



# Land Use

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856  
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • [www.bouldercounty.org](http://www.bouldercounty.org)

## BOULDER COUNTY PLANNING COMMISSION

September 24, 2012, 4:00 P.M.

Commissioners' Hearing Room, Third Floor  
Boulder County Courthouse  
Boulder, Colorado

### **Docket DC-12-0003: Amendments to Oil and Gas Development Regulations**

**Public Hearing for the Planning Commission to consider proposed Land Use Code amendments addressing oil and gas development within the Boulder County Land Use Code**

*Coordinating Staff:* Kimberly Sanchez, Planning Division Manager (Land Use Department)  
Jeff Robbins, Outside Counsel on Oil and Gas Issues

### **AGENDA:**

1. COUNTY STAFF PRESENTATION
  - a. Land Use Department
  - b. Comments from outside technical consultant - Mike Matheson
2. PLANNING COMMISSION Q & A (Technical consultants will be available, along with staff, to answer the Planning Commission's questions)
3. PUBLIC COMMENT (3-min. allowance per individual speaker\*\*)
4. PLANNING COMMISSION DISCUSSION/ACTION/DIRECTION TO STAFF

\*\* Time may be pooled (up to 12 minutes maximum) provided all individuals who are donating time are present. Anyone wishing to exceed 12 minutes must contact the Land Use Department with a request for consideration prior to the hearing.

### **PACKET CONTENTS:**

Item	Pages
o Land Use Department Memo	2 - 11
o Draft Regulations (Attachment A)	A2 - A39
o Resolutions 2012-16 and 2012-46 (Attachments B and C) related to moratorium	B1 - B5 / C1 - C4
o Boulder County Comprehensive Plan Amendments – adopted August 15, 2012 (Attachment D)	D1 - D6

**ACTION REQUESTED FROM PLANNING COMMISSION:**

Following the staff presentation and public testimony, the Planning Commission could (1) take final action (approve and recommend approval to the Board of County Commissioners), (2) table the subject docket to October 1, 2012 at 4:00 p.m. to further discuss the proposed text amendments and provide direction to staff, or (3) table the subject docket to October 17, 2012 to further discuss the proposed amendments and provide direction to staff.

While staff has put a tremendous amount of effort into drafting these regulations and believe they go a long way toward meeting the identified goals, we recognize it is only a first draft and look forward to receiving input from the public, Industry, State, and Planning Commission before bringing the Draft Regulations to the Board of County Commissioners for final adoption. We do not anticipate that Planning Commission will be able to take their final action on the Draft Regulations at this initial hearing.

**SUMMARY**

Today's public hearing is the initial introduction of the proposed revisions to the Boulder County Land Use Code Article 4-900, Development Plan Review for Oil and Gas Operations (Draft Regulations) and related provisions of the Land Use Code to the Planning Commission. They include the proposed creation of a new Article 20 for placement of the proposed Draft Regulations (see Attachment A). Staff's drafting these proposed regulations had several goals in mind. The regulations are intended to address issues raised by Planning Commission in its recent update of the Comprehensive Plan policies applicable to oil and gas development; to reflect today's industry, its practices, and impacts on land use, transportation, public health, parks and open space, and other environmental and natural resources across the County; and to provide the maximum protection possible for local public health, safety, and welfare under current state and federal law. Lastly, an overarching goal is to require that impacts be mitigated to the greatest extent possible, where they cannot be entirely avoided.

**Anticipated Schedule for Planning Commission's Review of the Draft Regulations:**

- ***Monday September 24, 2012 at 4:00 P.M.*** - Staff will present the Draft Regulations. The Planning Commission will take public comment and provide either their recommendation to Board of County Commissioners or direction to staff concerning the Draft Regulations.
- ***Monday October 1, 2012 at 4:00 P.M. (TBD)*** - Follow-up meeting if additional Planning Commission discussion and direction to staff is necessary after the September 24<sup>th</sup> public hearing.
- ***October 17, 2012*** - Planning Commission's regular monthly meeting. (The draft oil and gas regulations may or may not be on the agenda, depending on the outcome at previous sessions.)
- ***Tuesday October 30, 2012 at 4:00 P.M. (if needed)*** – The Planning Commission's final meeting on the Draft Regulations if they have not provided a recommendation to the Board of County Commissioners prior to this date.

