

STATE OF  
COLORADO

Andrews - DNR, Doug &lt;doug.andrews@state.co.us&gt;

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**COGCC Form 4 review for PDC Energy's Schneider 19Q-HZ Pad - Doc #400967192**

5 messages

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**Andrews - DNR, Doug** <doug.andrews@state.co.us>  
To: Kelsi Welch <Kelsi.Welch@pdce.com>

Fri, Jan 15, 2016 at 11:51 AM

Kelsi,

I have reviewed the referenced Form 4 Sundry and have the following comments.

- 1) In the Engineering/Environmental section you have not provided the approximate start date for when this additional activity will happen.
- 2) The Construction Layout Drawings appear to have been corrupted when they were attached to the Sundry, so I am unable to open and view them. Please send me this attachment and I will replace it on the Form 4 Sundry.
- 3) Per the COGCC Policy on the Use of MLVTs, the following additional information needs to be provided on the Sundry: the manufacturer or vendor, the size of the MLVTs, the anticipated timeframe the MLVTs will be onsite, and a BMP that certifies the MLVTs will be designed and implemented consistent with the COGCC Policy.
- 4) You have indicated the new total disturbed area of the location and total size of the location after reclamation will increase to 8.6 acres and 3.7 acres, respectively. The Form 2A for this location permitted 4 acres total size and 1.01 acres after reclamation. While the increase to 8.6 acres to add the MLVTs and the revised Access Road appears reasonable, what are the additional 2.69 acres ( $3.7 - 1.01 = 2.69$ ) after reclamation needed for once the MLVTs are gone?

Please respond to this correspondence by February 15, 2016. If you have any questions, please contact me. Thank you.

***Doug Andrews***

Oil &amp; Gas Location Assessment Specialist - Northeast Area

**COLORADO**Oil & Gas Conservation  
Commission

Department of Natural Resources

1120 Lincoln St., Suite 801  
Denver, CO 80203  
[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)  
303-894-2100 Ext. 5180

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**Kelsi Welch** <Kelsi.Welch@pdce.com>  
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Tue, Jan 19, 2016 at 11:10 AM

Hi Doug,

I got your voicemail, I appreciate you letting me know you will be gone this week. It is fine with me if you just go over this whenever you get back and have a chance. Please see my responses below:

1. Approximate start date is February 10, 2016

2. Please see attached – It was supposed to be the facility layout drawing but for some reason I could not find that title in the list of attachment options when submitting the sundry. In addition to the facility layout drawing, I accidentally attached an out of date access road map. The attached is the correct version- as you can see the temporary access is to the east and the permanent access is to the northwest, utilizing an existing oil and gas operations access. This should hopefully make my description make more sense.

3. Will the following satisfy your MLVT request?

*The MLVT will be onsite for 120 days and contains 53,000 bbls per tank. MLVT manufacturers currently used by PDC are Industrial Systems Inc. (ISI) and PCI Manufacturing.*

*PDC Energy, Inc. (PDC) has developed Best Management Practices (BMPS) to prevent injuries, property damage or environmental impacts and a Contingency Plan for any Modular Large Volume Tank (MLVT) leak or catastrophic failure of the tank integrity and resulting loss of fluid. These BMPs include, but not limited, by the following:*

*1) PDC determines MLVT locations based on size of location, nearby surface waters, site visibility, surrounding land use, property lines, onsite traffic, site security, tear-away tank fill connections, topography (high, low, slope, direction), nearby building units, roads, access points, and surface owner requests.*

*2) Signs shall be posted on each MLVT to indicate that the contents are fresh water and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210.*

*3) MLVTs will be operated with a minimum of 1 foot freeboard at all times.*

*4) Access to the tanks shall be limited to operational personnel.*

*5) Construction and installation of the tank structure, liner and sub-grade shall meet or exceed the manufacturer specifications. PDC follows manufacturer's Standard Operating Procedures (SOPs) and will provide these SOPs upon request to the COGCC.*

*6) PDC will conduct daily, visual inspections of the exterior wall and general area for any integrity deficiencies before, during, and after filling the MLVTs. PDC uses Construction Sign-Off, Site Preparation Sign-Off, Completion Sign-Off, Pre-Fill, and Site Visit checklists to maintain a written record of inspections. However, when the fluid level in the MLVTs is less than two (2) feet and there is no activity going on (i.e. during holidays or a small break between completions), only intermittent inspections will be conducted. Two feet is the safe volume of fluid level that is needed to hold the liner down and keep the MLVT stable.*

*7) Each location where MLVT's are used will have its own set of unique site-specific characteristics and associated risks (e.g., rural vs. urban setting, grade of the location, etc.) to be considered in a worst case scenario. These characteristics must be identified and addressed prior to the MLVT construction phase and should be documented in the MLVT construction checklist. Ensuring the safety of our employees, contractors, and the public are a top priority. This can be addressed with the implementation of MLVT pre-construction risk assessment measures to address safety concerns, and minimize environmental impacts and property damage in the unlikely event of a MLVT release.*

*8) In the event of a catastrophic MLVT failure, the Operator shall notify the COGCC as soon as practicable but not more than 24 hours after discovery, submit a Form 22-Accident Report within 10 days after discovery, conduct a "root cause analysis", and provide same to COGCC on a Form 4-Sundry Notice within 30 days of the failure.*

9) The MLVT shall be constructed and operated in accordance with a design package certified and sealed by a Licensed Professional Engineer either in Colorado or the state where the MLVT was designed or manufactured.

