

September 2025

Dear Neighbor,

We are writing to notify you that Kerr-McGee Oil & Gas Onshore, LP, a subsidiary of Oxy USA Inc., is working through the permitting process to obtain approval to develop an oil and natural gas project in your community. In our commitment to being a good neighbor, we provide frequent and transparent information, seek community feedback, safeguard the environment, and protect the health and safety of communities.

Oxy will be holding a community meeting to provide general and site-specific project details, proposed location maps, and an estimated development schedule. Additionally, we will provide more information about the permitting process, including how to provide public comment on the permit. We welcome your feedback and will provide an opportunity for you to provide an electronic mail address to receive electronic correspondence from Oxy.

Please see the in-person community meeting information below:

Where: Town of Bennett Town Hall (207 Muegge Way, Bennett, CO 80102)

Date: Wednesday, October 8th, 2025

Time: 5pm – 6:15pm

Location: Meeting will be held in a community room

Overview: Translation services provided, no RSVP required

The project information we share during the community meetings will be shared on our website OxyColoradoStakeholder.com/projects. Our team members will continue to work diligently in our outreach and operations with you in mind. Please reach out to our Stakeholder team with any questions about these upcoming meetings.

Oxy Stakeholder Relations

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ColoradoStakeholder@oxy.com
www.OxyColoradoStakeholder.com

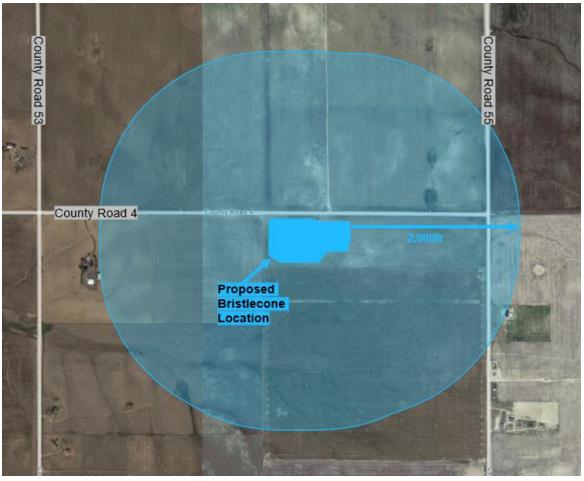
New Energy Development



Permitting Process

This proposed project is required to undergo a comprehensive permitting process at both the state and local level. The State of Colorado permitting process is known as an Oil and Gas Development Plan or OGDP. We will submit an OGDP application to develop 24 natural gas wells and a production facility on the Bristlecone location.

Proposed Location Information: Bristlecone OGDP (40.014340, -104.553681)



Pad Name	Parcel #	Location	Approx. Pad Dimensions	Acres during development	Acres after reclamation	ECMC Permit 2A Doc #
Bristlecone	147533000007	SECTION 33 TOWNSHIP 1 RANGE 64	1,324' x 628'	~19.07	~8.23	TBD

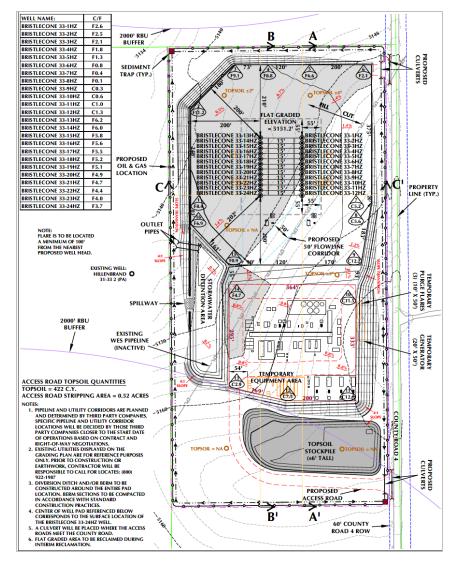
We will develop these wells as efficiently as possible and will work with you throughout the process to provide up to date information. For project updates, please see OxyColoradoStakeholder.com/Project-Updates

Bristlecone Site Layout



Site Planning and Visual Mitigation

We know that the location and potential visual impacts are important to you. We placed the equipment location as far from homes as feasible, while minimizing impacts to views.



This proposed site layout is shown above. 24 oil and gas wells will be drilled heading north from the surface location; 16 stemming to the SW then heading west, and the other 8 stemming to the NW then heading east.

An independent third-party company is responsible for the pipeline planning and facilitation for this project. The third-party pipeline operator is still in the planning phase of identifying and locating the proposed pipeline.



<u>Click here to watch a video</u> or visit https://bit.ly/OxyProductionFacilities
to learn about our production facilities and oil-tankless design. The video will show you what our typical facility looks like. If you have any questions about the site layout or what equipment will be on-site, please reach out to us.



Our Best Practices and Mitigation Measures

Traffic Management Plan

One part of the comprehensive permitting process is developing a traffic management plan. This includes specific routes for all traffic coming to and leaving the proposed project location (next page). Speed limits will be reduced to 10 mph on the access road and 5 mph once vehicles reach the well pad/facility.