**BACKGROUND**

On February 2, 2012, the Board of County Commissioners enacted a temporary moratorium on the intake and processing for oil and gas development plan review applications through adoption of Resolution 2012-16 (see Attachment B). This six-month moratorium was then extended until February 4, 2013 by adoption of Resolution 2012-46 (Attachment C). The purpose of these

moratoria were to allow County staff a reasonable amount of time to explore the adequacy of the County's Comprehensive Plan policies and Development Plan Review (DPR) regulations, based upon a more informed assessment of industry activities and trends, anticipated associated land use impacts, and an appropriate regulatory response at the County level. The resolutions directed County staff to study the current regulations and to prepare necessary amendments to the current DPR process to ensure that the development of new oil and gas operations within Boulder County is regulated in a manner to ensure protection of the environment, and the health, safety and welfare of the county.

The predominant reasons behind the moratorium included the recently rapid pace of development of the oil and gas industry in the Denver Basin generally and Wattenberg Field in particular; potentially major changes in drilling and resource recovery methods and technology; growing public concern, County-wide, statewide and nationwide, over hydraulic fracturing operations including possible adverse water quality impacts and ineffective waste disposal methods; the impacts associated with evolving industry technologies in such areas as truck traffic and road usage, land surface disturbance and reclamation, location and extent of structures (well pads, tank batteries, fencing, and the like), noise and odor, and wildlife, soil, air and water resources; major amendments over the past five or so years to the Colorado Oil and Gas Conservation Commission's (and related state agencies') regulations, as well as the growing involvement of federal agencies such as the U.S. Environmental Protection Agency; the outdated nature of the County's oil and gas DPR regulations which were enacted in 1993 and never substantively amended thereafter; and the outpouring of letters, e-mails, and other expressions of concern by residents of Boulder County over the past several months, worried about existing and future oil and gas development plans and questioning the ability of state and local regulation to deal with associated impacts.

With the renewed interest and activity surrounding oil and gas development and considering the ever-changing oil and gas regulatory environment, staff determined that the existing oil and gas policies of the Boulder County Comprehensive Plan (BCCP) required revision in order to better capture these movements as well as to respond to public concerns about the impacts to health, safety and welfare that may accompany accelerated exploration and development in the Niobrara Formation within Boulder County, known as the Wattenberg Field, which has the potential for substantially increased oil and gas exploration and development into the future. Consequently, since the moratorium became effective, the Planning Commission (PC) held four hearings to review oil and gas policy amendments for inclusion into the BCCP: one to authorize staff to proceed with drafting oil and gas policy amendments (May 16<sup>th</sup>) and three more on June 20<sup>th</sup>, July 18<sup>th</sup> and August 15<sup>th</sup> to review, critique and revise the draft proposals. This step was taken at the direction of the County Commissioners and is consistent with one of the principle functions of the BCCP, that being to provide policy guidance for the development of land use regulations. At the August 15<sup>th</sup> hearing the Planning Commission adopted new text which consisted of the basis for the amendments, the definition of two terms used throughout the amendments, an Objectives statement, 12 new policies, and two policy revisions for inclusion into the Geology and Agricultural Elements of the BCCP (see Attachment D). Extensive written and verbal public commentary was gathered and considered over the course of the process. The policies cover a range of subjects including the County's chosen roles and types of participation at various jurisdictional, stakeholder and policy levels; the identification of issues of concern and effective performance technologies and practices to be considered when reviewing oil and gas development proposals; information sharing and emergency response planning; cooperative use of infrastructure among operators to reduce the proliferation of duplicative facilities; public outreach and engagement; and the complete restoration and reclamation of impacted agricultural lands. In combination the oil and gas BCCP amendments

establish a platform for a multi-pronged and comprehensive approach to working with oil and gas development issues across the County and among affected parties.

#### **HISTORY OF OIL AND GAS REGULATIONS IN BOULDER COUNTY**

The BOCC first enacted a Development Plan Review (“DPR”) process for oil and gas operations at the height of a prior oil and gas development spurt, in Resolution 93-184 effective October 1, 1993.