10) COGCC Rules 605.a.(3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of this MLVT.

11) All MLVT liner seams shall be welded and tested in accordance with applicable ASTM international standards. Any repairs to liners shall be made using acceptable practices and applicable standards.

12) PDC Energy Inc. hereby certifies to the Director that the Modular Large Volume Tanks, utilized for the afore mentioned location, will be designed and implemented consistent with the Colorado Oil and Gas Conservation Commission policy dated June 13, 2014.

### **MLVT Certification**

*PDC Energy Inc. hereby certifies to the Director that the Modular Large Volume Tanks, utilized for the afore mentioned location, will be designed and implemented consistent with the Colorado Oil and Gas Conservation Commission policy dated June 13, 2014.*

4. The original permanent access was a single road between county road 54 to the south and the production facility. The access we are proposing now to the north is much longer in the initial portion and also goes through the well pad and around the production facility. We did not have to have as much disturbance when we were able to come from the south and directly access the production facility, however since we are now having to come from the north on the opposite side of the location, the additional access is necessary in order to get the production facility. I believe the additional access area accounts for the additional 2.69 of disturbance.

Thank you and please let me know if you need anything additional on this.

Kelsi

**From:** Andrews - DNR, Doug [mailto:[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)]

**Sent:** Friday, January 15, 2016 11:52 AM

**To:** Kelsi Welch

**Subject:** COGCC Form 4 review for PDC Energy's Schneider 19Q-HZ Pad - Doc #400967192

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### **2 attachments**



**ACCESS MAP\_SCHNEIDER 19Q-HZ PAD (2016-01-13).pdf**

1927K



**SCALED FACILITY\_SCHNEIDER 19Q-HZ PAD (2016-01-13).pdf**

256K

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**Andrews - DNR, Doug** <[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)>

To: Kelsi Welch <[Kelsi.Welch@pdce.com](mailto:Kelsi.Welch@pdce.com)>

Mon, Jan 25, 2016 at 1:47 PM

Kelsi,

I measured your permanent access roads as shown on the Access road Map and Facility Drawing and I don't get an additional 2.69 acres of disturbance. Based on a 30 foot wide access road, your drawings show approx. 1 acre of additional permanent access road disturbance. Comparing the original Facility Drawing to this revised one it appears that PDC is now proposing 150 feet of un-reclaimed disturbance needed around the wells whereas originally PDC proposed to reclaim the construction disturbance much closer to the wells. I have attached the original Facility Drawing so you can compare it to the revised one and see what I'm referring to.

So it seems the revised Access Road will need 1 acre of unreclaimed disturbance and the larger unreclaimed area around the wells appears to be the remaining 1.69 acres. Why does PDC need the additional space around the wells? Also, will the truck traffic change based on the revised Access Road? I'm being very particular here as this location is in a Buffer Zone and normally expanding a location this much should be handled via an Amended Form 2A, not a Sundry.

**Doug Andrews**

Oil & Gas Location Assessment Specialist - Northeast Area



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**PDC Schneider Original Facility Drawing.pdf**

323K

**Kelsi Welch** <Kelsi.Welch@pdce.com>

Mon, Jan 25, 2016 at 4:07 PM

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

Hi Doug!

I left you a voicemail also, but could you please give me a call at [303-257-0107](tel:303-257-0107) to discuss when you get a chance?

Thanks!

Kelsi

**From:** Andrews - DNR, Doug [mailto:[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)]  
**Sent:** Monday, January 25, 2016 1:48 PM  
**To:** Kelsi Welch  
**Subject:** Re: COGCC Form 4 review for PDC Energy's Schneider 19Q-HZ Pad - Doc #400967192

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**Kelsi Welch** <[Kelsi.Welch@pdce.com](mailto:Kelsi.Welch@pdce.com)>  
To: "Andrews - DNR, Doug" <[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)>

Tue, Jan 26, 2016 at 9:20 AM

Hi Doug!

The extra disturbance is included on the new exhibit is because Weld county requires a 150' buffer around wellheads. Everything on the location besides the tank battery will essentially be reclaimed (seeded by us) and farmed by the surface owner, but we left the 150' cleared area around the wellheads on the new exhibit because no permanent structures or fixtures can be constructed in that area while the wellheads remain on location.

The access road revision will not change in that we will be using CR 54.5, not CR 54 for access to the location. Please let me know if you need anything additional.

Thank you for all of your help on this!

Kelsi

**From:** Andrews - DNR, Doug [mailto:[doug.andrews@state.co.us](mailto:doug.andrews@state.co.us)]  
**Sent:** Monday, January 25, 2016 1:48 PM  
**To:** Kelsi Welch  
**Subject:** Re: COGCC Form 4 review for PDC Energy's Schneider 19Q-HZ Pad - Doc #400967192

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