

Kubeczko, Dave

From: Kubeczko, Dave
Sent: Thursday, September 08, 2011 11:46 AM
To: Kubeczko, Dave
Subject: FW: Vessels Coal Gas, Inc., Oxbow Mining LLC #1, NESW Sec 11 T13S R90W, Gunnison County, Form 2A #400147973 Review
Attachments: J10101 LEASE AREA 11 MAY 2011.pdf; J10101 CONSTRUCTION LAYOUT 11 MAY 2011.pdf; 2010 8 11 VESSELS WELL SITE PICTURES.pdf; J10101 CROSS-SECTIONS 11 MAY 2011.pdf
Categories: Orange - Operator Correspondence

Scan No 2033996 CORRESPONDENCE 2A#400147973

From: Paul Jordan [mailto:paul@np3llc.com]
Sent: Wednesday, August 31, 2011 4:24 PM
To: Kubeczko, Dave
Cc: Yokley, Bill
Subject: RE: Vessels Coal Gas, Inc., Oxbow Mining LLC #1, NESW Sec 11 T13S R90W, Gunnison County, Form 2A #400147973 Review

Dave:

Sorry about delay, but waiting to provide all info in a single email back to you was previously unachievable. I now provide here the information you requested in your email of April 14, 2011 (below) in the order of the points in your original email:

- 1 Rather than installing a pipeline to offsite location, we will be installing a small, skid-mounted power generating facility that offsets the Oxbow Mining LLC #1, so there will be minimal piping and facilities from the gas to that facility.
We do not believe the mine methane gas will be associated with water, so no separator required, and the methane produced by the well will directly feed the power generator, which will in turn produce electricity into the regional electricity grid.
- 2 (a) The first attachment to this email represents the disturbed area at the beginning of construction (2.2 acres - all presently disturbed due to mining operations) and (b) the second attachment to this email represents the disturbed area prior to drilling the well, which will also constitute our interim reclamation (0.3 Acres). As you know, this is unusual for oil and gas drilling operations, since we will actually be reducing, rather than expanding, a pad to drill the well, due to the fact that there is already disturbance there that we will be reclaiming prior to drilling.
- 3 Completed
- 4 Noxious weeds are not believe to be present
- 5 Vessels Coal Gas, Inc. understands these COA's and will comply.
- 6 Vessels Coal Gas, Inc. understands these COA's and will comply.
- 7 The third attachment to this email consists of photos taken from all four directions from the pad site, reflecting vegetation offsetting the pad.
- 8 See Item 2a above and the 1st attachment to this email for pre-construction drawing (current status of site) and 2b above for post-construction and interim (2nd attachment) and cross section during drilling and interim (4th attachment). The abandoned leach pond is in place at this time to capture run-off associated with the abandoned mine operations, and we have no intention of using it in our operations. We are working with the mine to determine if we will be allowed to reclaim the pond or if we must leave the pond in place to satisfy mining regulations.
- 9 See Item 1 above. The produced methane will feed a small skid mounted generator at the site.

Please note my new email address: paul@np3llc.com

Paul A. Jordan, P.E.
NP3 LLC
(303) 809-1273

From: Kubeczko, Dave [mailto:Dave.Kubeczko@state.co.us]
Sent: Thursday, April 14, 2011 3:44 PM
To: Paul Jordan
Subject: Vessels Coal Gas, Inc., Oxbow Mining LLC #1, NESW Sec 11 T13S R90W, Gunnison County, Form 2A #400147973 Review

Paul,

I have been reviewing the Oxbow Mining LLC #1 Pad **Form 2A** (#400147973). COGCC requests the following clarifications regarding the data Vessels Coal Gas Inc. has submitted on or attached to the Form 2A prior to passing the Oil and Gas Location Assessment (OGLA) review. In addition, COGCC would like to attach the following conditions of approval (COAs) to the Form 2A.

1. **Facilities (Section 5):** The facilities list also should include any tanks, separators associated with this well. If none are anticipated, can you please confirm this or indicate which might be needed.
2. **Construction (Section 6):** There needs to be an estimate for the following:
Size of disturbed area during construction in acres:
Size of location after interim reclamation:
It does not matter that an existing disturbed area is being used for the pad, the acreage needs to be provided.
3. **Soils (Section 12):** Form 2A indicates that the primary soil type is Map #41 – Curecant-Fughes stony loams – Poania Area, Parts of delta, Gunnison, and Montrose Counties. COGCC's review indicates that the location is underlain with soil type Map #74 – Torriorthent-Haplargids complex, very stony (COGCC has attached this report and made the change on the Form 2A).
4. **Plant Community (Section 13):** There needs to be an answer to the question: **Are noxious weeds present?**
5. **Water Resources (Section 14):** Form 2A indicates the distance to the nearest surface water is 300 feet. COGCC guidelines require designating all locations with close proximity to surface water (the exact distance varies with the location and takes into consideration soil type, surface geology, initial grade/topographic slope, the grade/topographic slope adjacent to the location, vegetative cover, as well as other factors) a **sensitive area** and requiring the following condition of approval (COA):
COA 23 - Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals, and maintained in good condition.
COA 46 – Due to the very steep slopes to the north, this location is in an area of high run off/run on potential; therefore the pad shall be constructed as quickly as possible and appropriate BMPs need to be in place both during, after well pad construction completion, as well as during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.
COA 5 - Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.
6. **Water Resources (Section 14):** Form 2A indicates the depth to groundwater to be 100 feet bgs for a well located 5200 feet from the proposed well pad. COGCC's review indicates there are two water wells, one (Permit No. 2146-Champion Coal Mining Company, domestic well) located approximately 948 feet to the east-southeast,