Prior to that time, the County required Special Use review for oil and gas operations on subdivided land in Rural Residential, Estate Residential and Nonurban Estate Residential zoning districts. Oil and gas operations elsewhere in unincorporated Boulder County were allowed as a use by right but were required to confine offensive odors, noise, fluid, gas, and dust to the leasehold premises, as well as be set back at least 600 feet from the lease lines and from schools, churches, and dwellings on other lots and at least 100 feet from all County and state roads.

The County’s current DPR Regulations (codified mainly in Article 4-900 of the Land Use Code) are substantively unchanged nearly two decades after they were adopted. In 2005-2006 Land Use Department staff, with the assistance of the County Attorney’s Office, discussed and prepared amendments to the County’s oil and gas DPR Regulations; however, these draft amendments were put on hold and never publicly released, as it appeared that the courts might significantly clarify the extent of county authority in this area.

The current DPR Regulations are akin to a Site Plan Review (SPR) type of administrative process (see Article 4-800 of the Land Use Code), requiring a Land Use Department staff-level review and approval prior to commencement of oil and gas operations. The Land Use Director’s decision can be called up before, or appealed to, the Board of County Commissioners (BOCC) in disputed situations, though BOCC review has hardly, if ever, occurred for DPR applications. Appeals include the applicant’s ability to challenge a condition of approval before the BOCC if alleged to be an operational conflict with the COGCC’s rules. Significantly, under the DPR Regulations the Director’s decision is limited to approving or conditionally approving a proposed development plan; unlike SPR, administrative denial of a Development Plan Review application is not an option. Also unlike SPR approvals, which expire within three years if not acted upon, DPR approvals do not expire. Finally, current DPR regulations have an automatic approval provision if the DPR is completely reviewed within 28 days.

The current DPR Regulations’ criteria address the following areas: (1) setbacks from buildings (350 feet) and public rights-of-way (150 feet), to “be complied with to the maximum extent possible”; (2) compliance with specified noise requirements; (3) location of operations to minimize visual impact and surface land disturbance (including siting away from hills/ridges and significant environmental features; painting with colors that blend with the natural environment; location of facilities in existing disturbed areas, with specified exceptions; the requirement for buried pipelines/electrical lines; and landscaping/screening requirements); (4) construction of access roads per County Transportation Department requirements, preference for use of existing roads, and the requirements to obtain oversize/overweight vehicle permits and utilize transportation routes to minimize traffic hazards and public roadway impacts; (5) signs consistent with COGCC requirements; (6) consultation with state and County wildlife authorities where significant wildlife habitat is affected, including a prohibition against threatening an endangered species; (7) air emissions compliant with state and County public health requirements; (8) operations compliant with state water quality control and drinking water standards; (9) waste disposal/treatment consistent with COGCC requirements and any applicable County Public Health and emergency response authorities; (10) location of production tanks within containment berms; (11) land reclamation plan approval;

(12) compliance with all COGCC requirements (including the ability to appeal permit conditions to BOCC which the operator asserts conflict with COGCC rules); and (13) consistency with the BCCP, applicable intergovernmental land use agreements, and the Land Use Code.

Staff believes that amendments to the current regulations are necessary in order to address points of administrative uncertainty under the DPR Regulations and to add areas currently not regulated which staff believes the County has the authority and should regulate.

**COUNTY AUTHORITY TO REGULATE OIL AND GAS OPERATIONS AND THE OPERATIONAL CONFLICT DOCTRINE**

A County's powers to enact traditional land use regulations governing land uses in its unincorporated areas is under most circumstances not constrained by the potential of conflicting regulations at the state level. A County's ability to regulate oil and gas operations is one of the circumstances where this is exceedingly more complicated. This regulatory dynamic is important for the Planning Commission to understand as it undertakes a review of the Draft Regulations over oil and gas operations and providing a recommendation to the Board of County Commissioners.

The Colorado Oil and Gas Conservation Commission (COGCC) is the state agency empowered to oversee the orderly and efficient development of oil and gas in a manner consistent with the protection of the environment and public health, safety and welfare. The Colorado legislature has delegated authority to the COGCC to regulate the technical or downhole aspects of oil and gas development. The delegation of this technical authority solely to this state agency was done in order to ensure the orderly development of the state's natural resources by centralizing standards and criteria while preventing the proliferation of multiple local ordinances and regulations. Examples of these areas of regulatory authority are topics such as drilling and spacing units, "downhole" drilling regulations, exploration and production waste management, and hydraulic fracturing. In recent years, the COGCC was delegated additional authority with regard to the regulation of the environment as it relates to oil and gas operations and with regard to the impacts to wildlife from oil and gas operations. Boulder County has statutory express authority and jurisdiction to regulate the land use aspects of oil and gas operations with the caveat that local land use regulation cannot "operationally conflict" with regulations of state agencies with authority to regulate oil and gas operations.

