



STATE OF COLORADO

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

Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

11 messages

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

Mon, Aug 31, 2020 at 9:28 AM

To: Jacob Everhart <jeverhart@enerplus.com>, "Garrison - DNR, Penny" <penny.garrison@state.co.us>, John Noto - DNR <john.noto@state.co.us>

Jacob,

Please find the COGCC's 1041 Response for the following Form 2A: Calgary Streets Doc #402442946

- 1) In the Construction section Enerplus has indicated construction is planned to commence on 11/1/20 and interim reclamation will begin a full year later on 11/1/21. The proposed location is not a large pad, consisting of only 8 wells, and a few tanks, separators, compressors, etc. Why will it take a full year to begin interim reclamation? Does Enerplus not intend to build this pad and drill all the wells in one occupation?
- 2) In the Construction section Enerplus has indicated the size of the disturbed area during construction will be 7.9 acres and after interim reclamation will remain at 7.9 acres. In effect, no interim reclamation will be taking place. Enerplus has included an operator comment that states "*Due to siting restrictions, Enerplus is limited on the area available to develop this location.*" As Enerplus has indicated they are the Surface Owner, please provide additional information as to these siting restrictions that lead to no interim reclamation being proposed.
- 3) Related to my Comment #2 above, Enerplus has included a Construction Layout Drawings attachment that appears to show a "Limits of Disturbance" that is larger than what is shown on the Location Drawing attachment. Also, the Production Phase Construction Plan (page 3 of this attachment) appears to indicate the disturbance area will be reclaimed back to 4.53 acres. Please provide additional information as to why the Location Drawing indicates the Oil & Gas Location is only within the fenced area while the Construction Layout Drawing indicates it will be greater than that and that the disturbed ground will be reclaimed back to 4.53 acres. All drawings and data fields on the Form 2A need to be consistent with each other or additional operator comments provided to explain the differences.
- 4) In the Drilling Waste Management Program Enerplus has indicated that Reuse Facility ID #475549 will be utilized for drilling waste disposal. That Land Application Site has been permitted only for the disposal of water based bentonitic drill cuttings. Enerplus has indicated they will be using oil based drilling fluids and a Waste Management Plan that only speaks to Commercial Disposal of drill cuttings. Drill cuttings generated from the use of oil based drilling fluids are not allowed at this Land Application Site. Please provide updated Drilling Waste Management information and/or an updated Waste Management Plan that complies with COGCC requirements.
- 5) In the Water Resources section Enerplus has indicated the distance to the nearest downgradient surface water feature is 140 feet. However, the Hydrology Map does not depict a surface water feature this distance from the edge of the location. Please confirm the distance to the nearest downgradient surface water feature, and if necessary, revise the Hydrology Map.
- 6) In the Water Resources section Enerplus has indicated the estimated depth to groundwater is 389 feet based on water well Permit #116657. A review of that water well permit indicates a static water level of 140 feet. Therefore, I would like to revise the estimated depth to groundwater from 389 feet to 140 feet.
- 7) In the Water Resources section Enerplus has indicated that one of the Floodplain Data Sources reviewed was a State data source. If this was only the Floodplain layer on our COGIS Map, this is not an official State floodplain data source as that map layer comes from Federal FEMA sources. Please confirm what State Floodplain Data Source was reviewed.

8) Enerplus is proposing eight wells with seven tanks (5 oil/2 water) for storage capacity. Is this sufficient storage capacity or will Enerplus be piping the liquids from this location? Also, how will produced gas takeaway be managed?

9) Per the COGCC Policy on the Use of MLVTs, please provide the vendor/manufacturer of the MLVT, the volume of the MLVT, and the anticipated timeframe it will be on the location.

This request for additional information stops the statutory 1041 60-day clock for the COGCC's review. The COGCC will resume review of this Form 2A upon receipt of all required information and the COGCC review will be conducted within 60 days. Enerplus is under no obligation to respond to this email; this Form 2A will remain ON HOLD, with all data and attachments intact, until Enerplus provides COGCC with all necessary requested information. Enerplus may request this Form 2A be withdrawn if that is preferred.

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/>

Jacob Everhart <jeverhart@enerplus.com> Mon, Aug 31, 2020 at 10:04 AM
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, "Garrison - DNR, Penny" <penny.garrison@state.co.us>, John Noto - DNR <john.noto@state.co.us>

Doug,

Good morning. I have received your email and comments/questions. I will provide additional info and answers promptly. Thanks.

