

From: [cathy.conery](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking
Date: Thursday, October 13, 2016 8:17:37 AM

Dear County Commissioners

I understand that the short term moratorium on fracking in Boulder County will expire in November. I would request that this be extended.

There are numerous concerns with with fracking. Three primary areas of environmental concern re: fracking are diminished air quality at the fracking site, potential water pollution from unknown chemicals in the solution used in fracking and the high water demands of the fracking process itself.

In addition to these environmental concerns, major questions have been raised re: health impacts on people living close to fracking sites.

Boulder County is a community known for its healthy lifestyle and natural beauty. Fracking could damage not only our environment, but destroy the very reason people choose to live and visit this area.

Cathy Conery

Sent from my iPhone

From: [Annette Hartman](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: FRACKING
Date: Thursday, October 13, 2016 8:32:40 AM

Your people have already been very vocal and clear --- we do not want fracking!

Any attempt to forcefully move fracking into Boulder County is a *violation* of our fundamental rights.

Please, please, please DO NOT allow more fracking in Boulder County!!!!

Don't let money be your bottom line.

--Annette Hartman

(Concerned Homeowner in Boulder Country that has investigated fracking and it's many many health and environmental drawbacks)

From: [Jim Maslanik](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Fugitive emissions detection (re: Resolution 2012-142 oil/gas air quality standards)
Date: Thursday, October 13, 2016 11:46:33 AM

Dear Boulder County Planning Commission,

The Air Quality Standards/Fugitive Emissions text in Resolution 2012-142, Sections 12-602, A., 3., and 12-703, B., 3. reads as follows: "The Applicant will develop and maintain a leak detection and component repair program, such as a leak detection and repair program, using most effective performance technologies and practices for equipment used on the well site for permanent operations."

Would it be possible for the County to (a) include a more precise definition of what qualifies as a "leak detection and repair program" and/or (b) specify a required minimum frequency and duration for leak detection activities that exceeds State or Federal requirements? Since leaks are often intermittent and potentially quite large, an infrequent, sporadic inspection program is not ideal. Relatively inexpensive technology exists to provide in-situ continuous monitoring at sites that could detect significant leaks of methane (for example, a leak that might yield a level of 3 ppm methane at 100 ft. from the source), thereby triggering in-person inspection using more accurate sensing.

James Maslanik, Ph.D.
Lafayette, Colorado
ph. 303-807-4064

From: [Alison Ramadei](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Boulder County
Date: Thursday, October 13, 2016 1:27:25 PM

NO FRACKING IN BOULDER COUNTY!! Please re-instate a moratorium that lasts into the next generation so our children can have clean water . . .

Alison Ramadei

From: [Liza Carlson](#)
To: [Boulder County Board of Commissioners](#)
Subject: Today's Meeting: Urgent Need: Ban on Fracking
Date: Thursday, October 13, 2016 1:33:51 PM

Thursday, Oct. 13, 2016

Dear Boulder County Commissioners,

I have been a resident of Boulder County since 1975, and I use and enjoy all the benefits of this special and unique place. I have lived other places in our country and seen the effects of careless and short-sighted community vision. Dear Commissioners, you did a great thing when you put a Moratorium on Fracking, so that the issue could be studied further. You took seriously the power and the responsibility to think ahead and protect our health and safety.

Today, I am writing to urge, plead and demand that you make permanent the moratorium on Boulder County fracking. When I wrote you in May, 2013, we were all waiting until further studies could be done on fracking's vast social and environmental effects. The results have become painfully obvious, e.g. the earthquakes in fracked Oklahoma, the polluted well water and other harmful effects that are now well documented. Fracking's cost is way too high in too many ways.

I am horrified at fracking's effects: 1) the extensive use of small county roads and the damage the trucks do to those roads, the pollution they emit, and the number of trips required to establish a well; 2) the left-over, untreated waste water which is then injected deep into the land creating chemical underground lakes to poison future generations; 3) the noise and air pollution; 4) the effects on wildlife; 5) the effects on our grass, farmland, and present and future crops; 6) and most importantly, the health costs to the surrounding neighbors, their animals, and generations to follow.

For these reasons and more, I urge, plead, and demand that you make permanent the ban in Boulder County on hydraulic fracturing. Humanity, land and wildlife, and the air and water require thoughtful shepherding. The responsibility lies with you.

You have been voted in to protect and promote the well being of Boulder County. Please, please make this Fracking ban PERMANENT and FINAL! Thank you for your service.

Sincerely,

Liza Carlson and
John Armstrong

Liza Carlson
The Magic of Time Management
781 - 11th St.
Boulder, CO 80302
liza@lizacarlson.net
303-442-3116

From: [Beth Osnes](#)
To: [Boulder County Oil and Gas Comment](#); info@corising.org; [Joellen Raderstorf](#); [KenCairn, Brett](#)
Cc: [Beth Osnes](#)
Subject: Community Comment for Hearing on O&G Regs - Wed, Oct 12 - BoCo Planning Commission
Date: Thursday, October 13, 2016 2:19:23 PM
Attachments: [Sample of NWEF Radio Show.wav](#)

Greetings to the Boulder County Planning Commission, I was unable to attend the meeting yesterday but would love to share the attached comment regarding my feelings regarding oil and gas development regulations. I would like to support every effort towards a clean energy future. I would like to see Boulder adopt the climate action plan being proposed that moves our city towards complete renewable energy sourcing for our city's needs. Please listen to the attached file of Winona LaDue speaking when she visited the CU Boulder campus two years ago. She articulates my views and my aspirations regarding energy use and a sustainable future for us all. In spirited partnership and in gratitude for what you contribute to our city, Beth

Beth Osnes, Ph.D.
Associate Professor
Department of Theatre & Dance
(and an associate of the Environmental Studies Faculty)
Director of Graduate Studies, Theatre
University of Colorado, Boulder
UCB 261, Boulder 80309

www.insidethegreenhouse.net
www.motherthefilm.com
www.strikingthematch.com

Recently Published
Theatre for Women's Participation in Sustainable Development Routledge 2014
<https://www.routledge.com/products/9781138189669>

From: [Megan Martorano](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Public comment - fracking moratorium
Date: Thursday, October 13, 2016 6:15:24 PM

As the current moratorium on fracking in Boulder County is ending, I hope you will please continue to prohibit fracking here. Please choose the health and safety of the people who live here, our environment and water conservation over oil and gas company profits. Please continue to keep fracking out of Boulder County!

Thank you
Megan Martorano
Longmont, CO

From: [JACQUELYN GOELDNER](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking
Date: Friday, October 14, 2016 8:00:35 PM

Please add my voice as one in loud and strong opposition to fracking!

Jacqui Goeldner

From: [Diane Birmingham](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: What more can we do?
Date: Saturday, October 15, 2016 10:12:59 AM

No matter what the health implications of Fracking and the high leakage of VOCs have, the corrupt politics of the state will have blow back for the endorsement of this environmental disaster for Dems and Republicans.

You cannot sugar coat this and suppress studies showing how deplorable this is for people and the environment!!

Diane Birmingham RN, MS EnPH

From: [Tricia Olson](#)
To: [Boulder County Oil and Gas Comment](#)
Cc: [Jones, Elise](#)
Subject: Detailed Commentary on Proposed Oil and Gas Regulations
Date: Monday, October 17, 2016 5:19:19 AM
Attachments: [OGRegs-PlanningBoard-Olson-161016.docx](#)

Attached is a my written commentary on the proposed oil and gas regulations.

Tricia Olson
7446 Park Pl
Boulder, CO 80301

October 17, 2016

Dear Boulder County Planning Board and Staff,

As someone who lives in unincorporated Boulder County, I expect to be profoundly impacted by the regulations you are considering. Above all, I urge you to keep in mind the negative impacts that come with industrial oil and gas development and fracking: health risks,¹ air pollution, contamination of the ground and water, the potential for fires and explosions, increased radioactivity, odors, noise, light pollutions, and of course, the impact of methane on the climate. There is also a long-term threat to local economies in mineral-rich sacrifice zones; after industry leaves, regions with boom/bust extractive industries are worse off than their neighbors.

State regulations are truly inadequate,² and these regulations will not truly protect the environment or the health and safety of Boulder County residents either. However, you must still do whatever you can to minimize the impacts.

I commend the staff for its work on these draft regulations. However, there are a few additional items to consider.

Detailed Comments

1. Re 12-100, Purpose: To the list of concerns in lines 4 and 5, add soil contamination and loss of agricultural land.
2. Re 12-400 A.2. Community Engagement and 12-400 C Special Review Process regarding notices and meetings: The regulations require notice to and input from the Parks and Open Space Advisory Committee. I suggest that the same be afforded to the school boards in Boulder County. This may be especially relevant for Heatherwood and Douglas Elementary Schools. Where pertinent, water agencies and special districts should also be noticed.

While anecdotal, Erie residents claim that they do not receive pertinent notices. We should expect the same in the county.

3. Re 12-400, A.3. Surface Use Agreements: I would leave out "...encourages such agreements but..." and stick to "The County recommends that they not be finalized..."
4. Re 12-400, E. Applicant Neighborhood Meeting: I suggest that the time of day also be convenient for the public. In addition, the applicant is supposed to provide a summary of the comments and agreed upon mitigation measures. Is the applicant allowed to choose which comments are on the record? Does this mean that some pertinent comments could essentially go into a black hole?
5. Re 12-400, J. Consultant Review: Why is the applicant given the opportunity to provide input concerning consultant selection and the scope of work? That is the County's job, to represent the best interests of the residents.
6. Re 12-500, first paragraph on Application Submittal Requirements: Submittal requirements may be waived or modify submission requirements if the usefulness of the information is outweighed

¹ New articles are being published continuously, with numerous articles on asthma recently (e.g. <http://www.parentherald.com/articles/55516/20160719/fracking-worsens-asthma-exposure-pollution-stress-increase-children-adults-need.htm>). Consult <http://psehealthyenergy.org/> and <http://www.psr.org/assets/pdfs/fracking-compendium.pdf>.

² For setbacks alone, see 50% of experts agreed that 1-1¼ mile is a minimum setback distance - <http://www.environmentalhealthproject.org/>. There is also a study on the respiratory health of children and infants - "We recommend that at a minimum, one-mile setbacks should be established between drilling facilities and occupied dwellings where infants and children might spend a substantial amount of time." http://ecowatch.com/wp-content/uploads/2016/05/fracking_study.pdf (p 12)

by the hardship placed on the Applicant in providing the information. I would remove this. The protection of the public outweighs all else, and if the Applicant can't provide needed information, then the project shouldn't go forward.

7. Re 12-500, B. Ownership: Require that mineral rights ownership is "perfected." If there is any way to avoid forced pooling, the County should pursue it.
8. Re 12-500, Application Submittal Requirements, add section between B and C.: Bankruptcies and abandonment of wells are a real risk with companies in this debt-ridden industry. The regulations seem to assume that the applicant will still be available to plug a well. In fact, as companies go bankrupt or out of business, there are numerous orphaned wells throughout the continent – Wyoming, Texas, North Dakota, Oklahoma, etc.³ The bonds put up by companies are nowhere near the costs required to clean up and plug these hazardous well, and the considerable costs fall on the taxpayer. An operator should be liable for these costs. At minimum, the County should require that applicants provide documents proving solid financial health with the application submission. The "letter of credit" for site improvements mentioned on page A-16 is not good enough.
9. Re 12-500, H. Proximity of Other Wells and Other Oil and Gas Operations: If there is an "orphaned" well within one mile, it should be shut in.
10. Re 12-500, I.12. and L.2 Existing and Proposed Lines and Emergency Preparedness Plan: The draft regulations frequently mention pipelines and gathering lines, and while they are addressed specifically on page A-31 for a special review hearing, there is information that should be required with the application. Most, if not all, of the pipelines and gathering lines will eventually spill and leak, and siting must be based on public safety. Current lines should be identified as to age, location, diameter, wall thickness, typical and maximum operating pressures, what they carry, and depth of cover. Application submissions for new lines should require the same information, along with an estimated worst case spill volume in the area of the development.
11. Re 12-500, after K. Air Quality Plan, add new section: Odor mitigation. An odor isn't just unpleasant, but can indicate something dangerous. Prevailing winds really do need to be considered in siting, and notification should be given to residents for certain well operations, such as scrubbing or snubbing. A woman named Terri in Windsor wrote to me, and I quote, "No one tells you that the oil and gas industry has to scrub and snub their wells all the time. When they do this, they open the hatches, and the VOC's are going everywhere. I was over a mile away, and the COGCC couldn't believe how far the gases had traveled."
12. Re 12-500, L.3. Emergency Preparedness Plan: Who will identify the pre-identified trigger levels that govern an emergency? The recent release at the Suncor Plant comes to mind. The CDPHE still hasn't determined if the release was toxic to human health.
13. Re 12-500, L.6. Emergency Preparedness Plan: Does Boulder County have identified hydrogen sulfide zones? Apparently, Colorado lacks an hydrogen sulfide standard. Windsor residents claim they can smell it near oil and gas operations, and it has been documented on the Western Slope and in Weld County.
14. Re 12-500, Application Submittal Requirements, add section after M. Land Disturbance Mitigation Plan: Fracking and oil and gas development is now associated with radioactivity waste. These regulations should require baseline testing, appropriate monitoring to determine the radioactivity of the waste material from the well and surrounding soils, and plans for disposal, including a timeline for the disposal of radioactive waste.

³ http://www.dailyranger.com/story.php?story_id=23587&headline=oil-slump-leaves-wyoming-other-states-in-trouble-on-orphan-wells

15. Re 12-500, O.3., Transportation Plan: The operator/applicant is required to submit information on maintenance practices on proposed routes, but it doesn't say who is responsible for maintenance. The County? In addition, the County's fugitive dust regulations should not allow the use of frack fluids in dust suppression.⁴
16. Re 12-500, Q.1., Transportation Plan: This section seems to encourage the use of pipelines when, in fact, pipelines come with their own set of problems.⁵ They leak and spill.
17. Re 12-500, X. Surrounding Land Uses Mitigation Plan: Surrounding land uses should include residential use, and mitigation should include the nuisance factors of noise and bright lighting. Residences should be shielded.
18. Re 12-600, P. Special Review Standards, Wetlands Protection: With the level of spills and leaks, degradation to wetlands will happen. To the extent possible, require special mitigation.
19. Re 12-700, H, Conditions of Approval, Exhaust: Are trucks included in this standard?
20. Re 12-700, J, Conditions of Approval, Flares: It is criminal that flaring is allowed at all and should be minimized. Flaring is, after all, "waste of the resource" and C.R.S. 34-60-102(1)(a)(II) says that it is in the public interest to "protect the public and private interests against waste in the production and utilization of oil and gas;"
21. Re 12-600, O., Conditions of Approval, Noise: Have you asked for noise mitigation? See comment under 12-500, X.
22. Re 12-600, Q, Conditions of Approval, Performance Guarantee: A letter of credit is not good enough. Indications of financial stability should be required. In addition, these operations are frequently sold or traded. There should be some guarantee that new owners also meet performance requirements.
23. Re 12-700, V., Conditions of Approval, Spills and Leaks: Can the County set additional clean-up requirements beyond state and federal law?
24. Re 12-700, Y., Conditions of Approval, Transportation Fees: Are fees based on the projected usage?
25. Re 12-700, CC, Conditions of Approval, Vehicle Tracking Control Practices: Will this include possible discharge of frack fluids on roads?
26. Re 12-700, FF, Conditions of Approval, Well Abandonment: I assume that the County understands that wells are often abandoned without being plugged.⁶
27. Re 12-701, A., Potential Site Specific Mitigation Measures, Air Quality: You may already have this reference, but just in case you don't, the following articles comes from the Four Corners Air Quality Task Force,
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwjPjdGt8NHPAhXr64MKHehkDB4QFgguMAI&url=https%3A%2F%2Fwww.env.nm.gov%2Faqb%2F4C%2FDocs%2F4CAQTF_Draft_Report_vers_7_OilGasExpProd.doc&usq=AFQjCNGKVTpUAmEsvyKU7Tsd7JNNb4HRIw&bvm=bv.135258522,d.amc.
28. Re 12-701, B.2., Potential Site Specific Mitigation Measures, Water Well Sampling: Why is the distance ¼ mile used? Water contamination has been found ½ mile away.⁷
29. Re 12-701, B.6, Potential Site Specific Mitigation Measures, Water Well Sampling, Resolution and mitigation: I didn't see the replacement of water sources mentioned.

⁴ <http://miniplanet.us/the-fracking-industrys-answer-to-toxic-wastewater-spray-it-on-public-roadways/>

⁵ <https://www.fracktracker.org/2013/04/us-pipelines-average-incidents-are-a-daily-occurrence/>

⁶ <http://www.wsj.com/articles/how-orphan-wells-leave-states-holding-the-cleanup-bag-1424921403>

⁷ Stephen G. Osborna, Avner Vengoshb, Nathaniel R. Warnerb, and Robert B. Jacksona, "[Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing.](#)" PNAS, April 14, 2011.