We reduce traffic as much as possible. The oil produced from our horizontal locations is transported off-site through a pipeline, eliminating the need for trucks. The oil produced from this location will be transported off-site through a pipeline, eliminating the need for trucks and removing 11,875 truck trips. We will use our Water on Demand system to transport water for hydraulic fracturing. Since its inception in 2012, these technologies have enabled us to eliminate 60 million miles of truck traffic from the roads in Weld County, reducing emissions, dust, road wear, and inconvenience to our neighbors. This system also mitigates our surface footprint by significantly reducing the tanks needed for water storage onsite during well completion. At this location, we estimate that our Water-On-Demand system will eliminate thousands of truck trips (actuals to be provided soon).

Estimated Project Timeline

We will develop these wells as efficiently as possible and will work with you throughout the process to provide up-to-date information. Below dates and traffic counts are subject to change. For project updates, please see OxyColoradoStakeholder.com/project-updates

Occupation 1

<u>Phase</u>	Work Activity	Estimated Start	Estimated End	Estimated Traffic Total / Per Day
1	Pad Construction	May 2028	July 2028	258 / 45
2	Surface Casing	July 2028	July 2028	24 / 32
3	Horizontal Drilling	July 2028	September 2028	56 / 120
4	Well Completions	September 2028	November 2028	274 / 122
5	Production Facility Construction	August 2028	November 2028	28 / 50
6	Interim Reclamation*	December 2028	June 2029	113 / 30

Occupation 2

<u>Phase</u>	Work Activity	Estimated Start	Estimated End	Estimated Traffic Total / Per Day
1	Pad Construction	November 2028	December 2028	258 / 45
2	Surface Casing	December 2028	January 2029	24 / 32
3	Horizontal Drilling	January 2029	March 2029	56 / 120
4	Well Completions	November 2029	January 2030	274 / 122
5	Production Facility Construction	September 2029	December 2029	28 / 50
6	Interim Reclamation*	January 2030	July 2030	113 / 30



Our Best Practices and Mitigation Measures

Occupation 3

<u>Phase</u>	Work Activity	Estimated Start	Estimated End	Estimated Traffic Total / Per Day
1	Pad Construction	April 2029	June 2029	258 / 45
2	Surface Casing	June 2029	July 2029	24 / 32
3	Horizontal Drilling	July 2029	August 2029	56 / 120
4	Well Completions	April 2031	May 2031	274 / 122
5	Production Facility Construction	January 2031	May 2031	28 / 50
6	Interim Reclamation*	May 2031	November 2031	113 / 30

Haul Route



Phases of Energy Development





Pad Construction (30-45 days per pad)

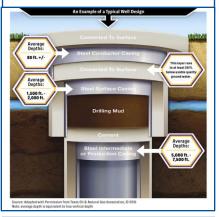




Standard construction equipment . prepares the well site. A wall may be installed to reduce or minimize noise and light during development.

Surface Casing Set (1-2 days per well)





A drilling rig begins the underground construction process by installing steel pipe and cement (surface casing) to protect groundwater. Surface casing is set at least 50' below the aquifer, typically about 1,5000'+ below the surface.

Horizontal Drilling (4-6 days per well)





A production rig arrives and drills to a depth of 7,000 to 8,000 feet. The horizontal portion of the wellbore can extend more than two miles. Additional layers of protective steel casing

and cement

are installed.

Well Completions (6-9 days per well)

Understanding





safe, highly engineered technology developed in the 1940s. Fluid is pumped over a mile below the earth's surface under pressure to create hairline fractures in the rocks. Flowback: After fracturing, the wells are opened, and oil and gas flow into the

Hydraulic Fracturing: A

Well clean-out and Tubing: The wells are cleaned out to remove excess sand and install the production tubing.

mobile production facility.

Production Facility Construction (30-45 days per facility)



Production facilities are constructed adjacent to the wells to collect and separate the oil, natural gas, and water that are produced. Facility production is 30-45 days of work, completed in stages over about four months.

Reclaim Well Site (60 days per pad)

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Once development phases are complete, the pad is reclaimed to the largest extent possible to match the existing landscape. Each well will produce energy vital to the health and welfare of our communities for decades to come.





We strive to make our activities compatible with the surrounding community and use various mitigation techniques to reduce the temporary impacts associated with development. Our team designs each location after careful consideration of the area's specific attributes. Although some of our operations are conducted 24/7, we aim to minimize non-essential work during the night. For each well pad, we deploy the following strategies to mitigate possible impacts including:

Our Best Practices and Mitigation Measures Noise Light



We use upgraded drilling rigs with noise-reducing features and quiet hydraulic fracturing technology. These features reduce the noise from our operations. In addition to mitigating noise at the source, we may also install sound walls, as needed.



We use light-emitting diode (LED) lights strategically oriented away from homes, making our operations less visible to our neighbors.

