

March 30, 2016

VIA EMAIL – ORIGINAL TO FOLLOW VIA U.S. MAIL

Colorado Oil and Gas Conservation Commission
Attn: Kyle Davenport and Peter Gowen
1120 Lincoln Street, Suite 801
Denver, CO 80203

**RE: Yater Pad Location ID # 159652
Notice of Alleged Violation # 400976773**

**Watson Ranch B Pad Location ID # 440705
Notice of Alleged Violation # 400983954**

**Monument Ridge Pad Location ID # 422286
Notice of Alleged Violation # 400983780**

Mr. Davenport and Mr. Gowen,

Please accept this letter as Ursa Operating Company LLC's ("Ursa") supplemental response to the Colorado Oil and Gas Conservation Commission's ("COGCC") Notice of Alleged Violation #400976773 for the Yater pad; #400983954 for the Watson Ranch B and #400983780 for the Monument Ridge locations (collectively, the "NOAVs"), all received by Ursa on February 9, 2016. Ursa is submitting this supplemental response as additional support for its original contest of the alleged violations detailed in the referenced NOAVs and per the follow up meeting with Ursa representatives, Ursa's counsel (Jamie Jost of Jost Energy Law, P.C.) and the COGCC on March 14, 2016.

Ursa believes that the corrective actions requested in the NOAV were completed in a timely manner and within the allowable timeframes stated in the inspections. Ursa respectfully disagrees with the basis for the NOAVs and the COGCC's intent to proceed with fines and penalties for such NOAVs. This response documents the integrity and comprehensive nature of Ursa's internal inspection, complaint and corrective action programs. In addition to this, information previously submitted to the COGCC as part of Ursa's original response and contained herein demonstrate that many actions taken represent self-disclosure.

A. Background Facts

The three (3) NOAVs specify alleged leaking of production tanks and repeats the reference to rule 605.d. and 805. By this response, Ursa will demonstrate below that it has a robust and

comprehensive regulatory compliance and inspection system in place; and the mechanical issues identified, allegedly leading to the 805 odor violation were well under control prior to the COGCC's inspections. The following list illustrates numerous background facts that Ursa believes are helpful to the COGCC as it continues to review and understand Ursa's internal compliance and inspection systems:

1. The leaking components were internally identified by Ursa as part of an unscheduled FLIR inspection by HRL (third party consultants) on October 19, 2015. The components consisting of thief hatches were proven to have required maintenance performed (replaced seals, springs, readjusted, etc.) and were in functioning condition per the manufacturer. The hatches from the manufacturer do not appear to be designed in a manner that will completely eliminate leaks as this is a new standard that Colorado has implemented. Tank and equipment manufacturers are adapting to new regulations and increased specifications. Parts are not easily available due to this relatively new change in requirements (implemented in Colorado on January 1, 2015). The equipment was functioning within the design specifications but still yielded leak(s) when viewed with a FLIR camera. Ursa took the proactive steps in researching and testing new styles of hatches. During this trial in the summer of 2015, Ursa identified the screw down style to be the best option for Ursa's configuration of emissions control equipment and tank setup. Ursa ordered these new style hatches the same day the FLIR inspection identified the leaks, or October 19, 2015.
2. Leaks identified at the Yater pad on December 7, 2015 consisted of the tank gauge and thief hatches. The tank gauge bushings and fittings were immediately replaced the next day, on December 8, 2015, prior to Ursa officially receiving the inspection from the COGCC. This demonstrates that the penalty matrix which shows eight (8) days is not accurate for the tank gauge. Thief hatch seals were replaced with brand new ones on December 10, 2015 and were upgraded to the screw down style on December 16, 2015 (work started in preparation on December 15, 2015). These parts were ordered on October 19, 2015 as indicated above. Once they were received they were installed, showing no delay or zero (0) days in violation.
3. Ursa has an effective complaint process in place. John Doose is the Ursa Landman who spearheads Ursa's internal complaint program. If a complaint is received, John immediately gets some basic information from the complainant. If it is an odor complaint specifically, the wind direction, type of odor, time, duration and strength are a few pieces of information initially collected. This information is immediately entered into Ursa's database tracker tablet collector (collector). Once the information is in the Ursa system, John makes calls and/or sends emails to the Ursa leads including Production, Completions, Drilling and Constriction. If any of the leads have specific information that may assist John they communicate that to him. John then sets up a confirmation of the odor (within 30 minutes or less of the complaint). If odors are determined to be present the source is tracked down and appropriate measures are taken to control. If the odor