30. Re 12-701, between B and C, Potential Site Specific Mitigation Measures, add Radioactivity Sampling: Now that fracking and oil and gas development are associated with radioactivity waste baseline measurements should be taken to determine the radioactivity of the waste material from the well and surrounding soils.
31. Re 12-701, C.3., Potential Site Specific Mitigation Measures, Land Disturbance, Disruption: I applaud the inclusion of reasonable disruption payments on page A-22. This reminds me of the Porter Ranch leak in California earlier this year. I suggest, however, that 60 days might be too long and that health emergencies and major leaks should be included in reasonable disruption payments. Also, there should be some allowance in the case that livestock is impacted.
- Ideally, with the connection between asthma and oil and gas development, there should be payments for treatment of childhood asthma that develops during the operational phases.
32. Re 12-900, B., Procedures Following Approval of a Special Review Application, Effect: It states that “the Applicant shall be entitled to have processed any necessary building....” The use of “any” in this sentence is overreach, too broad.
33. Re Amendments to Article 4-514, E., Gas and/or Hazardous Liquid Pipelines: Pipelines and gathering lines deteriorate with time and spill and leak, and if not adequately addressed, then the regulations aren’t the best they can be. While there are different jurisdictions involved, there is definitely a role for the County.

Apparently, a pipeline can be located a mere 50’ from a home. However, there are formulas that calculate a safe distance based on the items I mentioned previously: age, location, diameter, wall thickness, typical and maximum operating pressures, what they carry, and depth of cover.⁸

Eminent domain should not be used for pipelines

Thank you for the opportunity to provide comment.

Sincerely,

Tricia Olson
7446 Park Pl
Boulder, CO 80301
olynmawr@msn.com

⁸ There are likely more recent articles:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjwxa-q1-HPAhUI6oMKHa2YA_sQFggcMAA&url=http%3A%2F%2Fpstrust.org%2Fdocs%2Fops_doc1.pdf&usg=AFQjCNGikBit-ytXf9xL9wF1jSCziZJo6Q

From: [Joshua Weinstein](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Boulder Fracking
Date: Monday, October 17, 2016 6:04:26 PM

Please put in a new moratorium on fracking, 2. to require frackers to open their books to show they're solvent and, 3, will clean up at least as much as they can, and 4. have a plan for the waste. Suzanne, is that correct?

Then, two, meeting at Courthouse across from/between Boulder Theater / and Shine on November 15th at noon. Wear white shirt to show solidarity if you can't comment.

Sent from my iPhone

From: [Ginger Riversong](#)
To: [Boulder County Board of Commissioners](#)
Subject: Fracking and water: new study
Date: Monday, October 17, 2016 11:16:03 PM

Perhaps this will be helpful...<https://www.ceres.org/press/press-releases/new-data-water-use-in-hydraulic-fracturing-a-key-risk-in-water-stressed-regions-in-texas-and-colorado-1>

Thank you for doing what you can to protect us. Stand up to COGCC!

Ginger

From: [darlrv riv](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: amendment 71
Date: Tuesday, October 18, 2016 8:27:10 AM

Hello, I am writing for several reasons today.

One: To ask you to put in a new moratorium

Two: To require frackers to open their books to show they are solvent

Three: To require frackers to clean up all they can and should

Four: To require frackers to have an environmentally friendly plan for the disposal of the waste they create

Thank you for your consideration.

Dar River, a very concerned citizen

From: [Becca](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking
Date: Tuesday, October 18, 2016 12:30:22 PM

To whom this may concern,

Please, please put a new moratorium on fracking starting on the 19th of November 2016. Lets make an example to other communities how to protect our home from oil and gas companies. We as a community should also have these fracking companies open their books and show they can be profitable. We would also like them to show us how they will clean up their mess when they leave and also how they will dispose of the waste.

We are a strong community and I am grateful to you for taking the time to read my comment.

Thank you,
Becca Martin

From: [Jeremy Ciampa](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking in Boulder starting in November
Date: Tuesday, October 18, 2016 2:20:15 PM

Please do your very best to keep fracking out of Boulder County. I'm sure it won't be easy. I thank you in advance for your efforts.

Here's the thing: If companies were to begin attempting to frack in our county, I am certain that active, grassroots opposition to any fracking activity would create serious problems for the industry, and serious unrest for all parties involved.

I believe it is our local officials job to do everything in their power to enable and activate the will of the very people they serve. Your office is certainly up against larger forces- both the state government and the oil and gas industry (to the extent that they exist as separate entities) wish to subvert the will of local people. I'm sure the measures you will need to take to exercise the will of the people will require immense effort and creativity.

But you must do everything you can to stop fracking in Boulder County. There are tens of thousands of principled, but as of yet complacent, citizens that will stand up and actively commit to stopping fracking in our backyard by any and all means.

Thank you for your hard work; we need you.

Jeremy

From: [Larsson Burch](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: No to fracking
Date: Tuesday, October 18, 2016 8:21:54 PM

Boulder County commissioners,

I'd like to add my support against fracking in Boulder county. I support a 6 month extension of the moratorium against fracking. I support requiring that any involved oil company open their financial books to the public to prove their profitability. I support requiring companies to put down bonds for every fracking site to pay for any potential cleanup costs. I also support requiring companies to deliver detailed plans for disposal of fracking waste. I am severely disappointed that the oil companies suppressed our right to vote to ban fracking this year and hope that Boulder County will act responsibly to prevent fracking in our communities.

Regards,
Larsson Burch

From: [Maggie Boissard](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: No fracking in Boulder
Date: Tuesday, October 18, 2016 9:02:53 PM

Boulder County commissioners,

I add my support against fracking in Boulder county. I support a 6 month extension of the moratorium against fracking. I support requiring that any involved oil company open their financial books to the public to prove their profitability. I support requiring companies to put down bonds for every fracking site to pay for any potential cleanup costs. I also support requiring companies to deliver detailed plans for disposal of fracking waste. I am severely disappointed that the oil companies suppressed our right to vote to ban fracking this year and hope that Boulder County will act responsibly to prevent fracking in our communities.

If fracking begins in Boulder, it will inevitably leak chemicals into our water and air at the very least. If there's no clean water here, people will move. I don't want the oil companies destroying Boulder and I'd imagine you don't either.

Sincerely,
Margaret Boissard

From: [Catherine Cook](#)
To: [Boulder County Oil and Gas Comment](#)
Date: Tuesday, October 18, 2016 11:03:52 PM

Hi Boulder County Reps-- I know in your hearts what you want and I am writing to back that!

I would like to ask you to stand up for our environment. Please take the risk and stand up against the oil and gas industry in the form of the state. Please say no to Fracking in Boulder County. Please stand for our community and make moratorium on fracking in Boulder County.

I work in health care and I know that people living in poverty are always at the front lines of many environmental disasters. We in Boulder have been so insulated from the reality of fracking. We do not want to see our community's most vulnerable at the whim of the oil and gas industry.

Thank you for your courage!

Cate Cook
Case Manager Clinica Family Health

From: [Tricia Olson](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Thornton Road Doc, not comment
Date: Thursday, October 20, 2016 2:55:47 AM
Attachments: [Thornton-Model Traffic Code-ReO&G \(10.04.16 Draft\).pdf](#)

INTRODUCED BY: _____

AN ORDINANCE AMENDING THORNTON CITY CODE SECTION 38-523 OF THE LOCAL AMENDMENTS TO THE 2010 EDITION OF THE MODEL TRAFFIC CODE FOR COLORADO MUNICIPALITIES PERTAINING TO THE RESPONSIBILITIES OF THE OFFICE OF THE TRAFFIC ENGINEER.

WHEREAS, the City has adopted local amendments to the 2010 Edition of the Model Traffic Code for Colorado Municipalities ("MTC") in Section 38-523 of the Thornton City Code ("Code"); and

WHEREAS, such local amendments created the office of the Traffic Engineer in Section 113 of the MTC and established the duties and responsibilities for the Traffic Engineer in Section 113.5 of the MTC; and

WHEREAS, an oil and gas operator authorized to do business within or who is operating outside the City is required to obtain an Access Road Permit issued by the Traffic Engineer, for the use of public streets and roadways within the City in connection with the oil and gas operation; and

WHEREAS, oil and gas operations are unique in that heavy truck traffic for various phases of the business is a necessary and integral part of the oil and gas operations for the duration of the business. Consequently, the impact on the use of the City's public streets and roadways is disproportionately intense relative to the impact of other businesses using the City's public streets and roadways.

WHEREAS, use of such public streets and roadways by oil and gas operations adversely impacts the useful life of these public streets and roadways, and significantly impacts traffic patterns by the volume of oil and gas facility truck traffic, thereby complicating the City's regulatory efforts to manage impacts to and traffic flow on public streets and roadways; and

WHEREAS, in 2008, Rio Blanco County, Colorado, funded a traffic study addressing the roadway impacts caused by new development, including oil and gas development in the County, and the regulatory mechanisms by which those new developments could be required to pay their fair share of improvements. The study concluded that the increased traffic impacts related to oil and gas operations generated a need for increased capacity of roads, road improvements, and additional road maintenance, and consequently that the imposition of an impact fee on all oil and gas operations to pay for such traffic improvements and maintenance was an appropriate means to recoup government expenses associated with such development; and

WHEREAS, the County of Boulder similarly funded an oil and gas road impact study in 2013 to understand the potential impacts of oil and gas operations and production on the County's roadways and to design a road deterioration safety fee to offset costs associated with the oil and gas truck traffic, and concluded that oil and gas

roadway impact fees were an appropriate means to recoup the expenses incurred by the County associated with the adverse traffic impact created by such development, and thereafter developed a system for imposing and collecting transportation impact fees for all oil and gas facilities operating in the County; and

WHEREAS, the City funded a similar oil and gas road impact fee study, conducted by BBC Consulting and Research presented to the Thornton City Council in July, 2016 and which confirmed that truck traffic associated with oil and gas drilling and production can significantly impact local road systems. The study found, based on historical well drilling activity inventoried by the Colorado Oil and Gas Conservation Commission and current geographical distribution of oil and gas development that, while the City's costs associated with road damage vary based upon the development, an oil and gas road impact fee can be imposed in amounts calculated to isolate the oil and gas damage to City roads and allow the City to recoup associated maintenance or repair costs; and

WHEREAS, Recommendation #37 of the Colorado Oil and Gas Task Force Final Report recognizes that "[t]here is uniform agreement that one of the most serious impacts of oil and gas activity involves the use of large trucks and trailers." The Task Force Final Report concluded that the issue was serious enough to merit "special attention, study and action" such as the Rio Blanco County and Boulder County impact fee studies; and

WHEREAS, the City is experiencing an increase in oil and gas operations within the City and in the surrounding areas that impact City streets and roadways, and the applicable taxes and other revenue generated from oil and gas operations do not generate sufficient funds to cover the cost to the City, to provide the necessary capital facilities and safety improvements, to accommodate and address the added impacts of oil and gas operations on transportation system management and use of the City's streets and roadways; and

WHEREAS, without a mechanism requiring an oil and gas operation to pay their reasonable, fair, and equitable share of the costs incurred by the City for capital improvements and safety improvements made necessary by the impacts to streets and roadways caused by oil and gas operations in and surrounding the City, such streets and roadways will degrade making transportation inefficient, inconvenient, and less safe; and

WHEREAS, without imposing a fee, City taxpayers will bear the financial costs and suffer the consequences of impacts to public streets and roadways caused by oil and gas operations, through the delay or postponement of current or future capital investments elsewhere in the City's transportation system; and

WHEREAS, oil and gas operators should pay their reasonable, fair, and equitable share of the costs incurred by the City, associated with ensuring the public

roads are kept and maintained in a safe condition given the impacts caused by oil and gas operations; and

WHEREAS, Colorado law recognizes the authority of local governments to impose fees to defray the expenses associated with the provision of governmental services and anticipated future demand for such services; and

WHEREAS, the office of the Traffic Engineer was established to deal with and issue oversized and overweight truck permits for use of City streets and roadways and now the Traffic Engineer's authority needs to be amended to authorize and direct the Traffic Engineer to require and issue access road permits for oil and gas operations within the City and in surrounding areas that uses City streets and roadways and authorize the Traffic Engineer to impose an applicable fee for oversized and overweight truck permits and access road permits; and

WHEREAS, the Traffic Engineer should be authorized to enforce and establish standards for calculation of a fee rationally related to the need for street and roadway improvements and maintenance caused by the use of such City streets and roadways by oil and gas operations, which fee is to be recommended to City Council for adoption. Such fee is intended to timely and properly address related safety concerns, as traffic regulations provide a mechanism for allocating to such oil and gas operations their fair share of the costs of maintaining and improving the streets and roadways within the City that are directly impacted by oil and gas operations.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF THORNTON, COLORADO, AS FOLLOWS:

1. Section 38-523, Local Amendments to the Model Traffic Code, Section 113 is hereby amended by addition of the words double-underlined and the deletion of the words stricken to read as follows:

Sec. 523-113. Office of the Traffic Engineer.

- (1) The office of the Traffic Engineer is hereby established. The Traffic Engineer shall have the authority to exercise the powers and duties provided in this Code and as may be referred to in the Thornton Municipal Code. Such authority shall specifically include the power to issue all types of permits or authorizations associated with the use of public streets and roadways by any business impacting such public streets and roadways and to establish and impose applicable fees for such use of public streets and roadways pursuant to applicable provisions of this Code and the Thornton Municipal Code.
2. Section 38-523 Local Amendments to the Model Traffic Code, Section 113.5 is hereby amended by enactment of a new subsection 113.5(5) with the present

subsection (5) and the current subsections (6), (7) and (8) renumbered accordingly, to read as follows:

113.5. Duties and Powers of Traffic Engineer or other designated traffic official.

- (5) The Traffic Engineer, or designee, shall have the authority to and responsibility for establishing standards and procedures for the issuance of any type of permits and to establish and collect applicable fees, as fees are approved by City Council, related to the use of and impact on the City's public streets and roadways by all types of traffic and including any type of truck traffic in connection with the development, construction, operation, and maintenance of oil and gas facilities, whether such facilities are within the City or are outside the City limits, but intend to use or have used City streets and roadways in connection with the above described oil and gas operations. The Traffic Engineer shall also have the authority and responsibility to establish the process for imposition and collection of any applicable fees associated with the issuance of any permits allowing the use of public streets or roadways.
- a. Permit requirements. Any type of oil and gas operation, whether located within the City or located outside the City limits, which intends to use the public streets and roadways within the City in any way and in connection with said oil and gas operation, shall be required to obtain, in addition to any other applicable license or permit of general applicability, an Access Road Permit ("**Permit**") upon application to the Traffic Engineer. The following documents and information shall accompany all Permit applications, which application form shall be established by the Traffic Engineer:
- (1) Payment of the applicable Permit fee in an amount as set forth by resolution of the Thornton City Council;
 - (2) A copy of the complete Colorado Oil and Gas Conservation Commission (herein after "**COGCC**") application, Form 2 or 2A, and any accompanying exhibits.
 - (3) A copy of the COGCC approvals for the oil and gas operation.
 - (4) A traffic management plan, for those oil and gas operations located outside the City, that intend to use the City's public streets and roadways, identifying the projected number of all types of vehicles that will be used in connection with the operations and anticipated frequency of use for the various types of vehicles; excluding personal vehicles and personnel passenger trucks of employees and guests and excluding personal passenger trucks.

- (5) Route preferences, which shall be specific as to preferred routes, including estimated time of day for travel and projected volume of traffic for all types of traffic. Such route preferences must be approved for all types of motor vehicles, with the exception of personal vehicles of employees or guests, which are used in the development, construction, operation, and maintenance of the oil and gas development operations.
- (6) No Permit shall be issued until a complete application is received, completeness to be determined by the Traffic Engineer.
- (7) No oil and gas operation Development Permit will be approved until a Permit, as required by this Section 113.5, has been issued.
- (b) Fee established: An Access Road Fee (“**Fee**”) is hereby authorized to be imposed and collected by the Traffic Engineer that is intended to recoup roadway expenses that may be incurred by the City and are associated with the operation of oil and gas operation within the City that use public streets and roadways. The Fee shall be imposed and collected by the Traffic Engineer in an amount as set forth by resolution of the Thornton City Council.
- (c) Methodology for determination of applicable Fee: In evaluating the appropriateness of imposing a Fee, the Traffic Engineer shall consider the following factors and methods used for calculating the amount of the Fee:
 - (1) The recommendations contained in the Thornton Oil and Gas Impact Fee Study conducted by Felsburg, Holt & Ullevig, and BCC Research & Consulting.
 - (2) Traffic safety management modifications that may be necessary with respect to the routes proposed relative to the operational needs of vehicular traffic as set forth in the applicant’s Permit, to include:
 - (a) City streets or roadways designations relative to the composition of such streets or roadways designated in the route preferences, and the degradation of such streets and roadways requiring enhanced maintenance, and the need to upgrade for multi-modal safety concerns as a result of the proposed routes for vehicular traffic as set forth in the applicant’s Permit; and

- (b) The anticipated volume of all categories of traffic both initially and as build out for such traffic necessitated by the oil and gas operation as more particularly described in the applicant's Permit; and
- (c) Types of vehicles, including specifically the identification of the number of single axle and multi-axle vehicles used for all aspects of the oil and gas operation, and use of any of the vehicles as particularly identified in the applicant's Permit.

(3) The Fee to be imposed is based on the following method:

(a) A one time Fee shall be imposed as follows:

- i. For each and every type of well located within the site of an oil and gas operation, that is using or proposes to use the City's streets and roadways, a per operating well Fee will be imposed; for any capped well the Fee will be imposed when and if the capped well becomes operational; and
- ii. For each well pad located within the site of an oil and gas operation, that is using or proposes to use the City's streets and roadways, a per well pad Fee will be imposed; and
- iii. The amount of the Fee will be set forth by Resolution of the Thornton City Council.

