

Dave Kubeczko - DNR

From: Dave Kubeczko - DNR
Sent: Friday, August 04, 2017 10:06 AM
To: Dave Kubeczko - DNR
Subject: Vanguard Operating LLC (Vanguard), GGU Miller 11D Pad and GGU Miller 11D Multi-Well Pit, NWNW Sec 32 T6S R91W, Garfield County, Form 2A #401298622 and Form 15 #401239324 Review

Importance: High

Categories: Operator Correspondence

Scan No. 2108186

CORRESPONDENCE

2A #401298622

15 #401239324

From: Dave Ghan [mailto:sghan@vnreenergy.com]
Sent: Friday, August 04, 2017 9:57 AM
To: Dave Kubeczko - DNR
Cc: Carlos Lujan - DNR; Julie Webb
Subject: RE: Vanguard Operating LLC (Vanguard), GGU Miller 11D Pad and GGU Miller 11D Multi-Well Pit, NWNW Sec 32 T6S R91W, Garfield County, Form 2A #401298622 and Form 15 #401239324 Review

Dave,

Based on our phone conversation and email this morning regarding the GGU Miller Fed (MDP Pad #6) 33A-32-691 Pad and MDP 6-2 Multi-Well Pit (Form 2A #401298526 and Form 15 #401224814), Vanguard's accepts the COAs following the revisions we discussed to COAs 90B and 90C. Both locations and their associated multi-well pits are being permitted concurrently and we understand that following the agreed upon revisions to COAs 90B and 90C, the COAs for both locations and their associated multi-well pits will be identical to one another. We appreciated your time in discussing the COAs associated with both of these locations/multi-well pits and look forward to an expedited approval of the Form 2As and Form 15s, so that we may move forward with finalizing the scheduling of our planned development program. Please let me know if you have any questions or concerns.

Thanks again,

Scott Ghan

Senior EH&S Specialist
Vanguard Operating, LLC
112 Red Feather Trail Silt, Colorado 81652
Office 970.876.1959/Cell 970.744.8128/Fax 970.876.0981



From: Scott Ghan [mailto:sghan@vnreenergy.com]
Sent: Friday, August 04, 2017 9:54 AM
To: Dave Kubeczko - DNR
Cc: Julie Webb
Subject: RE: Vanguard Operating LLC (Vanguard), GGU Miller 11D Pad and GGU Miller 11D Multi-Well Pit, NWNW Sec 32 T6S R91W, Garfield County, Form 2A #401298622 and Form 15 #401239324 Review

Dave,

I have responded within the text below. Please understand we appreciate this opportunity to discuss these COAs with you and our comments should not be considered confrontational, argumentative, etc. We are strictly trying to get clarification or fully understand the purpose of only a few of the long list of COAs associated with these multi-well pits.

Thanks,

Scott Ghan

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Julie and Scott,

See Revisions and remaining COA from OGLA below in green text and yellow highlight; revisions from Environmental Group highlighted green; deletions in white and black; or comments below in red. These COAs will also be placed on the other Multi-Well Pit Location, I'm conducting that review and preparing that email.

If you have any questions, please do not hesitate to call me at (970) 309-2514 (cell), or email. Thanks.

Dave

David A. Kubeczko, PG
Oil and Gas Location Assessment Specialist
Western Colorado



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Please consider the environment before printing this e-mail

From: Julie Webb [mailto:jwebb@progressivepcs.net]

Sent: Tuesday, August 01, 2017 9:29 AM

To: Dave Kubezko - DNR; Scott Ghan

Cc: Carlos Lujan - DNR

Subject: Re: Vanguard Operating LLC (Vanguard), GGU Miller Fed (MDP Pad #6), 33A-32-691I Pad and MDP 6-2 Multi-Well Pit, SESW Sec 32 T6S R91W, Garfield County, Form 2A #401298526 and Form 15 #401224814 Review

Dave,

After reviewing the COAs, Vanguard believes that some of the COAs listed below are in reference to Rule 908 and a "Centralized E&P Waste Management Facility". Vanguard is not permitting a Centralized Facility and believes that requirements within Rule 908 are not applicable with these multi-well pits. These pits will allow the reuse and recycling of produced water within a reduced surface area on the location and also allows the utilization of existing pipeline infrastructure within the asset. We respectfully request that you consider removing or modifying the COAs we commented on below.

