



Oil & Gas Focus Group (Meeting 2 of 3)

May 22, 2019

Welcome

- Any questions / topics to discuss from the last focus group session before we start?



Meetings Overview

- Meeting 1 (April 24)
 - Introduction / Overview of Oil and Gas
- Meeting 2 (May 22)
 - Best Management Practices & Potential LDC changes
- Meeting 3 (June 26)
 - Follow up on LDC changes, and future rulemaking topics with COGCC

Scope of Focus Group and Intentions

- Focus group established for the sole purpose of providing non-binding input to City Staff regarding legislative efforts, both within the city and at the state level
- The focus group will not take formal positions
- City staff will report or summarize the input of the focus group
 - Intended to be a listening session

Land Development Code Updates

- Following the final focus group meeting, staff will take the feedback from the group that was generated, and begin the process of drafting LDC amendments.
- Multiple stakeholder participation meetings, meetings with the general public, and study sessions with Planning Commission and city council would be conducted as part of this process before any changes are adopted.
- Potential draft ordinance(s) could be generated around late August / September for consideration.



Potential LDC Changes from SB-181



Potential LDC Changes

1) Best Management Practices

- Codify the BMPs as standards in the LDC or as mandatory provisions in an extraction agreement
- Replace current sections that are less stringent than negotiated BMPs

2) Zoning

- Classify Oil & Gas Operations as an industrial use
- Disallow well pads from certain zone districts, e.g. residential, commercial
- Enhance land use regulations to fully account for impacts

Potential LDC Changes

3) Enforcement

- Add fines and other enforcement tools related to operational and BMP infractions
- Restate inspection authority

4) Process

- What hearing bodies should review Oil & Gas Permits?





Best Management Practices




BMP's Background

- 95 specific practices required by the document
- The 11/29 draft version was the result of 5-6 months of negotiation with Extraction Oil and Gas
 - To understand how the practices could apply to their site operations
 - Minimize impact on the community
- At the time, the BMP's were derived from code regulations from other cities and counties in Colorado, state regulations, and previous agreements signed between operators and cities, and general common best industry practices

BMP Categories (12)

 Air quality

 Water quality protection

 Use of pipelines

 Emergency Response Plan

 Inspections

 Transportation & Circulation

 Noise mitigation

 Community Outreach

 Reclamation

 Risk Management

 Safety

 Visual mitigation

Air Quality

- **Ambient Air Sampling** required at all sites
- **Electric Equipment.** All permanent production equipment must utilize electric line power in order to mitigate noise and to reduce emissions.
 - Includes things like compressors, motors and artificial lift equipment,
 - Drilling rigs near homes
- **Green completions**
- **Dust and Odor controls**
- **No-bleed pneumatic valves**
- **No tanks**

Water Quality

- **Chemical Disclosure and Storage.**
 - All fracturing chemicals disclosed to the City before chemicals are transported to the Well Site.
 - Operator shall not store fracturing chemicals, flowback from hydraulic fracturing, or produced water in the City limits.
 - Operator must remove all hydraulic fracturing chemicals from a Well Site within thirty (30) days following the completing of hydraulic fracturing at that Well Site.

- **Test all available sources within ½ mile**

- **Test all plugged and abandoned wells**



Water Quality

- List of specifically prohibited hydraulic fracturing chemicals, known to have adverse health risks:

Ingredient Name	CAS #
Benzene	71-43-2
Lead	7439-92-1
Mercury	7439-97-6
Arsenic	740-38-2
Cadmium	7440-43-9
Chromium	7440-47-3
Ethylbenzene	100-41-4
Xylene-F	1330-20-7
1,3,5-trimethylbenzene	108-67-8
1,4-dioxane	123-91-1
1-butanol	71-36-3
2-butoxyethanol	111-76-2
N,N-dimethylformamide	68-12-2
2-ethylhexanol	104-76-7
2-mercaptoethanol	60-24-2
benzene, 1,1'-oxybis-, tetrapropylene derivatives, sulfonated, sodium salts (BOTS)	119345-04-9
butyl glycidyl ether	8/6/2426
polysorbate 80	9005-65-6
quaternary ammonium compounds, dicocodyldimethyl, chlorides (QAC)	61789-77-3
tris hexamethylene triamine penta methylene phosphonic acid (BMPA)	35657-77-3
diethylenetriamine penta (methylene-phosphonic acid)(DMPA)	15827-60-8
FD&C blue no. 1	3844-45-9
Tetrakis(triethanolamino) zirconium(IV) (TTZ)	101033-44-7