(4) The Fee imposed may be based on an alternative method as follows:

(a) The Fee imposed for each oil and gas operation may be calculated using an Equivalent Single Axle Load ("**ESAL**") method as follows:

- i. An oil and gas operator may perform a traffic study to provide evidence quantifying the number of ESAL's the oil and gas operation is expected to generate relative to the designated routes approved by the Access Road Permit over the entire affected distances traveled.
- ii. The City Traffic Engineer must approve the results of the independent traffic study and the calculations for an ESAL type Fee amount proposed, based on a 12

foot average traffic lane, and thereby allow the calculated amount for the ESAL based Fee.

- iii. The oil and gas operation may also agree to use the City's calculated ESAL fee based upon the study conducted by BCC Research and Consulting, which established a weighted average Fee amount per each ESAL lane-mile for a 12 foot average traffic lane alternative.
- iv. The amount of the City's ESAL Fee for an oil and gas operation ESAL Fee will be set forth by resolution of the Thornton City Council.

(5) It shall be unlawful to allow or permit a vehicle, subject to a Fee imposed by this Section 113.5, of any type associated with oil and gas operations to use the public street or roadway within the City without first obtaining a Road Access Permit and remitting to the City all applicable Fees.

3. Section 38-523 Local Amendments to the Model Traffic Code, Section 510 is hereby amended by amendments to Subsections 510(8) and (9)(b) by addition of the words double-underlined and the deletion of the words stricken to read as follows:

(8) This local authority may require an oversized and/or overweight vehicle permit ("Permit") fee, in addition to, but not to exceed, the amounts required in Section 42-4-510(11), C.R.S., as provided by ordinance or resolution; and, in the case of a Permit under Section 42-4-510(11)(a)(IV), C.R.S., the amount of the fee shall not exceed the actual cost of the extraordinary action.

(9) (a) Any person holding a Permit issued pursuant to this section or any person operating a vehicle pursuant to such Permit who violates any provision of this section, any ordinance or resolution of this local government, or any standards or rules or regulations promulgated pursuant to Section 42-4-510, C.R.S., by the Colorado Department of Transportation except the provisions of Section 42-4-510(2)(b)(IV), C.R.S., commits a traffic offense.

(b) This local authority with regard to any issued Permit may, refuse to issue any Permit authorized by this section if the holder of the Permit has been found to have violated the provisions of this section, any ordinance or resolution of this local government, or any standards or rules or regulations promulgated pursuant to this section.

4. If any portion of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the constitutionality or validity of the remaining portions of this ordinance. City Council hereby declares that it would have passed this ordinance and each part hereof irrespective of the fact that any one part be declared unconstitutional or invalid.
5. All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portions hereof are hereby repealed to the extent of such inconsistency or conflict.
6. The repeal or amendment of any provision of the Code by this ordinance shall not release, extinguish, alter, modify, or change in whole or in part any penalty, forfeiture, or liability, either civil or criminal, which shall have been incurred under such provision, and each provision shall be treated and held as still remaining in force for the purpose of sustaining any and all proper actions, suits, proceedings, and prosecutions for the enforcement of the penalty, forfeiture, or liability, as well as for the purpose of sustaining any judgment, decree, or order which can or may be rendered, entered, or made in such actions, suits, proceedings, or prosecutions.
7. This ordinance shall take effect upon final passage.

INTRODUCED, READ, PASSED on first reading, ordered posted in full, and title ordered published by the City Council of the City of Thornton, Colorado, on _____, 2016.

PASSED AND ADOPTED on second and final reading on _____, 2016.

CITY OF THORNTON, COLORADO

Heidi K. Williams, Mayor

ATTEST:

Nancy A. Vincent, City Clerk

THIS ORDINANCE IS ON FILE IN THE CITY CLERK'S OFFICE FOR PUBLIC INSPECTION.

APPROVED AS TO LEGAL FORM:

Gary G. Jacobson, Interim City Attorney

PUBLICATION:

Posted in six (6) public places after first and second readings.

Published in the Northglenn-Thornton Sentinel after first reading on _____, 2016, and after second and final reading on _____, 2016.

<s:\legal\cityatty\ordinance\o&g traffic impact fee ordinance 10-5-16.doc>

From: [Amy DiLullo](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Please help us keep fracking out of Boulder
Date: Thursday, October 20, 2016 5:01:21 PM

Good evening,

I'm writing to express my concern over the possibility of oil and gas companies beginning to frack in Boulder County. I've been a Boulder resident for just over 3 years now, and my husband and I plan to raise a family here. We both work for local organic food companies and absolutely love this special place.

I urge you to push for at least a 6 month moratorium on fracking in Boulder County to allow more time to develop guidelines to control this potentially devastating activity. If fracking companies were to ever start operations in Boulder County, they should absolutely be required to prove that they are a solvent company with the funds and means to clean up any and all environmental impacts possible. Residents of Boulder County have a right to know that oil and gas companies who are fracking here have a plan in place for any waste, and that these companies are operating in a way that causes as little environmental and community health impact as possible (despite the fact that it's FRACKING!)

Boulder is one of the most unique, precious, gorgeous places in our country with a strong, eclectic, passionate community. We set an example for the rest of the US and the world when it comes to sustainability and environmental consciousness. Basically, if we can't keep fracking out of Boulder for the sake of our residents' health and our environment's health, what county can?

This is seriously scary stuff. If it ever ends up happening here, we must plan ahead to ensure that our laws and expectations force fracking companies to act responsibly and consciously.

Thank you so much
Amy DiLullo

From: [Amy Harris](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: Let's extend the moratorium
Date: Thursday, October 20, 2016 8:31:50 PM

Hello Boulder County
Please extend the moratorium on Fracking in Boulder County.
Please ask for the companies to open their books.
Please ask for a plan for their waste.
And let's test the air and water qualities continuously.

I'm born and raised in the mountains of Colorado. I LOVE this state. I believe our greatest resource here is not oil but rather nature as an attraction and the innovative and intelligent nature of the people who live here.

Let Boulder be a voice for change and a producer of new forms of energy.

Thank you!

Amy Harris
Yoga Pod University Faculty

e. amy.harris@yogapod.com
p. [720.504.4269](tel:720.504.4269)

From: [Tenzi AbiEzzi](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: comment on oil and gas development regulations in unincorporated Boulder County
Date: Saturday, October 22, 2016 4:45:11 PM

I was at the hearing 10/12 and read the public comments to date. Residents are too polite.

I am appalled that the county just decided to rollover and stop the moratorium and immediately start drafting regulations. It is ridiculous. When do you think it will be appropriate for us to fight back? When our soil, air, and water have been contaminated? Will that be a good time?

I am 37 weeks pregnant. I am putting my house on the market and leaving, I'm not going to sit around and wait for my family to start developing health problems and my property value to go down.

From: [Joshua Stevens](#)
To: [Boulder County Oil and Gas Comment](#)
Subject: No to Fracking
Date: Sunday, October 23, 2016 7:08:38 PM

I am a native of Boulder and have seen a great amount of destruction to the local environment in the last 59 years of my life.

You wouldn't want to drink out of the toilet so why are we letting big oil and gas mess with the air that we breathe and the water that we need to drink.

I am so embarrassed to be a man when I learn of how for money alone,
we have destroyed the environment.

There were beavers and 12 species of fish, two types of salamanders, two types of frogs and toads and giant turtles that were over a hundred years old,

living in Boulder creek when I was a child.

Only a single species of trout and sucker fish still survive in the creek today.

Seeing is believing so when a species is gone and you don't see it, you then have a hard time imagining that it ever existed in the first place.

Yes we need energy to live and we get an infusion of sunlight each day that also provides wind and water energy. Please stand up for clean renewable Solar and wind energy. Do not allow any test sites in the town or county for fracking of natural gas. It is not a safe technology. Get rid of politicians that sell out to big oil and gas.

Leave a sustainable legacy for future generations.

Joshua Stevens
Safer Money Solutions
Licensed Agent
License #260364
2299 Pearl Street, Suite 208
Boulder, CO 80302
Office 303-444-1115
Fax 303-444-5290
Cell 303-809-7885
J.Stevens Mortgage
LMB 100011682
Company NMLS # 394473
Individual NMLS # 280183

From: Ruth Mazur
To: [Boulder County Oil and Gas Comment](#)
Subject: Nov16 moratorium fracking end
Date: Wednesday, October 26, 2016 12:26:45 AM

Attn: Boulder County

How do citizens in this beautiful state of Colorado help to Preserve Historical Farmland while considering flood planes; and change the law (newly created in May of this year) to allow local residents the right to legally disallow oil and gas development in our own backyards???

It has been hurled in our faces just this evening, October 25th- curiously near to the November 16 end date of the moratorium, that a developer "Empire Road LLC" intends to purchase The Mayhoffer Centennial Farm: a 200 acre parcel of land just east of downtown Louisville, and incorporate a 5 acre fracking site into his Five 35 acre homesites!!! Not only is this beautiful land, in The Mayhoffer Family for a mere 100 years!, not planned to be preserved in any real way such as landmarked with historical sites and open space, historically significant farmsite, or anything that the Mayhoffer Family and 3 surrounding communities and/or Boulder County might agree upon in some way ... within as little as a few weeks (!) a "developer" (maybe an oil man posing as a developer) intends to buy this property and retain the mineral rights and frack right nextdoor to "the best town to raise a family" in the United States. Seriously? And build the 5 massive homes which are slated for well and septic... with mines beneath and surrounding... and fracking... Do you see any problems inherent in this plan? There are also the bordering wastewater treatment plant (Louisville's) and major flood plane drainage in this area (1938 and 2013!).

Fracking is full of chemicals that no one should have in their drinking water, and I don't want my kids drinking it nor anyone else in this area. It needs to be a local decision! The Colorado Supreme Court Justices/People who decided state law trumps local law on this issue need to have fracking in their own backyard for 15-20 years, with their children/grandchildren drinking the water, at which point they can try to convince anyone else that it's not harmful to have in our local backyards.

Boulder County and local governments need to bring the community into the discussion AND FAST regarding the Empire Road 200 acre property for sale to the Empire Road LLC (such a coincidental name for his business! obviously the intent to buy this land has been longer than the two years this man has been discussing this with the Mayhoffer Family, the City of Louisville, the City of Lafayette AND Boulder County... since the LLC was created nearly 3 years ago!) and it's plan to mcmansion and FRACK in the center of 47,000 residents!!! It is wrong and unacceptable, and the residents need to be brought into the discussion (two years too late) NOW. Boulder County should be scrambling to raise the necessary funds to do right by The Mayhoffer Family, maintain a semblance of Historical Significance and open space in this area, and locate the friends of this longstanding local farming family who can aid in a mediation to make the Sellers happy. Perhaps the Sellers would not appreciate a scenario in which Empire Road LLC purchase their land and somehow only frack, building mcmansions with wells on top of mines becomes impossible (is this possible or probable??? And layer in the fracking with wells and mines... again, is this possible or probable?? It sounds a complete recipe for disaster to me!) and doesn't happen... by then it's too late for the Sellers to change tack. Perhaps the Sellers would choose another course of action, one where they and they're land are shown the dignity and respect they both deserve, as well as financial recompense.

Sincerely,
Ruth Mazur
18 year Louisville resident

From: D.Cristopher Benner
To: [Boulder County Oil and Gas Comment](#)
Subject: No to Kerr Estates
Date: Wednesday, October 26, 2016 5:46:02 AM

I am writing to ensure that fracking, oil, gas development does not occur at the proposed Kerr Estates near Louisville, Lafayette. This would significantly alter our quality of life.

Thank you

From: Jonathan Wallace
To: [Boulder County Oil and Gas Comment](#)
Subject: Oil and gas well at mayhoffer property
Date: Wednesday, October 26, 2016 8:22:05 AM

Thanks for the reply. To reiterate my feelings on this:

I live at 1611 Centaur Circle, Lafayette CO. My home backs up to the Mayhoffer property on Empire road. I went to the “interest meeting” hosted by Empire Road LLC last night, Oct 25, 2016.

Their plans to build homes on the land is sad.

Their plans to add a 5 acre Oil and Gas well site right in the middle of this and 750’ from my back yard is A TERRIBLE IDEA. Considering the schools nearby (Centaurus High and Ryan Elementary), the coal creek, the ditches, the neighborhood 750’ away and the wildlife that will all be impacted. The site they marked for the well site was majorly flooded in 2013. There could not be a worse place for oil and gas development.

If there is anything we can do to help prevent this from happening, make this open space, etc., please keep me informed.

Jonathan Wallace, P.E., S.E.

720.341.7093

Jonathan@dlkeng.com

DLK ENGINEERING, LLC

1300 Plaza Ct N, Suite 200

Lafayette, Colorado 80026

From: Boulder County Oil and Gas Comment [mailto:oilgascomment@bouldercounty.org]
Sent: Tuesday, October 25, 2016 10:09 PM
To: Jonathan Wallace
Subject: Automatic reply: Oil and gas well at mayhoffer property

Thank you for your comment regarding oil and gas development in unincorporated Boulder County. We value your input on this issue. We are receiving a high volume of comments on this issue therefore staff may be unable to respond to individual comments. The comments will be added to the public record, reviewed by the Board of County Commissioners, and posted to the Oil & Gas Development webpage at bit.ly/BCoilgas.

Visit bit.ly/BCoilgas for more information and to sign-up for email updates.



This email has been checked for viruses by Avast antivirus software.
www.avast.com

From: Crystal Masterson
To: [Boulder County Oil and Gas Comment](#)
Subject: Mayhoffer Farm development Louisville
Date: Wednesday, October 26, 2016 9:45:26 AM

To whom it may concern,

I am writing with deep concern that the developers involved with the acquisition of the Mayhoffer property in Louisville plan to frack/drill on this land.

I respectfully request that the moratorium on oil/gas in boulder county be extended.

Our community cannot risk polluting our water and land with the waste from natural gas and oil drilling. We owe it to our children to make responsible decisions regarding energy - decisions that won't effect the environment and the health of our community members.

Let us put our energy into more solar and wind options, NOT OIL and GAS!!

Thank you,

Crystal Masterson
Louisville, CO

Lifetime Boulder County resident

Sent from my iPhone

From: Daniela Cabrerizo
To: [Boulder County Oil and Gas Comment](#)
Subject: Kerr Estates in Mayhoffer farmland - fracking plans
Date: Wednesday, October 26, 2016 9:50:18 AM

Good morning,

As a resident of Lafayette, near the Coal Creek Corridor Open Space, I am extremely concern and frustrated by yesterday's news that the developer of the Kerr States (in contract apparently with the Mayhoffer family) is holding back acres of the property (#5 and #4) along with the mineral rights for extraction (**FRACKING**) behind the local high school, right next to open/protected space, right in front of our properties, and a short walk to downtown Main Street, it is clear that this current development plan is bad for us all. The community at large and anyone buying in.

I understand the state sees fracking and oil as "of economic interest", but the people, us, the actual residents have to live next to this wells. We are the ones that will be paying the consequences, our quality of living will be affected, our health, the environment, and our property value will plum. We are tax payers, so we should have the right to have a say in this matter.

This area is also right next to open space and protected area, so it will affect wild life as well, and will change the landscape for ever, not even mentioning possible dangers of having a fracking well right next to a residential area.

I plead the county to do something about it ASAP. Protect us, the hundreds of families in this area, the city of Louisville and Lafayette.

Best,
Daniela Cabrerizo
Lafayette, CO

From: Sara Avery
To: [Boulder County Oil and Gas Comment](#)
Subject: moratorium
Date: Wednesday, October 26, 2016 12:20:41 PM

Hello,

I'm writing to express my strongest support for making Boulder County's fracking moratorium permanent. In Lafayette/Louisville, we are now seeing with the revelations about the Mayhoffer property exactly why this moratorium is so necessary. A frack well on that property would sit dangerously close to 2 schools and Coal Creek, not to mention so many of our homes. As a property owner in Lafayette, I want to see Boulder County lead the way in saying no to this dangerous and short-sighted kind of "development."

Sincerely,

Sara Avery

Sara Avery

1329 Agape Way

Lafayette, CO 80026

sara.avery@gmail.com | +1.303.489.2431 (m)

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: silica sand dust
Date: Wednesday, October 26, 2016 1:00:08 PM

Operators should be required to control the silica dust from sand piles. This is a known hazard, and no OSHA requirements deal with this.

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: Gathering lines
Date: Wednesday, October 26, 2016 1:01:32 PM

The state does not regulate gathering lines, which means that the local government has full authority to do so. I beg you to look into this and see what additional environmental protections can be had by regulating in this area, especially in light of your having detected leaks in flow lines and pipelines.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: Bonds, letters of credit insufficient
Date: Wednesday, October 26, 2016 1:04:09 PM

Bonds and letters of credit are insufficient protection for the county.

Companies should be required to demonstrate their financial health on an annual basis.

They should be required to purchase of insurance sufficient to cover costs of shutting down the operation and cleaning up spills. Require that the insurance have automatic % increase each year. To continue to operate, they need to update the insurance every 3 years so that it reflects the true and current cost of plugging and reclamation.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: pre-lease support for residents
Date: Wednesday, October 26, 2016 1:07:32 PM

By the time the operator seeks a permit to drill, it is too late to protect the area and neighbors from the damage drilling operations do. The county needs to do everything it can to help the public make informed decisions while they still have the power to avoid the drilling altogether, and that is **before** the lease is signed.

Given some of the documented sleazy practices of landmen, including threatening to force-pool, saying that neighbors have signed before they have, etc., as well as the practice of perfecting title to minerals only **after** having drilled and determined the productivity of the lease, we need to help the public have a way to determine if the landman's clients really do have a right to drill on the given property.