with a total depth of 55 feet bgs, a depth to groundwater of 51 feet bgs, and a pumping rate of 20 gpm; and the other (Permit No. 2146-Champion Coal Mining Company, domestic well) located approximately 1137 feet to the east, with a total depth of 10 feet bgs and a pumping rate of 9.7 gpm. I believe these wells are indicative of groundwater conditions in the area and that the depth to groundwater at this location is likely to be between, 10 and 50 feet bgs. COGCC has changed the depth to groundwater to 30 feet bgs. COGCC guidelines require designating all locations with shallow groundwater a **sensitive area** and requiring the following condition of approval (COA):

COA 1 - Location is in a sensitive area due to shallow groundwater; therefore, no pits are allowed.

7. **Rule 303.d.(3).F.ii.aa and bb:** Since the current and future land uses are non crop land (timber), a reference area needs to be indicated on a topographic map. In addition, four (each of the cardinal directions) color photographs taken during the growing season of the reference area are required within 12 months of the Form 2A permit application date (04/05/2011).
8. **Rule 303.d.(3).H.:** If the oil and gas location disturbance is to occur on lands with a slope ten percent (10%) or greater, or one (1) foot of elevation gain or more in ten (10) foot distance, then the following shall be required: i. Construction layout drawing (construction and operation); and ii. Location cross-section plot (construction and operation). The Construction Layout Drawing provided does not show the dimensions and layout of the well pad. Cross-sections are also needed.
9. **Rule 303.d.(3).C.:** Neither the Location Drawing nor the Construction Layout Drawings, show the location of the proposed gas pipeline. One of these drawings should show the anticipated location of this pipeline. Otherwise, a statement indicating that the proposed pipeline location will follow the access road in the comments section would be sufficient. I can make the change if you send an email with this request.
10. **Water Resources (Section 14): Rule 317B. PUBLIC WATER SYSTEM PROTECTION: d. Requirements for DCPS Operations at New Oil and Gas Locations in the Intermediate Buffer Zone. (5) Notification of potentially impacted Public Water Systems within fifteen (15) stream miles downstream of the DCPS Operation prior to commencement of new surface disturbing activities at the site.** COGCC's review indicates that this location is within the 317B Surface Water Supply Area intermediate buffer zone and requires notification (copies of which need to be included with the Form 2A) to all public water supply systems within 15 miles. In addition, the following conditions of approval (COAs) will also apply:

COA 6 – A closed loop drilling system must be implemented.

COA 25 - Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material (per Rule 604.a.(4)).

COA 38 - The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if drill cuttings are to remain/disposed of onsite, they must also meet the applicable standards of table 910-1.

COA 58 - Berms or other containment devices shall be constructed in compliance with Rule 604.a.(4) around crude oil, condensate, and produced water storage tanks.

COA 92 - When sufficient water exists in the Classified Water Supply Segment, collection of baseline surface water data consisting of a pre-drilling surface water sample collected immediately downgradient of the oil and gas location and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any drilling activities and operations or completion. The sample parameters shall include: pH; alkalinity; specific conductance; major cations/anions (chloride, fluoride, sulfate, sodium); total dissolved solids (TDS); benzene, toluene, ethylbenzene, total xylenes (BTEX); gasoline range organics (GRO); diesel range organics (DRO); total petroleum hydrocarbons (TPH); polycyclic aromatic hydrocarbons (PAH's [including benzo(a)pyrene]); and metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium). Current applicable EPA-approved analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain state or nationally accredited programs. Copies of all test results described above shall be provided to the Commission and the potentially impacted Public Water System(s) within three (3) months of collecting the samples. In addition, the analytical results

and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.

COA 72 - An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for downstream Public Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with intake(s) within fifteen (15) stream miles downstream of the DCPS operations. In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above-described emergency response program. If a spill or release impacts or threatens to impact a Public Water System, the operator shall notify the affected or potentially affected Public Water System(s) immediately following discovery of the release, and the spill or release shall be reported to the Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

COGCC would appreciate your concurrence with attaching these COAs (items 5, 6, and 10) to the Form 2A permit prior to passing the OGLA review. The other issues (Items 1, 2, 4, 7, 8, and 9) also need to be addressed prior to permit approval. 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

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