Be Well,

Jacob Everhart
Regulatory Compliance Coordinator
Office (720) 279 – 6743
Mobile (505) 999 – 0401
Jeverhart@enerplus.com

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, August 31, 2020 9:28 AM
To: Jacob Everhart <jeverhart@enerplus.com>; Garrison - DNR, Penny <penny.garrison@state.co.us>; John Noto - DNR <john.noto@state.co.us>
Subject: [EXT] Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

External

[Quoted text hidden]

Jacob Everhart <jeverhart@enerplus.com>

Tue, Sep 1, 2020 at 8:11 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, "Garrison - DNR, Penny" <penny.garrison@state.co.us>, John Noto - DNR <john.noto@state.co.us>

Doug,

Please see my answers to you questions below.

I still owe you information in questions 2 & 3. I expect to send that into over today. Thanks.

Be Well,

Jacob Everhart

Regulatory Compliance Coordinator

Office (720) 279 – 6743

Mobile (505) 999 – 0401

[Jeverhart@enerplus.com](mailto:jeverhart@enerplus.com)

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

Sent: Monday, August 31, 2020 9:28 AM

To: Jacob Everhart <jeverhart@enerplus.com>; Garrison - DNR, Penny <penny.garrison@state.co.us>; John Noto - DNR <john.noto@state.co.us>

Subject: [EXT] Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

External

Jacob,

Please find the COGCC's 1041 Response for the following Form 2A: Calgary Streets
Doc #402442946

1) In the Construction section Enerplus has indicated construction is planned to commence on 11/1/20 and interim reclamation will begin a full year later on 11/1/21. The proposed location is not a large pad, consisting of only 8 wells, and a few tanks, separators, compressors, etc. Why will it take a full year to begin interim reclamation? Does Enerplus not intend to build this pad and drill all the wells in one occupation?

[Jacob Everhart] Enerplus plans to construct the pad in November 2020 and commence drilling operations in December 2020 for (4) wells initially. The timeframe for interim reclamation reflects the amount of time that will be needed in order to fully install oil and water takeaway infrastructure which will connect the pad to the Enerplus Orca Centralized Gathering facility approximately .25 miles to the north. Gas takeaway via the Enerplus owned and operated Lazy T pipeline will be present at the time of initial production.

2) In the Construction section Enerplus has indicated the size of the disturbed area during construction will be 7.9 acres and after interim reclamation will remain at 7.9 acres. In effect, no interim reclamation will be taking place. Enerplus has included an operator comment that states "*Due to siting restrictions, Enerplus is limited on the area available to develop this location.*" As Enerplus has indicated they are the Surface Owner, please provide additional information as to these siting restrictions that lead to no interim reclamation being proposed.

3) Related to my Comment #2 above, Enerplus has included a Construction Layout Drawings attachment that appears to show a "Limits of Disturbance" that is larger than what is shown on the Location Drawing attachment. Also, the Production Phase Construction Plan (page 3 of this attachment) appears to indicate the disturbance area will be reclaimed back to 4.53 acres. Please provide additional information as to why the Location Drawing indicates the Oil & Gas Location is only within the fenced area while the Construction Layout Drawing indicates it will be greater than that and that the disturbed ground will be reclaimed back to 4.53 acres. All drawings and data fields on the Form 2A need to be consistent with each other or additional operator comments provided to explain the differences.

4) In the Drilling Waste Management Program Enerplus has indicated that Reuse Facility ID #475549 will be utilized for drilling waste disposal. That Land Application Site has been permitted only for the disposal of water based bentonitic drill cuttings. Enerplus has indicated they will be using oil based drilling fluids and a Waste Management Plan that only speaks to Commercial Disposal of drill cuttings. Drill cuttings generated from the use of oil based drilling fluids are not allowed at this Land Application Site. Please provide updated Drilling Waste Management information and/or an updated Waste Management Plan that complies with COGCC requirements.