The county could help if there is any way it can require that operators demonstrate clear title to the minerals, and render a contract invalid if sufficient title assurance is not provided. I understand that a lease is a private contract, and some would say that it is immune from this sort of reach of government, but a private contract that requires a party to break the law does not provide immunity to the parties, so please have the legal department look into the possibilities here.

In any case, the county can provide general advice to those with a landman knocking, just as it provides advice regarding septic systems and other public-health matters.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: Radii for all minimum distances, notice requirements, etc
Date: Wednesday, October 26, 2016 1:14:00 PM

Radii for all setbacks, testing/monitoring wells, public notices, etc - should be measured from the edges of the largest extent of the development activity (if not from the boundaries of the lease or pool, whichever is greater), including location of gathering lines and other associated equipment.

Given the distances that fractures can travel, the 1/2 mile radius (where used) should be reconsidered; perhaps a mile is more appropriate.

Given the distances that vibrations and noise have been observed to travel from fracking sites in Weld county, residents within at least 2 miles should be given notices for meetings, etc. I base this on the experience of a friend who lives 2 miles from the edge of a lease that was drilled in 2015, and when the fracking was under way, he was kept up at night.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: earthquakes
Date: Wednesday, October 26, 2016 1:15:23 PM

Since the first moratorium was put in effect and we first considered overhauling the regulations for O&G development in BoCo, earthquakes have become a matter of increasing severity and frequency in our neighboring states. In the proposed changes to the regs I don't see any call for earthquake-preparedness - either in requirements for stability-control or in preparedness for dealing with possible leakage resulting from damage. There should be at a minimum, an earthquake-preparedness plan.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: treat patterns of leaks as criminal neglect
Date: Wednesday, October 26, 2016 1:16:47 PM

Leaks of hydrocarbons are of concern to me because of their toxicity as well as because of the climate impact. I would like to see repeated patterns of leaks treated as willful and thus as criminal neglect. I don't see anything in the code that suggests that operators who continually have leaks are subject to criminal prosecution such as with the Illicit Stormwater Discharge ordinance. In addition, all leaks should result in fines, increasing in severity/unit of time through out their duration.

Nancy Hall, 12892 Sheramdi St., Longmont

From: hall.n
To: [Boulder County Oil and Gas Comment](#)
Subject: silica sand dust
Date: Wednesday, October 26, 2016 1:17:38 PM

Operators should be required to control the silica dust from sand piles. This is a known hazard, and no OSHA requirements deal with this.

Nancy Hall, 12892 Sheramdi St, Longmont

From: sean.edwards222@gmail.com
To: [Boulder County Oil and Gas Comment](#)
Subject: Re: Moratorium renewal
Date: Wednesday, October 26, 2016 1:57:56 PM

Dear Boulder County Decision-makers,

I am writing today to express my grave concern with the practice of hydraulic fracturing. I have seen a great video today on facebook, and I'm sure you've already received feedback from it. I would like to see fracking completely disbanded as a practice; nationwide, as well as worldwide. The oil and gas industry has corrupted our political system with their money, and taken away I right to have a say. The states power to override the local government's decision to ban fracking is unconstitutional. As suggested in the video, I would like to see a continuation of the fracking moratorium, even if just for the suggested 6 month short term.

I would also like to see a bonding process set into place where a proposed hydraulic fracturing company would have to set aside money upfront for cleanup. This process is toxic to the groundwater. This process is disrupting plate tectonics and is causing earthquakes. There was a bigger one in Oklahoma just recently.

And lastly, I would like to ask that we would require these incoming oil and gas companies to provide a plan on how they are safely going to dispose of the wastewater. Thank you for you time and consideration regarding this life or death issue. We must stand vigilant against those industries that exploit our land and resources.

Sincerely,
Sean Edwards

Sent from my iPhone

From: Gaythia Weis
To: [Boulder County Oil and Gas Comment](#)
Subject: Regulation of Oil and Gas Development
Date: Wednesday, October 26, 2016 8:43:26 PM
Attachments: [Boulder County Oil and Gas.odt](#)

I greatly appreciate the efforts of Boulder County to formulate effective regulations to protect the health and safety of Boulder County residents and to protect our natural environment.

My comments regarding

Docket DC-16-0004: Proposed Amendments to Oil and Gas Development Regulations

are attached below.

Respectfully submitted,

Gaythia Weis
1433 Cannon Mountain Dr.
Longmont, CO 80503

I believe that the Boulder County Commissioners, as well as Boulder County Staff and Administrators are committed to a desire to protect the citizens of Boulder County from excesses of the oil and gas industry. In my opinion, limitations to their ability to take the most effective actions are created by the constraints of the legal framework at Federal and State levels.

In that regard, I think that the extensive red-lined comments and white paper submitted to Boulder County on October 10, 2016, by the Colorado Oil and Gas Conservation Commission, COGCC, are crucial to defining a path forward. Central to most of the assertions of the COGCC in their submitted material is their contention that they are the agency with lead authority, and thus many of the proposed amendments to the Oil and Gas Development Regulations proposed by Boulder County overstep the boundary of what the county is allowed to do. I am not an attorney and not in a position to define those boundaries.

There is still much that Boulder County can do, however. It is important to give the public notification of proposed oil and gas operations as soon as possible. Application and operations should proceed with great transparency. Best available science should be employed. Information should be readily accessible to the public. Processes and procedures for public involvement should be clear and well publicized. The public should have ample opportunities to provide input and feedback, both to Boulder County and to higher levels, including the COGCC. As I note in a comment to section 12-100 B, below, Boulder County government is best positioned to aid Boulder County residents in acquiring needed information and in dealing with other governmental levels. Fostering an informed citizenry will aid in ensuring that Boulder County operations meet the full standards that local, state and federal regulations allow. This will also encourage a public drive towards improvements in such regulations that will further benefit Boulder County. Some county residents are near boundaries with other counties will also be able to use their increased levels of knowledge in ensuring that those operations meet regulatory standards.

Boulder County should work to ensure that all available public information regarding oil and gas operations in the county are readily accessible to Boulder County residents, and that notification is given of any events or actions that may raise health, public safety, property or ecological concerns.

If it does turn out to be true, as asserted by the COGCC, that certain information cannot be required of the proposed oil and gas operation by Boulder County, resources that might have been devoted towards collecting such information from industry, ought to be utilized by Boulder

County staff towards facilitating the ability of members of the public in accessing such information from the COGCC, or in aiding them in determining the best path towards requesting that such information be collected by the COGCC.

Some of my comments below contain references to the previous COGCC comments, which were submitted on October 10, 2016. These references are given in square brackets, [].

12-100 A Add *soil damage* to the second sentence.

I believe that the emphasis in this section on the inherent incompatibility of oil and gas operations with residential and rural zoning is appropriate and should be retained here. [A1]

12-100 B

I believe that close inspection and monitoring is vital to safe operations. There should be close linkage between the COGCC and Boulder County, such that Boulder County has the information needed to know when contacting COGCC for a cease and desist order is the appropriate action to take. Sometimes, this will be triggered by the concern of a local resident. Boulder County officials are in the best position to be the easily accessible first responders to such concerns. [A3]

12-300 A These review requirements should not be limited to new operations. Many oil and gas locations are “re-fracked”, expanded with new bore holes, or subject to other changes in operations. These need to trigger a new review. Any changes in the semantics here need to preserve the idea that changes need to be reviewed. [A6 and text edits]

Boulder County needs to clarify a process for removal of the moratorium that does not create a gap and thus trigger a rush to get to acceptance before an approval date takes effect. [A7]

12-300 B In my opinion, “substantial modification” should be defined as anything beyond continued pumping or collecting from an existing well, specifically including re-fracking. [A8]

12-400 A 3 I do not approve of the proposed COGCC wording change here that would allow a private landowner to enter into a private use agreement without County involvement. I believe that this involvement is essential to protecting the rights of the public. The impacts of oil and gas development generally extend beyond one property owner's lands.

12-400 B 1 I agree with the COGCC proposed comment that “near” be replaced by a specific radius.

[A14]. I question whether just 2 people could be counted on to be on 24 hour call in case of an emergency.

12-400 B 2 a I think that site plans, economics, and numbers of wells are a moving target and very variable with changing market conditions as well as with improving technologies. Can updates be required?

COGCC wanted to add a line here that said “Well estimates are subject to change at any time under the operator's sole discretion”. This seems like a dangerous loophole to me. I oppose this change.

12-400 D 2 I think that the original wording here is clear enough in allowing the oil and gas entity flexibility in having the County pre-application take place prior to or during siting decision making. Changing the wording to “conduct” or “construct and maintain” from “plan” would, in my opinion, leave the oil and gas applicant with too much flexibility and opens the possibility that actions would already be underway. [A17]

12-400 D 2 I think that having the County pre-application review come before the State application makes sense, but Boulder County will have to resolve jurisdictional issues with COGCC here, given their red-line comments. Worst case, in my opinion, would be lack of consistency in order of review, as I believe that might blindside members of the public trying to have input to both processes.

12-400 E A neighborhood meeting should be conducted at a convenient **time** as well as location. I tend to agree with comment [A19] regarding having the meeting after an application has been filed. I think that the public needs to have some concrete information as to what to expect before they can be expected to formulate opinions. Such public awareness takes time, however, and there should be some notification of intentions prior to filing the application.

12-400 F COGCC is worried about making 4 paper copies of the application and wants to ensure paper recycling? [A21] I think that not everybody has electronic access and so such copies ought to be available.

12-400 G, 12-400-G 1 In my opinion, these sections may need clarification as to length the completeness determination. But a COGCC proposed 14 day specification is unreasonable short. [A 24, 25] These can be complex operations and I believe that there will be times when the County may need to hire an outside consultant. Perhaps there should be a clause to exercise a delay for such an occurrence beyond an expedited completeness review. In my opinion, if an application is incomplete, it should be deemed so and be sent back to the applicant as specified in section 1. I find the last sentence of section **12-400 G** to be vague and unnecessary.

12-400 H 2 I favor the expanded notification radius as given here as opposed to those of the COGCC

requirements.

Additionally, I believe that property owners that are above horizontal drilling operations extending out from a well site should be notified.

12-400 H 3 b I believe that the public ought to have the right to have information regarding drilling techniques and fracking timing and duration, as stated in the document, not as proposed in [A29], unless COGCC itself issues such information.

12-400 H 4 & 5 Posting timing in 5 needs to come after approval in 4. But specifying 3 business days in 4, (COGCC redline) may be too short.

12-400 H 5 a As I believe ought to be true for any such zoning notification, notice should be posted not just from “a public road” but from enough sites and directions so as to make it possible for as many members of the public as possible to view such notices.

12-400 J The review is for the benefit of the public, the applicant should NOT allowed to give input regarding consultant selection and scope of work. In my opinion, this opens the possibility of collusion and detracts from the very reason that Boulder County might want to hire a consultant, which is to give an expert opinion that is independent of that of the applicant.

12-400 L Timing of the review by the County Commissioners needs to allow for adequate time for public notification of such a meeting, and input from the public regarding the proposed action. “Immediate placement on the agenda for review at the next meeting” may not allow enough time for this. [A37]

12-400 N The record should not be limited to residents within the notice radius as proposed by the COGCC [A38]

12-500 B It seems obvious to me that an oil and gas operation ought to have full title to the resource before gaining permission to extract that resource. I disagree with [A42]

12-500 D The idea that there might be confidential surface agreements sounds concerning to me. If there is no way to surmount this by way of forced disclosure, at the very least, all the surrounding property owners ought to be made aware of such an agreement. Red-line addition, COGCC

12-500 G Same concerns as D above.

12-500 H Abandoned old well sites are major potential conduits of fracking fluids and other containments driven by pressure into new rock layers and potentially into aquifers. Such sites need to be known to be sealed at appropriate levels.

12-500 I 3, 4 & 8 I support the original wording of a 1 mile radius.

12-600 and 12-700 I agree with Boulder County intentions in these sections. If COGCC is correct in their jurisdictional assertions, I favor having Boulder County devote resources towards, compiling such information and in helping county citizens access such information from the COGCC.

Boulder County should maintain databases, or links to COGCC databases with such things as air and water quality in a manner that leads to ready accessibility by Boulder County residents. Boulder County should publicize the existence of such access and foster its use by residents.

12-600 J Pipelines are major parts of oil and gas operation construction and should not be required to be approved on an expedited basis [A82]

12-701 B 7 Water and soil quality monitoring and testing should include measurement of radionuclides.

From: Tiffany Boyd
To: [Boulder County Oil and Gas Comment](#)
Subject: Mayhoffer Property East Boulder County
Date: Thursday, October 27, 2016 10:39:51 AM

I am writing to express my continued support of the temporary ban on fracking in Boulder county, and would like to see that become permanent.

I would also like to express my opposition to the planned housing development, and oil and gas exploration on the Mayhoffer property

East of downtown Louisville. I would hope that the Boulder county commissioners would help broker a deal that would allow the county to purchase the land as open space.

Sincerely,
Jeff Boyd

From: Staci Stark
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking
Date: Thursday, October 27, 2016 4:45:30 PM

To whom this may concern,

I am particularly concerned about the proposed Kerr Estates near Louisville/Lafayette and the developer's plans to frack on this land. I respectfully ask that Boulder extend the moratorium on fracking.

Let's protect our communities and open spaces from oil and gas companies.

I hope that Boulder County will act responsibly to prevent fracking.

Thank you for your time and consideration.

Staci Stark
720-454-0967

From: Marin McCallen
To: [Boulder County Oil and Gas Comment](#)
Subject: Mayhoffer property in Boulder County
Date: Thursday, October 27, 2016 8:13:35 PM

To Whom It May Concern,

I am a Lafayette resident and Colorado native. I love our town, our county and our beautiful state and I am writing because I am opposed to fracking or any and all development of the Mayhoffer property for oil and gas interests. This is not the best choice for our community, the health of our families, children and or our planet.

I can't be at the Nov. 1st meeting to voice these opinions but please take this into consideration.

I would like to see that land be protected open space for the enjoyment of all residents and animal residents.

m*

--
*

From: Angie
To: [Boulder County Oil and Gas Comment](#)
Subject: Please protect our home
Date: Thursday, October 27, 2016 10:50:11 PM

Dear Boulder County,

Please, please place a new moratorium on fracking, no matter the legal financial risk. We must not allow the expansion of fracking here or anywhere.

The next measures, in addition to the moratorium, should be these:

1. Require frackers to open their books to show they are solvent
2. Require frackers to clean up all waste
3. Require frackers to have a plan for waste
4. Require a community and environmental impact study
5. Require frackers to spend a significant amount of their money on renewable energy research and also alternative energy implementation
6. Require fracking company owners to pay a giant amount of taxes and to live on their own fracking site

Fracking should not be allowed as a right, especially because it greatly infringes upon the rights of others and desecrates land, plants, animals, and people's homes and endangers our water and stability. Please, no fracking in Boulder County. Fracking is equivalent to raping the land. The land and this earth are our home. Please protect it, not only for us, but for future generations.

Thank you,
Angie Hulsebus

From: Jessica Grant
To: [Boulder County Oil and Gas Comment](#)
Subject: Louisville Fracking
Date: Friday, October 28, 2016 8:29:32 AM

To Whom It May Concern,

Please let me know what I can do to help secure the Mayhoffer farm for open space and NOT fracking. Fracking is not an acceptable use for this land so close to where my children are growing up!!!!!!!!!!

Please protect your littlest ones.

Thank you,

Jessica Grant

Sent from my iPhone

From: Kathryn Marie Mutz
To: [Kathryn Marie Mutz](#)
Subject: Addressing Oil and Gas Development at the Local Level with MOUs
Date: Friday, October 28, 2016 3:12:45 PM
Attachments: [CO189 MOU Stakeholder Assessment 2016.pdf](#)

Local Government Designee --

The Intermountain Oil and Gas Best Management Practices (BMP) project, based at the University of Colorado Boulder, and CDR Associates have been exploring the use of MOUs in Colorado oil and gas development. The goal is to help Colorado and its communities find productive approaches to the ‘local vs. state control’ conflict.

Our MOU project resources include:

- *“Insights from the Field Toward an Understanding of Industry-Community MOUs”*—a stakeholder assessment exploring opportunities, challenges and other insights regarding the use of MOUs as a tool for addressing the interests of local governments, residents, operators and environmental advocates. (see attached)
- An MOU webpage describing the project and linking to the assessment and to searchable databases of Colorado MOUs and MOU Best Management Practices (BMPs) (<http://www.oilandgasbmeps.org/resources/MOU.php>).

Funding for the stakeholder assessment came from the National Science Foundation-funded AirWaterGas Sustainability Research Network and from grants to the Getches-Wilkinson Center for Natural Resources, Energy and the Environment from the Rocky Mountain Mineral Law Foundation (RMMLF) and the CU Boulder Office for Outreach and Engagement. RMMLF and the Colorado Energy Office provided funding for development of the MOU and BMP databases.