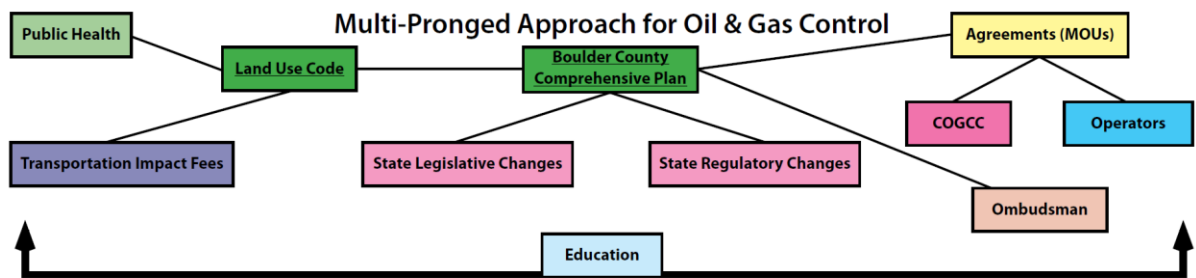
Importantly, the authority delegated to the COGCC did not originally, nor through the recent additional legislative grants of authority, negate the traditional land use authority delegated by the legislature to local governments over oil and gas operations. The Colorado Supreme Court has specifically held that the original enactment of the Oil and Gas Conservation Act, the act establishing the COGCC, did not preempt county land use regulatory authority. In other words, when the Colorado legislature created the COGCC as the agency with the primary responsibility of regulating and overseeing oil and gas development, the legislature did not mean to remove the existing authority of local governments to regulate oil and gas operations. Moreover, all the recent additional delegations of authority to the COGCC contain provisions ensuring the continued existence and non-diminution of the County's land use authority.

Despite the foregoing, there is not a bright line identifying on the one hand the extent of local authority to regulate land use aspects of oil and gas operations and the corresponding authority of the COGCC to regulate technical or environmental aspects of oil and gas operations. There is in essence an area of overlapping jurisdictional capacity where both the state and the local governments have regulatory authority. This intersecting or parallel relationship exists because it is

difficult to distinguish between an environmental or safety regulation (non-technical areas of authority delegated to the state) on the one hand and a land use or surface-oriented regulation on the other hand. In these areas, the Courts have stated local government regulations are valid so long as the operational effect of the application of the local regulations does not conflict with the application of the state statute. With respect to operational conflict, the Colorado Supreme Court has declared that state preemption by reason of operational conflict can arise “where the effectuation of a local interest would materially impede or destroy the state interests.”

**AREAS OF CONCERN TO BOULDER COUNTY RELATED TO POTENTIAL NEW OIL AND GAS OPERATIONS AND THE “MULTI-PRONGED APPROACH”**

The revised Boulder County Comprehensive Plan identifies a number of goals to be addressed through the County’s update to its oil and gas regulations or through the other avenues (see Attachment D for Boulder County Comprehensive Plan Amendments adopted August 15, 2012). Following adoption of the Comprehensive Plan amendments, the Board of Commissioners and the Planning Commission met for a joint study session on August 22, 2012. At that session, staff and the Board/Planning Commission discussed that addressing the foregoing concerns successfully would require a variety of measures, including both regulatory and non-regulatory measures. Accordingly, the BOCC and PC identified how implementation of the Boulder County Comprehensive Plan (BCCP) policies would occur under a “Multi-pronged approach” for oil & gas control:



Recognizing that all policies may not be addressed by regulation but may be dealt with in other manners, the BOCC and PC jointly identified the methods in which each BCCP policy should be tackled. With regard to potential land use regulations, the Board and PC provided direction to staff to evaluate utilizing local land use regulations in the following areas:

