

August 20, 2018

Mayor and City Council

For your information, attached is the final letter to Extraction Oil and Gas approving the Comprehensive Drilling Plan with conditions. This is being sent to Extraction today. It will be posted on our website as soon as it is sent. Also attached is a copy of a press release related to the approval of the CDP.

A series of questions were received from residents and Council members last week. Responses to those questions will be sent to City Council and posted on our website.

Charles



August 20, 2018

Eric Jacobsen, Senior Vice President of Operations
Extraction Oil and Gas, Inc.
370 17th Street - Suite 5300
Denver, CO 80202

Re: The Comprehensive Drilling Plan (CDP)

Mr. Jacobsen,

The Comprehensive Drilling Plan (CDP), dated July 27, 2018, ([linked here](#)) is approved provided that it is formally re-submitted to the City and County Manager, and Extraction Oil and Gas agrees in writing to the following conditions:

1. Extraction will place security guards at each of its Well Sites beginning no later than the Drilling Phase through the Completions Phase and amend the CDP accordingly.
2. Extraction will place hay bales at locations determined by the City to protect the trees located in the Davis Open Space which provide important wildlife habitat and amend the CDP accordingly.
3. Extraction will send mailers to the privately owned occupied structures south of the Northwest Parkway, north of 156th Avenue, west of Huron Street, east of the Zuni Street alignment, and immediately to the south of the Davis and Nordstrom Open Space as well as the three residents located at 15573, 15575, and 15585 Zuni Street regarding the final alignment of the access drive, at the sooner of, seven days prior to the start of construction of this access drive or, within thirty days of the date of this letter.
4. Extraction will make payment to Mr. Baker to compensate him for his crops lost due to the construction of pipelines through property Mr. Baker leases from Broomfield, in an amount equal to \$1,200 per acre of lost crops in 2018, within a time frame acceptable to Mr. Baker.
5. Extraction will revise Attachment B to Section J - Response Preparedness Plan to add the following two items/agreements:
 - The City will be constructing water lines and installing fire hydrants to locations closer to Extraction's Well Sites. Extraction agrees that it will reimburse the City for the City's actual costs for such construction and installation, not to exceed \$400,000. Extraction will make such reimbursement to the City within thirty days of the City presenting Extraction with an executed contract for the work to be completed. Notwithstanding the foregoing, any failure by the City to make these improvements timely or not at all shall not serve to delay Extraction in any way.

- Extraction will pay for the items included on Attachment B to the Emergency Response Plan, Section J, rather than just providing them.
6. The last sentence of the first section of the CDP, at page 20 under “6.0 Conclusion and next steps” will be amended to read: “Extraction and Broomfield agree to adopt any changes to the Plans as requested by either party after the CDP is approved, so long as such requests are reasonable, not in conflict with the Operator Agreement, and do not have material safety, economic, timing or other operational impacts.”
 7. In advance of well pad construction, Extraction shall complete baseline air quality and baseline noise testing for each of the four general drilling locations prior to commencement of pad construction, with the contractor, location, and method of such testing being subject to the reasonable approval by Broomfield, and Extraction will amend the CDP accordingly.
 8. A new sentence shall be added to Section 6.0, Conclusions and Next Steps, on page 20 of the CDP, to read as follows: Extraction will comply with all safety requirements of the CDP and implement any additional, reasonable, future measures needed to ensure safety.
 9. Extraction shall provide an amended Section (R) Risk Management Plan that includes the following additional risks, associated mitigation efforts, & resulting mitigated risk probability:
 - Each safety related risks identified in Extraction’s Securities and Exchange Commission Form 10-K;
 - Wildfire;
 - Light pollution;
 - Sabotage and vandalism;
 - Risks associated with pipelines (see Operator Agreement, Ex. B, BMP #3); and
 - Risks associated with potential interference with existing wells, including plugged and abandoned wells, during the fracking process.

If Extraction believes such risks are already included in the Risk Management Plan, Extraction will provide specific cross references.

