

STATE OF
COLORADO

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

COGCC Form 2A & 2B review - Crestone Peak Resources Operating's Blue 3-65 33-32-31

11 messages

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

Fri, Jan 7, 2022 at 2:32 PM

To: regulatorystate@crestonepr.com, "Agross@upstreampm.com" <agross@upstreampm.com>

Kathy & Andrea,

OGLA staff have reviewed the Blue 3-65 33-32-31 Form 2A (Doc #402779501) and Form 2B (Doc #402779821) and have the following comments.

Form 2A

- 1) Provide an update on the status of the siting permit application with the Relevant Local Government (City of Aurora). If Aurora has made a decision concerning the siting of the proposed Oil and Gas Location, provide a copy of their final decision documents.
- 2) Provide an update on whether any consultations have been held with the Proximate Local Governments (Adams and Arapahoe County). If consultations have occurred, provide the Proximate Local Government Consultation Summary.
- 3) On the Cultural & Safety Setbacks tab, the distance to the nearest Disproportionately Impacted (DI) Community is listed as 2,067 feet. However, on the Cultural Features Map and the DI Community Map the distance to the nearest DI Community is listed as 1,896 feet. Confirm the distance to the nearest DI Community, and if necessary, update the Cultural Features Map and the DI Community Map.
- 4) During my review it appears the Sediment Basin immediately to the east of the well pad will overlay the Adena-Colby association NRCS Soil Map Unit. Provide me with this NRCS Soil Map Unit Description and I will add it to the Form 2A.
- 5) In the Water Resources tab Crestone Peak Resources has indicated the estimated depth to groundwater is 18 feet below ground surface. This is considered a shallow groundwater depth and the Oil and Gas Location would then be considered to lie within a Sensitive Area for water resources. Therefore, I would like to change the answer to that question on the Water Resources tab to YES.
- 6) Light Mitigation Plan - The Introduction paragraph of the Plan found on page 2 contains factual mistakes about the location of the proposed Oil and Gas Location (east 1/2 of Section 34) and the number of proposed wells (12). The proposed Oil and Gas Location is in the west 1/2 of Section 34 and is proposing only 7 wells. Provide a revised Light Mitigation Plan that corrects these errors.
- 7) Cumulative Impact Plan - In Section 2.2 Public Health there is the following statement: "*These data, combined with corresponding documented wind directions, suggest that oil and gas-related analytes that may come from the wellpads are not migrating to the surrounding communities to any significant extent.*" The phrase "to any significant extent" is too broad and subjective. Revise this statement to provide context as to what would qualify as or constitute "any significant extent". See the screenshot below for where this statement is located in the Plan.

2.2 Public Health

In 2019, Crestone hired a third-party expert, CTEH, LLC (CTEH), to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and natural gas well pads being developed in Weld County, Colorado.⁴ It is important to note that Crestone is using the same practices and technologies for the Well Site as was used in the four locations in the studies. See **Attachment C** for the report.

The specific goals of this project were to: (1) collect a high-resolution data set of chemical concentrations in air near the well pad and the surrounding communities; and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. CTEH conducted real-time air monitoring for total VOCs, hydrogen sulfide (H₂S), particulate matter (PM), and specific VOCs (such as benzene), simultaneously with other measurements. As the report states in its Executive Summary:

More than 5,000 total measurements were collected in real-time by CTEH personnel in the communities surrounding the wellpads over a period of 26 days. Additionally, 20 analytical samples were collected from four locations around the Bighorn wellpad to evaluate potential community exposures over 5 days of flowback activities. Approximately 99% of the real-time VOC measurements recorded in the communities were non-detections, which means that VOCs were not present or that VOC concentrations were less than the instrument detection limit of 1 ppb (part per billion) for VOCs. This detection limit is well below the federal (ATSDR) health guideline

⁴ Community Exposure and Health Risk Assessment: Real-Time Air Monitoring and Air Sampling, Crestone Peak Resources, Weld County, CO, written by CTEH, The Science of Ready, dated December 11, 2019.



level for short-term adverse health effects for benzene (9 ppb). Of the over 1,500 measurements collected for benzene specifically or VOCs in general, just one reading was at a detectable level but did not exceed public health guideline values for the BTEX compounds. No H₂S was ever detected (at a detection limit of 0.1 part per million), and just one of over 1,500 readings taken for PM, taken on along a dirt road, was higher than typical background values. In the 20 analytical air samples collected in the surrounding community during flowback, the maximum measured concentrations for BTEX compounds were also all 10 to 13,000-times lower than their respective federal acute health guideline values.

These data, combined with corresponding documented wind directions, suggest that oil and gas-related analytes that may come from the wellpads are not migrating to the surrounding communities to any significant extent. Thus, the real-time and analytical data indicate no adverse health risks to nearby communities, including sensitive individuals, from cumulative exposures to VOCs that may be emitted from pre-production and production activities at Crestone wellpads.