Odor



To counteract any potential hydrocarbon odor during our drilling operations, we use low-aromatic, synthetic drilling fluid.

Dust



We work to mitigate dust by applying dust suppression to the roads as needed. Various techniques include installing tracking pads and sediment traps, hydro mulching and/or hydroseeding topsoil piles, seeding disturbed soils, and placing and compacting a gravel layer on the working pad surfaces and access roads.



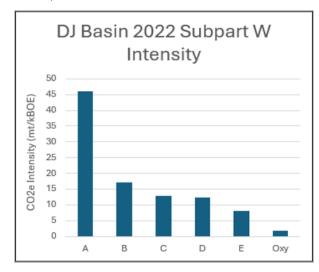
Our Best Practices and Mitigation Measures

Air Quality

To ensure the well-being of you, your family, and those living and working near our operations, we take action to reduce emissions and monitor air quality.

Reducing Emissions

To reduce greenhouse gas emissions and utilize the valuable energy resources we produce, we select equipment and design our locations and procedures to minimize emissions. As you can see from the graph below, we have been successful in our efforts.





- 1. Oxy is the first oil and gas company in the United States to endorse The World Bank's Zero Routine Flaring by 2030 initiative. In Colorado, we have already achieved zero routine flaring.
- 2. We keep emissions low by adhering to Colorado Department of Public Health and Environment (CDPHE) and the Air Quality Control Commission (AQCC) regulations. We run our drilling and completions engines using a method that's approved by state environmental rules, specifically Regulation 7 Part B. VI.E.1. Even though the use practices included in the rule are designed for ozone season, we follow these use practices all year long in our operations to help protect air quality.
 - https://www.coloradosos.gov/CCR/Upload/NoticeOfRulemaking/ProposedRuleAttach2024-00086.doc
- 3. Our innovative production facilities reduce air emissions in several ways. First, by eliminating oil tanks, we eliminate a major source of emissions at the site, especially those that contribute to ground-level ozone and air pollution. Transporting oil off-site through a pipeline also helps reduce emissions by cutting down on the number of trucks needed for hauling. Lastly, we use compressed air to operate control devices that regulate pressure, flow, temperature, and liquid levels across more than 90% of production. Oxy has also eliminated gas driven compressor engines from permanent facility designs and adopted electrification across sites. We have extensive automation in place that ensures environmental controls are operational while facilities are active. Additionally, during ozone season, we implement extra measures such as turning off heaters in the summer to further reduce ozone forming emissions.

These efforts, and others, have made Oxy the lowest-emitting operator in the DJ Basin. We have already met and exceeded CDPHE's targets for reducing carbon dioxide equivalent (CO2e) and nitrogen oxides (Nox) emissions. The targets help measure and reduce the environmental impact of our activities, protecting community health and advancing our long-term commitment to sustainability.



Our Best Practices and Mitigation Measures

Monitoring Emissions

We take the protection of air quality seriously throughout every phase of development.

During drilling and completions, independent third-party experts conduct continuous air monitoring using a combination of proven and cutting-edge technologies, such as weather stations, hydrocarbon analyzers, and advanced sampling tools, to ensure the accuracy of collected data and provide meaningful insights into local environmental conditions. Strategically placed air canisters also supplement monitoring station data. These air samples are collected and analyzed according to the Environmental Protection Agency (EPA) standards, with results compared against CDPHE health guideline values.

Air monitoring data is collected continuously and tracked 24/7 by our Integrated Operations Center (IOC), which ensures timely and effective responses. Our monitoring program includes clearly defined response and investigation levels to safeguard the health, safety, and welfare of nearby communities, our employees, and the environment.

To further reduce emissions near our production facilities, our in-house team conducts regular leak detection and repair inspections. During the production phase, trained personnel use handheld infrared cameras to inspect each site. We also deploy infrared-equipped drones and perform frequent audio, visual, and olfactory inspections to identify and address potential leaks quickly and thoroughly.

Our air monitoring program is approved by CDPHE and enforced by the Energy and Carbon Management Commission (ECMC), with monthly reports submitted to both agencies. Since 2020, we've collected over 11,500 samples - all well below the CDPHE Health Guidance Values of 9 Parts Per Billion. These monthly reports are publicly accessible and can be viewed here.

• https://oitco.hylandcloud.com/CDPHERMPublicAccess/index.html

Groundwater Protection

We conduct baseline water-quality sampling and construct double-walled produced water sumps and secondary containment for operations. Sensors between the walls of the water sumps and additional automation allow us to remotely monitor fluid levels and remotely shut in the wells if we detect an issue.