Water Quality

- **Closed-Loop Pitless Systems for the Containment and/or Recycling of Drilling Fluids.**
 - Closed loop, pitless systems required, in order for containment and/or recycling of all drilling, completion, flowback and produced fluids.
 - Operator shall recycle fluids to the maximum extent practicable
 - Operator shall not store waste onsite for periods longer than 30 days.
- **Containment Berms.**
 - The Operator shall utilize steel-rim berms around all permanent separation and storage equipment at the Well Sites
 - With capacity to contain 1.5 times the maximum volume of liquids that such equipment will contain at any given time plus overflow capacity.
 - No potential ignition sources installed inside the secondary containment area



Pipelines

- **Use of Pipelines.**

- Requirement for the utilization of pipelines on all sites
- To eliminate the need for excessive storage tanks
- To eliminate the need for tanker trucks
- For oil, gas, and produced water
- Must be complete prior to production phase
- Contingent on council approval of a Conditional Use Permit (CUP) for the Pipelines.



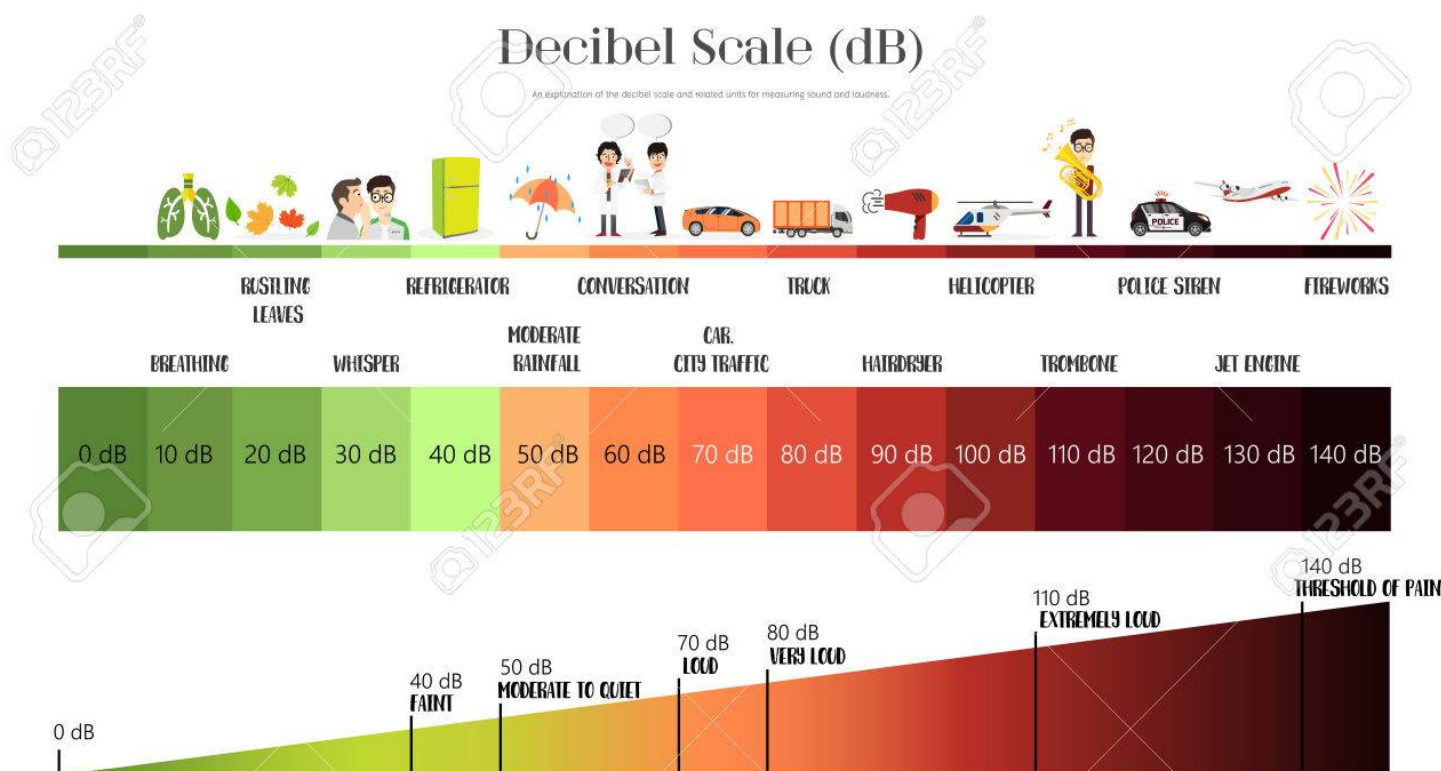
Transportation and Circulation

- **Traffic Control Plan.**
- Traffic plan required, which includes the following below:
 - Estimated weights and description of vehicles
 - Detail of access locations for each well site
 - Truck routing map
 - Restriction of non-essential traffic to and from Well Sites to periods outside of peak am and pm traffic periods and during school hours
 - Potential public improvements required
 - City or state access permits
 - Haul routes.
- **Pipelines required**



Noise Mitigation

- Sound levels may not exceed 55dB(A), or 4 dB(A) higher than baseline ambient sound measured at 1,000 feet from the sound walls at the Well Site (whichever is greater)
- Use of Quiet Fleet technology if within 1,320 ft of residential building
- Submittal of a sound study required to assess the potential impacts
 - Recommendation for size and location of sound walls an outcome of the study



