From: Greg Deranleau - DNR
To: "krodell@upstreampm.com"
Cc: "Agross@upstreampm.com"; Larry Coler - DNR
Subject: RE: Tabula Rasa Caddell 2 COGCC Review, Form 2A doc #400477202
Date: Tuesday, November 12, 2013 7:20:00 AM

Kim,
Thanks for the prompt reply. I will have both the 2 and 2A list OBM = Yes. I just need to upload and attach documents and correspondence and then this will be ready.

Thanks,

Greg Deranleau
Oil & Gas Location Assessment Supervisor
Colorado Oil and Gas Conservation Commission
303-894-2100 ext. 5153

From: krodell@upstreampm.com [mailto:krodell@upstreampm.com]
Sent: Monday, November 11, 2013 4:39 PM
To: Greg Deranleau - DNR
Cc: Agross@upstreampm.com
Subject: RE: Tabula Rasa Caddell 2 COGCC Review, Form 2A doc #400477202

Greg,

Please indicate on the map where the reference area will be and provide a lat/lon. **ADDED. SEE ATTACHED. We will get the necessary reference pictures during growing season**. I will add a COA that reference area photographs, taken in the growing season, will be provided within 12 months.

Based on proximity to surface water and likelihood of shallow groundwater in the Abeyta Creek drainage, I have changed the Sensitive Area from NO to YES. **OK**

Based on information provided on the Form 2, I have changed the answer for "Will Oil Based Mud be used?" from YES to NO. This may be changed in the future by Sundry Notice, provided that oil based fluids or cuttings will not be disposed onsite. **That is ok but we are using OBM. You are correct, nothing will be disposed of onsite.**

The disturbed acreages on the Form 2A are incorrect. The total disturbed area should include all areas disturbed for the Oil and Gas Location, including the cut and fill slopes required to construct the pad for all wells and equipment, both new and existing. The area after interim reclamation should indicate what the location will be pulled back to following drilling and completion—the area necessary for production, and is usually limited to the area within the anchors if they remain, or sometimes a much smaller if the anchors are removed. The initially disturbed area should never be less than the area after interim reclamation. You have indicated total disturbance of 0.34 acres, and area after interim reclamation of 0.40 acres. Please provide revised disturbance acreages. **Greg, the numbers were inverted. Tabula anticipates only minor additional disturbance. Total disturbed acreage is 0.40 and interim reclamation disturbance** is 0.34.

Please take a look at the attached photo from COGCC site visit, and the edit I made on the PDF you sent. The white feature in the aerial photo is not the Building Unit, it is a trailer, visible in my photo. The new building is just south of that, possibly where there appears to be a foundation in the aerial. Not sure if the foundation is an historic mining relic, or was a previously constructed foundation just waiting for a building, or if the new building sits off that spot to the east (which would make it closer to the proposed well location. Did you access any of the County records about the Building? I would think they should have an ILC on file or a site plan that would have been part of their permit application process that might be able to shed some light. Since this is right on the edge, I want to make sure we get it right. If it turns out to be less than 1000' COGCC would need the building unit owner to waive their rights to the 305 notices which it sounds like they would do. The 306 meeting requirements have likely been satisfied through your conversations with them. We would just need a 306.e. certification letter from the operator. Please provide revised distance to Building Unit**. Greg, I spoke with Clay Landon and he stated that the Perham's building sits southwest of the white trailer and is farther from the Caddell 2 location than the white trailer. I thought that Chris told me the trailer was the building unit. However, it HAS been confirmed that this building unit is out of the 1,000' buffer with the measurement still around 1,010' if not slightly more.**

As discussed, the following BMPs were added at your request (I modified the language from what Andrea had provided me). **OK**

1. Coordinate with Huerfano County Road and Bridge regarding access concerns, including bridge capacity and dust.
2. Operator will notify all property owners along CR 441 prior to construction and drilling activities.
3. Employ an engineer to assess the capacity of the bridge over Abeyta Creek on CR 441, between Hwy 160 and the access road. Inform Huerfano County Road and Bridge department of the results. If bridge is inadequate for rig mobilization, alternative access will be developed.
4. Operator will repair 2 cattle guards on CR 441 as agreed to with Huerfano County Road and Bridge. Operator will notify Huerfano County of any additional improvements that need to be made.
5. Operator will water the roads on an as needed basis to mitigate dust. Dust control will be conducted during high traffic periods, such as construction, mobilization, and water hauling.