Contacts

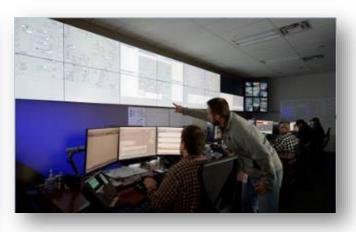




Macey Zientek

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> <u>Coloradostakeholder@oxy.com</u> www.OxyColoradoStakeholder.com



Oxy Integrated Operations Center (IOC) 970.515.1500

Real-time monitoring of wells, water tanks, and production facilities

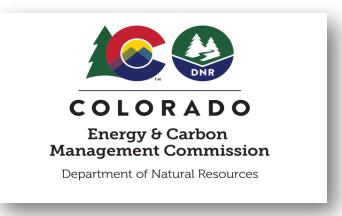
24 hours a day, 365 days a year



Weld County Oil and Gas Energy Department

970.400.3580 | oged@weld.gov https://www.weld.gov/Government/Department s/Oil-and-Gas-Energy

For information about the permit, ask about the **BRISTLECONE OGDP**



Energy & Carbon Management Commission (ECMC)

303.894.2100

https://ecmc.colorado.gov/

If you would like translation, please contact us at: coloradostakeholder@oxy.com or 866.248.9577

Si desea una traducción, comuníquese con nosotros a: coloradostakeholder@oxy.com o al 866.248.9577

Nếu bạn muốn dịch, vui lòng liên hệ với chúng tôi theo địa chỉ: coloradostakeholder@oxy.com hoặc số 866.248.9577

如果您需要翻译,请联系我们: coloradostakeholder@oxy.com 或 866.248.9577

번역이 필요하시면 coloradostakeholder@oxy.com 또는 866.248.9577로 문의해 주세요.



COGCC INFORMATION SHEET: PROCEDURAL STEPS FOR THE COMMISSION'S REVIEW OF OGDPs

(As required by COGCC Rule 303.e.(2).C)

Why am I receiving this information sheet?

Oil and gas operating companies ("Operators") are required to obtain approval of an Oil and Gas Development Plan ("OGDP") from the Colorado Oil and Gas Conservation Commission ("COGCC") prior to undertaking any new operations such as drilling oil and gas wells or building oil and gas locations. When an Operator submits an OGDP application to the COGCC for consideration, and the application has been received and is deemed complete, COGCC staff begins a formal technical review of the application materials, and a public comment period starts.

COGCC has prepared this information sheet to inform the public of the procedural steps involved with the Director's and Commission's review of an OGDP, so that the public is informed and may participate in the review process if they choose. As part of the process, Operators must provide this information sheet to certain recipients, like yourself, that include mineral owners within the area of proposed development and all landowners, homeowners, commercial property owners, tenants, and other entities within 2,000 feet of an oil and gas location proposed by a pending OGDP application.

What is an Oil and Gas Development Plan (OGDP)?

An OGDP is an Operator's plan to develop oil or gas resources ("minerals") from one or more surface locations. Operators prepare an OGDP and associated application materials, consistent with the requirements of COGCC Rule 303, and submit the plan for approval through the Commission's Hearings process. The application materials include a hearing application; one or more Form 2A, Oil and Gas Location Assessments; a Form 2B,

Cumulative Impacts Data Identification; and a Form 2C, OGDP Certification. The application may also include a request for the establishment of one or more Drilling and Spacing Units ("DSUs"). The OGDP, along with its associated supporting documents, will be heard at a public hearing where the Commission will make a final determination to approve or deny the OGDP application.

What are the procedural steps involved with the Director's and Commission's review of Oil and Gas Development Plans?

- OGDP application is submitted: Operator/ Applicant submits a complete OGDP application with all supporting documents. The written portion of the application is submitted to the COGCC hearings unit via the eFilings system, and Forms 2A, 2B, and 2C are submitted to technical staff via the eForms system. (See Rules 303 & 304)
- OGDP application is received: The COGCC hearings unit reviews the written hearing application, assigns a docket number for the OGDP, and provides public notice for the hearing. (See Rules 303 & 504)
- Completeness determination: The COGCC technical staff and Director review the application materials for completeness. When deemed complete:
 - a. the OGDP application materials are posted on COGCC's website;
 - the Operator provides notice (including this information sheet) to relevant persons;
 - c. the public comment period begins;
 - d. the formal consultation period commences as applicable (including relevant/ proximate local governments and other agencies such as Colorado Parks and Wildlife ("CPW") or Colorado Department

- of Public Health and Environment ("CDPHE")); and
- e. COGCC staff begin their technical review of the OGDP components. (See Rule 303).
- 4. Director's review of application (technical review): COGCC technical staff conducts the technical review of all application materials to ensure compliance with COGCC Rules, ensure the protection of public health, safety, welfare, the environment, and wildlife resources, and to evaluate potential Cumulative Impacts. The technical review includes analysis and assessment of:
 - a. DSUs and protection of mineral owner's correlative rights;
 - proposed surface locations and alternative locations;
 - c. downhole and engineering considerations;
 - d. best management practices;
 - e. public comments and recommendations provided by consulting agencies;
 - f. financial assurance; and
 - g. the need for conditions of approval. (See Rule 306)
- Director's recommendation: Once the Director has reviewed the application materials, the Director provides a written recommendation to the Commission in support of the approval or denial of the OGDP The Director will post the application. recommendation on COGCC's website, notify relevant parties1, and submit it to the COGCC hearings unit in preparation for hearing. (See Rule 306.c)
- Commission's consideration and final action (public hearing): The Commission receives the