10. Prior to the beginning of the Drilling Phase at any well site and subject to the approval of the City and County Manager, Extraction will provide the Risk Analysis, as referenced in the CDP in Section (W) Alternative Site Analysis, in sub-Section 7.5, and such Risk Analysis should support all of those critical risks identified in the Risk Management Plan.
11. Per Section 36, Plugged & Decommissioned Well Testing of Exhibit B of the Operator Agreement, within 30 days of approval of the CDP the Operator shall provide Broomfield with a list of the wells that will have soil testing and the schedule for such testing.
12. Final plans submitted by Extraction shall include all specifically listed requirements of Section 9(A) & (B) of the Operator Agreement.
13. A provision should be added to the CDP that Extraction will notify its subcontractors of all relevant requirements and require all subcontractors to comply with the conditions of the Operator Agreement and the CDP.
14. Add a provision to Section J - Response Preparedness Plan that any spill outside of the containment area, that has the potential to leave the facility or to threaten waters of the state, or as required by the City-approved Emergency Plan shall be reported to Broomfield as soon as possible, but no later than 24-hours, as referenced in Exhibit B of the Operator Agreement, BMP #19(C) and COGCC Rule 906.

15. As required by the Operator Agreement, BMP #19(k), Extraction shall provide its emergency shutdown protocols and promptly notify the City of any emergency shutdowns that would have an impact to any area beyond the confines of the Well Site.

The City intends to enforce compliance with these conditions and the CDP. Any non-compliance will result in enforcement action up to and including revocation of the CDP.

A handwritten signature in black ink, appearing to read "Charles Ozaki". The signature is fluid and cursive, with the first name "Charles" and last name "Ozaki" clearly distinguishable.

Charles Ozaki
City and County Manager
Broomfield, Colorado USA
cozaki@broomfield.org

Cc: City Council



FOR IMMEDIATE RELEASE August 20, 2018

CONTACT: Tami Yellico
City Manager's Office
303.438.5153
Broomfield.org/OilandGas

Broomfield Conditionally Approves the Comprehensive Drilling Plan for Future Oil and Gas Operations

Broomfield, CO -- After months of review and public comment, the City and County of Broomfield conditionally approved the Comprehensive Drilling Plan (CDP) with Extraction Oil and Gas on August 20, 2018. A copy of the letter approving the CDP with conditions is found [here](#) and at Broomfield.org/OilandGas. This CDP conditionally permits future oil and gas operations on the Livingston, Northwest A & B, United, and Interchange A&B well pads. The CDP includes best management practices that exceed State regulatory requirements, including: 1) minimizing the equipment, emissions and truck traffic during production by requiring pipelines for the removal of oil, gas & produced water from the well sites; 2) air, noise and water testing and monitoring; and 3) operator financial assurances.

The City and County Manager has conditionally approved Extraction Oil and Gas, Inc's Comprehensive Drilling Plan for six well sites containing 84 wells that Extraction intends to operate in Broomfield. (Here is a link to the [map](#).) Broomfield entered into an Operator Agreement with Extraction Oil and Gas, Inc., on October 24, 2017. That Operator Agreement requires Extraction to submit a Comprehensive Drilling Plan (CDP) that is subject to administrative approval by the City and County Manager. The Operator Agreement requires that this administrative approval not be unreasonably withheld or delayed. (Here is a link to the [operator agreement](#).)

Oil and gas wells have been located in Broomfield since the 1950s. Broomfield has been faced with oil and gas development at these or other nearby well sites since 2012, when Noble Energy first indicated its intent to drill. Under the law of the State of Colorado, local governments cannot prohibit oil and gas development within their jurisdiction, nor can local governments prohibit hydraulic fracturing. The Colorado Supreme Court has held that most aspects of oil and gas development are to be regulated by the Colorado Oil and Gas Conservation Commission (COGCC) and beyond the regulatory authority of local governments. Broomfield's goal has been to develop strategies and legally permissible tools to protect public safety that best reflect Broomfield's community values.

To that end, since 2016, Broomfield has worked with Extraction, a citizen led task force, and the community, to put in place best management practices for the Extraction well pads that are among the most stringent in the State of Colorado. The approval of the CDP marks the culmination of two years of efforts, including the appointment by the Mayor and City Council of an Oil and Gas Comprehensive Plan Task Force that resulted in recommendations for regulations that are more protective of health and the environment than state regulations. City Council adopted the Oil and Gas Comprehensive Plan Task Force recommendations in August of 2017 and those robust requirements became the basis of Broomfield's negotiations with Extraction and Broomfield's [updated oil and gas regulations](#).