For further information on the project or to make comments/corrections/additions, please contact one of the project principals:

- *For information about or to add to the website and databases:*
Kathryn Mutz, Intermountain BMP Project: kathryn.mutz@colorado.edu
- *For information about or to add to the assessment:*
Ryan Golten, CDR Associates: rgolten@mediate.org
Taber Ward, Intermountain BMP Project: taberward@gmail.com

Best regards,
Kathryn, Ryan and Taber

Kathryn Mutz
Natural Resources LLC
Intermountain Oil and Gas BMP Project
303-499-1092
kathryn.mutz@colorado.edu

STAKEHOLDER ASSESSMENT

Colorado Oil & Gas Development

Insights from the Field

Toward an Understanding of Industry-Community MOUs



GETTY IMAGE

September 2016

Prepared by:

Ryan Golten, J.D., CDR Associates, and
Taber Ward, J.D. and Kathryn Mutz, J.D., Intermountain Oil and Gas BMP Project

CDR ASSOCIATES
COLLABORATIVE DECISION RESOURCES



Intermountain Oil and Gas BMP Project

Acknowledgements

The authors would like to thank our stakeholder interviewees, the Colorado Oil and Gas Conservation Commission, our BMP Project advisor, Matthew Sura, J.D., and peer reviewer, Matthew Samelson, J.D., for lending their time, invaluable insights and experiences, review, and technical assistance to this project.

Funding for this assessment came from the National Science Foundation-funded AirWaterGas Sustainability Research Network and from grants to the Getches-Wilkinson Center for Natural Resources, Energy and the Environment from the Rocky Mountain Mineral Law Foundation and the University of Colorado-Boulder Office for Outreach and Engagement. The Colorado Energy Office provided funding for development of the MOU and BMP databases.

Finally, we are grateful to our University of Colorado Research Assistants: Erica Gajda, Michael Mazotti, Nat Logar, Andi Wilt, Bridger Ruyle, and Connor Riley.

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INTRODUCTION

BACKGROUND

In 2014, Governor Hickenlooper convened a 21-member Task Force to make legislative and policy recommendations to address conflicts between local and state regulation of oil and gas development within Colorado communities.¹ The Task Force was formed in response to rapid increases in energy development near urban and suburban Colorado communities that led to lawsuits, ballot initiatives, and a highly polarized debate regarding the ability of communities to regulate horizontal drilling and ‘fracking,’ or hydraulic fracturing, near and within their jurisdictional boundaries.

Two of the nine Task Force recommendations ultimately forwarded to the Governor identified Memoranda of Understanding (MOUs) – negotiated agreements between operators and local governments regarding the siting, operations and impacts of oil and gas development² – as important tools for diffusing conflict and encouraging environmentally responsible oil and gas development. Although a total of six MOU-related proposals were considered by the Task Force and received support from industry and some community representatives, ultimately, most were not included in the Task Force Recommendations to the Governor. Many local governments felt MOUs were a poor substitute for local regulatory control, noting MOUs are typically contractual rather than regulatory instruments and that local governments tend to have less bargaining power relative to industry in *ad hoc* MOU negotiations. There were also concerns about the efficacy of MOUs and the relative negotiation and implementation burdens they place on local governments.³

PROJECT GOALS

In light of the interest and questions raised about MOUs, the Intermountain Oil and Gas Best Management Practices (Intermountain BMP) Project at the University of Colorado teamed with CDR Associates, a natural resources facilitation and collaborative problem-solving firm in Colorado, to explore the use of MOUs in Colorado oil and gas development. The goal was to help Colorado and its communities find productive approaches to the ‘local versus state control’ conflict of oil and gas development.

The overall MOU project consists of two components: 1) a searchable database of Colorado MOUs and their Best Management Practices (BMPs), and 2) a stakeholder assessment regarding the use and potential use of

¹ Executive Order B 2014-005, Creating the Task Force on State and Local Regulation of Oil and Gas Operations (2014). The Governor created the Task Force to address state and local regulatory issues around oil and gas development. The Governor had established a similar task force in 2012 to develop cooperative strategies regarding the regulation of oil and gas development.

² A Memorandum of Understanding (MOU) memorializes an agreement between the parties signing the document. In the oil and gas development context, parties to these agreements may include federal, state or local governments, tribes, and operators. In Colorado, such agreements are often negotiated by a local government and an oil and gas operator and may be called an MOU, a memorandum of agreement (MOA), operator agreement, or development agreement. In these documents (which we collectively term ‘MOUs’), the parties agree on how, and under what conditions, the oil and gas operator will develop and/or operate oil and gas facilities within the local jurisdiction.

³ Oil and Gas Task Force, Colorado Department of Natural Resources, ‘Colorado Oil and Gas Task Force Final Report,’ February 27, 2015 (Task Force Report), available at <http://dnr.state.co.us/ogtaskforce/Documents/OilGasTaskForceFinalReport.pdf>. Local government and conservation community task force members also noted MOUs were already being used and instead advocated (unsuccessfully) for regulatory reform recommendations, such as requiring residential drilling plans (Recommendation #14); acknowledge local government siting authority (Recommendation #12a) and regulatory authority (Recommendation #2); and changing standing and notice requirements (Recommendation #21b). Some local government regulations provide the opportunity to enter into MOUs as an alternative to, rather than substitute for, regulatory approaches.

MOUs to address oil and gas development within Colorado’s regulatory framework. The database, completed in the spring of 2016, is available at the Intermountain BMP Project website.⁴

This Stakeholder Assessment explores opportunities, challenges, and other insights regarding the use of oil and gas MOUs as a tool for addressing the interests of local governments and residents, operators, and environmental advocates while reducing conflict, political polarization and expensive, time-consuming legal battles with the state and industry over jurisdictional authority. The intent of this study is to contribute to the resources, capacity and toolbox of stakeholders. The assessment assigns neither blame nor praise to particular entities, stakeholders or processes, nor does it recommend definitive approaches for addressing oil and gas development in and around communities. Rather, this study focuses on how and under what circumstances Colorado communities and operators have been able to effectively address conflicts over issues of proximity, intensity, scale and other impacts of oil and gas development. Likewise, it explores circumstances in which such approaches have been less effective, according to the stakeholders interviewed for the study.

While certain key legal issues are addressed in this paper for important context, this process is not intended to analyze legal or policy issues. A number of existing resources that do so are listed for reference throughout this paper.

METHODS

To conduct this assessment, the Intermountain BMP Project and CDR Associates conducted interviews with a dozen representatives of state regulatory agencies, local governments, industry, and community groups in the spring of 2016. These individuals came from Front Range cities and counties, as well as a western Colorado community with a long history of oil and gas development. Names of interviewees and specific communities have been omitted to preserve confidentiality.

Interviews with stakeholders were designed to learn about recurring themes, successes and challenges of existing and past MOUs. Interview questions focused on four major topic areas:

- 1) The **context and background** for MOU negotiations, including the local regulatory scheme and what brought parties to the table;
- 2) The **negotiation process** itself, including the role (or lack thereof) of community engagement during the process;
- 3) Relevant issues regarding **implementation and enforcement** of the MOU; and
- 4) Parties’ perspectives about the important **substantive provisions** of the MOU, including the BMPs.⁵

Stakeholder conversations highlighted a number of important lessons learned, including challenges and opportunities, regarding these four topic areas. These lessons may be helpful to industry, the state, and communities seeking productive solutions to local challenges posed by oil and gas development. Major takeaways are highlighted below and discussed at more length in the body of this paper.

⁴ The principal vehicle for the presentation of information on MOUs is the incorporation of MOUs into the website and databases of the Intermountain BMP Project at <http://www.oilandgasbmps.org/index.php>. MOU documents have been added to the website through an MOU webpage, at <http://www.oilandgasbmps.org/resources/MOU.php>, and through additions to the Bibliographic database and the BMP database, at <http://www.oilandgasbmps.org/mainsearch.php>.

⁵ BMPs are state-of-the-art mitigation measures applied to oil and natural gas drilling and production to help ensure that energy development is conducted in an environmentally responsible manner. See, for example, the [Bureau of Land Management BMP website](http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html) at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html (accessed on 7/10/16).

CHALLENGES AND OPPORTUNITIES PERCEIVED BY STAKEHOLDERS REGARDING O&G MOUs

	CHALLENGES	OPPORTUNITIES
Context for Negotiations and Relationship to Regulatory Scheme	Concern that issues of public health and safety should be regulated by local and state law, rather than negotiated on an <i>ad hoc</i> basis with the regulated industry.	Tool for helping parties meet their needs in ways they may not have been able to achieve otherwise, often through a series of site-specific trade-offs.
Negotiation Process	Concern about imbalances in capacity and resources, including expertise, experience and knowledge sets of negotiators.	Tool for building communication, trust and long-term coordination between operators and local governments.
	Relative lack of public participation and transparency in MOU negotiation processes, as opposed to public regulatory process.	Opportunity for operators to go through expedited administrative process, rather than a public hearing process. Opportunity to create predictability and certainty for operators; this can also be true for communities, depending on the terms of the MOU.
	Piecemeal approach, i.e., local government may have to negotiate different MOUs with each operator within that jurisdiction, and vice versa.	Opportunity to find creative, site-specific solutions to oil and gas issues and concerns at the local level (e.g., siting, operations, impacts).
Implementation & Enforcement	Lack of clarity or legal consensus regarding authority and/or mechanisms for enforcing MOU terms at the local level (e.g., as contracts, versus through the land use code) and as conditions of approval on state permits.	Mutually beneficial outcomes can create motivation for parties to voluntarily uphold the agreement out of self-interest, without the likelihood of needing to pursue enforcement actions.
	If an MOU is not supported by clear land use enforcement authority, it may be difficult for a community to enforce it. Breach of contract claims can be expensive, time consuming, and an inefficient legal process; local governments would also have the legal burden of proving damages.	MOU BMPs can be supported by local regulations and may be enforceable under local land use regulatory authority, by defining the parameters and conditions of local siting and drilling permits.
		MOU BMPs that are within the Colorado Oil and Gas Conservation Commission's (COGCC's) jurisdiction, and that an operator includes as a BMP in an application for a drilling permit or location permit, can be incorporated into the approved permit and are then enforceable by COGCC.
Substantive Provisions, Including BMPs	MOUs, like regulations, are 'snapshots in time.' One of the challenges of negotiating BMPs is keeping up with relevant technological advancements in the oil and gas industry.	MOUs can be a practical tool for building industry willingness to abide by stricter BMPs.
		MOUs can help fill regulatory gaps where state law does not sufficiently address the needs and priorities of the local community, including public health and safety (e.g., public notice, setbacks, air and water quality)

FRAMING THE REGULATORY CONTEXT

While the intent of this paper is not to analyze this regulatory framework, a general understanding of the context is important to understanding the challenges and opportunities that MOUs may present for addressing oil and gas conflicts in Colorado.

STATE AND LOCAL REGULATORY CONTEXT

Conflict Leads to Creative Solutions

Oil and gas development has been important to Colorado for decades. As both Colorado's population and the international demand for oil and gas have continued to climb, oil and gas development has encroached on urban and suburban areas, while cities and towns have sprawled towards historic oil and gas areas. While oil and gas regulations have evolved at the state-level, local jurisdictions have also sought to regulate oil and gas development through land use regulations and MOUs between industry and local governments.

Toward a New Solution: From Lawsuits to MOUs

In the 1980s and 1990s, a series of lawsuits and conflicts involved the question of local or state regulatory authority. As with any industrial land use, local governments have long assumed that traditional land use regulations would apply to the oil and gas industry. However, since the 1990s, several Colorado Supreme Court decisions have held that local oil and gas regulations are preempted if they are found to be in operational conflict with state oil and gas regulations. According to the 2016 decision in *City of Longmont v. Colorado Oil & Gas Association*, a local government ordinance may not authorize what state law forbids, forbid what state law authorizes, or be found to 'materially impede or destroy' the state interest in 'permit[ting] each oil and gas pool in Colorado to produce up to its maximum efficient rate of production, subject to the prevention of waste, consistent with the protection of public health, safety, and welfare, including protection of the environment and wildlife resources...'.⁶ The Court has been clear that local ordinances that prohibit oil and gas development or the use of hydraulic fracturing are preempted. However, it is unclear whether a local government would be preempted from denying a specific oil and gas development through its local land use approval process if it found, for example, that the industrial development was incompatible with surrounding land uses.

While the impact of the 2016 decision is not yet clear, earlier lawsuits had already prompted changes to local governments' approaches to regulating oil and gas operations. For example, in 2005, after a series of state-local-citizen-operator conflicts and related lawsuits, La Plata County and several operators turned to a new type of solution: MOUs.

MOUs are agreements negotiated between operators and local governments through an administrative process rather than a public regulatory process, such as conditional use permitting. The terms of an MOU create legally enforceable obligations between the jurisdiction and the operator. However, even though the MOU process is administrative, some jurisdictions have required public hearings or other public processes during the approval process. For example, Erie and Adams County noticed the MOU document for public hearing and the MOU document itself went through a public hearing process for board approval. Depending on the scope of the MOU, permits will generally go through an administrative process. As negotiated agreements, MOUs avoid and mitigate many of the issues around state preemption, jurisdiction and the legal grey areas that are a feature of a local regulatory approach.⁷

⁶ *City of Longmont v. Colorado Oil & Gas Ass'n*, 369 P.3d 573, 584 (Colo. 2016) (citing C.R.S. § 34-60-102).

⁷ See Geoff Wilson, *State and Local Regulation of Oil & Gas Operations in Colorado*, KNOWLEDGE NOW - Colorado Municipal League, August 2012, available at <https://www.cml.org/Issues/Oil-and-Gas/State-and-Local-Regulation-of-Oil-and-Gas-Operations-in-Colorado/>.

In La Plata County, the county and operators negotiated MOUs that guaranteed the county certain operating standards and road impact fees. In return, the county agreed neither to protest the operator’s infill drilling application, nor to advocate in state regulatory proceedings any position inconsistent with terms that had been negotiated in the MOU. MOUs became a way forward for the County and operators to negotiate above and beyond state rules, addressing site-specific and local development concerns, while guaranteeing operators certainty around the timing of permits and development. The COGCC has supported this use of MOUs by partnering with local governments and operators to facilitate development and implementation of MOUs. For example, in 2013, the COGCC was a strong and vocal proponent of MOUs when the agency supported the Town of Erie’s precedent-setting, jurisdiction-wide MOU. The COGCC also urged Longmont to develop an MOU with TOP Operating and spent time and resources with Arapahoe County and the City and County of Broomfield – two early MOU adopters – to refine their MOUs. COGCC has supported implementation of MOUs by incorporating BMPs from these agreements into their permit documents.⁸ More generally, the COGCC has advocated the potential benefits of MOUs with industry, local governments, legislators, and the public.

Local Authority: Land Use and Police Power

While many local governments have chosen to use MOUs to avoid preemption lawsuits, Colorado municipalities and counties have substantial authority to regulate local oil and gas development within parameters set by the state constitution, state statutes, and recent court decisions. Land use regulations have been the most conventional and widely used approaches for local jurisdictions to address oil and gas development. These include land use permitting processes for oil and gas as a permitted use, most commonly through regulations that are similar to ‘special use’ or ‘conditional use’ permitting. Permitting processes typically include public hearings and comment processes, as well as local requirements relating to oil and gas development. For example, in Adams County the current regulations require all oil and gas operators to obtain approval for any new oil and gas facilities on a site-specific basis. There are two options for an operator to obtain county approval of a new oil and gas facility location in Adams County: 1) A Special Use Permit (SUP) or 2) A Memorandum of Understanding (MOU) and an Administrative Use by Special Review (AUSR) Permit. The SUP option requires a public hearing before the Board of Adjustment. In lieu of a SUP, an operator may elect to enter into an MOU with the county. Operators who hold MOUs with the county must also receive a site-specific permit in the form of an AUSR. The county’s Development Standards and Regulations outline the processes for obtaining a SUP, an MOU, and an AUSR permit in detail.⁹

Local Regulation of Oil and Gas in La Plata County

Over twenty years ago, La Plata County Commissioners and oil and gas operators clashed on the issue of the County’s authority to regulate oil and gas beyond what COGCC regulations required. In 1988, La Plata County enacted a new Land Use Code to regulate oil and gas operations and was consequently sued by the oil and gas industry. The lawsuit made its way to the Colorado Supreme Court in 1992 where parts of La Plata County’s regulations were upheld. La Plata County was an early adopter of MOUs as a way to avoid constant legal challenges over regulatory authority.

See La Plata County Resolution No. 1988–53, Oil and Gas Regulations of La Plata County, Colorado 1988 and *Board of County Comm’rs v. Bowen/Edwards Assocs.*, 830 P.2d 1045, 1055 (Colo.1992).

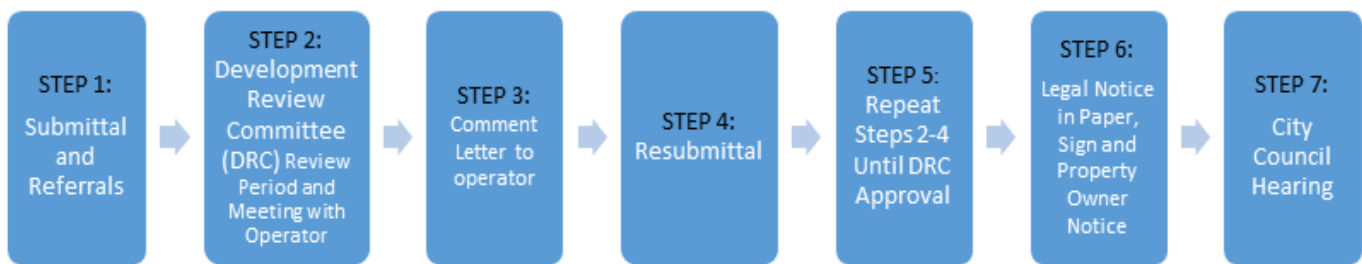
⁸ See the ‘Implementation and Enforcement’ section for more detail on incorporation of MOU BMPs into permit documents.