Director's recommendation of the OGDP and begins review of the OGDP with support from the COGCC hearings unit. The review includes all supporting documents, written testimony, public comments, consulting agency recommendations, and Director's recommendation. The Commission considers the OGDP at a public hearing, which may include oral testimony provided during the hearing. The Commission makes a final determination and presents its findings in a written order based on the evidence in the record; the Commission's order to approve or deny the OGDP application is final. (See Rule 307)

Where can I get additional information?

more For information about the COGCC administrative hearing process and OGDPs, please COGCC website refer the to http://cogcc.state.co.us. You may also contact COGCC the at dnr.ogcc@state.co.us 303-894-2100. Please note, COGCC staff are not available to provide legal advice. COGCC recommends that you engage an attorney with knowledge of oil and gas matters to assist you with reviewing any offers you receive from an oil and gas operator or other person.

Version 1.0 March 9, 2021

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¹ Parties who receive this information sheet will not necessarily be included in the notice of the Director's recommendation. Parties who make a public comment on the Form 2A and include their email address will receive the notice of the Director's recommendation.

Department of Natural Resources

Purpose

This information sheet provides details on how to make public comments on an Oil and Gas Development Plan submitted to the Colorado Energy & Carbon Management Commission via the Form 2A, Oil and Gas Location Assessment permit application.

Why am I receiving this Information Sheet?

You have received this Colorado Energy & Carbon Management Commission ("ECMC") information sheet because an oil and gas operator ("the Operator") has submitted an application for an Oil and Gas Development Plan ("OGDP"), and that application is under review by the ECMC. Per ECMC Rule 303.e.(1), the Operator is required to provide this information to you within seven days of the application materials being posted on the ECMC website.

ECMC Rule 303.d requires the ECMC to open a formal "public comment period" upon posting the OGDP application to our website. This public comment period allows the public to review OGDP applications and their components (i.e., proposed Oil and Gas Locations), and provide comments on those pending permit applications.

How can I provide comments on pending permits in an OGDP?

Members of the public can access OGDP applications through the ECMC website to review permit information and provide comments. Public comments may be made directly on Form 2A, Oil and Gas Location Assessment permit applications ("Form 2A") through the COGCC website.

- Go to the ECMC website https://ecmc.state.co.us
- On the green menu bar, click on the "Permits" page.
 This will take you to the "OGDP and Location Applications" tool for Applications for Oil & Gas Development Plans (OGDPs) and Oil & Gas Locations (Form 2As).



 Under "Applications for Oil & Gas Development Plans (OGDPs) and Oil & Gas Locations (Form 2As)", find "Oil and Gas Location Assessment Permits (Form 2A)" section. Select the county of interest from the dropdown menu of the "Pending Oil & Gas Location Assessments (Form 2As)" and click "Go!"

Oil & Gas Location Assessments (Form 2As)
Pending Oil & Gas Location Assessments (Form 2As):

Adams

Got

INFORMATION SHEET: PUBLIC COMMENTS

(As required by ECMC Rule 303.e.(2).D)

- This will generate a table of pending applications and will indicate the status of the public comment period for each permit within the ECMC review process.
- Scroll through the list of pending permits to find the one you would like to review. You may wish to use "crtl + f" to search for a specific document number, operator name, or location name.
- To view the submitted Form 2A and its associated attached documents, click the "Location Name & Number" link for the permit application you wish to view.



7. To make a public comment on a specific permit application, click the "Doc Number" link of the permit on which you wish to comment. This will take you to the Public Comment portal.



 In the Public Comment portal, you may navigate to the Form 2A application including the PDF and all attachments by clicking on "Related Documents".



 To make a public comment, click the "Make Comment" button. A Form will open for you to provide your name, contact information, and your comment. Only the text in the Comment box will be made public; your contact information will be kept confidential by ECMC.

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- Click the "Submit Comment" button when you are ready to submit your comment.
- You may also view other public comments and read yours after it is posted by scrolling down on this page (see below about a delay in displaying comments).

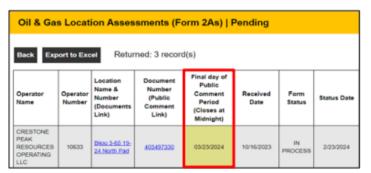
How long do I have to submit a comment on a permit?

The Public Comment Period begins once the ECMC Director determines the OGDP application is complete and has been successfully submitted by the operator. The Director will approve the Form 2C, OGDP Certification form, and post the OGDP application on the website for public review.

In order to be considered by the Director and Commission during the review of the OGDP, public comments must be received as follows:

- Within 30 days from the date that the Director posts the OGDP on the website, OR
- Within 45 days if the OGDP includes any proposed Oil and Gas Locations within 2,000 feet of a Residential Building Unit, High Occupancy Building Unit, or School Facility within a Disproportionately Impacted Community.