cannot be verified, the team still investigates and checks the adjacent locations. There is a standing 8:00 a.m. operations meeting every day (M-F) in which details are discussed and corrective action is determined if appropriate. Since most of the odor complaints occur at night, this is a perfect place and time to get the team onboard for a solution. This does not mean that the solution is postponed until the morning at 8:00 a.m., if there are actions that need to be taken, they are. Once the source has been identified, the Landman makes follow up contact with the stakeholder and informs them on the progress and/or solution.

4. Ursa has improved its operations by implementing the following practices since the fall of 2015:
 - a. Ursa has hired a “night watch” to secure the Battlement Mesa locations at night time for both operational and security purposes. This leads to a quick response time if a complaint is received and investigations are thorough and real-time. This also increases the security for Ursa’s equipment to the cost of approximately \$350/day or \$10,500/month.
 - b. The use of “screw down” style hatches have been made mandatory across the Battlement Mesa field. Each location has been retrofitted with the new standard. The Tompkins and Monument Ridge B locations will be updated prior to tanks being put into production. The cost per unit for upgrade is \$600 per tank or \$3600 for each location. The PRVs (Enardo Valves) were upgraded from stock to the green style at a cost of \$5000 per location (including install).
 - c. Telemetry or electronic fluid level monitoring is being used vs. opening the hatch to stick the tanks. This has proven to reduce odors by keeping pressure in tanks and emissions going through to the combustor. This was effective as of December 10, 2015.
 - d. Telemetry allowed the production team to automate the system to shut the well in if a sudden pressure loss is detected. This will eliminate the stuck dump issue that contributed to causing odors the night of December 9, 2015. If this situation occurs again in the future, the well will automatically be shut and manually activated.
 - e. When wells first come off of flowback and get put on the production equipment (separators and tanks) the volumes are at their peaks and will drop over time. This initial spike in fluids increases the emissions going to the production combustors. During flowback operations, large volume combustors/incinerators from the completions flowback process were utilized on the Yater pad in addition to the production combustors. Ursa will utilize these larger units to compensate for additional emissions volumes anticipated during the peak flow time periods.

These combustors will be used on an as needed basis. This additional equipment will cost Ursa \$10,000/month per location.

