STAKEHOLDER ASSESSMENT
Colorado Oil & Gas Development

Insights from the Field
Toward an Understanding of Industry-Community MOUs

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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 development\(^2\) – 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 at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html (accessed on 7/10/16).
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<th>CHALLENGES</th>
<th>OPPORTUNITIES</th>
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<tr>
<td><strong>Context for Negotiations and Relationship to Regulatory Scheme</strong></td>
<td>Concern that issues of public health and safety should be regulated by local and state law, rather than negotiated on an <em>ad hoc</em> basis with the regulated industry.</td>
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<td><strong>Negotiation Process</strong></td>
<td>Concern about imbalances in capacity and resources, including expertise, experience and knowledge sets of negotiators.</td>
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<td>Relative lack of public participation and transparency in MOU negotiation processes, as opposed to public regulatory process.</td>
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<td>Piecemeal approach, i.e., local government may have to negotiate different MOUs with each operator within that jurisdiction, and vice versa.</td>
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<td><strong>Implementation &amp; Enforcement</strong></td>
<td>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.</td>
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<td>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.</td>
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<td>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.</td>
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<tr>
<td><strong>Substantive Provisions, Including BMPs</strong></td>
<td>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.</td>
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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 permitting 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... 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.

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6 City of Longmont v. Colorado Oil & Gas Ass’n, 369 P.3d 573, 584 (Colo. 2016) (citing C.R.S. § 34-60-102).
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.\(^9\)

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

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. In addition, its regulatory jurisdiction depends on whether a particular use of its powers conflicts with state oil and gas regulations.

Snapshot of Regulatory Permitting Process vs. MOU Process

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

1. STEP 1: Submittal and Referrals
2. STEP 2: Development Review Committee (DRC) Review Period and Meeting with Operator
3. STEP 3: Comment Letter to Operator
4. STEP 4: Resubmittal
5. STEP 5: Repeat Steps 2-4 Until DRC Approval
6. STEP 6: Legal Notice in Paper, Sign and Property Owner Notice
7. STEP 7: City Council Hearing

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

1. STEP 1: Submittal, Referrals & Neighborhood Notice/Sign
2. STEP 2: Development Review Committee (DRC) Review Period and Meeting with Operator
3. STEP 3: Comment Letter to Operator
4. STEP 4: Neighborhood Meeting and Resubmittal
5. STEP 5: Finalize MOU

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 fracturing 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](http://www.co.adams.co.us/DocumentCenter/View/7355).

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.

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](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.’

- **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,

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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’ (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 Collin’s five-year fracking moratorium are preempted 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.

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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 crediblity 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.\(^\text{15}\)

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\(^{15}\) 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](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 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/](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 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.

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.oilandgasbmpps.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.** 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 apace 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.’ 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.’

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.’

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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

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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-VcuSd4xvFa6vxHnLshIl8aVBdZAvSbbx9Qejej10w/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. 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.

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). 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.

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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 desiginee 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 BPM BMP Project’s comparison table at [https://docs.google.com/spreadsheets/d/10h7A1iDOgQqqRSnuzDC_Pdz1GldJ2kkYKu478HLS2g/edit#gid=1559826536](https://docs.google.com/spreadsheets/d/10h7A1iDOgQqqRSnuzDC_Pdz1GldJ2kkYKu478HLS2g/edit#gid=1559826536)

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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 homes.

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 ¼ 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 that the state -- decibels are on a logarithmic scale (COGCC Rules 802.b and 604.c(2)(A)).


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.\textsuperscript{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

\textsuperscript{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.), comparisons of MOU BMPs among the MOUs of various jurisdictions/operators and to COGCC rules, 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.

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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_Pdz1GlJdJ2kKYKu478HLsT2g/edit#gid=1559826536