The final day for public comments can be found in the list of all pending permits:



When the Public Comment Period closes, the date will revert to read "Comments Closed". The link to the public comment portal will remain active, but comments will no longer be accepted. You will still be able to view any public comments submitted for pending permits.

The Director may extend or reopen the public comment period per Rule 303.g, for up to an additional 30 days for a proposed OGDP if the Director determines an extension or reopening is reasonable in order to obtain public input.

What happens to my comment?

Your comment will become part of the public record of the application and will be reviewed by the applicant, ECMC staff, Director, and the Commission. ECMC staff may recommend permit conditions in response to comments. But, Staff does not routinely respond individually to comments; instead, ECMC staff will work directly with the applicant to address the site-specific concerns expressed.

Submitted comments may not be immediately visible; it may be a few days before you see your comments posted. This delay allows ECMC supervisory staff to screen for offensive language prior to publication.

What if I want to make my comment to the Commission?

ECMC Staff and the Director review every comment received on a Form 2A permit application. They review the site specific concerns against the totality of the application materials, including the alternative location analysis, cumulative impacts evaluation, and best management practices proposed by the applicant. When the Director makes a recommendation to the Commission to either approve or deny an OGDP, that recommendation will include the consideration of the public comments received.

In their review of an OGDP for a final determination at the administrative hearing, the Commission will have access to the entire record, including your public comment.

Can I remain anonymous?

Yes. Only the "Comment" portion of your submitted comment will be made publicly viewable. Your name and contact information will be kept confidential, and will only be used by ECMC staff to contact you if necessary in the course of permit application review. If you choose to include your name and contact information in the body of your comment text, it will be part of the public record.

Where can I get additional information?

The following links provide guidance and additional information on providing Public Comments.

ECMC Permits Page:

https://ecmc.state.co.us/permits.html#/permits

Numerous helpful guidance documents can be found at the link on the ECMC Permits Page:

https://ecmc.state.co.us/permits2.html#/permitshelp

Daily Activity Dashboard (DAD) is another useful tool and can be used to access the public comment portal as well: https://ecmc.state.co.us/dashboard.html

Version 1.1 March 13, 2024



Colorado Department of Natural Resources

Information on Hydraulic Fracturing

What is hydraulic fracturing?

Hydraulic fracturing is the process of creating small cracks, or fractures, in deep, underground geological formations to liberate oil or natural gas and allow it to flow up the well for capture and use in heating our homes, fueling our cars and providing the electricity we all use for our televisions, computers and other devices.

To fracture the formation, fracturing fluids – mostly water and sand, with a small percentage of chemical additives – are injected down the well bore into the formation. The fluid, injected under pressure, causes the rock to fracture along weak areas.

The fluids that create the initial fractures are then mixed with thicker fluids that include sand and gelatin. These thicker fluids lengthen the openings in the rock. When the fractures are complete, and pressure is relieved, the fluids flow back up the well where they are captured and stored for later treatment or disposal.

As the fluids flow back up, sand remains in the fractures and props the rock open, maintaining

an open pathway to the well. This allows the oil and gas to seep from the rock into the pathway, up the well and to the surface for collection. In Colorado, the targeted formations for hydraulic fracturing are often more than 7,000 feet underground, and some 5,000 feet below any drinking water aquifers.

The process of hydraulic fracturing has been used for decades in Colorado, dating to the 1970s. Hydraulic fracturing continues to be refined and improved and is now standard for virtually all oil and gas wells in our state, and across much of the country. Hydraulic fracturing has made it possible to get the oil and gas out of rocks that were not previously considered as likely sources for fossil fuels.

Common questions and answers about hydraulic fracturing.

Q: Can hydraulic fracturing open up pathways for oil and gas to reach ground water zones where water wells are producing?

A: The distance between the oil and gas formation and the water formations is substantial. In the case of the Niobrara and the Fox Hills Aquifer in northeast Colorado, for example, the separation is about 5,000 feet – or roughly a mile – of bedrock.

Q: How do you ensure the fracturing fluid, including the chemical additives, don't escape the oil and gas wellbore and impact nearby water wells?

A: The COGCC requires all wells to be cased with multiple layers of steel and cement to isolate fresh water aquifers from the hydrocarbon zone. The steel casing and surrounding layers of cement protect the drinking water aquifers that the wellbore penetrates. Surface casing is required to extend 50 feet below the base of the deepest freshwater aquifer to seal it off from any possible

migration of fluids associated with oil and gas development. After it is determined that the well is capable of producing oil or natural gas, a production casing is set to provide an added layer of separation between the oil or natural gas stream and freshwater aquifer. A well survey called a cement bond log is performed to ensure the cement is properly sealed around the casing. Additionally, the COGCC requires that prior to hydraulic fracturing, the casing be pressure tested with fluid to the maximum pressure that will ever be applied to the casing. The well's construction design is reviewed by the professional engineering staff at the COGCC. Any flaw in the design will be corrected prior to issuing the required drilling permit.