- Agricultural land preservation and conservation
- Baseline data
- Emergency Response
- Greenhouse gas emissions (in particular, methane)
- Impacts on Agricultural lands, including restoration and reclamation
- Impacts on environmental resources
- Operator engagement with local residents and stakeholders
- Monitoring
- Noise
- Setbacks from residences and schools
- Setbacks from water
- Surface agreements potentially enforceable through the Land Use Code
- Shared Infrastructure
- Transportation Standards

Working under the time constraint of the moratorium, it was purposeful to first create a set of regulations that allow for review of oil and gas operations after the moratorium is lifted in a way that avoids or mitigates the identified impacts of concern. As far as other non-regulatory measures are concerned (i.e., the areas that will not be addressed explicitly in the Land Use Code), the County staff's next step is to develop programs and strategies to pursue the other areas identified in the multi-pronged approach.

Areas in which the County foresees activity include:

- negotiating a memorandum of understanding with COGCC on delegation of inspection authority to the County level, among other matters
- negotiating one or more memoranda of understanding with operators that would apply to all oil & gas development in Boulder County by the operator
- advocating for changes to CDPHE regulations, such as the current rulemaking by the Air Pollution Control Division on possible revisions to Regulation Number 6 to partially adopt at the state level recent changes to federal (EPA) regulations
- advocating for changes to COGCC regulations, such as a possible setbacks rulemaking anticipated to begin later this fall
- negotiating surface use agreements with operators on county parks and open space land, which would apply only to the affected parcel(s)
- reviewing the results of the third-party study currently underway of the potential impacts of oil & gas development on the county transportation system, and considering adopting transportation fees to offset impacts
- formulating county legislative positions for the 2012 (and future) state legislative session on bills affecting oil & gas development and local authority to regulate same
- exploring acquisition of expertise in oil and gas development to assist staff and the public
- monitoring and staying current of future educational developments in the field

#### **THE "DRAFT REGULATIONS" AND OTHER PROPOSED AMENDMENTS TO THE LAND USE CODE**

Staff has drafted a set of regulations that are protective of public health and environment while not overstepping the authority we have as a county government. The Draft Regulations are intended to be consistent with the extent of land use authority over oil and gas operations that the Colorado legislature has provided the County and as has been defined and clarified by Colorado courts.

Key substantive elements to the regulations include the following:

- Continued use of the Development Plan Review process - the Draft Regulations will continue to use a slightly modified Development Plan Review process to review proposed oil and gas operations. The Draft Regulations are re-formatted to a stand-alone new Article 20; however, the basic structure of the current regulations remains in place.
- New or expanded regulatory areas include:
  - Well siting provisions;
  - Air quality provisions\*\*;
  - Water quality provisions\*\*;
  - An expansive emergency response and emergency preparedness plan;
  - Refined transportation standards requiring operations to mitigate any adverse impacts to public and private roads as well as creation of a placeholder for the potential imposition of transportation impact fees to offset impacts to public roads;
  - More expansive plans involving the siting of wells to address compatibility and visual concerns.

- Newly identified areas for additional purview of cultural and historic resources, recreational activities, scenic and rural character impacts, wetland protection, and well abandonment.

(\*\*Note: The proposed set of regulations will address air and water quality issues for the first time. Previous standards in the current DPR regulations only required compliance with state requirements. The Draft Regulations include much more specific local regulation with regard to air and water issues.)

- Refined modification language to require compliance of existing operations with the current regulations when a new well is proposed on an existing pad.
- Creation of general operation standards applicable to all proposed new wells designed to ensure oil and gas operations are conducted in the least impactful manner. Such standards include measures to electrify all permanent equipment, to disclose the chemicals contained onsite, to suppress dust during operations, to implement lighting standards, traffic control measures and weed control.
- Certification, monitoring, and inspection throughout the oil and gas exploration and development process.

