



**WESTERN RESOURCE**  
ADVOCATES

**SAN JUAN CITIZENS ALLIANCE**  
**WESTERN COLORADO CONGRESS**

July 25, 2012

Thom Kerr  
Acting Director  
Colorado Oil & Gas Conservation Commission  
1120 Lincoln Street  
Suite 801  
Denver, CO 80203

Re: **Request to proceed with rulemaking to increase setbacks from residences, schools and health facilities under COGCC Rule 603**

Dear Director Kerr:

The residential setbacks issue is ripe for collaborative stakeholder efforts to craft win-win solutions that protect residents and the public, while also addressing the concerns presented during the meetings hosted by the Colorado Oil and Gas Conservation Commission (COGCC). After the stakeholder meetings are completed, the State needs to proceed with a rulemaking that: 1) gives voice to citizens living in proximity to current or future development; 2) implements the legislative mandate that COGCC rules “protect the health, safety and welfare of the general public in the conduct of oil and gas operations,” C.R.S. 34-6-106(11)(a)(II); and 3) addresses legitimate concerns of other stakeholders.

This letter offers five key points to inform this process, followed by four specific recommendations regarding future steps.

## **I. Introduction**

According to a Colorado Department of Health and Environment analysis, oil and gas production facilities can emit more than fifty types of toxic air pollutants from a variety of sources. Of these pollutants, volatile organic compounds comprise the largest component, and can include benzene, toluene, formaldehyde and others. These volatile organic compounds pose health risks ranging from asthma to neurological conditions to cancer. To cite one emerging issue, researchers at the National Institute for Occupational Safety and Health are warning that the particles in sand dust created during fracking

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operations can lodge in the lungs and cause potentially fatal silicosis (a lung or respiratory disease).<sup>1</sup> In light of these risks and concerns, a recently published Special Report on Unconventional Gas warned that “[o]perators have to perform to the highest standards in order to win and retain the ‘social license to operate’.”<sup>2</sup>

In Adams, Boulder, Broomfield and Weld counties, 87 existing, active or proposed drilling sites appear to be within 1,000 feet of public schools. Current COGCC Rule 603 only requires a 350-foot setback from schools and residences, a much shorter distance than required for liquor stores and similar businesses. Experience shows that distances significantly greater than current state standards can be successfully implemented. For example, La Plata County maintains setbacks of 450 feet.

## II. Key Points to Inform Meetings and Future Steps

We offer five key points for COGCC meetings and future steps:

First, residential setbacks are a top concern for the hundreds of thousands of Colorado families worried that they might wake up to find a well being drilled near their home, their children’s school, or a medical facility that cares for their loved ones. For many of these families, the proximity of drilling operations and other infrastructure is the most immediate concern when faced with the prospect of drilling in the neighborhood.

Residential setbacks are perhaps the most urgent piece of unfinished business from the 2007 rulemaking.<sup>3</sup> The past Commission recognized the vital importance of the issue, but ran out of time to update the residential setback rule due to the priority accorded to other proposed rules, including the 1200 series promulgated under the Colorado Wildlife Stewardship Act. Five years later, drilling activity increasingly targets populated areas on both the Front Range and Western Slope. It is past time to update the rules to address today’s available technologies. This update is more urgent than ever, given the newfound need to protect citizens in neighborhoods that may overlay producing formations like the Niobrara.

Affected Colorado citizens forcefully support increasing residential setbacks from current levels. Those residents see increased setbacks as one of the most readily available regulatory responses to the conflicts that accompany drilling in residential neighborhoods. The concerns identified by the stakeholder group are especially important for facilities such as schools or hospitals.

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<sup>1</sup> <http://www.bloomberg.com/news/2012-04-30/fracking-sand-threatens-gas-well-workers-researcher-says.html>

<sup>2</sup> “Golden Rules for a Golden Age of Gas: World Energy Outlook Special Session on Unconventional Gas,” *International Energy Agency*, May 2012 at 2, available at [http://www.worldenergyoutlook.org/media/weowebbsite/2012/goldenrules/WEO2012\\_GoldenRulesReport.pdf](http://www.worldenergyoutlook.org/media/weowebbsite/2012/goldenrules/WEO2012_GoldenRulesReport.pdf).

