



## Oil & Gas Update - July 16, 2018

\*\*\*\*\*

### AIR QUALITY TESTING RFP

Broomfield issued a request for proposals (RFP) for air quality testing near the Extraction well sites and in nearby neighborhoods, as well as for the development of a webpage to report air quality monitoring results. Eight proposals were received by the April 26th due date, including proposals from groups associated with the University of Colorado, Colorado State University, and six private firms. A committee composed of staff, consultants, a representative from the 301 group, and a representative of the Oil and Gas Comprehensive Plan Committee, reviewed the proposals on May 10, 2018, and sent follow-up questions to the three firms that were ranked highest by the committee. The Colorado Department of Health and Environment (CDPHE) and Adams County staff have also submitted comments with regard to the proposals of the three highest ranked firms. The committee further narrowed the highest ranked firms to two proposals, based upon the Committee's review of proposers' answers to follow-up questions and the feedback from CDPHE and Adams County. It is the combined proposal of Colorado State University (CSU) and Ajax Analytics that the RFP committee is recommended to City Council for consideration and a contract. Through a combination of CSU's mobile tracker, CSU canister testing, and Ajax Analytics moveable and hand held sensors, the data generated will be able to identify trends and monitor operations at well sites, to determine percent change in volatile organic compounds and identify source emissions and age of emissions. Ajax and CSU will validate data and interpret source, so that Broomfield can follow-up with the operator as necessary through inspections. These data will be collected hourly and posted at least quarterly on a Broomfield operated website.

The total cost of the proposal for three years is \$1,762,768 for an annual average cost of \$587,589 per year. A more defined cost per year for each of the three years was requested from AJAX/CSU.

Broomfield will use this air quality data in various manners:

- Information supporting emergency response actions
- Follow-up information to respond to citizen complaints and concerns
- Information supporting follow-up inspections to identify violations
- Data and trend analysis to support health decision and possible regulatory and statutory changes

City Council commented on the combined CSU/Ajax proposal at its regular meeting on July 10th. Based upon Council comments, staff is beginning negotiations with CSU and Ajax Analytics next week. Staff would like to have the contract awarded within 30-60 days, so that baseline testing can begin. View the [RFP here](#).

\*\*\*\*\*

\*\*\*\*\*

**EXTRACTION COMPREHENSIVE DRILLING PLAN (CDP) UPDATE**

- Broomfield’s Operator Agreement with Extraction requires a Comprehensive Drilling Plan (CDP), which contains 23 plans on topics ranging from air quality, to noise control, and emergency and risk analysis. The CDP will control activities on the 6 well pads and 84 wells that are allowed under the Operator Agreement. The CDP is subject to Broomfield’s approval.
- Extraction submitted a fourth draft of the CDP on May 11, 2018. Here is a [link](#) to the updated CDP documents. Staff sent additional comments to Extraction on May 23rd with [regard to the Risk Registry](#) and on May 25th with [regard to drainage ponds](#).
- Staff has reviewed the CDP and discussed it in two parts with City Council. A portion of the plans within the CDP was reviewed with [City Council at its June 12th Study Session](#). The remainder of the plans in the CDP was reviewed with [City Council at its June 26th meeting](#).
- Broomfield submitted [these additional comments to Extraction on the CDP on July 6th](#).
- Staff met with Extraction on July 10th to discuss their work in completing the CDP.

\*\*\*\*\*

**EXTRACTION’S FORM 2A LOCATION ASSESSMENT PERMITS**

- Extraction has submitted to the Colorado Oil and Gas Conservation Commission (COGCC) all of the Form 2A locations assessment permit applications for the six well sites in Broomfield.
- Broomfield has provided comments to the COGCC on all of the Form 2A permits.
- Broomfield’s comments on the United and Northwest A & B Pads can be reviewed here [Broomfield’s comments on these permits can be seen here](#).
- At the request of COGCC, Extraction prepared Best Management Practices (BMPs) to be included on the State Form 2A permits for the proposed 6 new well pads in Broomfield.
- Broomfield staff submitted comments to the COGCC on Extraction’s proposed BMPs for these State permits. The COGCC responded back to Broomfield’s comments on these BMPS and a link to that interaction is [here](#).
- Staff submitted additional comments from a member of the Oil and Gas Comprehensive Plan Committee on May 15, 2018, and a link to those comments is [here](#).
- The significance of having BMPs on the State Form 2A permits is that those BMPs will be enforceable by the State. Broomfield staff developed its comments on the Form 2A BMPs by comparing what was proposed by Extraction to the Operator Agreement BMPs. COGCC staff indicates that its interaction with Broomfield on these BMPs and their consideration and inclusion of some of our comments is an unprecedented level of interaction with a local government on these matters. The COGCC has though, expressed concern about including the entirety of Exhibit B of the Operator Agreement, Best Management Practices with the COGCC permits.
- COGCC has indicated to staff that the Form 2A permits for the Interchange A&B and Northwest A&B pads will be placed on the July 30, 2018 thru August 1, 2018 COGCC docket. [Notice of these hearings is linked here](#).
- The COGCC has approved the Livingston Pad Form 2A permit. Here is a [link](#) to the email from the COGCC and the final Livingston Pad Form 2A Permit.

