

STATE OF
COLORADO

Christopher - DNR, Brian <brian.christopher@state.co.us>

Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

19 messages

Christopher - DNR, Brian <brian.christopher@state.co.us>

Fri, Mar 6, 2020 at 9:56 AM

To: Regulatory <regulatory@ascentgeomatrics.com>, mbrown@bayswater.us

Cc: John Noto - DNR <john.noto@state.co.us>

Justin or Mark,

Please find COGCC's 1041 Response for the following 2A: West Eaton 2-A Pad, Form 2A Doc# 402179770.

ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant.

In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.

In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:

1. Please provide information about the buildings (shed, livestock pen) located approximately 230 ft. NE of where the tanks will be. If these are being removed as part of pad construction, please provide a comment I can include in the Form to note so that they do not need to be considered.
2. Please confirm that no MLVTs are planned for this location.
3. Please provide a description of the outreach and contact with residents within 1,500 feet of this location, as well as outreach and contact with other residents and landowners.
4. BMPs
 - a. BMP#1. The last sentence of the first paragraph can potentially conflict with the fencing BMP later and we will be needing sound walls on this location, so can this sentence be removed? Also, the second paragraph seems to fit better with the information in BMP#5.
 - b. 604.c.(2)E.ii. Multi-well Pads – Allowing construction and removal of noise mitigation without disturbing the site or landscaping. This is not covered under the current BMPs. Please provide language covering this, consolidating this in BMP#1 is likely.
 - c. BMP#4. Stormwater. With the presence of the ditches at the perimeter of the location, this will need to be strengthened to discuss how the ditches are protected. Is the pad being graded to flow away from the ditches, is there a perimeter BMP, etc.
 - d. BMP#5. As COGCC does not oversee SPCCP inspections, please provide concurrence to drop the last sentence of the first paragraph (Leak Detection Plan).
 - e. BMP#7. Please break the Berm Construction portion of this BMP into its own BMP. The Berm Construction does not address secondary containment around the separators, please provide. Please state whether the tertiary containment will required or not.
 - f. BMP#11. Noise mitigation. For "Sound walls will be installed minimally along...", please provide concurrence to remove or change 'minimally'. The compressor sound wall portion of this BMP is weak. With the proximity of nearby houses to the North, West, and South, please revise this.
 - g. BMP#13. Odor mitigation. The last paragraph of this BMP is referencing regulations that the COGCC is not responsible for enforcing. Please provide concurrence to remove the last paragraph.
 - h. BMP#13. Odor mitigation. The sentence beginning "An additive/odor neutralizer location" appears to be missing words. Please provide an updated sentence.
 - i. 604.c.(2)U. Identification of plugged and abandoned wells. As this is a Buffer Zone location, please provide a brief BMP to address this.

j. 604.c.(2)V. Development from existing well pads. Please provide a brief BMP or addition to BMP#1 to address this, addressing presence or lack thereof of nearby multi-well pads, locating the site next to existing facilities, etc. While much of this is covered in the siting rationale that is attached, as this is a Buffer Zone location, a 604.c.(2)V BMP must be included.

This request for additional information stops the statutory 1041 60-day clock for the COGCC's review. The COGCC will resume review of the Form(s) upon receipt of all required information and the COGCC review will be conducted within 60 days. Bayswater is under no obligation to respond to this email; the Form(s) will remain ON HOLD, with all data and attachments intact, until Bayswater provides COGCC with all necessary requested information. Bayswater may request the Form(s) be withdrawn if that is preferred.

Please direct all questions or responses to Brian Christopher.

Thank you.

Brian Christopher
Oil & Gas Location Assessment Specialist



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

P 303.894.2100 x5271
1120 Lincoln Street, Suite 801, Denver, CO 80203
Brian.Christopher@state.co.us | www.colorado.gov/cogcc

Justin Garrett <jgarrett@ascentgeomatics.com>

Mon, Mar 9, 2020 at 11:15 AM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, Regulatory <regulatory@ascentgeomatics.com>, "mbrown@bayswater.us" <mbrown@bayswater.us>

Cc: John Noto - DNR <john.noto@state.co.us>

Brian –

Please see the attached objective criteria summary and responses below in **Red**.

Also, please let us know if you have any other questions or need any additional information.

Thank you

Justin Garrett

Regulatory Analyst

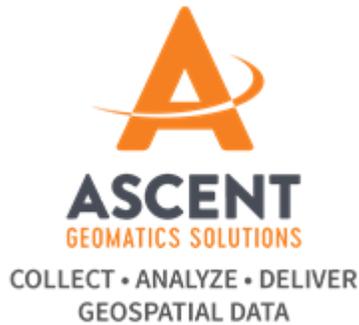
Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

[8620 Wolff Court](#)

[Westminster, CO 80031](#)

TBPLS Firm Registration No. 10194123



From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Friday, March 6, 2020 9:56 AM
To: Regulatory <regulatory@Ascentgeomatics.com>; mbrown@bayswater.us
Cc: John Noto - DNR <john.noto@state.co.us>
Subject: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:

1. Please provide information about the buildings (shed, livestock pen) located approximately 230 ft. NE of where the tanks will be. If these are being removed as part of pad construction, please provide a comment I can include in the Form to note so that they do not need to be considered.

The shed and livestock pens north of the location will be removed during/prior to pad construction to make room for the drainage pond.

2. Please confirm that no MLVTs are planned for this location.

Confirmed. No MLVT's are planned for this location.

3. Please provide a description of the outreach and contact with residents within 1,500 feet of this location, as well as outreach and contact with other residents and landowners.

A description of the outreach to residents in proximity to this location is included in the attached objective criteria summary.