[Jacob Everhart] Enerplus will use a reputable trucking company to transport drill cuttings using Waste Manifest Forms. Oil-based drill cuttings will be properly disposed at the Waste Management of Northern Colorado landfill at 40000 County Road 25, Ault, CO (970) 686-2800. Water-based drill cuttings will be land applied for beneficial use as a soil amendment at the Enerplus Spreadfield or disposed at the Waste Management of Northern Colorado landfill. I have attached an updated waste management plan for your review.

5) In the Water Resources section Enerplus has indicated the distance to the nearest downgradient surface water feature is 140 feet. However, the Hydrology Map does not depict a surface water feature this distance from the edge of the location. Please confirm the distance to the nearest downgradient surface water feature, and if necessary, revise the Hydrology Map.

[Jacob Everhart] The Water Resource section should list the nearest downgradient surface water feature at 389 feet instead of 140 feet. I think this was an error in the submission. As you can see by your comment 6 below, Enerplus had the groundwater depth listed at 389 feet and the nearest downgradient surface water feature at 140 feet. The two distances were swapped. The hydrology map provided is accurate once the change is made.

6) In the Water Resources section Enerplus has indicated the estimated depth to groundwater is 389 feet based on water well Permit #116657. A review of that water well permit indicates a static water level of 140 feet. Therefore, I would like to revise the estimated depth to groundwater from 389 feet to 140 feet.

[Jacob Everhart] The proposed revision is accepted.

7) In the Water Resources section Enerplus has indicated that one of the Floodplain Data Sources reviewed was a State data source. If this was only the Floodplain layer on our COGIS Map, this is not an official State floodplain data source as that map layer comes from Federal FEMA sources. Please confirm what State Floodplain Data Source was reviewed.

[Jacob Everhart] Enerplus reviewed the Colorado Hazard Mapping Program available through the Colorado Water Conservation Board website resources.

8) Enerplus is proposing eight wells with seven tanks (5 oil/2 water) for storage capacity. Is this sufficient storage capacity or will Enerplus be piping the liquids from this location? Also, how will produced gas takeaway be managed?

[Jacob Everhart] Seven tanks is believed to be adequate capacity as Enerplus will initially drill only 4 wells on the pad, though 8 wells are proposed. The facility is located approximately .25 miles southwest of the Enerplus Orca centralized gathering and processing location that is permitted and equipped with additional oil and water storage tanks. The Enerplus Calgary Streets pad is located directly on the Enerplus Lazy T low pressure gas gathering pipeline so gas takeaway capacity from this pad will be via pipeline also headed back to the Enerplus Orca facility. This pad will eventually be tankless, so Enerplus would expect all liquids and gas to be piped via pipeline back to the Enerplus Orca Facility for processing and transmission.

9) Per the COGCC Policy on the Use of MLVTs, please provide the vendor/manufacturer of the MLVT, the volume of the MLVT, and the anticipated timeframe it will be on the location.

[Jacob Everhart] The vendor/manufacturer will be wellwater solutions. The volume of the MLVT will be 40,000 barrels. The MLVT will be onsite for 4 days per well, so a total of 16 days. The timeframe expected would be from late December 2020 through mid-January 2021.

[Quoted text hidden]

 **CO Waste Management Plan (2020).pdf**
110K

Jacob Everhart <jeverhart@enerplus.com> Tue, Sep 1, 2020 at 10:16 AM
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, "Garrison - DNR, Penny" <penny.garrison@state.co.us>, John Noto - DNR <john.noto@state.co.us>

Doug,

Please see the remaining answers to your questions. Apologies for any prior confusion. If you have remaining questions after reading my email comments below, feel free to reach out and I can provide additional info. Thank you.

Be Well,

Jacob Everhart
Regulatory Compliance Coordinator
Office (720) 279 – 6743
Mobile (505) 999 – 0401
Jeverhart@enerplus.com

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Monday, August 31, 2020 9:28 AM
To: Jacob Everhart <jeverhart@enerplus.com>; Garrison - DNR, Penny <penny.garrison@state.co.us>; John Noto - DNR <john.noto@state.co.us>
Subject: [EXT] Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

External

Jacob,

Please find the COGCC's 1041 Response for the following Form 2A: Calgary Streets Doc #402442946

1) In the Construction section Enerplus has indicated construction is planned to commence on 11/1/20 and interim reclamation will begin a full year later on 11/1/21. The proposed location is not a large pad, consisting of only 8 wells, and a few tanks, separators, compressors, etc. Why will it take a full year to begin interim reclamation? Does Enerplus not intend to build this pad and drill all the wells in one occupation?

