraction did not amend their existing Raindance pad to the south to drill these six wells from.

Extraction did not amend the existing Raindance pad to the south due to development plans from the Town of Windsor as well as the Raindance golf course master plan—there is physically not enough space with the required BMPs and CUG/SUA agreements. Also, in order to drill the northern Merlin wells from Raindance, we would need to do a step out of nearly 1 mile, which is not technically feasible.

3) Extraction has provided a Traffic Control BMP that indicates "*If required by the local government, a traffic plan shall be coordinated with the local jurisdiction...*" Please modify this BMP to indicate whether or not the Town of Windsor requires a traffic plan for this location.

Extraction will be using a truck haul route requested by the Town of Windsor; no Traffic Plan is required.

4) Extraction has provided a Visual Impact mitigation BMP that meets the minimum COGCC requirements. The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the Conditional Use Grant (CUG), landscape screening is being proposed. The Town of Windsor has also indicated that "*Given the close proximity to residential neighbors, the Drilling and Site Improvement Plans shall depict proposed long-term screening materials including landscaping, earth berms and any other screening methods to mitigate visual impacts.*" However, your Visual Impact mitigation BMP does not address any landscape screening. Please revise the Visual Impact mitigation BMP to include the landscape screening referenced by the Town of Windsor's public comment.

The Town of Windsor has requested earthen berms planted with evergreen trees and shrubs to provide visual screening for the pad.

5) Extraction has provided a Light impact mitigation BMP that indicates "*Permanent lighting shall be mounted at compressor stations on a pole or building and directed downward to illuminate key areas within the facility, while minimizing the amount of light projected outside the facility.*" As no compressors are proposed for this location, this BMP should be modified and include specific details as to how any lighting on the proposed Oil & Gas Location will not be a nuisance to the nearby Building Unit owner (e.g. shielding, automatic cut-offs, etc.).

In addition to the lighting that will be directed downward to illuminate key areas within the facility, the Merlin pad is surrounded by berming that will act as long term visual mitigation from lights. Furthermore, all produced fluids will be piped off location reducing the amount of light associated with trucks.

Also, there should be 7 VRUs listed in the equipment section, not 3.

"Per Rule 303.b(3)C" should be changed to the following:

Extraction will trench flowlines in one piping corridor that runs between the wells and the separator pad and be placed at 9" to 12" centers. These lines will most likely be 2" or 3" fusion bonded steel pipe and have proper cathodic protection throughout the run. All welds on these are 100% x-ray and hydro tested to the API and Manufactures specs for a class 1500 series flange.

6) Extraction has provided a Noise mitigation BMP that indicates "*Sound walls and/or hay bales will be installed on north and east edges of the pad to mitigate impacts to s recreational trail to the north and building unit to the east.*" The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the CUG, "*The temporary buffer/sound walls shall enclose the drilling operations to provide screening and noise mitigation barriers in the direction of nearby homes, as appropriate.*" Please revise your Noise mitigation BMP to conform to the requirements of the the Town Of Windsor's requirements to enclose the drilling operations.

Noise mitigation will be provided by sound walls on the northern and eastern sides of the pad. The western and southern sides of the pad will be enclosed by 25 to 30 foot high cut slopes that will assist in noise mitigation. Between the sound walls and cut slopes, the pad will be enclosed to prevent sound from impacting adjacent land uses.

7) Extraction has provided an Emissions mitigation BMP that indicates "*Operator will bring a new or expand existing gas sales lines, in a timely manner, to send salable quality gas immediately down the sales line.*" The phrase "in a timely manner" is too ambiguous and open ended to accept. As at least one of the wells on Extraction's nearby Raindance pad is selling gas, it would seem that Extraction should be able to connect to a gas sales line at the first sign of salable quality gas. Please revise the Emissions mitigation BMP to more specifically address when Extraction will connect these wells to a gas sales line.

Extraction will ensure the connect is in place to take gas downline immediately.

8) Extraction has provided Planning BMP that indicates they will host a neighborhood meeting prior to public hearings. Has this neighborhood meeting been held? If yes, please provide the Rule 306.e. certification letter detailing the outcome of the neighborhood meeting. If this neighborhood meeting has not yet happened, please wait until it does before sending the Rule 306.e. certification letter.

This neighborhood meeting was held in order to meet local jurisdiction requirements (Windsor's CUG process). I will make a note in the 306.e Certification; however, please be advised that this meeting was not held because of building unit owners' requests per COGCC rules.

9) As we discussed in our telephone conversation last week, the attachment labelled Exception Location Request is not required on this Form 2A and I would like to remove it to eliminate any possible confusion.