4. BMPs

a. BMP#1. The last sentence of the first paragraph can potentially conflict with the fencing BMP later and we will be needing sound walls on this location, so can this sentence be removed? Also, the second paragraph seems to fit better with the information in BMP#5.

Yes, please remove "A meeting with the surface owner will determine the fencing and sound wall plan." From this BMP. A revised BMP #5 with the second paragraph from this BMP is below, as well as a revised BMP #1 with language for 604.c.(2)V for item 4.j and the removal of noise mitigation per item 4.b.

b. 604.c.(2)E.ii. Multi-well Pads – Allowing construction and removal of noise mitigation without disturbing the site or landscaping. This is not covered under the current BMPs. Please provide language covering this, consolidating this in BMP#1 is likely.

A revised BMP #1 with language for 604.c.(2)V for item 4.j and the removal of noise mitigation per item 4.b. is below.

c. BMP#4. Stormwater. With the presence of the ditches at the perimeter of the location, this will need to be strengthened to discuss how the ditches are protected. Is the pad being graded to flow away from the ditches, is there a perimeter BMP, etc.

A description of the site-specific measures to protect the concrete ditch is included in the attached Objective Criteria Summary item 5.c and is included in the request for the Berm Construction BMP to be separated as its own BMP in item 4.e of this response for BMP #7. The ditch is higher in elevation than our pad site so there will be no flow into that ditch from the site. The site will be graded such that it drains to our proposed drainage pond up in the NE corner of the DA.

d. BMP#5. As COGCC does not oversee SPCCP inspections, please provide concurrence to drop the last sentence of the first paragraph (Leak Detection Plan).

Yes, please drop that sentence and add the last paragraph from BMP #1. The revised BMP should read:

Leak Detention Plan: Pumper will visit the location daily and visually inspect all wellheads and fittings for leaks.

Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected by the lease operators and weekly AVO inspections are performed and documented.

Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25 feet from the wellhead. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code. 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. Electrical equipment shall comply with API RP 500 and will comply with the current

national electrical code.

Automation: The location will be completely automated to monitor all production operations remotely. In the event that the facility is not operating under normal conditions, the automation system will immediately notify the operator. The automation system also has the ability to remotely perform an emergency shut down if necessary.

Operator shall comply with state and federal laws, rules and regulations governing the presence of any petroleum products, toxic or hazardous chemicals or wastes on the Subject lands.

e. BMP#7. Please break the Berm Construction portion of this BMP into its own BMP. The Berm Construction does not address secondary containment around the separators, please provide. Please state whether the tertiary containment will required or not.

Yes, please remove the Berm Construction from this BMP. Tertiary containment will be required, as indicated in this berm Construction BMP to be added as a separate BMP:

Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition. Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed, as this location is sensitive due to the proximity to a concrete ditch and shallow depth to groundwater. Bayswater will also line the secondary containment areas for the tanks with an impervious material and implement site-specific best management practices sufficient to protect the concrete ditch located along the southern edge of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.

f. BMP#11. Noise mitigation. For "Sound walls will be installed minimally along...", please provide concurrence to remove or change 'minimally'. The compressor sound wall portion of this BMP is weak. With the proximity of nearby houses to the North, West, and South, please revise this.

Yes, please remove 'minimally'.

Please revise the last paragraph to:

Operator will utilize permanent engineered sound walls around production facility compressor units to mitigate the impact to the surrounding building unit owners by dampening the noise. The sound walls will be designed based on the site specific compressors when installed and their individual noise signatures which are dependent on the power source, the HP needed and the housing around such units.

g. BMP#13. Odor mitigation. The last paragraph of this BMP is referencing regulations that the COGCC is not responsible for enforcing. Please provide concurrence to remove the last paragraph.

Yes, please remove.

h. BMP#13. Odor mitigation. The sentence beginning "An additive/odor neutralizer location" appears to be missing words. Please provide an updated sentence.

Please revise the BMP to:

Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator utilizes a clear, colorless refined distillate derived from petro hydrocarbons that is specifically designed for down hole OBM drilling purposes. This product provides a higher aniline point and a lower BTEX than straight diesel which should reduce the odor associated with the OBM system. The refined distillate is a non-Group II or Group III fluid and is not an additive/odor neutralizer. An additive/odor neutralizer during drilling and completion and the utilization of closed flowback tanks with all water vapors being sent to a temporary ECD during the flowback period will also be used to help mitigate aromatics on location.

Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

i. 604.c.(2)U. Identification of plugged and abandoned wells. As this is a Buffer Zone location, please provide a brief BMP to address this.

Please add: 604.c.(2).U. The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.

j. 604.c.(2)V. Development from existing well pads. Please provide a brief BMP or addition to BMP#1 to address this, addressing presence or lack thereof of nearby multi-well pads, locating the site next to existing facilities, etc. While much of this is covered in the siting rationale that is attached, as this is a Buffer Zone location, a 604.c.(2)V BMP must be included.

An inclusion of this rule has been added to BMP #1. Please change BMP #1 to:

Multi-well Pads are selected in a manner that allows for resource extraction while maintaining the greatest measurement from offsetting residential areas, while also honoring the wishes of the surface owner. Bayswater utilizes flood plain information, COGCC setbacks, development strategies, economics, mechanical and well bore integrity, safety, traffic, geology and operations life cycles among other items when planning horizontal sites. Bayswater plans extended reach laterals to minimize the number of disturbance areas and the number of multi-well sites. The use of existing pad sites in accordance with 604.c.(2)V, access roads and the proximity to pipelines all play important roles in site selection. Additionally, Bayswater looks at the torque and drag on drilling operations to see what the limitations are on site selection compared to landing points of the laterals. Bayswater will continue to be in close communication with Surface Owner(s) with respect to land use consideration, construction and drilling rig move-in date. Bayswater will construct the pad in a manner that allows for the construction and removal of noise mitigation without disturbance to the site or landscaping.