The CDP that was conditionally approved by the City and County Manager is made up of 23 separate plans, covering such topics as air quality, noise, emergency management, risk management, and detailed site plans. A copy of the approved CDP can be found [here](#).

Extraction first submitted its draft CDP for review by Broomfield in December 2017. Since that time Extraction has submitted four more drafts of the CDP. Each draft of the CDP has been reviewed by Broomfield staff and consultants, with expertise in each of the issue areas. Broomfield sent Extraction detailed comments on each draft of the CDP, focusing comments on the protection of public health, safety, and welfare, including protection of the environment and wildlife resources. The first four drafts of the CDP and Broomfield's comments on each draft of the CDP can be found on Broomfield's website linked [here](#).

The May 11, 2018, draft CDP was discussed with City Council in June of 2018 at two regular meetings of City Council, at which public comment was taken. Broomfield staff sent a July 6, 2018 letter to Extraction detailing remaining City Council comments, citizen comments, and staff/consultant comments on the May 11, 2018, draft of the CDP. Subsequent to that time staff discussed with Extraction its final comments on the draft CDP, as contained in the July 6, 2018 letter. Extraction agreed to address each of those final comments in the July 27 draft CDP. Extraction's response to each of those comments is indicated in green, in this link to Broomfield's July 6, 2018, [letter on the draft CDP](#). Most recently, City Council took public comment on the July 27, 2018, draft of the CDP at a Special Meeting on August 14, 2018.

The CDP is more than 1,500 pages of requirements for the proposed well sites. The adopted best management practices in the Operator Agreement and the CDP far exceed the COGCC requirements for oil and gas operations and in some instances exceed the requirements of Broomfield's recently adopted oil and gas regulations.

Some of the protections provided in the Operator Agreement and the CDP include:

<ul style="list-style-type: none"> ● Financial assurance including environmental insurance requirement and \$100,000,000 general liability insurance requirement ● All water to the well pads and all oil, gas, and produced water from the well pads to be transported in pipelines, eliminating truck traffic and emissions ● Permanent Containment Berming around all well sites and additional measures to protect groundwater contamination ● Pipeline testing ● Pipeline safety design, construction & testing ● Safety valves ● Risk management plan ● Reporting of fires and explosions ● Spill reporting ● 6 month timeframe to reclaim sites ● Odor limitations ● No injection wells ● Electric drill rigs 	<ul style="list-style-type: none"> ● Use of quiet fleet technology ● Closed loop drilling, completion and operation ● Air modeling study ● Funds for air monitoring ● Air quality-monitoring, testing & reporting requirements ● Groundwater monitoring ● Banned chemicals ● Noise limitations ● Lighting control ● Setbacks in excess of 1,000 feet from occupied structures (in the form of the locations of well pads and proximity to homes/structures) ● Minimal equipment on well pads ● Detailed Emergency Response and Risk Management Plans ● Automatic Safety Protective Systems and safety shut-off valves ● The elimination of 42 legacy wells in Broomfield and neighboring communities and the associated reclamation of public lands ● Plugged and decommissioned well testing
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In addition to the protections in the Operator Agreement and the CDP, Broomfield is commissioning an air quality study to be led by Ajax Analytics and Colorado State University that will test the air quality near the Extraction well pads in advance of and during all phases of well pad development through operations. A summary of that air quality study can be found [here](#). In addition, Broomfield has facilitated the placement of the Colorado Department of Health and Environment’s mobile air quality monitoring unit to study Extraction’s operations. Broomfield has a robust inspection program. Broomfield inspectors will be onsite and inspecting every stage of Extraction’s operations and pursue enforcement of the Operator Agreement and the CDP. Broomfield continues to make efforts to improve COGCC regulation of the oil and gas industry, including participation in the flowline rulemaking, forced pooling rulemaking, and potential upcoming financial assurance rulemaking.

Questions about the CDP can be directed to Broomfield by email to oilandgas@broomfield.org or calling (303) 438-6300.