2) In the Construction section Enerplus has indicated the size of the disturbed area during construction will be 7.9 acres and after interim reclamation will remain at 7.9 acres. In effect, no interim reclamation will be taking place. Enerplus has included an operator comment that states "*Due to siting restrictions, Enerplus is limited on the area available to develop this location.*" As Enerplus has indicated they are the Surface Owner, please provide additional information as to these siting restrictions that lead to no interim reclamation being proposed.

[Jacob Everhart] Due the way in which our facilities are laid out, there is not any "fill" available to put on the cut slope. The drawings show total fence acreage number, a pad acreage (dirt to build pad), and facility usage acreage (Drivable acreage) This happens when the pad is seeded back to the edge of pad. Disturbance acreage is what we have taken from the fence. The pad sizing and layout is dictated by the enerplus gathering pipelines to the south and east, as well as a buffer radius implemented to avoid emission, safety, and SUA usage overlaps, hence the atypical pad layout and siting restrictions.

3) Related to my Comment #2 above, Enerplus has included a Construction Layout Drawings attachment that appears to show a "Limits of Disturbance" that is larger than what is shown on the Location Drawing attachment. Also, the Production Phase Construction Plan (page 3 of this attachment) appears to indicate the disturbance area will be reclaimed back to 4.53 acres. Please provide additional information as to why the Location Drawing indicates the Oil & Gas Location is only within the fenced area while the Construction Layout Drawing indicates it will be greater than that and that the disturbed ground will be reclaimed back to 4.53 acres. All drawings and data fields on the Form 2A need to be consistent with each other or additional operator comments provided to explain the differences.

[Jacob Everhart] On the drill pad & production pad drawings (C101 & C102 in construction plats), the 4.53 acres is just reporting drivable surface and what will be left over after seeding has taken place. The 7.903 acres in the entire fenced area that we are allowed to disturb. Apologies for any confusion. Reclaimed acreage will continue to be 7.9 acres.

[Quoted text hidden]

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Jacob Everhart <jeverhart@enerplus.com>

Tue, Sep 1, 2020 at 11:54 AM

[Jacob Everhart] The drawings show total fence acreage number, a pad acreage (dirt to build pad), and facility usage acreage (Drivable acreage) This happens when the pad is seeded back to the edge of pad. Disturbance acreage is what we have taken from the fence. The pad sizing and layout is dictated by the enerplus gathering pipelines to the south and east, as well as a buffer radius implemented to avoid emission, safety, and SUA usage overlaps, hence the atypical pad layout and siting restrictions.

[Jacob Everhart] On the drill pad & production pad drawings (C101 & C102 in construction plats), the 4.53 acres is just reporting drivable surface and what will be left over after seeding has taken place.

If the **pad acreage (dirt to build pad)** is how much ground Enerplus will disturb to conduct all of their construction activities to build this pad then that needs to be listed as the size of the disturbed area during construction, not just the fenced area. What is the total acreage of ground that will be disturbed to construct this pad? The reason I am wanting to be clear on this is when one of our Reclamation Inspectors visits this site and he sees disturbed ground outside of the fenced area and it is greater than 7.9 acres, he will likely find Enerplus out of compliance with our Rules.

The **4.53 acres is just reporting drivable surface and what will be left over after seeding has taken place** sounds to me like the size of the location after interim reclamation. If Enerplus is planning on doing seeding, then the size of the location after interim reclamation must be less than during

construction. We will not approve an oil and gas location that does not accurately reflect how much of the disturbed ground will be interim reclaimed (seeded).

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

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1120 Lincoln St., Suite 801, Denver, CO 80203
doug.andrews@state.co.us | <http://cogcc.state.co.us/>

[Quoted text hidden]

Jacob Everhart <jeverhart@enerplus.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Wed, Sep 2, 2020 at 8:16 AM

Doug,

The pad disturbance area within the fenced area is 6.917 acres, which is the pad daylight lines and piles only. So in this case, the total disturbance area would be 6.917 acres. This 6.917 value would also be the final reclamation value. If I am properly confusing you on the issue, I would be happy to jump on a call to discuss. Please advise. I have also provided (attached) revised plats that clarify the 4.53 acres by removing that reference.