This request for additional information stops the statutory 1041 60-day clock for the COGCC's review. The COGCC will resume review of the Form(s) upon receipt of all required information and the COGCC review will be conducted within 60 days. Bayswater is under no obligation to respond to this email; the Form(s) will remain ON HOLD, with all data and attachments intact, until Bayswater provides COGCC with all necessary requested information. Bayswater may request the Form(s) be withdrawn if that is preferred.

Please direct all questions or responses to Brian Christopher.

Thank you.

**Brian Christopher
Oil & Gas Location Assessment Specialist**

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 **WestEaton2-APad_ObjCriteriaSummary.pdf**
167K

Justin Garrett <jgarrett@ascentgeomatics.com> Mon, Mar 9, 2020 at 2:06 PM
To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, Regulatory <regulatory@ascentgeomatics.com>, "mbrown@bayswater.us" <mbrown@bayswater.us>
Cc: John Noto - DNR <john.noto@state.co.us>

Brian –

I have confirmed the liner and berm information per your phone request.

Here is a revised BMP:

Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. The separator area will utilize a steel containment only with no liner. All berms will be visually checked periodically to ensure proper working condition. Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed, as this location is sensitive due to the proximity to a concrete ditch and shallow depth to groundwater. Bayswater will also line the secondary containment areas for the tanks with an impervious material and implement site-specific best management practices sufficient to protect the concrete ditch located along the southern edge of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

8620 Wolff Court

Westminster, CO 80031

TBPLS Firm Registration No. 10194123



[Quoted text hidden]

Christopher - DNR, Brian <brian.christopher@state.co.us>

Mon, Mar 9, 2020 at 3:14 PM

To: Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>, "mbrown@bayswater.us" <mbrown@bayswater.us>, John Noto - DNR <john.noto@state.co.us>

Thanks Justin. I will get this back into process.

Brian Christopher
Oil & Gas Location Assessment Specialist



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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Christopher - DNR, Brian <brian.christopher@state.co.us>

Mon, Mar 9, 2020 at 5:33 PM

To: Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>, "mbrown@bayswater.us" <mbrown@bayswater.us>

Justin,

Please confirm the revisions on two of the BMPs as there is some uncertainty above:

BMP#13, odor. Strikeout is mine to confirm removal of the second paragraph. ***Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator utilizes a clear, colorless refined distillate derived from petro hydrocarbons that is specifically designed for down hole OBM drilling purposes. This product provides a higher aniline point and a lower BTEX than straight diesel which should reduce the odor associated with the OBM system. The refined distillate is a non-Group II or Group III fluid and is not an additive/odor neutralizer. An additive/odor neutralizer during drilling and completion and the utilization of closed flowback tanks with all water vapors being sent to a temporary ECD during the flowback period will also be used to help mitigate aromatics on location.***

~~Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.~~

BMP#4. Stormwater. The blue text is what I brought across from the email to add to the BMP, slightly rephrased to be a BMP. Please let me know if this is accurate and if there is concurrence for me to put this as the BMP.

Operator shall install stormwater controls, constructed in a manner that is consistent with good engineering practices, that will prevent offsite migration of sediment/contaminant, into the nearby sensitive areas. Stormwater controls shall be installed prior to construction activities. Gas, oil, and water gathering lines will be co-located to minimize potential of erosion associated with construction of any pipeline(s). ***The ditch adjacent to the location is higher in elevation than the pad site so there will be no flow into that ditch from the site. The site will be graded such that it drains to the proposed drainage pond in the NE corner of the location.***

Please let me know if there are questions or issues with this.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



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P 303.894.2100 x5271
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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Mark E. Brown <mbrown@bayswater.us>

Mon, Mar 9, 2020 at 5:44 PM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, Justin Garrett <jgarrett@ascentgeomatrics.com>

Cc: Regulatory <regulatory@ascentgeomatrics.com>

Brian,

See my edits below that may help remove some confusion.

Thanks

Mark

From: Christopher - DNR, Brian <brian.christopher@state.co.us>

Sent: Monday, March 9, 2020 5:33 PM

To: Justin Garrett <jgarrett@ascentgeomatrics.com>

Cc: Regulatory <regulatory@ascentgeomatrics.com>; Mark E. Brown <mbrown@bayswater.us>

Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

Please confirm the revisions on two of the BMPs as there is some uncertainty above:

BMP#13, odor. Strikeout is mine to confirm removal of the second paragraph. ***Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator utilizes a clear, colorless refined distillate derived from petro hydrocarbons that is specifically designed for down hole OBM drilling purposes. This product provides a higher aniline point and a lower BTEX than straight diesel which should reduce the odor associated with the OBM system. The refined distillate is a not a Group II or Group III fluid. and is not an additive/odor neutralizer. An additive/odor neutralizer during drilling and completion and the utilization of closed flowback tanks with all water vapors being sent to a temporary EGD during the flowback period will also be used to help mitigate aromatics on location. An additive/odor neutralizer will be used during drilling operations to mitigate the odor associated with OBM on location. During completion operations, closed flowback tanks will be used with any gas vapors from the tanks being captured and sent to a temporary EDC to help mitigate aromatics on location.***

[Quoted text hidden]

[Quoted text hidden]

Christopher - DNR, Brian <brian.christopher@state.co.us>

Tue, Mar 10, 2020 at 2:12 PM

To: "Mark E. Brown" <mbrown@bayswater.us>

Cc: Justin Garrett <jgarrett@ascentgeomatrics.com>, Regulatory <regulatory@ascentgeomatrics.com>

Justin or Mark,

While writing the Objective Criteria Review Memo I had several additional questions:

Is there concurrence on the above stormwater BMP?