- f. The flowback process will continue to be modified from the existing high quality process to the following: Wellhead to test separator to P-tank, new sealed production tanks, and then to storage tanks (frac tanks).
 - g. Flowback: This portion will remain essentially unchanged. Flow process will be from Wellhead to Primary Separator, then Secondary Separator (P-tank), then flowback tank. Flowback tanks will be where we control odors with chemical odorants (smell-good) and carbon-fiber blankets.
 - h. Production Watch: Ursa will continue to evaluate and implement processes in sensitive areas such as Battlement Mesa. Normally when wells come off of flowback, fluids and gas from the well go to the Permanent Separator, and dump straight into the Production tanks. Ursa has improved and developed a new process: fluids and gas will go from Wellhead to Production Separator (serving as Primary), then to a Secondary Separator (P-tank), then into the same flowback tanks as before. In this scenario, the Production tanks will essentially be un-used during the entire time the Flowback / Production Watch operation is on-going on the pad. All water will be in a single point for odor mitigation. Also, this additional level of vapor capture and reduced level of water transfer will greatly reduce the potential for odors on the pad.
5. Safety and environmental meetings are conducted by Ursa on a bi-weekly basis. During these meetings, Ursa informs its contractors about the concerns, complaints and mitigation efforts completed for that period. Odors have been discussed in these meetings for the last seven (7) months in a row with contractors (September 2015 – March 2016) – well before the odor complaints leading the NOAV in December. Ursa is very diligent with informing contractors of the concerns that are realized from the citizens, odors being at the top.
 6. Ursa's primary water management contractor (MCS) was adding odorizing chemicals to the produced water to assist with combating odors from that portion of the operations. They also discussed the issue of odors nearly every day during their safety meetings and in their daily reports. (see attached information)
 - a. Odorizers are added to the flowback water to reduce odors. The cost of the chemicals used by Ursa to control odors from November 2015 to December 2015 alone is over \$26,000.
 7. Ursa holds meetings prior to construction, drilling and completions activities. In these meetings the Conditions of Approval ("COAs") for that particular pad are discussed in great detail. Odors were discussed at each of these locations subject to the NOAVs with

all contractors working on Ursa's Battlement Mesa locations. Ideas were discussed and processes were reviewed to reduce odors.

8. Starting in the summer of 2015, Ursa voluntarily increased the number of inspections in the Battlement Mesa area:
 - a. General inspections are conducted to determine if there are any deficiencies with programs not caught under other inspections (SPCC, AVO, Stormwater and water). These inspections are not required but Ursa values having this extra layer of oversight over operations in sensitive areas such as Battlement Mesa. General inspections have increased from once per month (Ursa internal SOP) to every week.
 - b. Stormwater inspections in Battlement Mesa are required every 14 or 28 days depending on activity. Ursa has voluntarily increased the inspections to once per week.
 - c. Audio, Visual, Olfactory (AVO) inspections are required in Battlement mesa every 30 days. As of December 2015, Ursa has voluntarily increased the frequency to every week for Battlement Mesa due to the increased scrutiny.
 - d. Forward Looking Infrared camera surveys (FLIR surveys) are required annually for Yater and Watson Ranch B and quarterly for Monument Ridge. Ursa has voluntarily increased the frequency of these inspections to every month starting December, 2015. These are conducted by HRL Compliance Solutions out of Grand Junction, Colorado.
 - i. Ursa voluntarily commenced IR surveys on their locations in October of 2014, three months prior to the regulatory requirements to do so per the CDPHE. This demonstrates Ursa's culture to ensure heightened standards that go above and beyond state requirements due the nature of their asset locations.

B. Ursa's Position Regarding the Three NOAVs

1. Rule 605.d.:

605.d, Mechanical Conditions. All valves, pipes and fittings shall be securely fastened, inspected at regular intervals, and maintained in good mechanical condition.

Ursa has proven it has not violated this regulation. Hatches are not included in the equipment listed in the 605.d regulation and therefore cannot be subject to a violation of Rule 605.d. Further, the modification of brand new tanks, hiring of a night watch, addition of

smelling agents in flowback water, increased inspections for General, SPCC, AVO and IR have added substantial costs to Ursa for the Battlement Mesa field. Ursa has done so voluntarily knowing that Ursa's presence in the community is not welcomed by a few individuals. The COGCC needs to be aware of the actions Ursa has taken to accommodate the community and address their concerns.

2. Rule 805:

805.b.(1)B No violation of Rule 805.b.(1) shall be cited by the Commission, provided that the practices identified in Rule 805.b.(2) are used.

805.b.(2)A. Crude Oil, Condensate, and Produced Water Tanks. All crude oil, condensate, and produced water tanks with uncontrolled actual emissions of volatile organic compounds (VOC) of five (5) tons per year (tpy) or greater, located within 1,320 feet of a Building Unit, or a Designated Outside Activity Area shall use an emission control device capable of achieving 95% control efficiency of VOC and shall obtain a permit as required by Colorado Department of Public Health and Environment, Air Pollution Control Commission Regulation as set forth in 805. b. (1).