<sup>3</sup> Current Rule 603 generally does not distinguish between “building units,” so the same setbacks can apply to sheds or barns as residences. A revised rule should focus on residences, educational and health facilities, and other buildings used by people.

Intelligent modifications to Rule 603 should benefit all stakeholders. For instance, industry and government can save time and money by reducing the resources currently consumed by responding to the local concerns driving educational or issue forums across the Front Range. These processes stem from uncertainty and deep-rooted sentiment that some state rules should be updated to address current conditions. Leadership and direction from the COGCC and the Colorado Department of Public Health and Environment (CDPHE) will help all stakeholders move forward in the right direction.

Second, while updating Rule 603 is key, solutions to the setbacks issue must be broader than that important step, in order to meet the legislative mandate that Colorado protect public health in the conduct of oil and gas operations. Examples of rule changes or Best Management Practices (BMPs) to address concerns of residents in the gas patch include:

- Mandatory air and water baseline testing and monitoring, including tracers (if technology is viable) to ensure that water quality is protected – subject to rigorous protocols designed to ensure program integrity.
- Green completions should be universally required for drilling projects where public health benefits will accrue; many of these technologies are already available and widely deployed.
- Pitless drilling: as adoption of pitless methods surpasses 90% in Colorado’s major producing basins, the goal should be a complete phase-out of pits, for which public health concerns are magnified near residential areas.
- Comprehensive Drilling Plans (COGCC Rule 216), negotiated among affected interests, will balance interests and achieve stakeholder buy-in. As the collaborative new approach is implemented, the advantages (compared with the currently broken process, often resulting in vast time commitments and high rates of dissatisfaction by many stakeholders) should include cost savings, and potentially quicker overall review and approval processes. More certainty and broader participation should benefit all stakeholders.
- A Geographic Area Plan (COGCC Rule 503)(GAP) for the Niobrara formation on the Front Range. The Niobrara formation is ripe for the first GAP in Colorado. A rulemaking specific to Niobrara issues can resolve many of the issues currently being addressed on an ad-hoc basis by individual operators, local governments, residents and other stakeholders. All interested parties, including home builders, will be entitled to a seat at the table in crafting a GAP.
- The accommodation doctrine adopted by state law is instructive regarding the role of setbacks and related measures to address surface concerns: “An operator shall conduct oil and gas operations in a manner that accommodates the surface owner by minimizing intrusion upon and damage to the surface of the land.” C.R.S. 127(b).
- The recommendations from the Local Government Task Force are also instructive regarding the ability of local government to protect constituents from industrial development and address conflicts between surface and mineral estate interests.

Third, informed and innovative solutions have the potential to achieve win-wins. For instance, changes to the residential setback rule can acknowledge that advanced

technologies and planning tools offer the ability to significantly limit and focus the footprint of development. Properly planned development integrating cutting-edge directional drilling technologies can go a long way to avoid, minimize or mitigate the impacts of drilling to local residents.

Multi-well pads consolidate drilling and infrastructure into fewer and more suitable locations – further from residences and high-use buildings. These consolidated pads offer much greater potential for avoiding inappropriate locations than older vertical drilling technologies, which limit drilling to one well per pad, and can result in twenty or more wellpads being proposed for a single square mile. A 1,000 foot setback applied to a pad designed to drill out an entire section of land can achieve a smaller total drilling footprint than four pads with 350 foot setbacks; and the footprint decreases exponentially as the number of pads decreases.

Consolidated pads, used in conjunction with rapidly evolving directional drilling technologies, can reduce surface impacts and conflicts. One leading operator has already committed to a multi-year drilling program utilizing technologies that allow horizontal reaches of up to 9,000 feet.<sup>4</sup> This technology offers great promise for both 1) planning the drilling footprint in undeveloped areas that might be considered for future subdivisions; and 2) planning to safeguard the livability of existing communities. Under a properly tailored setback rule, industry can thrive employing these technologies, while residents enjoy increased safety and peace of mind.

The potential for a win-win solution using improved directional drilling technologies illustrates the advantages of approaching these challenges with a fresh perspective.

Fourth, the rulemaking can explore “off-ramps”, intended to balance competing interests. Subject to the paramount need to protect public health, these off-ramps can offer flexible regulatory approaches. For instance, structures that receive intensive public use could be appropriate for maximum “gold standard” setbacks. As currently defined by Rule 603(c), these facilities include “an educational facility, assembly building, hospital, nursing home, board and care facility, or jail[.]” The health, safety and nuisance issues already identified by the stakeholder group are especially important for facilities such as schools or hospitals – which are unusually sensitive to both nuisance concerns and potential health threats.