Please provide distances to the nearest building unit and the building unit to the south, measured from the edge of the location.

Please confirm what I concluded from my discussion with Justin about the concerns of the landowner to the south

- Bayswater met with the nearest non-surface owner resident to discuss the location. The landowner had questions about location and timing of the location and expressed concerns about traffic, lights, noise, and expressed a desire for sound walls. Bayswater agreed to route the majority of its traffic to the north, away from the house, to install a sound wall on the south side of the location, and had BMPs to further control light and noise. The landowner was reportedly satisfied.

Does the surface owner own any of the minerals being produced to this location?

Will there be a fluids pipeline to this location?

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Justin Garrett <jgarrett@ascentgeomatics.com>

Wed, Mar 11, 2020 at 8:21 AM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, "Mark E. Brown" <mbrown@bayswater.us>

Cc: Regulatory <regulatory@ascentgeomatics.com>

Brian –

Responses are below in **Red**.

Please let me know if you need any additional information.

Thank you

Justin Garrett

Regulatory Analyst

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Office: 303.928.7128

[8620 Wolff Court](#)

[Westminster, CO 80031](#)

TBPLS Firm Registration No. 10194123



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Sent: Tuesday, March 10, 2020 2:12 PM
To: Mark E. Brown <mbrown@bayswater.us>
Cc: Justin Garrett <jgarrett@Ascentgeomatics.com>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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Yes, we concur.

Please provide distances to the nearest building unit and the building unit to the south, measured from the edge of the location.

Todd & Stacy Smith are 1152' S of the proposed edge of disturbance.

Please confirm what I concluded from my discussion with Justin about the concerns of the landowner to the south

- Bayswater met with the nearest non-surface owner resident to discuss the location. The landowner had questions about location and timing of the *operations* and expressed concerns about traffic, lights, noise, and expressed a desire for sound walls. Bayswater agreed to route the majority of its traffic to the north, away from the house, to install a sound wall on the south side of the location, and had BMPs to further control light and noise. The landowner was reportedly satisfied.

Yes, confirmed with revision.

Does the surface owner own any of the minerals being produced to this location?

Yes.

Will there be a fluids pipeline to this location?

Yes on oil, maybe on water.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist

P 303.894.2100 x5271

1120 Lincoln Street, Suite 801, Denver, CO 80203

Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Mon, Mar 9, 2020 at 5:44 PM Mark E. Brown <mbrown@bayswater.us> wrote:

Brian,

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Thanks

Mark

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Sent: Monday, March 9, 2020 5:33 PM

To: Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>; Mark E. Brown <mbrown@bayswater.us>

Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

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with OBM on location. During completion operations, closed flowback tanks will be used with any gas vapors from the tanks being captured and sent to a temporary EDC to help mitigate aromatics on location.

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Please let me know if there are questions or issues with this.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist

[Redacted signature]

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Brian Christopher
Oil & Gas Location Assessment Specialist

[Redacted signature]

[Quoted text hidden]

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To: Justin Garrett <jgarrett@ascentgeomatrics.com>
Cc: "Mark E. Brown" <mbrown@bayswater.us>, Regulatory <regulatory@ascentgeomatrics.com>

Wed, Mar 11, 2020 at 10:05 AM

Justin,

I was also looking for the distance to the nearest building unit from the edge of the location (landowner's building, to the north).

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

P 303.894.2100 x5271
1120 Lincoln Street, Suite 801, Denver, CO 80203
Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Justin Garrett <jgarrett@ascentgeomatics.com> Wed, Mar 11, 2020 at 10:11 AM
To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>
Cc: "Mark E. Brown" <mbrown@bayswater.us>, Regulatory <regulatory@ascentgeomatics.com>

Brian –

The two building units north of the pad on the same parcel are 749' and 770' from the edge of disturbance.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

[8620 Wolff Court](#)

[Westminster, CO 80031](#)

TBPLS Firm Registration No. 10194123



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From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Wednesday, March 11, 2020 10:06 AM
To: Justin Garrett <jgarrett@Ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

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Brian Christopher
Oil & Gas Location Assessment Specialist



[Quoted text hidden]

[Quoted text hidden]

Christopher - DNR, Brian <brian.christopher@state.co.us>
To: Justin Garrett <jgarrett@ascentgeomatics.com>
Cc: "Mark E. Brown" <mbrown@bayswater.us>, Regulatory <regulatory@ascentgeomatics.com>

Wed, Mar 11, 2020 at 10:43 AM

Justin,

Can you send me the 306.e. Certification Letter. Though we have discussed landowner contacts, please make sure the Certification Letter indicates any meetings/consultations requested and the outcomes.

Brian Christopher
Oil & Gas Location Assessment Specialist



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Justin Garrett <jgarrett@ascentgeomatics.com>
To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>
Cc: "Mark E. Brown" <mbrown@bayswater.us>, Regulatory <regulatory@ascentgeomatics.com>

Wed, Mar 11, 2020 at 12:18 PM

Brian –

The Op Cert Letter is attached.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

8620 Wolff Court

Westminster, CO 80031

TBPLS Firm Registration No. 10194123



From: Christopher - DNR, Brian <brian.christopher@state.co.us>

Sent: Wednesday, March 11, 2020 10:44 AM

To: Justin Garrett <jgarrett@Ascentgeomatics.com>

Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@Ascentgeomatics.com>

Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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Brian Christopher
Oil & Gas Location Assessment Specialist

[Redacted signature]

[Quoted text hidden]

[Quoted text hidden]

 **WestEaton2-APad_306e(5)OpCert_LTD.pdf**
138K

Christopher - DNR, Brian <brian.christopher@state.co.us>

Tue, Mar 17, 2020 at 3:59 PM

To: Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: "Mark E. Brown" <mbrown@bayswater.us>, Regulatory <regulatory@ascentgeomatics.com>

Update. This location passed Objective Criteria Review today and is heading on to Final Review, with Final Approval the step beyond that.