\*\*\*\*\*

\*\*\*\*\*

## EXTRACTION APPLICATIONS FOR PUBLIC and PRIVATE IMPROVEMENT PERMITS FOR PIPELINES

Broomfield negotiated with Extraction to have all gas, oil, and produced water piped off of the proposed Extraction well sites. Pipelines are safer and result in less emissions because it avoids the retention of oil, gas, and produced water on the well sites. Pipelines also greatly reduce the amount of truck traffic to and from a well site. Broomfield insisted that pipelines be in place to Extraction well sites prior to completion of the drilling and removal of oil, gas, and produced water from the sites. A map of the pipeline route can be viewed [here](#).

The estimated schedule for the installation of the pipelines is set forth below, with the section referenced those indicated on the map.

Updated Tentative Schedule Forecast: upcoming Public Private Improvement Permits (PPIP) applications and work:

PPIP	PPIP Submittal	PPIP Approval	Construction Start
Crossing C1 & C2	5/2 (reviewing redlines, 1/40 scale)	~ June (20-Day 1 <sup>st</sup> or 2 <sup>nd</sup> week of June)	~ Mid-June (likely C2)
Segment 1, 2 & 3, F1	5/2 (reviewing redlines)	~ June (20-Day 1 <sup>st</sup> or 2 <sup>nd</sup> week of June)	~ Mid-June (likely S3)
Crossing F2 & C3A	~ 5/21	~ 2 <sup>nd</sup> week of June	~ July/Aug
Segment 4 & 5	~ 5/21	~ 2 <sup>nd</sup> week of June	~ July/Aug
Segment 6 & 7	~ 4 <sup>th</sup> week of May	~ 3 <sup>rd</sup> week of June	~ July/Aug
Crossing C3 & C4	~ 4 <sup>th</sup> week of May	~ 3 <sup>rd</sup> week of June	~ Aug/Sep
Segment 8 & 9	~ 1 <sup>st</sup> week of June	~ 4 <sup>th</sup> week of June	~ Aug/Sep
Crossing C5 & C6	~ 1 <sup>st</sup> week of June	~ 4 <sup>th</sup> week of June	~ Aug/Sep
Crossing F5, F6, F7	~ 2 <sup>nd</sup> week of June	~ 2 <sup>nd</sup> week of July	~ Sep/Oct
Crossing C7, C8, C9	~ 2 <sup>nd</sup> week of June	~ 2 <sup>nd</sup> week of July	~ Sep/Oct
Segment 10 & 11	~ 3 <sup>rd</sup> week of June	~ 3 <sup>rd</sup> week of July	~ Sep/Oct

Section 13 of the Operator Agreement with Extraction requires pipelines to be built in accordance with specific protections like the highest class of pipeline for safety and durability and continuous monitoring systems. In exchange, Broomfield agreed to grant easements over City owned property for the pipelines. The pipelines, as contemplated by the Operator Agreement, are subject only to the issuance of a PPIP by the City Engineer. (A link to Broomfield's permit form can be found [here](#).) The primary purpose of the permit is so that any pipelines or utilities crossing public or private lands are built to engineering specifications, do not interfere with public utilities, and address associated environmental issues.

After months of working with Extraction, staff has issued the first two PPIPs for sections of pipeline in northern Broomfield, north of SH 7 and west and east of 1-25. These are sections S12 and S13 of the of the pipeline shown in red and aqua on the map. These sections of the pipeline will serve the Broomfield well sites, as well as the Coyote well pad in Weld county that resulted from negotiations to move forty wells from within Broomfield, which will be complete sooner.

As can be seen from the map of the pipeline linked above and the schedule set forth above, the next sections of the pipeline that will be reviewed and are subject to approval through the PPIP process are the pipelines serving the Livingston Pad and then moving east through the Northwest A&B Pads and the Interchange A&B Pads.

\*\*\*\*\*

**CRESTONE PEAK OIL AND GAS UPDATE**

Staff met with Crestone on May 7th to discuss its pending application for two well pads in northeastern Broomfield, the Gottl well pads. Staff provided Crestone with a first round of [comments on these applications](#). Crestone has begun working with the North Metro Fire & Rescue District and the Emergency Manager within the Police Department on the details of its Emergency Management Plan.

\*\*\*\*\*

**NEW DRAFT OIL AND GAS REGULATIONS**

- City Council adopted final oil and gas regulations on second reading on July 10, 2018. A link to the July 10th Council packet and the adopted regulations is [here](#).
- City Council directed staff to bring proposed amendments to these regulations concerning hearing requests on State Form 2 and 2A permits, a citizen grievance process, and setbacks for new surface developments to existing well sites to Council for consideration on first reading at Council’s August 14th regular meeting at 6 p.m., in Council Chambers. These items will be discussed by the City Council at its July 17, 2018, Study Session.