COA 90b - Prior to first use of the multi-well pit, operator shall submit an Operating Plan and Contingency Plan, generally consistent with Rules 908.b.(8) and 908.b.(11) via Form 4 Sundry Notice. The Contingency Plan shall include procedures if liners are compromised and if fluids are found in the leak detection system. which lists locations and wells that this multi-well pit will be used to support and facilitate completions; and updated annually as needed.

COA 90b references Rule 908 and requirements for a centralized facility, not multi-use pits. We are requesting this COA be removed. While we appreciate the removal of the reference to Rule 908.b, the Rule 908.b.(8) specific requirement remains. As stated earlier, since the 2A and Form 15 are associated with a multi-well pit we don't feel that a specific Rule 908 (Centralized E&P Waste Management Facility) requirement is applicable. Furthermore, I have included text from our "Supplemental Information" below, attached to the Form 15, which we believe addresses your statement "procedures if liners are compromised and if fluids are found in the leak detection system".

902.a.

This pit has been designed with features to prevent spills or leaks from impacting the environment. The implementation of VNR's Stormwater Management Plan, CDPS General Permit COR-03000(Certification Number COR-039752; Attachment A) and the operational policies and procedures described in this supplement are designed to minimize risk to the environment and accommodate rapid response in the event of an accidental spill or release of fluids. All transfers of water into and out of the pit are monitored by personnel during the entire transfer operation to ensure adequate freeboard (minimum of 2 feet) is maintained in the pit at all times. VNR has a spill response trailer staged at a location near all of our operations to facilitate response to any spills that may occur. The double lined pit will be installed with a leak detection system and this system will be checked at least once per week. In the event that a leak is detected, the pit will be drained as quickly as possible so that the source of the leak can be determined.

COA 90c - Per Rule 902.e, this multi-well pit is permitted for maximum of three (3) years use for storage, recycling, reuse, treatment, or disposal of E&P waste or fresh water, as applicable. The three year time clock will start from the date of first use after hydrostatic testing and be based on submittal of the Form 42 providing that date. The operator shall cease using the pit after three (3) years use and immediately begin pit closure in accordance with Rule 905. If the Operator envisions the need to extend the use of the pit beyond the 3-year period, a Form 28 application shall be submitted before the end of the 3-year period (one year, six months?) to allow for revision and approval from the COGCC. unless the following conditions are met; a Form 28, Application for a Centralized E&P Waste Management Facility is submitted COGCC within two (2) years of the Form 15 approval date, the Form 28 is deemed complete by COGCC, and the pit construction and operation is in full compliance with Rule 908. In order for the Form 28 to be deemed complete, it must fully comply with Rule 908 and not require a Rule 502.b variance from any part of Rule 908. The reference to Rule 902.e is applicable however, we cannot find in the rules where it is required to submit a Form 28 within 2 years of the Form 15 approval date. We do not intend to submit a Form 28, therefore we would like the text in red removed from the COA. Does there need to be a specific time frame (now one year, six months?) listed?

Could the COA just state “a Form 28 application shall be submitted before the end of the 3-year period” if you feel it is needed. I am assuming the timeframe is what the COGCC deems necessary for an operator to get a Form 28 approved?