Q: What kinds of fluids do operators use to hydraulically fracture wells?

A: Approximately 99.5% of the fracturing fluid volume is water and sand. The remaining portion is made up of a variety of chemicals. There are chemical additives used to reduce friction during pumping and prevent corrosion of the steel, biocide to kill bacteria in the water and surfactant to promote water flowback. The exact formulation may vary depending on the well and the objectives of the specific fracturing treatment. Fracturing chemicals are similar to other industrial chemicals which must be handled properly. For certain chemicals, safe work practices, proper site preparation, and attentive handling are required to ensure that employees, the public, and the environment are protected.

COGCC rules require that operators publicly disclose the ingredients and concentrations of fracturing chemicals for each well within 60 days of completion. That information is required to be posted on the website www.fracfocus.org, which is searchable by county, operator and well. The website also provides information on chemicals used and their purpose.

Q: How are these fluids managed on the surface?

operations begin. operators to ensure all fittings and connections costly delays, providing additional incentive for prevent leaks. In addition to complying with water and chemicals at different stages of the operation. The blended mix is sent to pumping site in equipment that adjusts the mix of sand, spills violate state law. The fluids are blended on care to prevent spills; operators are charged are pressure tested with clean water before any state regulations, leaks and spills would create down the well. Like spills, operators must units to raise the pressure and send the fluid with protecting environmental resources and fracturing process. Operators must take great drill site during the drilling and hydraulic A: Large volumes of fluids are maintained on the

After the fracturing is completed, fluids return to the surface as "flowback." These fluids are now considered exploration and production waste and must be treated accordingly in compliance with state regulations. Production fluids, including oil and related substances, also rise to the surface. All of these fluids must be separated and contained in impervious vessels and waste fluids must either be recycled or properly disposed of under regulatory oversight.

Q: What can neighbors expect to experience during the fracture stimulation work?

A: After the drilling rig is moved off site, water tanks are brought to the site and water-hauling trucks arrive. The day the operation is to begin, the sand haulers, pump truck, blender and the control van arrive. The equipment will all be connected together and then connected to the well head with high pressure hoses. After testing the equipment, the actual fracture stimulation will begin. The operation may take several hours

to several days depending on the number of fracture zones. You will not feel the fracture of the rock because of its very low energy and depth of the formation. The equipment noise is the most noticeable occurrence during the operations.

The COGCC has rules that are specific to hydraulic fracturing. For more information on these rules, visit: http://cogcc.state.co.us

- Rule 205 Inventory chemicals
- Rule 205A Chemical disclosure
- Rule 317 Well casing and cementing; Cement bond logs
- Rule 317B Setbacks and precautions near surface waters and tributaries that are sources of public drinking water
- Rule 341 Monitoring pressures during stimulation
- Rule 608 Special requirements for coal bed methane wells
- Rules 903 & 904 Pit permitting, lining monitoring, & secondary containment
- Rule 906 Requires COGCC notify CDPHE and the landowner of any spill that threatens to impact any water of the state

Where can I get further information?

The FracFocus website – www.fracfocus.org – contains detailed explanations on how hydraulic fracturing works, how groundwater is protected, what chemicals are used, and how to find a well near you. The COGCC has additional information on its hydraulic fracturing information page at its website: http://cogcc.state.co.us

What is the purpose of baseline water sampling?

The purpose of baseline water sampling is to collect data before any drilling operations at individual well sites to demonstrate the pre-drilling conditions of a water well. This provides a reference point for future evaluations of any

suspected impacts by the drilling or hydraulic fracturing of oil and gas wells.

How do I obtain baseline water samples?

The COGCC provides baseline sampling on a case-by-case basis based on proximity to new or existing drilling activity. Please contact the COGCC at 303-894-2100.

The Colorado Oil & Gas Association (COGA), an industry trade group, has a voluntary baseline ground water quality sampling program http://www.coga.org/index.php/BaselineWaterSampling.

a water quality database that will be available to also be submitted to the COGCC for inclusion in the public through the COGCC website. collecting the sample. The laboratory results will provided to landowners within three months of completed. Results of all samples will be feature within one to three years after drilling is round of sampling will be collected from each will be collected before drilling begins. A second gas well pads, or new wells on existing pads. half mile of the surface location of new oil and features, such as wells or springs, within one-Under the These samples require landowner consent and from two COGA program, samples are existing groundwater

Water well owners can also either sample their own water wells or contract a qualified individual to collect samples for baseline testing. Most analytical laboratories can provide sampling along with analytical services. A list of laboratories offering these services can be found under Laboratories-Analytical or Laboratories-Testing in the phone directory.

The Colorado Department of Public Health and Environment also offers analytical laboratory services. Call 303-692-3090 for additional information.

http://www.cdphe.state.co.us/lr/water.htm

INFORMATION SHEET: OGDP STATUS INFORMATION

(As required by ECMC Rule 303.e.(2).G)

Why am I receiving this information sheet?