⁹ See Adams County Development Standards and Regulations, Application and Permitting Procedures Specific Development Review Steps for Development Applications, 2-02-11 SPECIAL USE PERMIT (2014), *available at* <http://www.co.adams.co.us/DocumentCenter/View/7354>, and Adams County Design Requirements and Performance

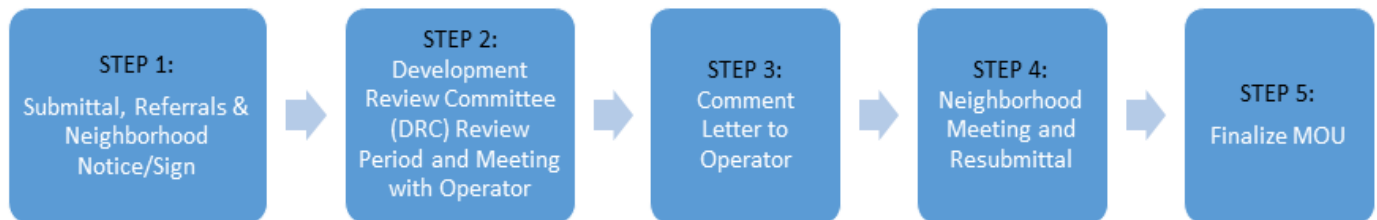
The ability of a local government to regulate oil and gas in Colorado depends on whether it is a county or municipality, and whether it has home rule or statutory authority.¹⁰ In addition, its regulatory jurisdiction depends on whether a particular use of its powers conflicts with state oil and gas regulations.¹¹

Snapshot of Regulatory Permitting Process vs. MOU Process

Conditional Use - Public Process **Typically 90 to 120 Days**



MOU Process - Administrative Process **Typically 38 days or less**



MOU processes are typically much shorter with significantly less public involvement than regulatory permitting processes. Just as MOUs became a way forward for local governments seeking to avoid preemption lawsuits, they offer an appealing alternative for operators seeking local permits. Because regulatory processes take much longer and tend to involve contentious public debates on drilling and hydraulic fracking practices and impacts, operators have tended to prefer the expedited administrative processes that MOUs afford. One industry stakeholder explained this benefit, noting that ‘MOUs do not circumvent the permitting process. . . they establish a mechanism for regulatory certainty related to permit timing.’ MOUs require site-specific review similar to those required in local permitting processes, and ‘the bulk of the information [and subsequent application materials] required by a traditional [permitting] process are still submitted through the MOU.’ The main difference is that ‘a set of the requirements have already been agreed to in the MOU [and it is] thus not necessary to negotiate on a permit by permit basis. The timing certainty is the key benefit for the operator.’

Standards, 4-10-02-05 OIL AND GAS FACILITIES ADMINISTRATIVE USE BY SPECIAL REVIEW and 4-10-02-04-06 OIL AND GAS WELL DRILLING AND PRODUCTION REVIEW (2016), available at <http://www.co.adams.co.us/DocumentCenter/View/7355>.

¹⁰ For example, Colo. Rev. Stat. Section 31-15-401(1)(c) grants municipalities the authority to regulate and enforce oil and gas development around noise as a nuisance. (This authority does not extend to counties regulating noise.) In contrast, Colo. Rev. Stat. Section 25-7-128(1) has broader application and grants authority to ‘home rule cities, cities, towns, counties, and cities and counties’ the authority ‘to enact local air pollution resolutions or ordinances’ concerning oil and gas development.

¹¹ For further discussion on tools that local governments may employ to regulate oil and gas development, see Intermountain Oil and Gas Project, Colorado County and Municipal Law, available at http://www.oilandgasbmps.org/laws/colorado_localgovt_law.php.

THEMES AND LESSONS LEARNED FROM THE SUCCESSFUL USE OF MOUS

While oil and gas MOUs have proliferated, they have also been criticized in some circumstances as an insufficient, ineffective and/or inequitable tool to address impacts from oil and gas operations. Below is a more thorough discussion of stakeholders' insights regarding how, under what circumstances, and to what extent MOUs can successfully address the concerns of local communities while offering industry sufficient benefits, including a viable alternative to lawsuits. This discussion also includes parties' perspectives on the negotiation, substance, and implementation of MOUs.

1. GETTING TO THE TABLE

CREATING A FORUM FOR NEGOTIATION THROUGH CONFLICT

Oil and gas representatives and local government officials who have been parties to MOUs or Operator Agreements underscored the importance of a particular set of circumstances that allowed them to negotiate a mutually acceptable MOU with opportunities beyond what state law would have provided. Without at least one of these conditions, they said they would not have been able to achieve what they did. Many described the following not-mutually-exclusive conditions as both challenges and opportunities, and in many cases as necessary prerequisites to their negotiations.

- ❖ A **catalyst/event** that provides the motivation for both operator and local government to engage in negotiations. Absent a motivating reason on both sides that makes a negotiated agreement better than the status quo, parties will stick with existing local and state permitting procedures. Examples include lawsuits that lead to uncertainty and/or a shift in negotiating power, or public relations crises such as extreme, on-going drilling noise in a suburban neighborhood.
- ❖ Long-term **existing relationship** between operator and local government that provides good faith and good will to negotiate, including the motivation to further the operator's 'social license to operate.'¹²
- ❖ Local governments may encourage the use of MOUs while in **lease negotiations**. Local governments often have extensive mineral rights that may need to be leased by the operator. When evaluating competing lease offers, local governments may favor operators that have shown a willingness to enter into an MOU.
- ❖ Changing conditions that motivate an operator to **develop a relationship** and social license to operate with a community, as new technologies in horizontal drilling result in operators staying in communities for longer periods of time.
- ❖ Threat of a **worse outcome** – e.g., communities considering drilling moratoria and bans. In January 2015 the Town of Erie's Board of Trustees proposed a one-year moratorium on oil and gas drilling,

¹² 'As a first principle. . . [a] social license to operate requires, and is primarily based on, reasonable transparency and accountability, and most importantly, public trust. . . how can industry earn and maintain the public's trust. . .' For further discussion on the idea of a 'social license to operate,' see University of Colorado-Boulder Getches-Wilkinson Center for Natural Resources, Energy, and the Environment, 'AGENDA: Changing Regulatory Frameworks for Shale Development and 'Social License to Operate'' (2013). *Changing Regulatory Frameworks for Shale Development and 'Social License to Operate'* (July 24). Available at: http://www.oilandgasbmps.org/docs/GEN431_Social_License_Shale_Gas.pdf.

which would have prohibited all new oil and gas development within Erie's borders for one year. However, after public comments at meetings and via email, a majority of the board found the town's leverage had improved enough to dismiss the moratorium in favor of working toward MOUs with Encana as well as Anadarko Petroleum.¹³ Erie also adopted permit regulations for oil and gas development at the same time it approved the MOU with Encana, in order to supplement the terms of the MOU with Encana and ensure enforcement authority under the local land use code.¹⁴

- ❖ Unique opportunity for **mutual gains**. For operators, it can be worthwhile to agree to more stringent permit conditions in exchange for certainty, predictability, and expedited permitting. Avoiding negative publicity through the public hearing process and building a long-term social license to operate in communities where they hold a significant number of mineral rights is also important to industry. Likewise, for communities with a sufficient degree of leverage and negotiating capacity, MOUs can provide important substantive and procedural protections, such as BMPs and notice requirements, not otherwise found in state law. Local government stakeholders noted that negotiating with an industry partner with something to gain from an MOU process – and, perhaps more importantly, something to lose from *not* negotiating an MOU – was critical to reaching an outcome they considered meaningful and successful.

Local Drilling Bans & Moratoria in Colorado

Historically, the threat of long-term moratoria on drilling operations was one factor driving operators to negotiate MOUs with local governments. Recently, however, two 2016 Colorado Supreme Court decisions, *City of Longmont v. Colorado Oil and Gas Association*, 369 P.3d 573 (Colo. 2016) and *City of Fort Collins v. Colorado Oil and Gas Association*, 369 P.3d 586 (Colo. 2016), held that Longmont's fracking ban and Fort Collins's five-year fracking moratorium are pre-empted by the state's regulation of oil and gas activity, by operationally conflicting with state law, and therefore are invalid.

These recent decisions, like others before them, require that local governments take a hard look at local oil and gas regulations to ensure they do not frustrate or conflict with the state's interest in oil and gas development. As a result, threats of long-term local moratoria on drilling operations may no longer be a factor driving parties to the table to negotiate MOUs.

2. NEGOTIATION PROCESS

Stakeholder interviews revealed the following perceived challenges and opportunities related to the MOU negotiation process itself.

NEGOTIATION CHALLENGES

- ❖ **Negotiator Expertise and Experience** - For local governments, legal counsel with land use experience and a clear understanding of the scope of the local government's land use authority is an important factor to negotiate effectively with industry. Most local governments must retain outside counsel, requiring extra resources and funding that some local jurisdictions lack.

¹³ Robino, Joe. *Erie rejects one-year fracking moratorium: Board plans instead to work on new agreements with oil and gas companies*. THE DAILY CAMERA. Jan. 27, 2015. Available at http://www.dailycamera.com/erie-news/ci_27408475/erie-rejects-fracking-moratorium (accessed 7/10/16).

¹⁴ The Town of Erie Board of Trustees approved amendments to the Town's Unified Development Code (UDC) to accommodate the adoption of new oil and gas regulations during its September 8, 2015 meeting. See *Ordinance 21-2015 and UDC Amendments*, available at <http://www.erieco.gov/DocumentCenter/View/7078>.

Both operators and local government representatives expressed the importance of having skilled negotiators with a clear understanding of their constituents' core interests, and with broad latitude for negotiating creative solutions. Rather than drawing lines in the sand, they emphasized the importance of discussing needs and interests for creative and effective problem-solving and in order to reach mutually acceptable agreements.

- ❖ **Relationship-Building and Trust** - Stakeholders emphasized the need for a process to develop good-faith relationships outside the public spotlight. For them, a key part of the trust-building process was discussing their respective needs, interests and ideas, and having the other party acknowledge and find ways to address these core needs.
- ❖ **Authority** - Stakeholders discussed the need to have both industry and government decision-makers at the table, or those empowered to negotiate binding agreements.
- ❖ **Inclusion of Relevant Stakeholders** - Stakeholders need relevant parties at the table. For instance, if an MOU stipulates that the parties will ask the COGCC to enforce provisions as conditions of approval on a state permit, COGCC needs to be at the negotiation table at some point in the process. Further, as discussed above, having operators with an immediate stake in the negotiations at the table tends to produce more robust and broadly supported MOUs. Negotiating MOUs with several operators at once has tended to result in less protective MOUs that lack site-specific provisions, and that do little to address a community's concerns about oil and gas development and its local impacts.
- ❖ **Public Process** - One of the key issues voiced by community advocates is the lack of public participation in MOU negotiations. Concerns included a sense by some that if 'there is no public process, the public does not have rights and remedies.' Negotiations can appear exclusionary and as a 'work around' to avoid the direct public input and access that accompanies public hearing and approval processes.

On the other hand, as some local government and community stakeholders articulated, a robust public engagement process can provide local governments with leverage from the community in the MOU negotiations, add credibility to the process, and help assure both parties that an agreement will have local support over the long run. Residents need a mechanism to understand the trade-offs, provide input to the negotiation process, and feel they have been heard in the process. Without this, even those MOUs with significant local protections may ultimately fail to address or appease residents' concerns, undermine the MOU's long-term effectiveness, and fail to gain a 'social license' for the operator to operate in that community.

Some communities have held a public consultation process prior to engaging in MOU negotiations. For example, in January 2016, the Adams County Commissioners called for a public hearing on oil and gas drilling in anticipation of signing MOUs with multiple oil and gas operators in the county. At the hearing, community advocates emphasized the need for greater protections around public health and safety, including: 1) a site-specific MOU when large operations are in or near neighborhoods, 2) stronger air and water monitoring standards, 3) a formal public hearing and comment period, and 4) increased distances from homes and schools.¹⁵

¹⁵ Adams County, Oil and Gas Public Hearing. January 26, 2016, 6:30pm. Adams County Government Center. Available at https://www.youtube.com/watch?v=albf5_ACiGk (accessed 7/10/16).

One stakeholder noted that ‘Ultimately, the MOU is a contract, and like many, if not all, of the contracts negotiated by local governments, MOUs seek input (similar to what Adams County did), but the negotiations are between the parties to the contract. In addition, like other contracts, the MOU goes to the board in a public meeting for approval.’

POSITIVE OUTCOMES FROM EFFECTIVE NEGOTIATIONS

Industry, local government, community and state regulatory stakeholders defined ‘effective’ negotiation processes and/or outcomes differently based on their ultimate goals and interests. Companies placed the most value on predictability and certainty. For some, there was significant value in a more collaborative relationship with local government, leading, among other things, to more expedited permitting and advance notice about potential regulatory changes or proposals that could impact the operator. For local governments, binding operators to provisions such as enhanced setbacks, rigorous public notice requirements, or attorney fee-shifting, constituted a more successful outcome than they felt they could otherwise have achieved under land use regulations. However, nearly everyone interviewed expressed that ‘effective’ negotiations contained or led to the following:

- ❖ **Communication** - Increased communication, transparency and/or effective coordination between the operator and community – including monitoring, reporting, engagement with the public, and responsiveness of the parties to stakeholder concerns.
- ❖ **Good Faith Based on Better Understanding of Interests** - Negotiating parties believe the other(s) will voluntarily uphold the agreement out of self-interest, without resorting to enforcement.
- ❖ **Clarity** - Clear, enforceable MOU agreements and provisions that are understood and supported by parties to the MOU.
- ❖ **Meeting Community Needs** - Providing a practical path forward from an otherwise polarizing state debate, by addressing community concerns at the local level.
- ❖ **Staying out of Court**- Avoidance of lawsuits (e.g., over regulatory authority, jurisdiction, preemption, notice).
- ❖ **Worthwhile Outcomes** - Parties see the agreement as providing useful trade-offs and ultimately being better than what they could have achieved otherwise.
- ❖ **Long-Term Gains** - Good faith and sense of mutual gain from voluntary, incremental efforts leading to increased possibilities for reducing and mitigating industry impacts. Both parties benefit by better understanding the interests of the other party and proactively discussing issues, such as a possible new oil and gas or housing development, in an effort to avoid future conflict.

3. IMPLEMENTATION AND ENFORCEMENT

LOCAL VERSUS STATE ENFORCEMENT – LEGAL AND PRACTICAL CHALLENGES

One of the thorniest and least settled issues is the authority and mechanism for enforcing MOUs, both legally and practically. Interestingly, for most stakeholders interviewed, this was more of a theoretical than actual dilemma. Most of the stakeholders interviewed for this paper had negotiated MOUs that had sufficient buy-in by both parties that enforcement had not been an actual issue.

Local Enforcement – Opportunities and Constraints

- ❖ **MOUs – Enforceable as Contracts.** As negotiated agreements between parties, MOUs are enforceable by a breach of contract action by either party or by whatever process the MOU itself creates. However, one stakeholder felt that proving damages from a violation and marshaling the resources to enforce this type of legal action are beyond what most jurisdictions could or would realistically do.
- ❖ **MOUs – Enforceable as Part of Local Land Use Code.** A number of attorneys and seasoned local government representatives argue MOUs are not simply enforceable as contracts. Rather, they argue, MOU BMPs are enforceable if the MOU is characterized as an exercise of local land use regulatory authority while defining the parameters and conditions of local siting and drilling permits. Because the specific terms of the local permits are negotiated rather than required through codes or ordinances, there is little question they avoid state preemption claims.¹⁶

As discussed above, for many local stakeholders, MOUs are simply a short-term fix to address regulatory gaps, and the preferred longer-term and more ironclad approach is through local code. In an attempt to avoid legal challenges or residents' rejection of stricter regulations, however, many local governments and their attorneys believe that MOUs can be an effective tool for working with operators provided there is a strong land use code as a framework for enforcement. In fact, more than one interviewee emphasized that MOUs should never be in lieu of local regulations governing oil and gas development.

Likewise, some operators agreed that, as tools for increasing communication, mutual understanding, and for gradually overcoming mistrust with local governments, MOUs can help companies anticipate and become comfortable with more stringent local regulations and BMPs over time. While some industry and community stakeholders agreed that MOUs can ultimately lead to stronger regulations at a local level in the long run, other industry representatives disagreed, noting that MOUs are not a 'stage gate for local regulations that would go beyond local land use authority into the realm of jurisdiction of operational aspects of oil and gas development regulated by the state.'

State Enforcement – Opportunities and Constraints

Regardless of local governments' enforcement authority, there are significant practical questions about whether the COGCC can, should, or must enforce MOU conditions and BMPs. Some local governments believe they are legally empowered to monitor and enforce their own MOUs and in the best position to do so. Nonetheless, most MOUs stipulate that the negotiated BMPs should be included on the COGCC permit and enforced by the COGCC.¹⁷ Reasons for this vary. They include the fact that the COGCC has much greater capacity and technical expertise than local governments to monitor and enforce provisions relating to issues such as air and water quality, berms and closed-loop systems.¹⁸ They also include a perception by some community members that COGCC permit conditions carry more weight, and are more likely to be followed, than a negotiated MOU with the operator. Many local government negotiators reported being strongly encouraged by their constituents to ensure the negotiated BMPs were reflected in state permits.