COA 61 - Operator must submit an as-built drawing (plan view and cross-sections) of the multi-well pit and the oil and gas location (including all tanks and other pit operations equipment) within 60 calendar days of re-construction of the location, pit, and any operating equipment. Would you please let us know why an as-built drawing is required? We submitted a plan view and cross section drawings within the Form 15 submittal package. We cannot find in the Rules where an as-built drawing is a requirement for a Form 15. This type of Form 15 submittal package has been used utilized in other Form 15s, which were approved by the COGCC, and as-built drawings were not required or requested as a COA. We ask that this COA be removed, as we do not understand its purpose, unless it is an additional reference or requirement associated with a Centralized Facility. **The attachments submitted are general on the Form 2A and cartoon-like drafted over an aerial on the Form 15. COGCC requires this of all multi-well pits from operators as wells for locations where fluids are transferred to centralized tank batteries, or to nearby pads.** I apologize if our “cartoon-like” drawing was unable to depict the location and dimensions of the pit, as intended. We feel that the drawings, although not as-built, meet the requirements associated with a Form 15 and a multi-well pit, but probably do not meet the requirements of a centralized facility.

COA 59 - The multi-well pit must be fenced and netted. The operator must maintain the fencing and netting until the pit is closed. The fencing shall be placed a minimum of 1-foot from the pit liner anchor trench. Vanguard addressed this COA within our Form 15 submittal package and it can be referenced in the attachment “COGCC Form 15 Earthen Pit permit Supplemental Information”. **The Form 15 does not state that netting will be used. COGCC and CPW are requiring netting since the pit will contain produced water all the time and flagging does not work. COGCC also requests that the fencing be set back from the pit liner anchor trench. COA remains as is.** We respectfully disagree that this was not included in our Form 15 package and please see the text below which was copied from our “Supplemental Information” which was attached to the Form 15.

904.e.

Since the facility is within Elk and Mule deer concentration area, it is considered to be in a sensitive area. All material used in the determination are included in Attachment D. The pit will be fenced in accordance with the recommendations of the Colorado Division of Parks and Wildlife, specifically –

1. **Minimum 7 foot perimeter fence constructed of wire mesh.**
2. **Installation of chicken wire around the lower portion of the fence to prevent small mammals from entering the pit with about 1 foot of the wire buried under ground.**
3. **Installation of netting, as necessary, to prevent a loss of waterfowl.**

The pit will be double lined and constructed as described above in 904.c and include a leak detection system. The pit has been designed with features that significantly reduce the potential for the facility to impact nearby surface and ground water.

COA 41 - Any oil [other than de minimis] observed on the surface of completions fluids must be removed in accordance with Rule 902.c. We would like “No” removed from the COA and have the COA, if needed since it reflects an existing Rule, utilize text within Rule 902.c Rule 902.c is listed below for reference.

c. Any accumulation of oil or condensate in a pit shall be removed within twenty-four (24) hours of discovery. Operators shall use skimming, steam cleaning of exposed liners, or other safe and legal methods as necessary to maintain pits in clean condition and to control hydrocarbon odors. **Only de minimis amounts of hydrocarbons may be present unless the pit is specifically permitted for oil or condensate recovery or disposal use.** A Form 15, Earthen Pit Report/Permit, may be revoked by the Director and the Director may require that the pit be closed if an operator repeatedly allows more than de minimis amounts of oil or condensate to accumulate in a pit. This requirement is not applicable to properly permitted and properly fenced, lined, and netted skim pits that are designed, constructed, and operated to prevent impacts to wildlife, including migratory birds. Thank you for the revision.

COA 19 - The multi-well pit shall be used for a period of no more than three (3) years for storage, recycling, reuse, treatment, or disposal of E&P waste or fresh water, as applicable. The three year time clock will start from the date of first use after hydrostatic testing and be based on submittal of the Form 42 providing that date. **This COA is addressed in COA 90c and we request that it be removed due to redundancy.** Thank you for the revision.

Thank you for taking the time to review the COAs that Vanguard has concerns with.

