

Dave Kubeczko - DNR

From: Dave Kubeczko - DNR
Sent: Tuesday, January 27, 2015 9:52 AM
To: dave.kubeczko@state.co.us
Subject: FW: Resend of URSA Operating Company LLC, Watson Ranch B Pad, SESW Sec 17 T7S R95W, Garfield County, Form 2A#400725879 Review

Categories: Operator Correspondence

Scan 2107276 CORRESPONDENCE 2A#400725879

From: Dave Kubeczko - DNR [mailto:dave.kubeczko@state.co.us]
Sent: Tuesday, January 27, 2015 9:50 AM
To: Cari Mascioli
Subject: RE: Resend of URSA Operating Company LLC, Watson Ranch B Pad, SESW Sec 17 T7S R95W, Garfield County, Form 2A#400725879 Review

Cari,

COGCC has responded to URSA's comments on the COAs below (responses are similar to those provided for the Yater Pad). COGCC is ready to approve the Form 2A with the revisions below.

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

Dave

From: Cari Mascioli [mailto:CMascioli@ursaresources.com]
Sent: Tuesday, January 06, 2015 4:12 PM
To: Dave Kubeczko (dave.kubeczko@state.co.us)
Subject: RE: Resend of URSA Operating Company LLC, Watson Ranch B Pad, SESW Sec 17 T7S R95W, Garfield County, Form 2A#400725879 Review

Good Afternoon Dave,

Thank you for bringing these items to our attention. We appreciate the opportunity to comment on the COAs, please see our responses below. Also I have attached a revised Attachment H Soils, revised Attachment L Multi-Well Plan and the USACE Investigation Report.

Thank you,
Cari

Cari Mascioli
Regulatory Technician



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From: Dave Kubeczko - DNR [<mailto:dave.kubeczko@state.co.us>]

Sent: Tuesday, December 30, 2014 1:19 PM

To: Cari Mascioli

Subject: Resend of URSA Operating Company LLC, Watson Ranch B Pad, SESW Sec 17 T7S R95W, Garfield County, Form 2A#400725879 Review

Cari,

I realized after talking to you, and after I sent this email, that the Watson Ranch B Pad will have an injection well on the location (Form 2#400731442, WATSON RANCH B 24AWI-17-07-95 Injection Well). Therefore, a few additional conditions of approval (COAs) that are placed on locations with injection wells will be required. I have listed these below. I have also revised **COA 91 - Notification** below (**see highlighted black with white text**).

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

COA 2 - Approval of this Form 2A does not authorize operator the right to inject. Authorization to inject into the selected Formation(s) requires approval of both the Form 31 and the Form 33.

Agree

Construction: The following conditions of approval (COAs) will apply:

COA 48 - Operator must submit an as-built drawing (plan view and cross-sections) of the injection well pad and associated equipment within 30 calendar days of construction.

The Facility Layout Drawing & Construction Layout Drawing show how the pad will be constructed and where the equipment will be placed. If you could provide the basis or a better understanding for a need on this COA it would be appreciated. **COA has been removed. The as-built drawings are generally requested for injection well.**

COA 46 - Operator will use qualified containment devices for all appropriate chemicals/hazardous materials and injection equipment (pumps) used onsite during the operation of the injection well.

Agree

COA 41 - All tanks and aboveground vessels containing fluids must have secondary containment structures. All secondary containment structures/areas must be lined. Operator must ensure a minimum of 110 percent secondary containment for the largest structure containing fluids within each bermed area at the facility during operations. The construction and lining of the secondary containment structures/areas shall be supervised by a professional engineer or their agent.

Agree

COA 51 - Operator shall equip and maintain on all tanks an electronic level monitoring device.

Agree

Drilling/Completions: The following conditions of approval (COAs) will apply:

COA 22 - Before hydraulic stimulation of the each well, operator shall collect a groundwater sample from the Iles Formation and analyze for total dissolved solids (TDS); submit laboratory analytical results to COGCC (emails: bob.koehler@state.co.us and arthur.koelspell@state.co.us).

Agree

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
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 Please consider the environment before printing this e-mail

From: Dave Kubeczko - DNR [mailto:dave.kubeczko@state.co.us]
Sent: Monday, December 29, 2014 4:13 PM
To: Cari Mascioli
Subject: URSA Operating Company LLC, Watson Ranch B Pad, SESW Sec 17 T7S R95W, Garfield County, Form 2A#400725879 Review

Cari,

I have been reviewing the Watson Ranch B Pad **Form 2A #400725879**. COGCC would like additional/revised attachments (Revised Multi-Well Plan [current plan shows 14 wells, Form 2A indicates 17 wells, number of 2s submitted is 14, based on Related Forms Tab], Reference Area Map, and Reference Area Pictures) as outlined below.

Rule 303.b.(3).G.ii.: Designation of the current land use(s) and landowner's designated final land use(s) and basis for setting reclamation standards.