The following COAs will be stipulated by COGCC: **OK**

1. Operator shall utilize additional stormwater BMPs as necessary to prevent erosion and prohibit stormwater runoff from carrying sediment from the disturbance associated with this Oil and Gas Location beyond stormwater controls or into Abeyta Creek.
2. Operator shall provide sufficient soil berm or utilize pad sloping to prevent fluids from leaving the pad along the eastern edge of the northern section of the Location.
3. Operator shall provide sufficient soil berm at the southeast corner of the existing pad where the access road enters the Location to prevent fluids (stormwater or drilling/completions fluids) from leaving the site. The berm should be extended along the

southern edge of the pad from west to east across the access road (allowing for traffic) and then be turned north along the eastern edge of the existing portion of the Location.

4. Operator shall evaluate and take preventative measures at the culvert crossing of Abeyta Creek to prevent erosion from access road drainage from damaging the stability of the slopes around the culvert inlet and outlet.

5. Operator shall evaluate and repair access road from CR 441 to Location as necessary to prevent ponding/pooling of water and associated damage north of the Abeyta Creek crossing.

6. Any lighting required during drilling, completion or 24 hour operations shall be shielded or otherwise mitigated to prevent glare on Hwy 160.

7. Reference area photographs, taken in the growing season, shall be provided within 12 months.

Operator concurs with the above BMPs and COAs.

Please reply with the requested information (distance to Building Unit, Reference Area, disturbed area acreages) and provide the operators concurrence with changes, BMPs and COAs. If the Building Unit is within 1,000', also provide the required 305 notice waivers, and 306 meeting certification.

Kim

From: Greg Deranleau - DNR [mailto:Greg.Deranleau@state.co.us]
Sent: Monday, November 11, 2013 1:58 PM
To: krodell@upstreampm.com
Cc: Agross@upstreampm.com
Subject: Tabula Rasa Caddell 2 COGCC Review, Form 2A doc #400477202

Kim,
Attached is a PDF of the referenced Form 2A. Please review it for changes made, comments, BMPs and COAs. Below is a discussion of the COGCC OGLA review.

During COGCC review, the reference area information provided was found to be insufficient. The map provided does not show where the reference area will be (visible in the map are the Caddell 1 well, the Caddell 2 proposed location, 4 triangle symbols, and the nearby water well). Photograph #2, appears to be looking south over the area of the location that will be included in the construction for the location. The reference area must be on land that will remain undisturbed from oil and gas activities. Please indicate on the map where the reference area will be and provide a lat/lon. I will add a COA that reference area photographs, taken in the growing season, will be provided within 12 months.

Based on proximity to surface water and likelihood of shallow groundwater in the Abeyta Creek drainage, I have changed the Sensitive Area from NO to YES.

Based on information provided on the Form 2, I have changed the answer for "Will Oil Based Mud be used?" from YES to NO. This may be changed in the future by Sundry Notice, provided that oil based fluids or cuttings will not be disposed onsite.

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Please reply with the requested information (distance to Building Unit, Reference Area, disturbed area acreages) and provide the operators concurrence with changes, BMPs and COAs. If the Building Unit is within 1,000', also provide the required 305 notice waivers, and 306 meeting certification.

I will be back in the office 11/12/13, if you need to discuss anything.

Thanks.

Greg Deranleau
Oil & Gas Location Assessment Supervisor
Colorado Oil and Gas Conservation Commission
303-894-2100 ext. 5153