Community Outreach

- **Outreach to Affected Residents:**
- Residents and business owners within ¼ mile (1,320 feet) of a location
- Provide at least 7-14 days advanced notice and community awareness to affected residents on a number of items

- **Bi-Annual Updates to City:**
- Operator provides a formal written update to the City Council on a bi-annual basis as to the progress of the project, regarding
 - any reportable spills or reportable accidents at locations
 - any notice of alleged violations from the City or COGCC
 - summary of complaints to the Operator and COGCC

Reclamation

- **Final Reclamation Plan.** Required not later than six (6) months after plugging and abandoning the last New Well, weather and planting season permitting.
 - Removal of Pipelines. Pipelines, gathering lines and flowlines shall be removed after one year of non-use when last well utilizing lines are plugged and abandoned
 - Temporary Access Roads. Temporary access roads associated with oil and gas operations at the Well Sites shall be reclaimed and revegetated to the original state within a reasonable amount of time



Visual Mitigation

- **Visual Mitigation Methods.**
- Example of visual mitigation methods described. Will be more of a site specific application.
 - Use of low-profile tanks (of no more than 16ft in height), facility painting, vegetative or structural screening, land berming and landscaping.
 - Earthen berm located around the perimeter of the fence
 - Establishment and proper maintenance of ground cover, trees and shrubs for screening and aesthetic purposes; and
 - Designing the Oil and Gas Facility to utilize natural screens where possible.
 - Construction of fences for use with or instead of landscaping or berming.
- No pumpjacks allowed.



Exercise and Discussion

- Of the BMP's described, which four would be most critical to include within a Land Development Code update?
- Are there any BMP's you think should not be included within a code update?
- Are we missing any BMP topics? If so, what and why?