Brian Christopher
Oil & Gas Location Assessment Specialist



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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Mark E. Brown <mbrown@bayswater.us>

Tue, Mar 17, 2020 at 4:01 PM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>

Thanks for the update!

[Quoted text hidden]

Christopher - DNR, Brian <brian.christopher@state.co.us>

Fri, Mar 20, 2020 at 2:55 PM

To: "Mark E. Brown" <mbrown@bayswater.us>

Cc: Justin Garrett <jgarrett@ascentgeomatics.com>, Regulatory <regulatory@ascentgeomatics.com>

Three questions came up during Final Review.

1. Local Government Information. The disposition of the local government permit is selected as other. It seems that this should now be submitted, unless Weld County has acted on this. If so, please let us know.
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Please let me know.

Thanks,

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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Ann Feldman <afeldman@ascentgeomatics.com> Fri, Mar 20, 2020 at 3:25 PM
To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, "Mark E. Brown" <mbrown@bayswater.us>
Cc: Justin Garrett <jgarrett@ascentgeomatics.com>

Hi, Brian,

We will work with Mark Brown/Bayswater to get you responses to your questions as soon as possible.

Many thanks in advance for your assistance.

Best regards,

Ann L. Feldman

Regulatory Manager

Ascent Geomatics Solutions (Formerly PFS)

8620 Wolff Court

Westminster, Colorado 80031

Office: 303-928-7128

Fax: 303-218-5678

TBPLS Firm Registration No. 10194123



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From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Friday, March 20, 2020 2:55 PM
To: Mark E. Brown <mbrown@bayswater.us>
Cc: Justin Garrett <jgarrett@Ascentgeomatics.com>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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Please let me know.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist

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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Tue, Mar 17, 2020 at 4:01 PM Mark E. Brown <mbrown@bayswater.us> wrote:

Thanks for the update!

Mark

From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Tuesday, March 17, 2020 4:00 PM
To: Justin Garrett <jgarrett@ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Update. This location passed Objective Criteria Review today and is heading on to Final Review, with Final Approval the step beyond that.

Brian Christopher
Oil & Gas Location Assessment Specialist

[Quoted text hidden]

[Quoted text hidden]

Ann Feldman <afeldman@ascentgeomatics.com>

Tue, Mar 24, 2020 at 3:37 PM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>, "Mark E. Brown" <mbrown@bayswater.us>

Cc: Justin Garrett <jgarrett@ascentgeomatics.com>, Kristi McRedmond <kmcredmond@ascentgeomatics.com>

Good afternoon, Brian,

We have responses to your questions attached and below.

Attached:

 West Eaton 2-A Pad 6N66W2 Location Drawing

 West Eaton 2-A Pad 6N66W2 Facility Layout Drawing

Should you have any additional requests, please let us know at your earliest convenience.

Many thanks for your patience and guidance.

Be safe, stay healthy!

Best regards,

Ann L. Feldman

Regulatory Manager

Ascent Geomatics Solutions (Formerly PFS)

8620 Wolff Court

Westminster, Colorado 80031

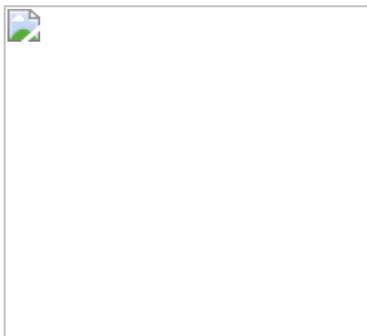
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Sent: Friday, March 20, 2020 2:55 PM
To: Mark E. Brown <mbrown@bayswater.us>
Cc: Justin Garrett <jgarrett@Ascentgeomatics.com>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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3. BMP#5. Stormwater BMP. A stormwater drainage pond is on the BMP but is not on either the Location Drawing or the Facility Drawing. **Please find attached a revised Location Drawing and Facility Layout Drawing, which depict the detention pond.** Please let me know if this stormwater drainage pond will be there long-term or not. This question is likely worth discussing with me. **The detention pond will be onsite through production.**

Please let me know.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist

[Redacted]
P 303.894.2100 x5271
1120 Lincoln Street, Suite 801, Denver, CO 80203
Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Tue, Mar 17, 2020 at 4:01 PM Mark E. Brown <mbrown@bayswater.us> wrote:

Thanks for the update!

Mark

From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Tuesday, March 17, 2020 4:00 PM
To: Justin Garrett <jgarrett@ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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Brian Christopher
Oil & Gas Location Assessment Specialist

[Redacted]
[Quoted text hidden]

[Quoted text hidden]

2 attachments

 **West Eaton 2-A Pad 6N66W2 Location Drawing.pdf**
807K

 **West Eaton 2-A Pad 6N66W2 Facility Layout Drawing.pdf**
614K

Christopher - DNR, Brian <brian.christopher@state.co.us>
To: Ann Feldman <afeldman@ascentgeomatics.com>

Wed, Mar 25, 2020 at 9:42 AM

3/25/2020

State.co.us Executive Branch Mail - Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Cc: "Mark E. Brown" <mbrown@bayswater.us>, Justin Garrett <jgarrett@ascentgeomatics.com>, Kristi McRedmond <kmcredmond@ascentgeomatics.com>

Looks good. For the paper trail, just wanted confirmation of concurrence to change the Local Government Information to include: The local government siting permit was filed on 2/7/20. That it is in process and the dropdown box can be changed to that. That the box certifying that the application was filed can be checked.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



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Department of Natural Resources

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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

[Quoted text hidden]

Ann Feldman <afeldman@ascentgeomatics.com>

Wed, Mar 25, 2020 at 9:49 AM

To: "Christopher - DNR, Brian" <brian.christopher@state.co.us>

Cc: "Mark E. Brown" <mbrown@bayswater.us>, Justin Garrett <jgarrett@ascentgeomatics.com>, Kristi McRedmond <kmcredmond@ascentgeomatics.com>

Good morning, Brian,

Yes, you have confirmation of our concurrence to change the Local Government Information to: 1) WOGLA permit was filed on 2/7/20, 2) it is in process, and 3) the dropdown box can be changed to reflect this information.