- i. If the final land use includes residential, industrial/commercial, or cropland and does not include any other uses, the land use should be indicated and no further information is needed.
- ii. If the final land use includes rangeland, forestry, recreation, or wildlife habitat, then a reference area shall be selected and the following information shall be submitted:
 - aa. A topographic map showing the location of the site, and the location of the reference area; and
 - bb. Four (4) color photographs of the reference area, taken during the growing season of vegetation and facing each cardinal direction. Each photograph shall be identified by date taken, well or Oil and Gas Location name, and direction of view.

URSA needs to provide a Reference Area Map now, and four (4) color photographs of the Reference Area, taken during the growing season, within twelve (12) of the Form 2A permit submittal (12-03-2014).

After verifying with our Land team, the current and future land use is irrigated crop land. The Attachment H Soils has been revised to remove any mention of attachment G and rangeland. Please see attached. COGCC will correct the Form2A to irrigated cropland.

Rule 303.b.(3).L.: Where the proposed Oil and Gas Location is for multiple wells on a single pad, a drawing showing proposed wellbore trajectory with bottom-hole locations. Current multi-well plan shows 14 wells, Form 2A indicates 17 wells, number of 2s submitted is 14, based on Related Forms Tab.

URSA needs to confirm number of wells and correct either the Multi-Well Plan or indicate that the Form 2A, Facilities Tab, needs to be corrected.

The Attachment L Multi-Well Plan has been revised to show 17 wells as listed on the Form 2A. Please see attached.

Based on COGCC's review, COGCC would like to attach the following conditions of approval (COAs) based on the information and data URSA has submitted on or attached to the Form 2A prior to passing the Oil and Gas Location Assessment (OGLA) review.

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

COA 91 - Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, start of hydraulic stimulation operations, start of flowback operations (if different than hydraulic stimulation), pipeline testing, and start of injection using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

We agree with the COA, with the following exceptions: rig mobilization and pipeline testing are not on the Form 42. However we could comply by sending an email notification to you 48 hours prior to meet these requirements. URSA can still submit a Form 42 and mark the OTHER – AS SPECIFIED BY PERMIT CONDITION add (2/2A): box and describe on the Form 42 what the permit-specific notification is for.

COA 91a - Operator will implement sufficient public notification of proposed oil and gas activities. These may include the following: (1) provide 30 day advance notice and community awareness to neighborhood; (2) schedule changes will be communicated to the community at meetings or emails; (3) notify local emergency response agencies (Fire/Police) of schedule changes; and (4) notify all homes within a ¼-mile radius and local emergency responders (Fire/Police) 7 days prior to mobilization in, rig up (MIRU). If the operator, local emergency response agencies (Fire/Police), and the nearby community have agreed on other means of notification, that will satisfy this COA.

Based on notifications under the August 2013 and September 2014 regulations, Ursa believes that these notifications are adequately addressed. We would like to ensure that this COA is consistent with existing regulations. In addition Ursa holds numerous community and stakeholder meetings as identified in the application BMPs. COGCC adds COAs to go beyond the current rules and regulations, therefore; this COA has been revised as indicated above.

COA 91b - Operator will review local governmental requirements for access from public roads. At a minimum the following traffic requirements will apply: (1) operator will work with the Garfield County Road and Bridge Department to develop and implement a traffic control plan that, at a minimum: a) establishes designated haul routes, b) designates haul routes to avoid school zones and schedules heavy equipment movement to avoid school bus operation hours, c) provides for additional signage on major and/or local roads to be employed during heavy activity periods warning of increased truck traffic, d) restricts all oil and gas related construction, drilling, and operational traffic to access the location from a single point, e) provides for flaggers and/or pilot vehicles as necessary, and f) schedules work to avoid peak traffic flow. Deleted - In addition, the operator will require safe driving training for employees and contractors.

We could comply by encouraging safe driving training for employees and contractors. Ursa addresses driving safety in twice-monthly employee and contractor meetings under its Health and Safety training program. COGCC has revised the COA as shown above.

In addition, this location has been designated a "sensitive area" due to proximity to down gradient surface water (the well pad will be built over two intermittent streams with another located approximately 139' to the south) and proximity to a domestic water well (729').

Construction: The following conditions of approval (COAs) will apply:

COA 23 - Operator must ensure 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 (at least every 14 days and after precipitation events), and maintained in good condition.

We agree with the exception of the inspection intervals following a precipitation event. We suggest that this should be revised to indicate the Stormwater inspections will be conducted in accordance with the CDPHE general permit and regulations. This COA will remain.

COA 44 - Since the proposed access road crosses an intermittent stream, the access road will be constructed and maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages or ditches leading to surface water.

We have discussed this matter with US Army Corp of Engineers. The pad and access road do not impact jurisdictional waters of the United States and will not require USACE permitting. USACE Investigation Report is attached. This COA will remain.

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

Agree

COA 41 - Operator has indicated they have prepared a job specific Emergency Management/Response Plan. Operator will provide temporary engineering controls to prevent uncontrolled public access during drilling and completion activities. Site security shall include, but not be limited to, appointing a Health and Safety Officer that will insure the Emergency Management/Response Plan is adhered to and who is authorized to shut down operations at any time when health and safety risk is present.

We will continue to use Job Safety Analysis (JSA) as well as signage stating "authorized personnel only" as engineering controls.