\*\*\*\*\*

**PROPOSED STATE RULEMAKING ON FINANCIAL ASSURANCES**

Staff and outside counsel have worked with member of the Oil and Gas Comprehensive Plan Committee to prepare proposed changes to the COGCC’s 700 series rules on financial assurances for oil and gas operators. (A letter to the COGCC regarding the proposed changes can be viewed [here](#).) Outside legal counsel, staff, and the member of the Oil and Gas Comprehensive Plan Committee met with the Director of the COGCC to discuss this proposal last week. The Director of the COGCC indicated that if COGCC initiated a financial assurances rulemaking bonding would be the focus of the rule changes and that at this time it is a longer range project for COGCC that may involve a task force. Staff intends to follow-up with COGCC with additional information and research as a result of what was learned at the initial meeting.

\*\*\*\*\*

**STATE RULEMAKING ON FORCED POOLING STATUTE**

Additionally, staff will be participating in [State rulemaking](#) concerning the new forced pooling statute.

\*\*\*\*\*

**COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT MOBILE AIR QUALITY UNIT**

Staff and members of the Oil and Gas Comprehensive Plan Committee toured potential sites for the placement of CDPHE’s mobile air monitoring unit in Broomfield to measure air quality in proximity to the Extraction well pads. A tentative location for the mobile air quality unit has been selected by CDPHE and that location is northwest of the the Livingston Pad and

south of the Northwest Parkway. Staff is finalizing access, pad, and electrification issues for the site. At this time, CDPHE anticipates doing baseline testing at the selected location and then follow-up testing during hydraulic fracturing and flowback.

\*\*\*\*\*

**STAFF MEETINGS WITH SOME OF THE REPRESENTATIVES OF THE BALLOT QUESTION 301 GROUP ON DRAFT OIL AND GAS REGULATIONS**

This week, staff continued its discussions with some of the representatives of the Ballot Question 301 Group to discuss their issues on the draft Oil and Gas Regulations. That discussion focused on issues previously raised by the group. One of those issues is the potential for a nuisance hearing initiated by citizens, if there are repeated complaints about oil and gas operations. A second issue is a mechanism for citizens to request that City Council request a hearing with the COGCC on Form 2A Location Assessment Permits. Staff will discuss these issues further with City Council in executive session and provide draft proposals for these additions to the regulations.

Other issues discussed were staff’s progress on a proposal for soil gas testing around plugged and abandoned well sites in Broomfield. Staff intends to update City Council on the soil gas testing proposal at City Council’s July 10th meeting. In addition, the Ballot Question 301 group that met with staff indicated that they would like Broomfield to put in place a notification system for oil and gas activities. Staff is working on a system for citizens to file complaints and to provide their email addresses for these updates.

\*\*\*\*\*

**SOIL GAS TESTING AT PLUGGED AND ABANDONED WELL SITES**

Soil gas testing of a plugged and abandoned well helps to identify any leakage in pluggings and cement. If leaks are identified those would be reported to the appropriate State agency for follow-up. There are 72 plugged and abandoned wells in Broomfield. ([Click here](#) to view the map of plugged and abandoned wells.) Forty-three of these plugged and abandoned well at at 500 feet or less from residences.

ERO is a consulting firm that Broomfield has worked with on this type of testing and water testing in the past. ERO made a presentation to the Planning Subcommittee of the Oil and Gas Comprehensive Plan Committee on soil gas testing around plugged and abandoned wells and the subcommittee recommended the use of this consultant for this purpose and for water testing. The cost per plugged and abandoned well for soil and gas testing is \$1,500 for a total cost of testing all plugged and abandoned wells of \$ 108,000 and for testing the 43 plugged and abandoned wells that are within 500 feet or less from residences is \$ 64,500.

In addition, Extraction will pay for plugged and abandoned well testing for those plugged and abandoned wells within one quarter mile of the projected track of the borehole of any new well that it drills.

\*\*\*\*\*

\*\*\*\*\*

**RECENT MEETINGS**

- Council reviewed the first section of the CDP during the June 12, 2018, meeting. A link to that presentation and discussion is [here](#).
- Council reviewed the second section of the CDP during the June 26, 2018, meeting. A link to the [memo, presentation, and discussion](#) is here.
- Council adopted new oil and gas regulations on July 10, 2018. A link to the new oil and gas regulations is [here](#).

\*\*\*\*\*

**FUTURE MEETINGS**

- A study session on proposed amendments to the new Oil and Gas Regulations will be held on July 17, 2018.
- First reading on amendments to the new Oil and Gas Regulations are scheduled to be conducted on August 14, 2018.

\*\*\*\*\*