Please check the box that certifies that the application was filed.

Thank you very much for following up.

Best regards,

Ann L. Feldman

Regulatory Manager

Ascent Geomatics Solutions (Formerly PFS)

8620 Wolff Court

Westminster, Colorado 80031

Office: 303-928-7128

Fax: 303-218-5678

TBPLS Firm Registration No. 10194123



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Sent: Wednesday, March 25, 2020 9:42 AM
To: Ann Feldman <afeldman@Ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Justin Garrett <jgarrett@Ascentgeomatics.com>; Kristi McRedmond <kmcredmond@Ascentgeomatics.com>
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[1120 Lincoln Street, Suite 801, Denver, CO 80203](https://www.ascentgeomatics.com)

Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Tue, Mar 24, 2020 at 3:37 PM Ann Feldman <afeldman@ascentgeomatics.com> wrote:

Good afternoon, Brian,

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Attached:

 West Eaton 2-A Pad 6N66W2 Location Drawing

 West Eaton 2-A Pad 6N66W2 Facility Layout Drawing

Should you have any additional requests, please let us know at your earliest convenience.

Many thanks for your patience and guidance.

Be safe, stay healthy!

Best regards,

Ann L. Feldman

Regulatory Manager

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From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Friday, March 20, 2020 2:55 PM
To: Mark E. Brown <mbrown@bayswater.us>
Cc: Justin Garrett <jgarrett@Ascentgeomatics.com>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Tue, Mar 17, 2020 at 4:01 PM Mark E. Brown <mbrown@bayswater.us> wrote:

Thanks for the update!

Mark

From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Tuesday, March 17, 2020 4:00 PM
To: Justin Garrett <jgarrett@ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Update. This location passed Objective Criteria Review today and is heading on to Final Review, with Final Approval the step beyond that.

Brian Christopher
Oil & Gas Location Assessment Specialist

[REDACTED]

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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Wed, Mar 11, 2020 at 12:19 PM Justin Garrett <jgarrett@ascentgeomatics.com> wrote:

Brian –

The Op Cert Letter is attached.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

[8620 Wolff Court](#)

Westminster, CO 80031

TBPLS Firm Registration No. 10194123



From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Wednesday, March 11, 2020 10:44 AM
To: Justin Garrett <jgarrett@Ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

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Brian Christopher
Oil & Gas Location Assessment Specialist



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Brian.Christopher@state.co.us | www.colorado.gov/cogcc

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Brian –

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Thank you

Justin Garrett

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Sent: Wednesday, March 11, 2020 10:06 AM
To: Justin Garrett <jgarrett@Ascentgeomatics.com>
Cc: Mark E. Brown <mbrown@bayswater.us>; Regulatory <regulatory@Ascentgeomatics.com>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

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Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



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 1120 Lincoln Street, Suite 801, Denver, CO 80203
Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Wed, Mar 11, 2020 at 8:21 AM Justin Garrett <jgarrett@ascentgeomatics.com> wrote:

Brian –

Responses are below in **Red**.

Please let me know if you need any additional information.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

[8620 Wolff Court](#)

[Westminster, CO 80031](#)

TBPLS Firm Registration No. 10194123



From: Christopher - DNR, Brian <brian.christopher@state.co.us>

Sent: Tuesday, March 10, 2020 2:12 PM

To: Mark E. Brown <mbrown@bayswater.us>

Cc: Justin Garrett <jgarrett@Ascentgeomatics.com>; Regulatory <regulatory@Ascentgeomatics.com>

Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin or Mark,

While writing the Objective Criteria Review Memo I had several additional questions:

Is there concurrence on the above stormwater BMP?

Operator shall install stormwater controls, constructed in a manner that is consistent with good engineering practices, that will prevent offsite migration of sediment/contaminant, into the nearby sensitive areas. Stormwater controls shall be installed prior to construction activities. Gas, oil, and water gathering lines will be co-located to minimize potential of erosion associated with construction of any pipeline(s). The ditch adjacent to the location is higher in elevation than the pad site so there will be no flow into that ditch from the site. The site will be graded such that it drains to the proposed drainage pond in the NE corner of the location.

Yes, we concur.

Please provide distances to the nearest building unit and the building unit to the south, measured from the edge of the location.

Todd & Stacy Smith are 1152' S of the proposed edge of disturbance.

Please confirm what I concluded from my discussion with Justin about the concerns of the landowner to the south

- Bayswater met with the nearest non-surface owner resident to discuss the location. The landowner had questions about location and timing of the *operations* and expressed concerns about traffic, lights, noise, and expressed a desire for sound walls. Bayswater agreed to route the majority of its traffic to the north, away from the house, to install a sound wall on the south side of the location, and had BMPs to further control light and noise. The landowner was reportedly satisfied.

Yes, confirmed with revision.

Does the surface owner own any of the minerals being produced to this location?

Yes.

Will there be a fluids pipeline to this location?

Yes on oil, maybe on water.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist



P 303.894.2100 x5271
1120 Lincoln Street, Suite 801, Denver, CO 80203
Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Mon, Mar 9, 2020 at 5:44 PM Mark E. Brown <mbrown@bayswater.us> wrote:

Brian,

See my edits below that may help remove some confusion.