The Draft Regulations are intended to be consistent and harmonized with the authority delegated to the COGCC. The overall procedural goal contained within the Draft Regulations is to work within the land use authority provided to counties by enacting the most protective land use regulations governing new oil and gas operations while at the same time recognizing the existence and extent of state authority over oil and gas operations by creating processes that harmonize actual application of the local regulations with the state regulations and state goals. For instance, the following provisions allow for better coordination and harmonization with the State:

- Mandatory early on pre-application process - the Draft Regulations require operators to conduct a mandatory pre-application conference before completing well siting determinations. To be eligible for the Expedited DPR process, the pre-application conference is to be conducted at least thirty (30) days prior to the applicant applying for a COGCC Application for Permit to Drill (APD). This timing provision and the pre-application process of the Draft Regulations are intended to allow the County to harmonize application of its regulatory procedures with those of the COGCC. The pre-application conference allows the operator to be informed as to the County's requirements in a manner so that new proposed operations can be planned in a manner to ensure compliance with the development plan regulations and applicable state and federal regulations.
- Refined operational conflict waiver - this provision allows an operator to early on and up front identify areas of the Draft Regulations that if applied could create an operational conflict concern as against an allegedly conflicting state requirement. A hearing process allows the concern to be raised before the County Commissioners who will determine whether an operational conflict exists and, if so, how to alter strict application of the regulation in a manner to address the operational conflict. The hearing process also invites the COGCC to bring its perspective on the alleged operational conflict so that the County can be informed as to the COGCC requirements alleged to be in operational conflict with application of the County regulation. Finally, the hearing process allows the applicant to develop a full evidentiary record which is a necessary pre-requisite to seeking a review in district court as to the potential for the operational conflict.



The Draft Regulations contain two primary processes for the permitting of a new oil and gas operation: the Standard Development Plan Review (Standard DPR) process and the Expedited Development Plan Review (Expedited DPR) process. While the components listed in the key elements section above are themes common to both processes, the Standard DPR process and Expedited DPR process can be distinguished as follows:

Standard DPR

The Standard DPR process is a goal-based based criteria land use permitting process. In the Standard DPR process, subjective land use criteria are used to review the impacts to resources on a unique site. The operator is required to create mitigation plans to protect land uses and the environment and to address surface impacts for each, identifying the techniques it will use to mitigate any potential impacts. For instance, rather than locating a proposed new well pursuant to specific objective criteria (500 feet from a residence, 500 feet from a water well, etc.), the Standard DPR process requires the operator to locate a well in a manner that minimizes impacts to adjacent land uses, water quality, air quality, visual and scenic resources, etc.

Elements specific to the Standard Review process include:

- Mandatory Applicant Neighborhood Meeting – the applicant will be required to conduct a neighborhood meeting 30 days before it files an application with the County. The purpose of the meeting is for the applicant to provide an overview of its proposed oil and gas operation and allow those in attendance to provide input on the proposed operation including but not limited to well siting and well locations and suggested mitigation measures.
- A number of mitigation plans addressing impacts to: agricultural land, cultural and historic resources, geologic hazards, land disturbance, natural resources, recreational activities, scenic attributes and rural character, surrounding land uses, transportation system, water quality, and wetlands.
- Board of County Commissioners Public Hearing – the Board of County Commissioners will conduct a public hearing to review Standard DPR applications. (The current DPR process does not require a public hearing, but is an administrative review only.)

Expedited DPR

The Expedited DPR process is for operators who voluntarily choose to meet this objective criteria based on permitting process and who engage in most effective performance technologies and practices in the planning, development and operation of new or significantly modified oil and gas operations. This process is available for operations that meet certain well siting criteria, meet water well testing provisions, and meet air quality criteria beyond the county's granted authority in a local permitting process. This process provided operators the opportunity to plan for and operate an objectively sited well and to institute

measures that objectively protect the health, safety, welfare and the environment and, in exchange, the permitting process is expedited.

Elements specific to the Expedited DPR process include:

- 45-day administrative review - an application processed through the Expedited DPR process is to be acted upon within 45 days of the filing of the complete application.
- Specific objective criteria for the operation of an oil and gas operation - the process establishes certain well siting criteria that if complied with will qualify the new operation for Expedited DPR. The process identifies certain techniques and practices in the areas of air quality and water quality that ensure the best level of protection to the environment, health, safety and welfare. In order to encourage its use, the process contains far fewer subjective based criteria and does not require for the most part the development of impact mitigation plans.

The goal is for the outcomes of both the Standard and Expedited review processes to be the same, in that both provide the same level of protection to public health and the environment but are achieved in different ways – either objectively or on an individual site basis. Having two processes in the Code provides operators a choice if they can qualify for Expedited DPR.