Julie Webb
Senior Regulatory Analyst
Progressive Consulting
[616-813-5063](tel:616-813-5063)

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From: Dave Kubeczko - DNR [mailto:dave.kubeczko@state.co.us]
Sent: Thursday, August 03, 2017 4:01 PM
To: Julie Webb; Scott Ghan
Cc: Carlos Lujan - DNR
Subject: Vanguard Operating LLC (Vanguard), GGU Miller 11D Pad and GGU Miller 11D Multi-Well Pit, NWNW Sec 32 T6S R91W, Garfield County, Form 2A #401298622 and Form 15 #401239324 Review
Importance: High

Julie and Scott,

COGCC has been conducting the Oil and Gas Location Assessment (OGLA) review of the **Vanguard Operating LLC (Vanguard), GGU Miller 11D Pad Form 2A #401298622** and the **GGU Miller 11D Multi-Well Pit Form 15 #401239324**. The COGCC would like to attach the following conditions of approval (COAs) based on the data Vanguard has submitted on or attached to the **Form 2A** and **Form 15**, or subsequently in discussion and/or emails, will be placed on these two permits prior to passing the Form 2A and Form 15 Oil and Gas Location Assessment (OGLA) review.

COGCC has revised: Date planned to commence construction: from 08/01/2017 to 08/11/2017;
COGCC corrected distances from Wellhead to Public Road from 5280' to 4680' and from Production Facility to Public Road from 5280' to 4515' based on COGCC's review of COGCC's Online GIS Map, 2015 Aerial Photo layer and Roads layer; and

Based on proximity of the well pad to downgradient surface water (streams and/or intermittent streams located 318' to the north based on COGCC's review of COGCC's 2015 Aerial Photo Layer and Topo layer), COGCC has revised the distance to nearest downgradient surface water from 1480' to 318' and this location has been designated a "sensitive area".

The COGCC would like to attach the following conditions of approval (COAs) based on the data Vanguard has submitted on or attached to the **Form 2A** and **Form 15**, or subsequently in discussion and/or emails, will be placed on these two permits prior to passing the Form 2A and Form 15 Oil and Gas Location Assessment (OGLA) review.

Planning: The following conditions of approval (COA) will apply:

COA 90a - Prior to first use of the multi-well pit, operator shall submit and receive approval of an E&P waste management plan per Rule 907.a.(3).

COA 90b - Prior to first use of the multi-well pit, operator shall submit an Operating Plan and Contingency Plan. The Contingency Plan shall include procedures if liners are compromised and if fluids are found in the leak detection system.

COA 90c - Per Rule 902.e, this multi-well pit is permitted for maximum of three (3) years use for storage, recycling, reuse, treatment, or disposal of E&P waste or fresh water, as applicable. The three year time clock will start from the date of first use after hydrostatic testing and be based on submittal of the Form 42 providing that date. The operator shall cease using the pit after three (3) years use and immediately begin pit closure in accordance with Rule 905. If the Operator envisions the need to extend the use of the pit beyond the 3-year period, a Form 28 application shall be submitted before the end of the 3-year period (one year, six months?) to allow for revision and approval from the COGCC.

COA 91 - In addition to the notifications required by COGCC listed in the **Northwest Notification Policy (Notice of Intent to Construct a New Location and Notice of Intent to Commence Hydraulic Fracturing Operations)** and **Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment and c. Notice of Construction or Major Change)**; operator shall notify the COGCC 48 hours prior to start of pit construction, pit liner installation, start of hydrostatic test, start of first use of pit for operations, pipeline testing, onsite and offsite pipeline testing (any permanent buried or temporary surface lines used for hydraulic stimulation and/or flowback operations), and start of hydraulic stimulation operations at nearby well pad locations using the Form 42 (as described in **Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions**). The appropriate COGCC individuals will automatically be email notified.

COA 92 - Prior to placement of any temporary surface pipelines (poly or steel), operator will submit a Form 4 Sundry Notice indicating the proposed route of the temporary surface pipelines and any pump stations along the route.

Location Construction: The following conditions of approval (COAs) will apply to construction of the multi-well pit location:

COA 44 - The access road from the public road to the multi-well pit location will be maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

COA 76 - Strategically apply fugitive dust control measures, including encouraging established speed limits on public and private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Earthen Pit Construction: The following conditions of approval (COAs) will apply for construction of the multi-well pit and ancillary facilities:

COA 66 - Operator has indicated that all water used at this multi-well pit location will be delivered and sent via existing buried water pipelines. If for any reason, water has to be brought into or removed from the pit location by trucks, delivery and vacuum truck hoses will not be allowed to be placed directly onto the pit liner. Operator will utilize water tank hook ups at the location's existing tank battery.