Thanks

Mark

From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Monday, March 9, 2020 5:33 PM
To: Justin Garrett <jgarrett@ascentgeomatics.com>
Cc: Regulatory <regulatory@ascentgeomatics.com>; Mark E. Brown <mbrown@bayswater.us>
Subject: Re: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin,

Please confirm the revisions on two of the BMPs as there is some uncertainty above:

BMP#13, odor. Strikeout is mine to confirm removal of the second paragraph. ***Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator utilizes a clear, colorless refined distillate derived from petro hydrocarbons that is specifically designed for down hole OBM drilling purposes. This product provides a higher aniline point and a lower BTEX than straight diesel which should reduce the odor associated with the OBM system. The refined distillate is a not a Group II or Group III fluid. and is not an additive/odor neutralizer. An additive/odor neutralizer during drilling and completion and the utilization of closed flowback tanks with all water vapors being sent to a temporary ECD during the flowback period will also be used to help mitigate aromatics on location.*** An additive/odor neutralizer will be used during drilling operations to mitigate the odor associated with OBM on location. During completion operations, closed flowback tanks will be used with any gas vapors from the tanks being captured and sent to a temporary EDC to help mitigate aromatics on location.

~~***Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.***~~

BMP#4. Stormwater. The blue text is what I brought across from the email to add to the BMP, slightly rephrased to be a BMP. Please let me know if this is accurate and if there is concurrence for me to put this as the BMP.

Operator shall install stormwater controls, constructed in a manner that is consistent with good engineering practices, that will prevent offsite migration of sediment/contaminant, into the nearby sensitive areas. Stormwater controls shall be installed prior to construction activities. Gas, oil, and water gathering lines will be co-located to minimize potential of erosion associated with construction of any pipeline(s). *The ditch adjacent to the location is higher in elevation than the pad site so there will be no flow into that ditch from the site. The site will be graded such that it drains to the proposed drainage pond in the NE corner of the location.*

Please let me know if there are questions or issues with this.

Thanks,

Brian Christopher
Oil & Gas Location Assessment Specialist

P 303.894.2100 x5271

1120 Lincoln Street, Suite 801, Denver, CO 80203

Brian.Christopher@state.co.us | www.colorado.gov/cogcc

On Mon, Mar 9, 2020 at 3:14 PM Christopher - DNR, Brian <brian.christopher@state.co.us> wrote:

Thanks Justin. I will get this back into process.

Brian Christopher
Oil & Gas Location Assessment Specialist


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On Mon, Mar 9, 2020 at 2:07 PM Justin Garrett <jgarrett@ascentgeomatics.com> wrote:

Brian –

I have confirmed the liner and berm information per your phone request.

Here is a revised BMP:

Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. The separator area will utilize a steel containment only with no liner. All berms will be visually checked periodically to ensure proper working condition. Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed, as this location is sensitive due to the proximity to a concrete ditch and shallow depth to groundwater. Bayswater will also line the secondary containment areas for the tanks with an impervious material and implement site-specific best management practices sufficient to protect the concrete ditch located along the southern edge of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

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[Westminster, CO 80031](http://Westminster.com)

TBPLS Firm Registration No. 10194123



From: Justin Garrett
Sent: Monday, March 9, 2020 11:16 AM
To: Christopher - DNR, Brian <brian.christopher@state.co.us>; Regulatory <regulatory@Ascentgeomatics.com>; mbrown@bayswater.us
Cc: John Noto - DNR <john.noto@state.co.us>
Subject: RE: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Brian –

Please see the attached objective criteria summary and responses below in *Red*.

Also, please let us know if you have any other questions or need any additional information.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

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TBPLS Firm Registration No. 10194123



From: Christopher - DNR, Brian <brian.christopher@state.co.us>
Sent: Friday, March 6, 2020 9:56 AM
To: Regulatory <regulatory@Ascentgeomatics.com>; mbrown@bayswater.us
Cc: John Noto - DNR <john.noto@state.co.us>
Subject: Requesting Additional Information, Bayswater, West Eaton 2-A Pad Form 2A# 402179770

Justin or Mark,

Please find COGCC's 1041 Response for the following 2A: West Eaton 2-A Pad, Form 2A Doc# 402179770.

ON HOLD: This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form ON HOLD until additional information is received from the applicant.

In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.

In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review:

1. Please provide information about the buildings (shed, livestock pen) located approximately 230 ft. NE of where the tanks will be. If these are being removed as part of pad construction, please provide a comment I can include in the Form to note so that they do not need to be considered.

The shed and livestock pens north of the location will be removed during/prior to pad construction to make room for the drainage pond.

2. Please confirm that no MLVTs are planned for this location.

Confirmed. No MLVT's are planned for this location.

3. Please provide a description of the outreach and contact with residents within 1,500 feet of this location, as well as outreach and contact with other residents and landowners.

A description of the outreach to residents in proximity to this location is included in the attached objective criteria summary.

4. BMPs

- a. BMP#1. The last sentence of the first paragraph can potentially conflict with the fencing BMP later and we will be needing sound walls on this location, so can this sentence be removed? Also, the second paragraph seems to fit better with the information in BMP#5.

Yes, please remove "A meeting with the surface owner will determine the fencing and sound wall plan." From this BMP. A revised BMP #5 with the second paragraph from this BMP is below,

as well as a revised BMP #1 with language for 604.c.(2)V for item 4.j and the removal of noise mitigation per item 4.b.

- b. 604.c.(2)E.ii. Multi-well Pads – Allowing construction and removal of noise mitigation without disturbing the site or landscaping. This is not covered under the current BMPs. Please provide language covering this, consolidating this in BMP#1 is likely.