Since Crestone is planning to use the same practices and technologies for the Well Site as was used in the four locations in the studies, we are assuming the same conclusion can be relied upon.

2.2.1 Emission Increases

8) Cumulative Impacts Plan - Overall, the Plan speaks to actions taken to minimize impacts to public health, water and terrestrial and aquatic wildlife with little information regarding the actual aggregate of adverse impacts resulting from the proposed development. Provide additional information regarding the increase and accrual of impacts to these receptors resulting from the proposed development.

9) On the Surface & Minerals tab, please provide an email address for the Surface Owner. This would be the email address that Crestone Peak Resources would like us to use when we send out required notices (e.g. the Director's Recommendation) to the Surface Owner.

Form 2B

1) In the Beneficial Impacts tab Crestone Peak Resources has indicated there are no incremental beneficial impacts to the surrounding community. It is strongly encouraged that Crestone Peak Resources consider and provide any socio-economic (e.g. job creation, revenue generation to the local community businesses, etc.) beneficial impacts to the surrounding community that will occur from this proposed development.

2) In the Public Health Resources section of the Oil & Gas Location Data tab Crestone Peak Resources provided a qualitative evaluation of any potential acute or chronic, short-or long term incremental impacts to public health that says "Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposure to VOCs, H₂S or PM that may be emitted from operational phases at the various Crestone well pads." Is H₂S anticipated at this proposed Location?

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/>

Agross@upstreampm.com <agross@upstreampm.com>

Fri, Jan 21, 2022 at 9:53 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Kathy Denzer <kdenzer@civiresources.com>

Hi Doug,

Please see our responses below.

Thank you and please let me know if you have any questions.

Andrea

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

Sent: Friday, January 7, 2022 2:33 PM

To: regulatorystate@crestonepr.com; Agross@upstreampm.com

Subject: COGCC Form 2A & 2B review - Crestone Peak Resources Operating's Blue 3-65 33-32-31

Kathy & Andrea,

OGLA staff have reviewed the Blue 3-65 33-32-31 Form 2A (Doc #402779501) and Form 2B (Doc #402779821) and have the following comments.

Form 2A

1) Provide an update on the status of the siting permit application with the Relevant Local Government (City of Aurora). If Aurora has made a decision concerning the siting of the proposed Oil and Gas Location, provide a copy of their final decision documents.

The Blue 3-65 33-32-31 location has been approved by the City of Aurora planning department. Please find attached the Administrative Decision Letter approving the location. The site location is also approved by the Operator Agreement. There was a Neighborhood Meeting on September 13, 2021. Only 3 residents attended and they did not have any questions.

2) Provide an update on whether any consultations have been held with the Proximate Local Governments (Adams and Arapahoe County). If consultations have occurred, provide the Proximate Local Government Consultation Summary. No consultations were requested by PLGs.

3) On the Cultural & Safety Setbacks tab, the distance to the nearest Disproportionately Impacted (DI) Community is listed as 2,067 feet. However, on the Cultural Features Map and the DI Community Map the distance to the nearest DI Community is listed as 1,896 feet. Confirm the distance to the nearest DI Community, that and if necessary, update the Cultural Features Map and the DI Community Map. **Please change the distance on the 2A to 1,896'**

4) During my review it appears the Sediment Basin immediately to the east of the well pad will overlay the Adena-Colby association NRCS Soil Map Unit. Provide me with this NRCS Soil Map Unit Description and I will add it to the Form 2A. **I agree. There is the Adena-Colby NRCS to the east. Please see the attached.**

5) In the Water Resources tab Crestone Peak Resources has indicated the estimated depth to groundwater is 18 feet below ground surface. This is considered a shallow groundwater depth and the Oil and Gas Location would then be considered to lie within a Sensitive Area for water resources. Therefore, I would like to change the answer to that question on the Water Resources tab to YES. **Yes, I agree. Should be checked.**

6) Light Mitigation Plan - The Introduction paragraph of the Plan found on page 2 contains factual mistakes about the location of the proposed Oil and Gas Location (east 1/2 of Section 34) and the number of proposed wells (12). The proposed Oil and Gas Location is in the west 1/2 of Section 34 and is proposing only 7 wells. Provide a revised Light Mitigation Plan that corrects these errors. **Please see the attached.**

7) Cumulative Impact Plan - In Section 2.2 Public Health there is the following statement: *"These data, combined with corresponding documented wind directions, suggest that oil and gas-related analytes that may come from the wellpads are not migrating to the surrounding communities to any significant extent."* The phrase "to any significant extent" is too broad and subjective. Revise this statement to provide context as to what would qualify as or constitute "any significant extent". See the screenshot below for where this statement is located in the Plan.