¹⁶ Communities can clearly prescribe certain land use requirements through their local codes and ordinances; the question is how much and how far these can go without being subject to preemption arguments. *City of Longmont v. Colorado Oil and Gas Association*, 369 P.3d 573 (Colo. 2016) and *City of Fort Collins v. Colorado Oil and Gas Association*, 369 P.3d 586 (Colo. 2016).

¹⁷ The exception is the Longmont/TOP Operating Company MOU (2012). Also, for La Plata County, provisions of MOUs are incorporated via infill orders rather than into the permit (Form 2 or 2A).

¹⁸ Elliott, Dan. *Colorado's new, higher oil and gas fines are biting industry: But companies are policing themselves to avoid bigger fines* The Denver Post, June 1, 2016, available at <http://www.denverpost.com/2016/06/01/colorados-new-higher-oil-and-gas-fines-are-biting-industry/> (accessed 7/12/16).

Despite the stipulation on many MOUs that the negotiated BMPs should be included on the COGCC permit and enforced by the COGCC, COGCC cannot enforce terms that are beyond its jurisdiction. In January 2016, the COGCC sent a letter to both Adams County and Erie in which it rejected the language of their MOUs that required all BMPs be included on the state permit. The letter to both governments detailed COGCC's position on the types of BMPs that may and may not be included in a COGCC Form 2 or Form 2A permit.

Essentially, for COGCC to enforce the BMP, the issue addressed by the BMP must be in the COGCC's jurisdiction – as opposed to local issues such as landscaping, domestic water supplies, traffic and communications with local governments – and the specific requirement must be at least as stringent as the State rule. Additionally, the COGCC will not include provisions that are redundant with state law or that are not existing conditions for the permit approval.

At the same time, the COGCC has made clear that, although it may have jurisdiction over an issue, for practical reasons it may be limited in its ability to enforce BMPs with very specific parameters that were negotiated without COGCC's participation. For example, although the COGCC has jurisdiction over noise, it may not agree to enforce MOU terms that would necessitate that the COGCC monitor at specific times or with a certain frequency beyond the agency's capacity and resources to do so. This aspect of MOU enforcement involves practical considerations that suggest the need for close coordination and communication among the state, industry, and communities. It also suggests that questions of how to best enforce, on a practical level, the terms of a broadly accepted agreement will find limited answers in legal and political debates over jurisdiction.

While a detailed legal analysis is beyond the scope of this paper, it is clear the question of what entity can, should, or must enforce different types of MOU provisions – and through what enforcement mechanisms – must be clarified among the state, local governments and operators. This is particularly urgent as MOU signatories have stipulated that BMPs be included in state permits, only to realize after the fact that the COGCC cannot inspect for or enforce against BMPs for matters that are outside of the COGCC's statutory authority. Regardless of where that line is drawn, recent developments suggest COGCC should be involved to some degree in MOU negotiations in which negotiators seek enforcement by the COGCC.

Do Universal MOUs Work?

According to community stakeholders interviewed for this paper, 'universal' MOUs, in which industry is represented by multiple companies, have tended to result in industry-friendly BMPs that restate what Colorado law already requires. In addition, these 'universal' MOUs, which, by their nature, involve a greater difference in bargaining power, also tended to have less impact on community relations or the 'social license' in those communities. Many stakeholders have cautioned against the use of universal MOUs.

4. SUBSTANTIVE PROVISIONS

The substantive provisions of an MOU are the elements of an MOU that create, define, and regulate the rights, obligations, and agreements between an operator and a local government. MOUs provide an opportunity for local governments and operators to negotiate site-specific agreements that focus on the most salient issues for that community. The following section captures key themes, challenges, and opportunities discussed by stakeholders with respect to MOU substantive provisions, including BMPs.

ONE-SIZE-DOES-NOT-FIT-ALL

One of the most important messages from stakeholder interviews was that **not all MOUs are created equal, and there is no one-size-fits all solution**. One stakeholder noted that 'the only thing consistent between the many MOUs in different counties is the word 'MOU'. Substantive provisions, levels of protection, requirements, enforcement and fines, best management practices – these are not the same.' One noteworthy distinction is that some MOUs are negotiated specifically with individual operators – e.g., BP

Petroleum with La Plata County, Sovereign Operating Company with Broomfield, Agave Oil and Gas with Elbert County, Prospect Energy with Fort Collins, TOP Operating Company with Longmont, or Encana with the Town of Erie. Other local jurisdictions drafted ‘universal’ MOUs with standard provisions and terms that applied to a number of different operators – e.g., Arapahoe County and Adams County. For a complete list of operator-specific and ‘universal’ MOUs, see the Intermountain BMP website’s MOU page at <http://www.oilandgasbmps.org/resources/MOU.php>.

FLEXIBILITY

Stakeholders highlighted the need to allow **BMPs outlined in an MOU to keep up with relevant changes in technology and policy.**¹⁹ Several stakeholders noted that MOUs should be written to ensure operators will incorporate advanced technologies if feasible (for example, equipment electrification or green completions). One stakeholder pointed out that there is political risk if an MOU fails to incorporate flexible BMPs. If MOU standards quickly fall behind the best available technologies, the public can easily perceive ‘they didn’t get anything ‘extra’ from the MOU.

Stakeholder observations included the sentiment that **‘MOUs need to look into the future’ and ‘cannot be a stagnant snapshot in time.’** One stakeholder questioned, ‘how [do we] draft and execute an MOU in 2014 that applies in 2024, especially with changes in technology?’ Another stakeholder suggested that the ‘MOU can include a clause that revokes the MOU with six months written notice if there is a change in technology and the operator does not change technology voluntarily.’ This would ensure that MOUs could keep pace of changing technologies.

Currently, it is common for MOUs to explicitly stay current with federal or state law by including BMPs that reiterate requirements of federal or state law or include generic language that the operator will comply with this law ‘as amended.’²⁰ Provisions that would allow MOUs to stay ahead of state and federal regulation are rare and require some kind of action by the operator or the local government. For example, MOU provisions may require compliance with specific plans (e.g., traffic management plans) that ‘shall be amended, as necessary, from time to time.’²¹

Amending local codes may also force agreed-to-BMPs to keep pace with emerging technologies and policies that go beyond state and federal rules. For example, Longmont’s MOU with TOP Operating Company includes an agreement that ‘The Company shall comply fully with the Longmont Municipal Code and all applicable local, state and federal laws as they may be amended from time to time, which are incorporated into and made part of this Agreement. . . .’²² Similarly, the Broomfield MOU provides ‘The City reserves the

¹⁹ Some MOUs generically provide for modifications, but require revision of BMPs to be mutually agreed upon (Encana’s MOU with Erie) or ‘agreed to in writing by all parties’ (several La Plata MOUs). Other MOUs explicitly recognize that changes may be necessary, for example: ‘If there is a new development in state law, rules or judicial decisions that substantially affect any provision of this MOU, the Parties agree to negotiate in an attempt to update this MOU in light of same by a written amendment executed by both Parties.’ See Adams County and Elbert County MOUs. But this provision neither provides for an automatic update, nor does it explicitly recognize changes in technology that are not already recognized in law.

²⁰ The rationale for including this seemingly superfluous language is unclear. Repetition of state/federal rules or incorporating these rules by reference may be done in MOUs simply to provide a more complete treatment of a specific issue (e.g., air quality protection) in the MOU, rather than including only those practices that are ‘above and beyond’ that which is required of the operator by state or federal law. Another reason to include the ‘compliance with law’ language may be to assert the right of the local government, at least by contract, to enforce the operator’s compliance with federal or state law in the absence of federal or state agencies willingness or ability to do so.

²¹ Memorandum of Understanding between Town of Hudson and Kerr-McGee (Hudson Wells), 2012.

²² Presumably the ‘as amended from time to time’ refers to the Municipal code as well as to the state and federal laws.

right in the future to enact and apply prospectively oil and gas regulations that are general in nature and are applicable to all similarly situated oil and gas activities subject to land use regulation by the City, even though such regulations may be more or less stringent than the standards applicable to the Well Sites by virtue of this Agreement.’

PUBLIC PROCESS AND INVOLVEMENT

MOUs may decrease the potential for public participation at the local level.

The local government permit processes (special or conditional use permits) typically allow the public an opportunity to comment in writing and through public hearing processes. The ability for local governments to give voice to impacted community members before making a land use decision is a strength of local governments. One of the concerns of impacted community members and other stakeholders is that administratively-approved MOUs can potentially circumvent opportunities for public comment at the local government level.²³

On the other hand, some industry stakeholders have noted that MOUs themselves are not administratively approved – rather, it is the subsequent, site-specific permit that is administratively approved. While one industry stakeholder thought that ‘most MOUs have provisions for neighborhood meetings and written comments by the public’, a review of MOUs only identified about 10 percent of all MOUs and less than half of all jurisdictions with neighborhood meetings/comments provisions.²⁴

MOUs may increase the potential for public participation at the state level through notice requirements and neighborhood meetings.

Some stakeholders have expressed concerns that the COGCC does not offer sufficient and/or meaningful opportunities for the public to be notified, consulted and/or engaged in the state-level permitting processes. At the same time, the COGCC has significantly increased opportunities for public participation in the COGCC permitting process since 2013 through rulemaking and outreach to local governments and communities. COGCC added more liberal notice and comment period rules for development within specified setback areas and in Urban Mitigation Areas (UMAs), although only a small percentage of new well locations have been in UMAs.²⁵

- ❖ **Notice Requirements.** Generally, stakeholders noted that the goal of MOU notice provisions is to ‘reduce development conflict with homeowners and community members’ and avoid ‘surprises’ to homebuyers and residents. MOUs can – and some have – supplemented COGCC notice/comment requirements.

Under COGCC rules, members of the public may comment online on the COGCC Form 2 (Application for Permit to Drill) and Form 2A (Location Assessment), which typically include the MOU BMPs. A minimum 20-day public comment period is provided for all Form 2s and Form 2As. This period can be extended to 30 days upon request by, among others, the surface owner or owners of surface

²³ Note that if an MOU is approved pursuant to a public hearing process in a municipality, it could be deemed a legislative action that exposes the MOU to referendum.

²⁴ See the MOU Elements comparison table at available at: <https://docs.google.com/spreadsheets/d/1e-VcuSd4xvFa6vxHnLslhRI8aVBdZAvSbbX9Qejz10w/edit#gid=1503432545>

²⁵ See generally, Rule 604 on Setbacks, Rule 305 on notice, and Rule 305A on Large UMA Facilities. COGCC estimated that only .8% of the 1,700 wells locations approved in the first 27 months following definition of “UMAs” in the rules were sited in UMAs. Cost-Benefit and Regulatory Analysis, Cause No. 1R Docket No. 151100667, Governor’s Task Force Rulemaking, November 6, 2015. p. 4. Available at: <http://cogcc.state.co.us/documents/reg/Rules/GtfRulemaking/CBA%20RA/20151106%20Cost%20Benefit%20and%20Regulatory%20Analysis.pdf>

property within five hundred (500) feet of a proposed oil and gas location, except in the Greater Wattenberg and Yuma/Phillips County areas.²⁶ Additionally, COGCC Rule 510 provides the opportunity to make a statement at any Commission hearing on a pending Form 2 or Form 2A at any time during the COGCC's review of the pending permit application. However, in most cases, COGCC Form 2 and Form 2A are approved administratively, without a public hearing. Comment periods may be extended to 30 days if requested by, among others, the surface owner or an owner of property within 500 feet of the location.²⁷

Since public comments can only be made on pending applications, the public cannot comment directly until a Form 2 or 2A has been submitted to the COGCC. However, COGCC provides for pre-application notification for locations within UMAs and Buffer Zone Setback areas (1000 feet).²⁸ The intent of this rule is to provide early information on the proposed operations and facilitate discussions between owners and the operator or local government.

MOUs can require community-specific notice requirements for all development within their jurisdiction. Alternatively, they can specify notice for individual wells and/or operators. For example, the 2015 MOU between Encana and Erie requires written notice to certain residents in the following circumstances:

- 1) Notice of an anticipated Form 2A must be provided to certain properties, determined jointly by Encana and Erie, within at least ½ mile of the pad site. (Art III. 8). *COGCC requires operators to notify surface owners and Building Unit Owners that a permit is being sought within Exception Zone (500') or Buffer Zone Setback (1000') areas. COGCC Rule 305.a(2).*
- 2) Encana must post a notice of the proposed development on a sign at the pad site. (Art III. 9). *The COGCC posts complete Form 2As on the Commission's website, but requires no posting at the pad site. COGCC Rule 305.b(1).*
- 3) Encana must mail a pre-drilling notice to the same set of properties if the operator begins drilling more than six months after the Form 2A was approved by COGCC. This notice must include location of wells to be drilled, drilling date and Encana's contact information. (Art. III. 10). *COGCC requires 'Move-in, Rig-up' notice with similar information to all Building Unit Owners within the Buffer Zone (1000') if it has been more than one year since the previous notice or since drilling activity occurred or if notice was not previously required. COGCC Rule 305.h.*

- ❖ **Neighborhood Meetings.** Some MOUs (Broomfield/Sovereign, Erie/Encana, Fort Collins/Prospect, and Timnath/Petersen) require a neighborhood meeting to 'give a voice' to their communities prior to finalizing local government conditions of approval and prior to operator submission of Forms 2 and 2A to the COGCC.

²⁶ The notification of surface property owners within 500 ft (COGCC Rule 305.c (1) A.iii) and the comment period extension rule (Rule 305 d(1) A) do not apply to wells governed by rules for the Greater Wattenberg area (Rule 318A) or the Yuma/Phillips County area (Rule 318B). These areas have specific rules for notification of mineral owners, but not for surface property owners.

²⁷ Again, according to Rule 305.d(1) A., the comment period extension rule does not apply to the Greater Wattenberg area (Rule 318A) or the Yuma/Phillips County area (Rule 318B). The COGCC must further extend the public comment period to not more than 40 days if requested by the local government designee for locations within 500 feet of a Building Unit and for most facilities in UMAs (Rule 305.d(1).b). The location of a Large UMA Facility has a standard 40-day comment period (Rule 305.d(2)).

²⁸ Rule 305.a (2) requires operators to provide a Notice of Intent to Conduct Oil and Gas Operations to the surface owners and all Building Unit owners at least 30 days prior to filing a Form 2A for locations within the Exception Zone (500 feet) or Buffer Zone (1000 feet). Rule 305.a also requires pre-application notification to local governments for UMAs and Large UMA Facilities.

Many of the community and local government stakeholders noted that BMPs requiring neighborhood meetings prior to the operator's filing of individual permit application 'inform discussions' and 'ensure community input' at the COGCC level regarding the siting of wells. Neighborhood meetings can be used to collect community and public comments and to submit them to the COGCC prior to the state's review of an operator's Location Assessment (Form 2A) or Application for Permit to Drill (Form 2). Further, half of the stakeholders asserted these meetings are particularly important because they perceive limited opportunities at the COGCC level to involve the public before an operator submits a permit application to the state.

COMPREHENSIVE DRILLING/DEVELOPMENT PLANS

Some MOUs (e.g., Erie/Encana, Broomfield/Sovereign, Timnath/Petersen) require the operator to submit comprehensive planning documents to provide a forecast of the operator's development plans into the future. One local government stakeholder suggested that the goal of these plans is 'to maximize planning and minimize the impacts of the planned operations.' Many stakeholders pointed out that these plans help give predictability and certainty to both the operator and the community. Several La Plata County MOUs provide more limited predictability by requiring an annual overview of proposed drilling plans for the following year. Interestingly, these MOUs stipulate that these proposed drilling plans must be kept confidential.²⁹

MANDATORY OPERATOR MEETINGS WITH LOCAL GOVERNMENT

Stakeholders also pointed out that mandated operator/local government check-ins or meetings on a monthly, quarterly or bi-annual basis can help to 'build trust between operator and government officials' and also help the government 'stay abreast of operator plans, technologies and modifications.'

BEST MANAGEMENT PRACTICES

A standard component of MOUs, BMPs have been incorporated into the documents in various ways. Some BMPs are included in the main body of the MOU; some occupy an appendix, exhibit or operator agreement; and some are duplicated, more or less, in the body of an MOU and an appendix/exhibit. BMPs of an MOU are 'best' as determined by the parties to the agreement for the particular place and time to which the MOU applies.

Key BMPs noted by stakeholders include traffic, noise, water and air quality protections, electrification of equipment, setbacks, roads, and impact fees. This is not an exhaustive list of BMP found in Colorado MOUs, but instead illustrates and highlights the BMPs identified as 'critical' by different stakeholders. For a more complete comparison of MOU BMPs and COGCC rules on several key issues, see the Intermountain BMP BMP Project's comparison table at https://docs.google.com/spreadsheets/d/10h7A1iDOgOqqRSnuzDc_Pdz1GldJ2kKYKu478HLsT2g/edit#gid=1559826536

²⁹ See, e.g., Article IX, Annual Reporting Requirement, Memorandum of Understanding Between the Board of County Commissioners of La Plata County, Colorado and Black Hills Exploration and Production, Inc., 2010, available at: <http://www.oilandgasbmps.org/viewpub.php?id=817>.