Per Rule 805, Ursa complies with this Rule by: (1) having using an emissions control device that is (2) capable of achieving 95% control efficiency of VOC, and (3) has permits in place from CDPHE.

The four CDPHE regulations below are incorporated by reference in COGCC regulation 805.b(1)A with the pertinent sections bolded.

- CDPHE Regulation 2 Part A Section I.A.
*For areas used predominantly for residential or commercial purposes **it is a violation if odors are detected after the odorous air has been diluted with seven (7) or more volumes of odor free air.***
- CDPHE Regulation 2 Part A Section II.
*For the purposes of this Part A of Regulation Number 2, **two odor measurements shall be made within a period of one hour, these measurements being separated by at least fifteen (15) minutes. These measurements shall be made outside the property line of the property from which the emission originates.***
- CDPHE Regulation 2 Part A Section III.
For the purposes of this Part A of Regulation Number 2, personnel for evaluating odors shall be selected using a “detectability rating test” as outline in “Selection and Training of Judges for Sensory Evaluation of the Intensity and Character of Diesel Exhaust Odors.” USPHS Pub. #999-AP-32.

- CDPHE Regulation 2 Part A Section IV.
An instrument, device, or technique designated by the Colorado Air Pollution Control Division may be used in the determination of the detectability of an odor and may be used as a guide in the enforcement of this Part A of Regulation Number 2.

These four sections incorporated by reference in COGCC regulation 805.b(1)A state the process, technique, certifications and equipment required to be used by an inspector to determine if a violation has occurred when investigating an odor complaint. Ursa has not been provided documentation that this process was followed or the required certifications and equipment was used during these odor investigations. If documentation of a violation is not available, Ursa requests that the violation of rule 805 be stricken from these NOAVs.

3. Days of Alleged Non-Compliance. The days of non-compliance on the Penalty Matrix are listed as eight (8) days for the 605.d mechanical conditions and 5 days for the 805 odor regulation violation. Ursa has demonstrated that they have maintained their equipment and there were zero (0) days of violation. It has also been demonstrated that the 805 odor may not have been investigated properly.

4. Additional Information. The CDPHE recently (February 24 and 25, 2016) had 12 unannounced IR inspections throughout their asset, including two in Battlement Mesa. These inspections did not result in a single finding. This further reiterates Ursa's level of commitment for their air program.

C. **Conclusion.**

Ursa requests that the COGCC fully consider all relevant facts, plans, inspection and compliance programs to determine Ursa's level of compliance on these three NOAVs and future potential violations. Ursa is concerned that the COGCC may be setting a dangerous precedent by issuing a NOAV and pursuing fines and penalties for odor complaints without the proper support. Ursa is concerned that it, as well as other operators, will be in a compromised position from all those opposing O&G operations and will be constantly defending themselves from odor complaints whether there is a basis to support the complaint or not.

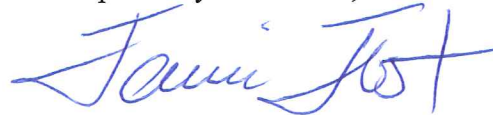
Ursa takes compliance responsibilities seriously, and we look forward to continue working with the COGCC to ensure compliance into the future. In this case, Ursa believes that for the reasons outlined above, there should be no violation against Ursa and again respectfully request that the COGCC rescind the Notice of Alleged Violations for the Yater, Watson Ranch B and Monument Ridge locations.

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Please feel free to contact me at 720-446-5620 or jjost@jostenergylaw.com. Thank you for your attention to and consideration of the content of this response.

Respectfully Submitted,



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Enclosures

cc: Margaret Ash, COGCC
Dave Kulmann, COGCC
Rob Bleil, Ursa Operating Company
Don Simpson, Ursa Operating Company