In short, when the operator negotiates a plan that addresses local concerns, some flexibility on setbacks may be appropriate – subject to the willing and informed consent of affected homeowners.

Fifth, some issues may be more appropriate for legislative action than executive agencies such as COGCC and CDPHE. For instance:

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<sup>4</sup> Mark Jaffe, “Noble Energy Spending \$8 Billion to Drill Colorado’s Shale Oil Fields,” *The Denver Post*, May 23, 2012, available at [http://www.denverpost.com/breakingnews/ci\\_20685593/noble-energy-spending-8-billion-drill-colorados-shale](http://www.denverpost.com/breakingnews/ci_20685593/noble-energy-spending-8-billion-drill-colorados-shale).

- Historically, Colorado planned its communities to be nearby, but not in the midst, of mining and other industrial activities. When state laws allowing drilling in communities were passed, no one could have predicted the recent surge of interest in drilling the Niobrara – a development which could impact hundreds of thousands of Colorado families. That raises questions of state law regarding how much drilling is appropriate, in what proximity to our communities, and whether drilling is an acceptable land-use within residential neighborhoods or city limits.
- We are listening closely to the perspective of the homebuilders and other stakeholders. Perhaps the surface owner compensation issue should be revisited by the legislature.
- Unitization and pooling have played important roles in the development of law and policy governing development and management of the mineral estate. Perhaps unique legal or policy solutions can be tailored to issues specific to the surface estate when mineral development affects landowners and their investment-backed expectations. Legislative proposals might explore mechanisms to provide that the surface owner best situated to host mineral development infrastructure receives a proportional share of the revenue from housing development in adjacent lands. A working group could explore options to fairly apportion the costs and benefits of surface and subsurface development.

### **III. Specific Recommendations**

In light of the key points above, we offer four specific recommendations on the residential setbacks issue, to be immediately pursued at the close of this working group:

1. COGCC should develop a draft rule amending existing Rule 603 and commence a formal rulemaking. We propose a rule requiring new setbacks of 1,000 feet for residences, and 1,500 feet for schools, hospitals, nursing homes and other facilities.
2. In drafting the proposed rule, COGCC should integrate innovative approaches such as requiring Comprehensive Drilling Plans for future development in high-density residential neighborhoods and urban areas. Once the first few plans have been finalized and implemented, this new requirement will become accepted as a part of doing business in such areas. The end result will be a regulatory framework that treats oil and gas operations like other regulated activities – such as residential development, which requires subdivision approval and other regulatory oversight by governmental planning entities. Plans can incorporate BMPs as mandatory standards for operations close to residences, and consider potential off-ramps from the new setbacks under appropriate circumstances.
3. In the first half of 2013, COGCC should notice a rulemaking for preparing a Geographic Area Plan for the Niobrara formation on the Front Range.

4. COGCC should cooperate with CDPHE and the legislature to ensure that CDPHE has funding to design and implement urgently needed public health studies. CDPHE's presentation established the professionalism and dedication of the department's staff, and highlighted the need to focus additional resources and personnel on the health impacts of drilling near communities and residential neighborhoods. Scientific studies will help fill information gaps and improve understanding of risks. Steps to accomplish this goal include: funding the studies, assuring their scientific integrity, obtaining useful information, and providing for peer review.

#### IV. Conclusion

Ample science and experience establishes that the statutory mandate of protecting human health and the environment in the conduct of oil and gas operations will be furthered by 1) minimizing the quantities of emissions and other toxics, and 2) maximizing the distance between these industrial sites and both residences and public places. These two principles should guide state policy on oil and gas activities in populated areas.

Thank you for your leadership in addressing the setbacks issue. By providing a forum for discussion and sharing the perspectives of key stakeholder groups, you have moved the conversation forward. We look forward to continued participation and to engaging in efforts to update COGCC Rule 603 to ensure that public health concerns are adequately addressed in light of today's challenges and opportunities.

After listening to the perspective of other stakeholders, we are optimistic about our collective ability to meet these challenges when the State addresses the crucially important public health issue of drilling in the midst of our communities.

Very sincerely yours,



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