- ❖ **Traffic & Road Impact Fees** – Many MOUs require a ‘traffic management plan’ with estimated number of vehicle trips per day, types of vehicles, access roads, and mitigation measures. Some jurisdictions require that operators improve access roads to well and production facilities and that operators pay for road repairs, or provide a bond, to pay for damages caused by increased truck traffic or to public infrastructure during active drilling and completion. Some MOUs require temporary access roads to be reclaimed and re-vegetated to the original state along with erosion control measures.
- ❖ **Noise** – Some MOUs require noise mitigation, reduction below COGCC maximums and/or construction of noise mitigation measures along edges of any oil and gas operation sites located near existing residential development. Other MOUs require noise mitigation studies and/or noise measurements.
- ❖ **Air Quality** – Many MOUs require dust suppression along with operator requirements to perform well leak detection and repair via audio, visual, olfactory and infra-red camera inspections on a monthly basis at all new and existing wells as well as related facilities and equipment. Other air quality BMPs found in MOUs include 1) Operator must provide access and cooperate with local jurisdictions for ambient air sampling; 2) operator must pay (at least a portion) for sampling and additional testing if ambient air testing indicates that the drill sites are causing an unacceptable risk to air quality; 3) operator must capture all vapors and route to a control device with at least a 98% vapor capture efficiency; 4) operators must employ no bleed pneumatic controllers; and 5) operators must use electric equipment if electricity from the grid is available.
- ❖ **Water Quality** – Jurisdictions have water quality BMPs in their MOUs to protect local watersheds, some examples include: 1) recycling and reuse of water to minimize waste water production; 2) closed-loop systems for drilling and completions; 3) steel rim berms or state of the art technology that will contain fluids and other material instead of sand or soil berms; 4) disclosure to local jurisdiction before bringing chemicals on site; 5) avoidance of dust suppression within 300 feet of water; 6) identification of the source of all water used in drilling operations; 7) stormwater management and spill prevention controls.
- ❖ **Setbacks** – Setbacks, or ‘distance to buildings,’ are an important tool used by many MOUs. Setback requirements may include, for example, in the 2015 Erie-Encana MOU, a specific distance to buildings from well-pad sites to building units that are much greater than COGCC setbacks, generally 500 feet from homes, and requiring instead that that new wells are at least 1,000 feet from

EXAMPLES FROM ERIE/ENCANA MOU: Provisions More Stringent than COGCC Regulations

Notification distances: COGCC requires notice to homeowners (building unit owners) within 1,000 ft (Rule 305.c(2)). Erie requires notice of all landowners within ½ mile.

Setbacks: COGCC requires 500-foot setbacks from homes and the COGCC Director may approve shorter setbacks under certain conditions (COGCC Rule 604.a(1)). Erie requires at least 1,000 feet and up to 8,990 feet from homes.

Noise: Erie’s noise standards set a maximum noise level that is 50% lower than the state -- decibels are on a logarithmic scale (COGCC Rules 802.b and 604.c(2)(A)).

See, Operator Agreement between Town of Erie and Encana Oil & Gas (USA) Inc., Art. III and Appendix A, Resolution 15-98 (2015).

Note that the 2015 Erie-Encana MOU pertains to a specific set of planned oil and gas locations, not to all new proposed oil and gas locations within Erie.

homes.³⁰ It is important to note, however, that setback distance vary from MOU to MOU; 1,000 feet is not a standard or default distance.

Overall, stakeholder conversations revealed that some MOU agreements have been much more successful than others in addressing local needs and concerns while, at the same time, providing sufficient benefits to operators – e.g., in the form of certainty, predictability, expedited permitting, better communications and coordination with local government, and a social license to operate at the local level.

Ultimately, the most successful MOUs resulted from a mutual problem-solving effort between industry and government. These MOUs included substantive provisions that focused on, as one stakeholder put it, ‘the deeper interests behind each demand.’ Effective negotiators got ‘creative to get the needs of both industry and the community met.’ Substantive provisions became more than just ‘a list of demands.’ Successful MOUs provided local governments and operators the opportunity to reflect the needs and most salient issues for specific communities.

CONCLUSION AND NEXT STEPS

As MOUs develop rapidly as a tool for communities to address oil and gas siting and operations, the state and local governments, as well as industry operators, are struggling to keep up with best practices and lessons learned thus far. This assessment has sought to identify stakeholder perspectives on the opportunities and limitations posed by MOUs for the state and its communities – lessons that will hopefully benefit others seeking productive approaches to the challenges posed by oil and gas development in Colorado.

POTENTIAL NEXT STEPS

Interviews with stakeholders have raised the following as potential next steps:

- ❖ **Stakeholder Dialogue** – This Assessment draws on lessons learned from a small fraction of oil and gas stakeholders in Colorado. These individuals and others representing communities, the state, industry, and other key interest groups could benefit from opportunities to share experiences, learn from one another, and develop recommendations regarding the use of MOUs. A dialogue process could highlight cases in which MOUs are or are not appropriate and how best practices have been successful in other Colorado communities.
- ❖ **Guidance Documents and Processes** – In addition, stakeholder interviews highlighted the need to clarify certain MOU issues, e.g., enforcement, both by local communities and the COGCC. This could be in the form of guidance documents, COGCC workshops, local governmental designee (LGD) technical assistance, webinars, or different discussion and policy dialogue forums.
- ❖ **Ongoing Engagement with Communities** – This Assessment underscored the significant challenge around integrating public engagement and transparency into MOU processes, while at the same time ensuring that MOU negotiations contain the trust, relationship-building, and interest-based

³⁰ Although COGCC Rule 604.c(3) requires a 1,000 foot setback from High Occupancy Building Units, this may be restricted to the ‘urban’ areas, leaving residential or suburban areas with only the 500-foot setback. See also, Operator Agreement between Town of Erie and Encana Oil & Gas (USA) Inc., Art. III and Appendix A, Resolution 15-98 (2015).

focus that allows MOUs to be effective. Stakeholders will need to find ways to strike this balance, learning from one another and understanding the components that lead to effective processes with long-term support from negotiating partners and their communities.

- ❖ **MOU Policy Development** – The recent proliferation of MOUs suggests that both industry and local governments have found MOUs can be mutually beneficial tools for meeting particular needs under certain circumstances. The COGCC and DNR have been strong proponents of MOUs since 2012 and have advocated the potential benefits of MOUs in public speaking engagements. It is the goal of this paper to prompt the COGCC and local communities to explore what official policy and legal changes might optimize the use of local MOUs where appropriate to ensure all stakeholders are on the same page regarding where the COGCC and local governments can work together to implement effective and enforceable MOUs.
- ❖ **MOU Information Repository** – The Intermountain BMP Project has taken the first steps in creating a long-term repository of information on MOUs. The project currently provides a catalogue of over 40 MOUs, including signed, general, and draft documents from 2005 – 2016. This searchable bibliography provides pdf copies of the documents and links to a separate catalogue of the BMPs from most of those MOUs. This BMP database is searchable by both topic area (e.g., air quality) and keywords (e.g., dust, VOC, or green completion). The MOU webpage (<http://www.oilandgasbmps.org/resources/MOU.php>) provides a portal for these resources, as well as information on the structural elements of MOUs (e.g., terms, applicability to future operators, planning, inspections, enforcement provisions, etc.),³¹ comparisons of MOU BMPs among the MOUs of various jurisdictions/operators and to COGCC rules,³² and links to background documents (e.g., court cases) and other resources (e.g., Colorado Municipal League’s ‘knowledge Now’ series). Contributions of information and requests for specific data/analysis from stakeholders in the future would continue to expand and improve this resource.

For more information, or to contribute to the assessment, MOU webpage, or databases, please contact one of the authors below.

For the Assessment:

Ryan Golten, CDR Associates: rgolten@mediate.org

Taber Ward, Intermountain BMP Project: taberward@gmail.com

For the Website and Databases:

Kathryn Mutz, Intermountain BMP Project: Kathryn.mutz@colorado.edu

³¹ A comparison table of structural elements of MOUs is available at <https://drive.google.com/drive/folders/0B-KiSGMinKGheUNsQmw2Zk1raDg>.

³² A comparison table of BMPs from MOUs is available at https://docs.google.com/spreadsheets/d/10h7A1iDOgOqqRSnuzDc_Pdz1GldJ2kKYKu478HLsT2g/edit#gid=1559826536

From: chwolf@juno.com
To: [Boulder County Oil and Gas Comment](#)
Subject: no fracking ban
Date: Friday, October 28, 2016 3:26:51 PM

Boulder County Commissioners,

I'm a Boulder County property owner and I own my mineral rights. I'm tired of writing these emails regarding the implementation of so called moratorium on oil and gas fracking. This has already been decided by the Colorado Supreme Court that this can not be continued.

It is outrageous that this is even considered. I know at the end of the proposed 5 year "ban" another study will be found and start the whole process of another 5 years and then another 5 years and on and on and on thus you are creating your own ban. The county has had since 2012 to finish what was needed to complete the new rules and regs. NO MORE!

I'm not anywhere next to a subdivision, or a school where oil and gas drilling would be an issue. I have proposed in the past to allow fracking on a case by case basis. That way we are not all lumped in with people living in sub-divisions and by schools ect that are calling for another moratorium. Of course they do not want an oil rig next to them, but outside the city limits on acres of land that are available should not be included. These people that live in the city do not speak for me.

Please do not set up another moratorium.

Sincerely,

Cheryl Larsen

From: carol coburn
To: [Boulder County Oil and Gas Comment](#)
Subject: moratorium
Date: Saturday, October 29, 2016 9:03:45 AM

I hope you are listening to all sides of this issue. The anti-frackers are very vocal but in many cases uninformed. I urge you all to respect the right of a property owner to own and develop minerals on land they own. This is a fundamental privilege of such ownership. I also hope you will respect the law of the State and decisions rightfully made on Longmont and Ft. Collins. The latest information presented by Feinberg Lopez is simply another ploy to postpone and unfortunately you have extended your interference much too long. The Colorado Oil and Gas Commission, Vital Colorado, Coloradans for Responsible Energy Development, and Chapters of the National and Colorado Organization of Royalty Owners are watching closely and plan to react accordingly. PLEASE MAKE A WISE DECISION! Carol N Coburn, Boulder Co Resident for 77 years Please consider these ideas as you meet in mid-November.

From: Patty Sunfield
To: [Boulder County Oil and Gas Comment](#)
Subject: Extend Fracking Moratorium!!! Save Boulder, out water, our air and environment from selfish destructive greed.
Patricia Sunfield Boulder Native
Date: Saturday, October 29, 2016 10:50:22 AM

Sent from my Verizon Wireless 4G LTE Droid

From: Peter Korba
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking
Date: Saturday, October 29, 2016 1:38:47 PM

If fracking has one minute chance to pollute, poison, endanger our citizens, lands, planet then fracking should not be allowed.

Peter Korba,
Boulder

From: ollimaleya@aol.com
To: [Boulder County Oil and Gas Comment](#)
Subject: Extend the Moratorium
Date: Saturday, October 29, 2016 3:40:14 PM

Oil and gas prices are down, Boulder isn't a hot spot for drilling, and the idea of going up against Boulder is unappealing given the sheer number of activists and the wealth here. Go for it! Extend the moratorium.

Carolyn Usher
2210 Balsam Dr

From: Judith Dack
To: [Boulder County Oil and Gas Comment](#)
Subject: Fracking moratorium extension needed.
Date: Saturday, October 29, 2016 5:00:41 PM

I am writing to let you know of my 100% support for the moratorium extension on Fracking. PLEASE PLEASE do not allow this horrible practice which makes people sick and threatens our whole eco-system, ruin more of our great state!! This is a fact. Please do not let the propaganda and pressure by selfish oil and gas interests influence your decision. What will you do when its too late and your air and water are so polluted your children and grandchildren can not drink the poisoned water? And what will you say to them when they say to you, "You knew Fracking was a danger to our water and air and you let this happen...Why?"

Please please..I beg of you to do the right thing.... as it was the propositions on fracking should have made this upcoming ballot for certainly there where enough signatures but the powerful corruptors prevailed....

I am trusting you to stand up for the citizens of Boulder who have a right to clean air and non toxic water... Once Fracking practices ruin our natural resources and destroy our beautiful state, there will be no recourse. Keep it in the ground and use renewable energy practices only!

Thank you for reading this.

Judith Dack, MA
Artist & Art Therapist
Registered Psychotherapist
Mobile/Text 301-529-6700

From: Tony Beauchamp
To: [Boulder County Oil and Gas Comment](#)
Subject: Extend fracking ban
Date: Saturday, October 29, 2016 5:12:24 PM

Let's follow the lead of New York State's complete ban on fracking statewide or face the Oklahoma reality of earthquakes as a consequence.

Please extend the ban.

Anthony Beauchamp

From: Pete Dignan
To: [Boulder County Oil and Gas Comment](#)
Subject: Extend the fracking moratorium
Date: Saturday, October 29, 2016 8:06:28 PM

I am writing to encourage you to extend the moratorium on fracking in Boulder County.

With 1800 potential fracking sites in Boulder County, this is something that affects all us - our air, our water and our health.

This recently reported Yale study is just one example of the evidence that fracking is not safe, and is not in the public interest: <http://www.ecowatch.com/yale-fracking-cancer-study-2063265923.html>.

Thank you,

Pete Dignan
2000 Dartmouth Ave.
Boulder CO 80305

From: Renee Albert
To: [Boulder County Oil and Gas Comment](#)
Subject: Extension on Moratorium
Date: Saturday, October 29, 2016 10:26:11 PM

Hello,

Im writing to urge those with the authority to make decisions with regard to the extension of the Boulder County Moratorium on Hydraulic Fracturing here in CO. When I moved here from South Florida 4 years ago, I purposefully chose to move to Boulder County because I believed in the purpose of what it stands for. We are a health conscious, forward thinking, progressive community that does not always adhere to the norms of other counties throughout the state of Colorado.

We are a community of people who value and appreciate the environment on a level I have never seen anywhere else before. We agree to taxation for beautiful open space and parks throughout out County. How can we barter the land we value so much for gas rights and still consider ourselves, "exceptional", "environmentally conscience" and "Progressive"? I believe it would be terrible for our land, our health and our reputation as a community.

As such, please consider extending the moratorium on Fracking in our wonderful community.

Thank You,

Renee Albert (Louisville)

From: Patricia Class
To: [Boulder County Oil and Gas Comment](#)
Subject: Tracking
Date: Sunday, October 30, 2016 4:50:15 AM

I am from upstate New York, bordering Pennsylvania. Witnessed Fracking up close and personal. Please go on the web, Fracking disasters in Pennsylvania, N. Y Times articleyou will feel ill.
NY , witnessing this and N Y groups working tirelessly, among threats and oil company lawyers...won and New York, a very smart state said "There will be No Fracking in New York! Fight, with all your heart to keep the GOP from raping our beautiful Country.

From: Frederica Acora
To: [Boulder County Oil and Gas Comment](#)
Subject: Re: Extend the moratorium
Date: Sunday, October 30, 2016 8:02:09 AM

Dear Commissioners,

Please extend the moratorium on fracking. You realize the dangers in allowing this industry to start it's destructive heavily industrial practices close to hospitals, schools, homes and water sources, Renewables are the way to go! Fossil fuels are not!

Sincerely,
Frederica Acora

From: Event from Evensi
To: [Boulder County Oil and Gas Comment](#)
Subject: Demand Extension on Boulder County's Fracking Moratorium has been published on Evensi!
Date: Sunday, October 30, 2016 1:02:34 PM



Demand Extension on Boulder County's Fracking Moratorium **has been added among the best events on Evensi**

Promote the event to reach really interested users at Boulder to increase engagement by more than 300%.

PROMOTE THIS EVENT

Evensi is the biggest events network, with more than 40 million events worldwide and 2 million active users monthly.



Demand Extension on Boulder County's Fracking Moratorium
Boulder - 15 Nov 2016
[Go to the page](#)



info@evensi.com



[Unsubscribe](#)

Event from Evensi

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From: Kelly Stasney
To: [Boulder County Oil and Gas Comment](#)
Subject: Extend the moratorium!
Date: Monday, October 31, 2016 7:06:56 AM

With so many studies completed and more in process showing potential health hazards of fracking and drilling to surrounding communities, please do consider extending the moratorium. Our children deserve clean air, clean water and land on which to play that is not forever tainted by short term profitability.

Sincerely,

Kelly and Dave Stasney, on behalf of our daughter Bergen Stasney

From: Eric Hiivala
To: [Boulder County Oil and Gas Comment](#)
Subject: Spam: moratorium
Date: Monday, October 31, 2016 8:31:08 AM

Please keep Boulder the unique place that it is preserved with beauty and not destroyed by ugly and damaging oil pumping and fracking rigs. Hasn't there been enough research swept under the rug about earthquakes and air quality issues to support the ban of doing this in a pristine area?

Sincerely,

Eric Hiivala
303.809.2376
Eric@Accentrr.com
www.AccentREgroup.com

From: Jean Morgan
To: [Boulder County Oil and Gas Comment](#)
Subject: extend moratorium
Date: Monday, October 31, 2016 4:22:14 PM

I have just voted for Jones and Gardner. I am encouraging you to extend the moratorium on oil and gas development in Boulder county.

Thank you,
Jean Morgan
1131 Spruce St
Louisville, Co 80027
303 666 4149

From: Kjmit543
To: [Boulder County Oil and Gas Comment](#)
Subject: The Frickin" Fracking!
Date: Monday, October 31, 2016 8:26:47 PM

What in the world is going on!! Are we selling out our beautiful country. When it is known how it brings about pollution, destroys the site, how can these companies, or foreigners or whom ever they are get the right to invade our beautiful country. Where is the huge effort to go green! Has anyone investigated these people, find out who they are, who has given them the right?