2.2 Public Health

In 2019, Crestone hired a third-party expert, CTEH, LLC (CTEH), to design and perform studies to characterize the short-term impacts on local air quality and public health from discrete operational phases at four oil and natural gas well pads being developed in Weld County, Colorado.⁴ It is important to note that Crestone is using the same practices and technologies for the Well Site as was used in the four locations in the studies. See **Attachment C** for the report.

The specific goals of this project were to: (1) collect a high-resolution data set of chemical concentrations in air near the well pad and the surrounding communities; and (2) evaluate the impact on risks to public health, if any, from the release of oil and gas-related compounds into the air during specific operational phases of well development. CTEH conducted real-time air monitoring for total VOCs, hydrogen sulfide (H₂S), particulate matter (PM), and specific VOCs (such as benzene), simultaneously with other measurements. As the report states in its Executive Summary:

More than 5,000 total measurements were collected in real-time by CTEH personnel in the communities surrounding the wellpads over a period of 26 days. Additionally, 20 analytical samples were collected from four locations around the Bighorn wellpad to evaluate potential community exposures over 5 days of flowback activities. Approximately 99% of the real-time VOC measurements recorded in the communities were non-detections, which means that VOCs were not present or that VOC concentrations were less than the instrument detection limit of 1 ppb (part per billion) for VOCs. This detection limit is well below the federal (ATSDR) health guideline

⁴ Community Exposure and Health Risk Assessment: Real-Time Air Monitoring and Air Sampling, Crestone Peak Resources, Weld County, CO, written by CTEH, The Science of Ready, dated December 11, 2019.

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consultants

level for short-term adverse health effects for benzene (9 ppb). Of the over 1,500 measurements collected for benzene specifically or VOCs in general, just one reading was at a detectable level but did not exceed public health guideline values for the BTEX compounds. No H₂S was ever detected (at a detection limit of 0.1 part per million), and just one of over 1,500 readings taken for PM, taken on along a dirt road, was higher than typical background values. In the 20 analytical air samples collected in the surrounding community during flowback, the maximum measured concentrations for BTEX compounds were also all 10 to 13,000-times lower than their respective federal acute health guideline values.

These data, combined with corresponding documented wind directions, suggest that oil and gas-related analytes that may come from the wellpads are not migrating to the surrounding communities to any significant extent. Thus, the real-time and analytical data indicate no adverse health risks to nearby communities, including sensitive individuals, from cumulative exposures to VOCs that may be emitted from pre-production and production activities at Crestone wellpads.

Since Crestone is planning to use the same practices and technologies for the Well Site as was used in the four locations in the studies, we are assuming the same conclusion can be relied upon.

2.2.1 Emission Increases

8) Cumulative Impacts Plan - Overall, the Plan speaks to actions taken to minimize impacts to public health, water and terrestrial and aquatic wildlife with little information regarding the actual aggregate of adverse impacts resulting from the proposed development. Provide additional information regarding the increase and accrual of impacts to these receptors resulting from the proposed development.

Please see attached.

9) On the Surface & Minerals tab, please provide an email address for the Surface Owner. This would be the email address that Crestone Peak Resources would like us to use when we send out required notices (e.g. the Director's Recommendation) to the Surface Owner. Please add the following email address jsonnier@civiresources.com

Form 2B

1) In the Beneficial Impacts tab Crestone Peak Resources has indicated there are no incremental beneficial impacts to the surrounding community. It is strongly encouraged that Crestone Peak Resources consider and provide any socio-economic

(e.g. job creation, revenue generation to the local community businesses, etc.) beneficial impacts to the surrounding community that will occur from this proposed development. **There will be beneficial impacts to the surrounding community and state in the form of taxes and royalties paid by the operator.**

2) In the Public Health Resources section of the Oil & Gas Location Data tab Crestone Peak Resources provided a qualitative evaluation of any potential acute or chronic, short-or long term incremental impacts to public health that says "Real-time data indicate no adverse health risks to nearby communities, including sensitive individuals, from exposure to VOCs, H2S or PM that may be emitted from operational phases at the various Crestone well pads." Is H2S anticipated at this proposed Location? **No H2S is anticipated.**

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4 attachments

 **BLUE 3-65 33-32-31 - LIGHTING REPORT 1-14-22.pdf**
5524K

 **NRCS Adena-Colby Map Unit Description.pdf**
91K

 **Cumulative Impacts Report - Blue_Jan Rev.pdf**
7276K

 **BLUE 3-65 33-32-31 City of Aurora Permit Approved.pdf**
428K

Agross@upstreampm.com <agross@upstreampm.com>

Mon, Jan 31, 2022 at 8:32 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Kathy Denzer <kdenzer@civiresources.com>

Hi Doug,

Just checking that you received my email last week. Please let us know if you have any additional questions.