OK

Please reply to this correspondence by June 7, 2018. If you have any questions, please contact me. Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Bonnie Lamond <blamond@extractionog.com>

Mon, May 21, 2018 at 10:26 AM

Bonnie,

I have some follow-up requests based on your response to my original comments.

4) Extraction has provided a Visual Impact mitigation BMP that meets the minimum COGCC requirements. The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the Conditional Use Grant (CUG), landscape screening is being proposed. The Town of Windsor has also indicated that "*Given the close proximity to residential neighbors, the Drilling and Site Improvement Plans shall depict proposed long-term screening materials including landscaping, earth berms and any other screening methods to mitigate visual impacts.*" However, your Visual Impact mitigation BMP does not address any landscape screening. Please revise the Visual Impact mitigation BMP to include the landscape screening referenced by the Town of Windsor's public comment.

The Town of Windsor has requested earthen berms planted with evergreen trees and shrubs to provide visual screening for the pad.

Please provide an updated Location Drawing that shows the earthen berms that provide visual screening as required by the Town of Windsor.

6) Extraction has provided a Noise mitigation BMP that indicates "*Sound walls and/or hay bales will be installed on north and east edges of the pad to mitigate impacts to s recreational trail to the north and building unit to the east.*" The Town of Windsor has placed a Public Comment on this Form 2A that indicates, as part of the CUG, "*The temporary buffer/sound walls shall enclose the drilling operations to provide screening and noise mitigation barriers in the direction of nearby homes, as appropriate.*" Please revise your Noise mitigation BMP to conform to the requirements of the the Town Of Windsor's requirements to enclose the drilling operations.

Noise mitigation will be provided by sound walls on the northern and eastern sides of the pad. The western and southern sides of the pad will be enclosed by 25 to 30 foot high cut slopes that will assist in noise mitigation. Between the sound walls and cut slopes, the pad will be enclosed to prevent sound from impacting adjacent land uses.

Please provide Construction Layout Drawings of the proposed location that depict the 25 to 30 foot high cut slopes that will assist in noise mitigation.

8) Extraction has provided Planning BMP that indicates they will host a neighborhood meeting prior to public hearings. Has this neighborhood meeting been held? If yes, please provide the Rule 306.e. certification letter detailing the outcome of the neighborhood meeting. If this neighborhood meeting has not yet happened, please wait until it does before sending the Rule 306.e. certification letter.

This neighborhood meeting was held in order to meet local jurisdiction requirements (Windsor's CUG process). I will make a note in the 306.e Certification; however, please be advised that this meeting was not held because of building unit owners' requests per COGCC rules.

Your response contradicts itself. How could a neighborhood meeting both be held, as required by Windsor, and not held due to Building Unit owner's requests? What Building Unit owners? A Building Unit owner may not wish to meet with Extraction, but how do they have the authority to cancel a neighborhood meeting required by Windsor. Our Rules don't grant a Building Unit owner the authority to override a local jurisdiction's requirements. Please provide the date the neighborhood meeting was held in order to meet Windsor's requirements.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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Bonnie Lamond <blamond@extractionog.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Fri, May 25, 2018 at 3:26 PM

Hi Doug,

I have attached an updated engineered drawing that shows the earthen berms as well as the cut slopes and the 306.e Certification.

Please let me know if you need anything else.

Have a great Holiday weekend!

Best,

Bonnie Lamond

Extraction Oil & Gas

370 17th Street, Suite 5300

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From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, May 21, 2018 10:27 AM
To: Bonnie Lamond <blamond@extractionog.com>
Subject: Re: COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #401561765

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2 attachments

 **Merlin Layout.pdf**
4121K

 **306 e Certification Letter.pdf**
117K

Bonnie Lamond <blamond@extractionog.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Thu, May 31, 2018 at 2:01 PM

Hi Doug,

I never heard back. Did you receive everything you needed from my end?

Thank you,

Bonnie Lamond

Extraction Oil & Gas

370 17th Street, Suite 5300

Denver, CO 80202



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From: Bonnie Lamond
Sent: Friday, May 25, 2018 3:26 PM
To: 'Andrews - DNR, Doug' <doug.andrews@state.co.us>
Subject: RE: COGCC Form 2A review of Extraction's MERLIN PAD location - Doc #401561765

[Quoted text hidden]

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Bonnie Lamond <blamond@extractionog.com>

Thu, May 31, 2018 at 2:03 PM

Bonnie,

Sorry, I got busy with other stuff this week and haven't looked at it yet.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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