Zoning

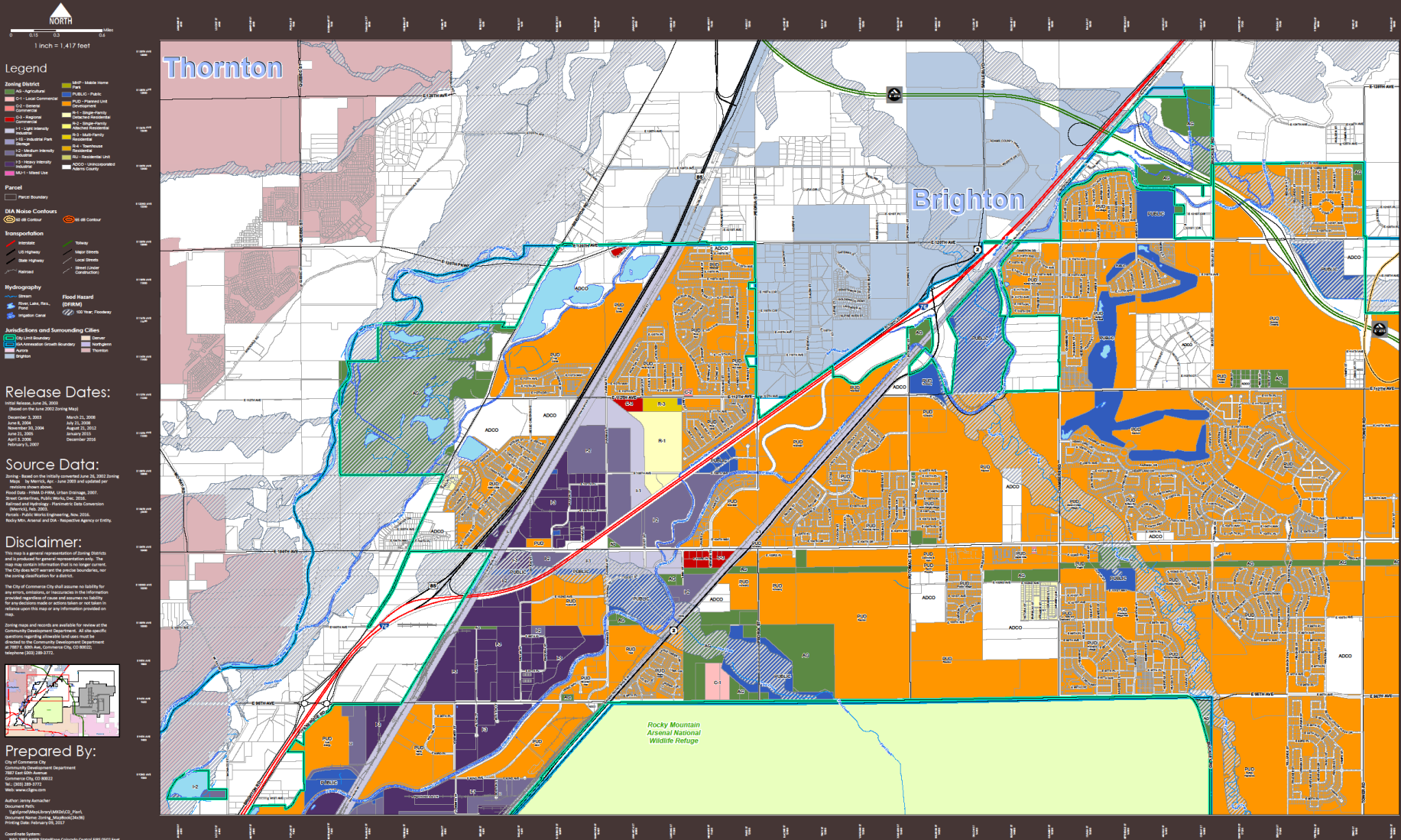


SB-181 Impacts on Commerce City

- SB-181 modified **C.R.S. §§ 29-20-104**
 - Allows for the city to further regulate surface locations through police powers: zoning and land use controls
- Prior to SB-181, local governments were pre-empted from using zoning authority to regulate surface use of well sites
- Currently Unclear:
 - Whether zoning regulations (whether intentional or not) may prevent operators from accessing certain mineral rights
 - Will most likely be decided in court



Zoning



Zoning Map

Zone Districts - North Area, Map 3
December 2016

Exercise and Discussion

- Which zone districts should allow oil and gas well pad sites?
- Should a setback be included for certain uses ?
If so, from what land uses and why?





Enforcement



SB-181 Powers

- Gives the city express authority for monitoring and enforcement and the ability to assess fees for violations of local land use regulations
- Expressly authorizes local governments to impose fees for cost of monitoring & penalties for violations of local land use regulations
- Financial securities, indemnification and insurance
- All other nuisance-type effects of O&G development
- Inspection of all O&G facilities

Exercise and Discussion

- Are there any enforcement provisions that would be most critical to include within a Land Development Code update?
- Are there any enforcement provisions you think should not be included in a code update?
- Are we missing any enforcement provisions? If so, what and why?



Process



Hearing Bodies

- Currently, the LDC allows for approval of an Oil & Gas Permit through an administrative process
 - Except where a Planned Unit Development (PUD) requires a Conditional Use Permit
- What process should oil and gas development sites go through?
 - Use by Right (Administrative Approval)
 - City Council (Conditional Use Permit)
 - Planning Commission (Conditional Use Permit)
 - Board of Adjustment (Use by Permit)
- Should different zoning districts have different public hearing processes?



Exercise and Discussion

- Should Oil and Gas development sites go through an administrative or public hearing process? If so, why?
- Should different zoning districts have different processes?



Focus Group Next Steps

- June 26, Session #3: Follow-up on Zoning, and future rulemaking topics with COGCC
- Reading Materials