Just for some clarity from my side, when we construct the pad, we will also place topsoil on the slopes and seed during seeding times. So all slopes will have topsoil and seed from the beginning.

[Quoted text hidden]

2 attachments

Calgary Streets Pad - REVIESED PLATS ONLY -Revised 9-1-20.pdf
850K

Calgary Streets Pad - Final Plats -Revised 9-1-20.pdf
8430K

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Jacob Everhart <jeverhart@enerplus.com>

Wed, Sep 2, 2020 at 9:22 AM

Jacob,

When is a good time to call you to discuss this as it still doesn't make sense to me.

[Quoted text hidden]

Jacob Everhart <jeverhart@enerplus.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Wed, Sep 2, 2020 at 9:25 AM

Doug,

10am will be great! Ill setup a call right now.

Be Well,

Jacob Everhart

Regulatory Compliance Coordinator

Office (720) 279 – 6743

Mobile (505) 999 – 0401

Jeverhart@enerplus.com

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

Sent: Wednesday, September 2, 2020 9:23 AM

To: Jacob Everhart <jeverhart@enerplus.com>

Subject: Re: [EXT] Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

Jacob,

[Quoted text hidden]

Jacob Everhart <jeverhart@enerplus.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Wed, Sep 2, 2020 at 4:59 PM

Doug – Per our phone conversation, here is a bulleted list of our justification/reasoning for the pad remaining the same in size from construction to reclamation. Please review and let me know what you think. Thanks sir.

- Enerplus has an internal standard that only places facilities on "cut" which helps to prevent any slope failure, tank settling, pipe stress, etc.
- This internal design control helps each pad design to be more suitable for holding facilities without any shifting or differential settlement.
- Options for removing fill material is limited to placement on the southside of the pad since placement on the north side of the pad is not an ideal option due to those areas being high truck traffic areas, facilities placement and flare location in the NW corner of the pad.
- If the south pad edge is reduced and the removed fill material (spoils pile) is placed on the south side, there would be no reduction in size/acreage since the removed fill material (spoils pile) itself will occupy the area reduced.

Be Well,

Jacob Everhart

Regulatory Compliance Coordinator

Office (720) 279 – 6743

Mobile (505) 999 – 0401

Jeverhart@enerplus.com

From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Wednesday, September 2, 2020 9:23 AM
To: Jacob Everhart <jeverhart@enerplus.com>
Subject: Re: [EXT] Requesting Additional Information: Enerplus Resources' Calgary Streets location (Doc #402442946)

Jacob,

[Quoted text hidden]

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Jacob Everhart <jeverhart@enerplus.com>

Thu, Sep 3, 2020 at 7:55 AM

Jacob,

Will you provide an additional bullet point or two that explicitly explains that the other bullet points result in the acreage after interim reclamation being the same as during construction. If I'm reading this right, this pad is designed to disturb the bare minimum of ground necessary to build, and the provided bullet points above result in Enerplus not being able to reclaim back any ground as they will need all of it to safely conduct future production operations. The last bullet point kinda says that, but I'm hoping one more that is really plainly stated will help explain this to anyone else reviewing this permit application.

Thanks.

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/>

[Quoted text hidden]

Jacob Everhart <jeverhart@enerplus.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Thu, Sep 3, 2020 at 10:33 AM

Doug – Here is another crack at it. Please review and let me know what you think.

- Enerplus has an internal standard that only places facilities on "cut" which helps to prevent any slope failure, tank settling, pipe stress, etc.
- This internal design control helps each pad design to be more suitable for holding facilities without any shifting or differential settlement.
- Options for removing fill material is limited to placement on the southside of the pad since placement on the north side of the pad is not an ideal option due to those areas being high truck traffic areas, facilities placement and flare location in the NW corner of the pad.

- If the south pad edge is reduced and the removed fill material (spoils pile) is placed on the south side, there would be no reduction in size/acreage since the removed fill material (spoils pile) itself will occupy the area reduced.
- For the abovementioned reasons, this location is designed in such a manner that the construction phase will disturb the absolute minimum amount of ground necessary to build a fully functional and safe location for future oil and gas production operations.
- The 7.9 acres that will be disturbed for construction and operations will not be suitable for any reduction in pad size for reclamation, resulting in the pad size remaining at 7.9 acres.

[Quoted text hidden]