COA 61 - Operator must submit an as-built drawing (plan view and cross-sections) of the multi-well pit and the oil and gas location (including all tanks and other pit operations equipment) within 60 calendar days of re-construction of the location, pit, and any operating equipment.

COA 22 - After installation of the uppermost liner and prior to operating the pit, the synthetic liner(s) integrity shall be tested to the operating capacity of the pit facility (not to exceed the 2-foot freeboard requirement). The operator shall monitor the pit for leaks for a period of 72 hours prior to either draining the pit or commencing operations. Operator shall notify the COGCC 48 hours prior to start of the hydrotest using the Form 42. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to COGCC prior to using the pit via a Form 4 Sundry.

COA 59 - The multi-well pit must be fenced and netted. The operator must maintain the fencing and netting until the pit is closed. The fencing shall be placed a minimum of 1-foot from the pit liner anchor trench.

COA 74 - Operator will use adequately sized secondary containment devices for all chemicals and/or hazardous materials stored or used on location.

COA 40 - Operator will implement measures to ensure that adequate separation of hydrocarbons from the influent occurs to prevent accumulation of oil on the surface of stored completions fluids. Operator shall also employ a method for monitoring buildup of phase-separated hydrocarbons on the surface of stored fluids.

COA 41 - Any oil (other than de minimis) observed on the surface of completions fluids must be removed in accordance with Rule 902.c.

Completions Operations: The following condition of approval (COA) will apply to the pit location during completion operations at nearby locations:

COA 26 - Potential odors associated with the multi-well pit operations must be controlled/mitigated.

Material Handling and Spill Prevention: The following conditions of approval (COAs) will apply to these Form 2A and Form 15 Permits if any temporary surface (**COAs 45, 49, 54, and 55**) or new buried permanent (**COA 45**) flowlines and/or offsite pipelines (poly or steel) are used during operations at the multi-well pit location as well as nearby well pad locations where completions are taking place:

COA 45 - Operator shall pressure test pipelines (flowlines from the existing tank battery to the multi-well pit [if constructed] and from any temporary surface lines used for hydraulic stimulation and/or flowback operations from this location to nearby well pad locations) in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines.

COA 49 - Operator must routinely inspect the entire length of all surface pipelines to ensure integrity. Operator shall conduct daily inspections of surface poly or flex-steel pipeline routes for leaks during active transfer of fluids and implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. In addition, pump stations along the surface poly or flex-steel pipeline route will be continuously monitored when operating in order to swiftly respond to such a failure.

COA 54 - Operator will implement BMPs necessary to mitigate a potential for a release of fluids to impact streams, intermittent streams, ditches, and drainage crossings. For these crossings: if poly pipe or flex-steel are used on the surface, operator will ensure appropriate containment by either installing over-sized pipe "sleeves" which extend the length of the crossing and beyond to a distance deemed adequate to capture (catchment basins) and/or divert (divergent trenches) any possible release of fluids and prevent fluids from reaching the stream or drainage; installing over-sized pipe "sleeves" which extend the length of the crossing and installing shut off valves on either side of crossing instead of catchment basins; or develop an alternative means for containment.

COA 55 - Operator will utilize, to the extent practical, all existing access and other public roads, private roads along access roads, and/or existing pipeline right-of-ways, when placing/routing the temporary surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

COGCC would appreciate your concurrence with attaching these COAs to the Form 2A and Form 15 permits prior to passing the OGLA and final approver review. In addition, could Vanguard provide COGCC with the COAs and wildlife stipulations that BLM has attached to this location, or MDP, any approved Sundry for the use of the pit, as well as all drawings that have been submitted with the BLM for this location. If you have any questions, please do not hesitate to call me at (970) 309-2514 (cell), or email. Thanks.

Dave

David A. Kubeczko, PG
Oil and Gas Location Assessment Specialist
Western Colorado



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