Thanks,

Andrea

[Quoted text hidden]

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

Tue, Feb 1, 2022 at 9:57 AM

To: "Agross@upstreampm.com" <agross@upstreampm.com>

Cc: Kathy Denzer <kdenzer@civiresources.com>

Andrea & Kathy,

We see a small update to the Water Plan on the Form 2A needing to be made. While you have provided the seller's name and address for the Completions phase sources of water, the Plan also needs to have the seller's name and address for the Drilling and Pad Construction phase (Rangeview Metropolitan District). This info (the seller's name and address) is required by Rule 304.c.(18).B.

Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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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/>

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Agross@upstreampm.com <agross@upstreampm.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>
Cc: Kathy Denzer <kdenzer@civiresources.com>

Tue, Feb 1, 2022 at 10:25 AM

Thanks Doug. We will revise the plan and send it to you.

[Quoted text hidden]

Kathy Denzer <kdenzer@civiresources.com>

Tue, Feb 1, 2022 at 11:20 AM

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

Good Morning Doug,

Attached is the revised Water Plan with contact name and address for Rangeview Metropolitan District on page 4.

Please let me know if you need anything further.

Respectfully,

Kathy Denzer

Lead, Well and Location Permitting

CIVITAS RESOURCES, INC.

Crestone Peak Resources Operating LLC

a Wholly-Owned Subsidiary

C: 720.822-8083

O: 303.312.8131

kdenzer@civiresources.com

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Tuesday, February 1, 2022 9:57 AM
To: Agross@upstreampm.com
Cc: Kathy Denzer <kdenzer@civiresources.com>
Subject: Re: COGCC Form 2A & 2B review - Crestone Peak Resources Operating's Blue 3-65 33-32-31

Andrea & Kathy,

We see a small update to the Water Plan on the Form 2A needing to be made. While you have provided the seller's name and address for the Completions phase sources of water, the Plan also needs to have the seller's name and address for the Drilling and Pad Construction phase (Rangeview Metropolitan District). This info (the seller's name and address) is required by Rule 304.c.(18).B.

Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado

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[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

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[Redacted]

[Quoted text hidden]



18. Water Plan Blue 2-1-22 KD Revisions.pdf
402K

Kathy Denzer <kdenzer@civiresources.com>

Tue, Feb 1, 2022 at 12:04 PM

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

Doug,

Would you please confirm receipt of this document.

Thank you!

[Quoted text hidden]

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Kathy Denzer <kdenzer@civiresources.com>
Cc: "Agross@upstreampm.com" <agross@upstreampm.com>

Tue, Feb 1, 2022 at 1:23 PM

I have received the updated Water Plan.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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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/>

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Kathy Denzer <kdenzer@civiresources.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Tue, Feb 1, 2022 at 1:34 PM

Thank you!

Respectfully,

Kathy Denzer

Lead, Well and Location Permitting

CIVITAS RESOURCES, INC.

Crestone Peak Resources Operating LLC

a Wholly-Owned Subsidiary

C: 720.822-8083

O: 303.312.8131

kdenzer@civiresources.com

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Tuesday, February 1, 2022 1:23 PM
To: Kathy Denzer <kdenzer@civiresources.com>
Cc: Agross@upstreampm.com
Subject: Re: COGCC Form 2A & 2B review - Crestone Peak Resources Operating's Blue 3-65 33-32-31

I have received the updated Water Plan.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado

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Andrews - DNR, Doug <doug.andrews@state.co.us> Thu, Feb 3, 2022 at 1:17 PM
To: Kathy Denzer <kdenzer@civiresources.com>, "Agross@upstreampm.com" <agross@upstreampm.com>

Kathy & Andrea,

Will you provide the date the siting permit application for the Blue 3-65 location was submitted to the City of Aurora. I see that it was approved on 10/13/21, but the Form 2A also requires the date it was submitted.

Thanks.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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

[Quoted text hidden]

Kathy Denzer <kdenzer@civiresources.com> Thu, Feb 3, 2022 at 1:33 PM
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, "Agross@upstreampm.com" <agross@upstreampm.com>

Good Afternoon Doug,

The submittal date for the Blue 3-65 to the City of Aurora was June 29, 2021.

Please let me know if you need anything further!

Thank you!

Respectfully,

Kathy Denzer

Lead, Well and Location Permitting

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C: 720.822-8083

O: 303.312.8131

kdenzer@civiresources.com

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

Sent: Thursday, February 3, 2022 1:18 PM

To: Kathy Denzer <kdenzer@civiresources.com>; Agross@upstreampm.com

Subject: Re: COGCC Form 2A & 2B review - Crestone Peak Resources Operating's Blue 3-65 33-32-31

Kathy & Andrea,

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