A revised BMP #1 with language for 604.c.(2)V for item 4.j and the removal of noise mitigation per item 4.b. is below.

- c. BMP#4. Stormwater. With the presence of the ditches at the perimeter of the location, this will need to be strengthened to discuss how the ditches are protected. Is the pad being graded to flow away from the ditches, is there a perimeter BMP, etc.

A description of the site-specific measures to protect the concrete ditch is included in the attached Objective Criteria Summary item 5.c and is included in the request for the Berm Construction BMP to be separated as its own BMP in item 4.e of this response for BMP #7. The ditch is higher in elevation than our pad site so there will be no flow into that ditch from the site. The site will be graded such that it drains to our proposed drainage pond up in the NE corner of the DA.

- d. BMP#5. As COGCC does not oversee SPCCP inspections, please provide concurrence to drop the last sentence of the first paragraph (Leak Detection Plan).

Yes, please drop that sentence and add the last paragraph from BMP #1. The revised BMP should read:

Leak Detention Plan: Pumper will visit the location daily and visually inspect all wellheads and fittings for leaks.

Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected by the lease operators and weekly AVO inspections are performed and documented.

Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25 feet from the wellhead. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code. 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. Electrical equipment shall comply with API RP 500 and will comply with the current

national electrical code.

Automation: The location will be completely automated to monitor all production operations remotely. In the event that the facility is not operating under normal conditions, the automation system will immediately notify the operator. The automation system also has the ability to remotely perform an emergency shut down if necessary.

Operator shall comply with state and federal laws, rules and regulations governing the presence of any petroleum products, toxic or hazardous chemicals or wastes on the Subject lands.

e. BMP#7. Please break the Berm Construction portion of this BMP into its own BMP. The Berm Construction does not address secondary containment around the separators, please provide. Please state whether the tertiary containment will be required or not.

Yes, please remove the Berm Construction from this BMP. Tertiary containment will be required, as indicated in this berm Construction BMP to be added as a separate BMP:

Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition. Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed, as this location is sensitive due to the proximity to a concrete ditch and shallow depth to groundwater. Bayswater will also line the secondary containment areas for the tanks with an impervious material and implement site-specific best management practices sufficient to protect the concrete ditch located along the southern edge of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.

f. BMP#11. Noise mitigation. For "Sound walls will be installed minimally along...", please provide concurrence to remove or change 'minimally'. The compressor sound wall portion of this BMP is weak. With the proximity of nearby houses to the North, West, and South, please revise this.

Yes, please remove 'minimally'.

Please revise the last paragraph to:

Operator will utilize permanent engineered sound walls around production facility compressor units to mitigate the impact to the surrounding building unit owners by dampening the noise. The sound walls will be designed based on the site specific compressors when installed and their individual noise signatures which are dependent on the power source, the HP needed and the housing around such units.

g. BMP#13. Odor mitigation. The last paragraph of this BMP is referencing regulations that the COGCC is not responsible for enforcing. Please provide concurrence to remove the last paragraph.

Yes, please remove.

h. BMP#13. Odor mitigation. The sentence beginning "An additive/odor neutralizer location" appears to be missing words. Please provide an updated sentence.

Please revise the BMP to:

Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Operator utilizes a clear, colorless refined distillate derived from petro hydrocarbons that is specifically designed for down hole OBM drilling purposes. This product provides a higher aniline point and a lower BTEX than straight diesel which should reduce the odor associated with the OBM system. The refined distillate is a non-Group II or Group III fluid and is not an additive/odor neutralizer. An additive/odor neutralizer during drilling and completion and the utilization of closed flowback tanks with all water vapors being sent to a temporary ECD during the flowback period will also be used to help mitigate aromatics on location.

Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

- i. 604.c.(2)U. Identification of plugged and abandoned wells. As this is a Buffer Zone location, please provide a brief BMP to address this.

Please add: 604.c.(2).U. The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.

- j. 604.c.(2)V. Development from existing well pads. Please provide a brief BMP or addition to BMP#1 to address this, addressing presence or lack thereof of nearby multi-well pads, locating the site next to existing facilities, etc. While much of this is covered in the siting rationale that is attached, as this is a Buffer Zone location, a 604.c.(2)V BMP must be included.

An inclusion of this rule has been added to BMP #1. Please change BMP #1 to:

Multi-well Pads are selected in a manner that allows for resource extraction while maintaining the greatest measurement from offsetting residential areas, while also honoring the wishes of the surface owner. Bayswater utilizes flood plain information, COGCC setbacks, development strategies, economics, mechanical and well bore integrity, safety, traffic, geology and operations life cycles among other items when planning horizontal sites. Bayswater plans extended reach laterals to minimize the number of disturbance areas and the number of multi-well sites. The use of existing pad sites in accordance with 604.c.(2)V, access roads and the proximity to pipelines all play important roles in site selection. Additionally, Bayswater looks at the torque and drag on drilling operations to see what the limitations are on site selection compared to landing points of the laterals. Bayswater will continue to be in close communication with Surface Owner(s) with respect to land use consideration, construction and drilling rig move-in date. Bayswater will construct the pad in a manner that allows for the construction and removal of noise mitigation without disturbance to the site or landscaping.

This request for additional information stops the statutory 1041 60-day clock for the COGCC's review. The COGCC will resume review of the Form(s) upon receipt of all required information and the COGCC review will be conducted within 60 days. Bayswater is under no obligation to respond to this email; the Form(s) will remain ON HOLD, with all data and attachments intact, until Bayswater provides COGCC with all necessary requested information. Bayswater may request the Form(s) be withdrawn if that is preferred.

Please direct all questions or responses to Brian Christopher.

Thank you.

**Brian Christopher
Oil & Gas Location Assessment Specialist**

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