COA 42 - Temporary perimeter sound walls (consisting of earthen berms and/or metal, synthetic, or wood sheeting) shall be used, at a minimum, on the south perimeter of the location during drilling and completion activities to provide noise relief to nearby residents. Operator shall conduct noise monitoring as described in 802.c. at a minimum once during each phase of activity (pad construction, drilling, completion and production), and submit the results to the COGCC. The COGCC may require additional noise mitigation if measures taken are deemed insufficient.

Ursa will be using temporary sound walls and conducting noise monitoring in accordance with 802.c. for drilling and completions activities.

COA 43 - Operator will take aggressive action to establish vegetation on cut and fill slopes to prevent storm water erosion and the generation of fugitive dust. Operator shall install and maintain native vegetative visual buffering on the west and east sides in conjunction with site stabilization. Visual mitigation shall also include the use of low profile tanks.

Agree

COA 58 - Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around permanent crude oil, condensate, and produced water storage tanks.

Agree

Drilling/Completions: The following conditions of approval (COAs) will apply:

COA 38 - The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. **Deleted - After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. Land-farming of E&P waste is prohibited on the location; however, this shall not preclude onsite disposal of E&P waste in accordance with COGCC Rules and permit conditions. After the drill cuttings have**

been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of an amended Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.

Agree with the exception of the need for a Form 4 Sundry Notice for commercial disposal of drill cuttings as we are complying with CDPHE & disposal facility waste acceptance criteria. Operator has indicated that cuttings will be disposed of "OFFSITE" using "COMMERCIAL DISPOSAL"; COGCC has made the change. And revised the COA as above.

COA 51 - Lighting abatement measures beyond the requirements of **Rule 803**, shall be implemented, including the following, at a minimum: (1) rig oriented to direct light away from nearby residents; (2) install lighting shield devices on all of the more conspicuous lights; **and (3)** rig shrouded on the west and south sides.

Agree with the exception of low density sodium lighting as Ursa is currently utilizing a super single style rig, which is significantly shorter than that of a traditional triple style drilling rig. Ursa will ensure lighting is facing in a downward direction. COGCC has revised the COA to exclude sodium lights.

COA 52 - For purposes of reducing impacts to nearby residents, flares (such as TCI's portable flare with high combustion rate, low noise, and low visibility flare) will be utilized.

Agree

COA 53 - Emissions from condensate, crude oil, and produced water tanks and from glycol dehydrators shall be controlled as described in **Rule 805.b.(2)**, notwithstanding the exceptions for production facilities emitting less than five tons per year (TPY) of volatile organic compounds (VOC).

Agree

COA 54 - Air quality and odor controls will be implemented and will include the following : (1) flowback stream to be routed from wellhead to a "four-phase" separator and then to a sealed flowback tank, with non-salable gas sent to a temporary flare or VOC combustor; (2) oil or condensate captured during separation process will be sent to a tank with emissions controls; (3) frac/flowback storage tank hatches shall operate with hydrocarbon absorbing blankets to control odors; **and** (4) operator will comply with the green completions section under **Rule 805.b.(3)**. Deleted - **and (5) maintain a portable meteorological weather station during well drilling and completion operations, that includes a data logger to archive wind speed, wind direction, and temperature, with information provided to COGCC and CDPHE.**

Agree with the exception of (5) regarding a portable weather station. Existing weather station data and air quality data is available from multiple public sources including Garfield County. COGCC has revised the COA to exclude a portable meteorological weather station.

COA 25 - Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.

Agree

Material Handling and Spill Prevention: The following conditions of approval (COAs) will apply to the Form 2A Permit if any temporary surface pipelines (poly or steel) or buried (poly or steel) pipelines are used during operations at the well pad location or nearby well pads:

COA 45 - Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.

Agree, Ursa will pressure test pipelines upstream of the point of sale.

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

Agree

Operator shall also adhere to the BMPs listed on the Operator BMP/COA Tab as well as to the following rule:

Rule 604.c.(2). A. thru W.:

604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATIONS

c. Mitigation Measures. The following requirements apply to an Oil and Gas Location within a Designated Setback Location and such requirements shall be incorporated into the Form 2A or associated Form 2 as Conditions of Approval.

(2) **Location Specific Requirements – Designated Setback Locations.** Subject to Rule 502.b., the following mitigation measures shall apply to any Well or Production Facility proposed to be located within a Designated Setback Location for which a Form 2 Application for Permit to Drill or Form 2A Oil and Gas Location Assessment is submitted on or after August 1, 2013: In particular:

C. Green Completions - Emission Control Systems.

F. Leak Detection Plan.

M. Fencing requirements.

N. Control of fire hazards.

Agree

COGCC would appreciate your concurrence with attaching these COAs to the Form 2A permit prior to passing the OGLA review. The above COAs have been previously attached to URSA's existing, and nearly adjacent, Watson Ranch Pad (OGCC Facility ID#413055) and URSA's nearby Monument Ridge Pad (OGCC Facility ID#422286); as well as EnCana Oil & Gas (USA) Inc's nearby Cook Martin #20-1D, PB-20 Pad (OGCC Facility ID#422328). 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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