The Colorado Energy & Carbon Management Commission ("ECMC") prepared this information sheet to inform the public in the vicinity of a proposed Oil and Gas Development Plan ("OGDP") how to access documents and view the status of proposed OGDPs through the ECMC's website, webforms, and eFiling system. A review of public property records indicates that you may have an interest in lands that an oil and gas operator wishes to develop as part of an OGDP. Pursuant to Commission Rule 303.e.(2).G, operators are required to provide this information sheet to certain recipients near their development plans.

What is an Oil and Gas Development Plan?

An OGDP is an operator's plan to develop subsurface oil and gas resources ("minerals") from one or more surface locations. An OGDP consists of a hearing application and associated permit materials that provide technical information. The Director (i.e. ECMC Staff) reviews the technical information and makes a recommendation to the Commission for the hearings application; the Commission has the ultimate authority on approval or denial of the OGDP.

How do I view the status of the pending OGDP hearing application?

Members of the public may view the status of proposed OGDP applications through the ECMC eFiling System by creating an account in the Applications and Docket Portal, available on the "Hearings Page."

 Go to www. ECMC.state.co.us and click on the green "Commission Hearings" button:

Commission Hearings (Click Here)

On the right-hand side of the Hearings page, in the Operator Tools box header, click on "Application and Docket Portal":



 Create a user account by clicking "Request Access to Site," and completing the required registration information. There may be a delay for processing following your request before

- you are granted access. Check your email for access approval.
- Once registration is complete, access the Application and Docket Portal by entering your user name and password.
- 5. At the bottom left of the page, find the panel labeled "Find Hearing Application by Docket Number" and enter the 9-digit docket number provided by the operator in their cover letter in the field named "Docket Number":



- The general status of the docket is listed in the first column on the left, titled "Docket Status."
- Double click the docket search result to load the docket's main page, which will show additional information, including the application type, status, assigned Hearing Officer, and applicant information.

Do I have to create an account to view documents?

No. You may view documents through the "Document Search" described below without creating an eFiling System account, but you will not be able to view the "status" of the docket through this method.

 On the right-hand side of the Hearings page, in the Public Tools box, click on the "Document Search" link:



From the "Search Type" dropdown menu, select "DNRCOG Search for Docket Related Documents":



Input the docket number provided by the operator.

DNRCOG Docket Number 210012345

 If you don't have a docket number, or to view any OGDP, scroll down to the "DNRCOG Application Type" dropdown menu and select "OIL & GAS DEVELOPMENT PLAN":



- Scroll down and click the "Search" button.
- A table of all related documents will appear. Click on any item to view its contents or download to your computer.

How do I view general forms, permits, and data regarding permits and OGDPs?

Use the Daily Activity Dashboard (DAD) to access frequently requested oil and gas data at the county and state levels. The DAD link is located in the right-hand corner of the ECMC homepage:

Daily Activity Dashboard (DAD)

It allows you to generate statistical charts, graphs, tables, and maps for information including pending permits, well status, production, well inspections, Notices of Alleged Violation, active notifications, and spills. The ECMC also provides access to pending and approved permits through its "Permits Search" and interactive map on the ECMC website.

To view the status of pending Form 2As (Oil and Gas Location Assessment Permits) through the "Permit Search" function, follow the steps outlined below:

- Click "Permits" in the green menu bar on the ECMC homepage. This will take you to the "Drilling and Location Permits Search" page.
- Under Pending Permits, find "Oil & Gas Location Assessment Permits (Form 2A)". Select "All Counties" or a specific county using the drop down menu and click "Go!":

Pending Permits (Filed ON or AFTER January 15th, 2021)

Oil & Gas Location Assessment Permits (Form 2A): All Counties

Got

A table will show all pending Form 2As currently under review by the ECMC.



- Clicking a "Doc Number" link will take you to the Public Comments portal for that pending permit.
- b. Clicking a "Location Name" link will take you to a list of documents related to that permit, including the Form 2A (as submitted by the operator) and supporting documents that are attached to the pending permit application.

Can I view pending applications on the ECMC Map?

Yes. You may access the ECMC GIS Online Interactive Map by clicking "Maps" in the green banner on the ECMC homepage, then click "Click HERE to access interactive map". You may use the "address search" option to zoom to your address to see oil and gas activity near you. With the map zoomed to your area of interest, you may specify pending permits by checking the appropriate boxes on the left-hand menu:



To select and view a pending application, use the arrow tool to double-click on the pending icons to display the Application.

Where can I get additional information?

ECMC Homepage:

https://ecmc.state.co.us/#/home

Hearings Page:

https://ecmc.state.co.us/reg.html#/hearings

eFiling system help:

http://ecmc/documents/reg/Hearings/External_E filing_System_Users_Guidebook_20201109.pdf

ECMC GIS Online Interactive Map help:

http://ecmc/documents/about/Help/Search%20pendin g%20permits%20on%20the%20COGCC%20map.pdf