***Other Proposed Amendments to the Land Use Code***

Other proposed amendments to the Code include new definitions and review for Major Oil and Gas Facilities and Pipelines. These pertain to other operations that are not associated with extraction of the resource but are related to the processing or transmission of it:

- Major Oil and Gas Facilities (Art. 4-506.D) - the amendments to the Land Use Code include the creation of a new use definition for Major oil and gas operations. This use would be allowed in the General Industrial Zoning District and require Special Review. Major oil and gas operations would be defined as: water injection wells and facilities, centralized water transfer stations, centralized water pump stations, storage yards and construction staging yards in place for longer than six months, and any other oil and gas operation the location of which is not dependent upon development of the mineral resource or subject to Article 20. As noted, these uses are not dependent on being located in a certain area relative to the mineral resource. As a result, major oil and gas operations are to be permitted under the normal special review process for industrial activities.
- Pipelines (Art. 4-514.E and P) - the amendments to the Land Use Code expand upon and create specific standards addressing the permitting of flow lines and gathering lines associated with proposed new oil and gas wells. Flow lines are defined as pipelines which connect individual well sites to gathering lines and gathering lines are defined as pipelines transporting produced gas, oil, or water from multiple well sites to centralized facilities. Both flow lines and gathering lines are associated with movement of the mineral resource from its original location to other areas. As a result, on-site flow lines and gathering lines are reviewed and permitted in association with the development plan review

for the proposed well necessitating the new pipeline. Any new constructed or substantially modified pipelines may need to comply with the new provisions in Art. 4-514.E for Gas and/or hazardous liquid pipelines. The Draft Regulations contain new criteria concerning siting, alignment and minimizing of disturbance to the surface associated with new flow lines and gathering lines.

- Other Code-conforming amendments to Article 4 and as needed throughout the Code, such as changing the definition of "Oil and Gas Development" in the Art. 4 uses to "operations" to conform with the proposed terminology; deletion of Article 18 definitions that are now solely in (necessary for) Article 20; and cross-reference changes/other clerical changes as needed.

#### **TEXT AMENDMENT CRITERIA REVIEW**

Pursuant to Article 16-100 of the Land Use Code, no text amendment shall be adopted by the Board of County Commissioners unless the Board has determined that:

1. the existing text is in need of the amendment;
2. the amendment is not contrary to the intent and purpose of this Code; and
3. the amendment is in accordance with the *Boulder County Comprehensive Plan*

The Planning Commission provides a recommendation to the Board of County Commissioners. The moratorium adopted by the Board of County Commissioners demonstrated the need for the amendments; the amendments are not contrary to the intent and purpose of the Code but update and revise the outdated DPR regulations that are currently in place; and the amendments do not conflict with the Boulder County Comprehensive Plan but they implement many of the policies that were adopted by the Planning Commission on August 15, 2012. Consequently, staff finds the criteria for text amendments in Article 16-100.B. of the Land Use Code are met.

#### **SUMMARY AND RECOMMENDATION**

The overall goal contained within the Draft Regulations is to work within the land use authority provided to counties by enacting the most protective regulations governing new oil and gas operations while at the same time recognizing the extent of state authority over oil and gas operations. Staff has attempted to create processes that address areas of great local importance but harmonize application of the local regulations with the state.

**STAFF RECOMMENDS THAT THE PLANNING COMMISSION APPROVE AND RECOMMEND TO THE BOARD OF COUNTY COMMISSIONERS APPROVAL of Docket DC-12-0003: Amendments to Oil and Gas Development Regulations and the official record of the Docket before the Commission with its staff comments, public testimony, and Commission discussion/action.**

# DC-12-0003

## ATTACHMENT A Table of Contents

	<i>Page Number</i>
A.1 – Proposed New Article 20 (DPR for Oil and Gas Operations)	A-2
A.2 – Proposed Amendments to Article 4-500 (use definitions)	A-35
A.3 – Proposed Amendment to Section 4-1205 (Board of Adjustment provisions)	A-37
A.4 – Proposed Amendments to Article 18 (Land Use Code Definitions)	A-38
A.5 – All clerical changes necessary to conform the Code to primary text amendments in DC-12-0003	A-39

# ATTACHMENT A.1

## Proposed New Article 20

### Development Plan Review for Oil & Gas Operations

#### 20-100 Purpose

- A. Boulder County recognizes the existence of oil and gas mineral property rights within its unincorporated areas. It is the County's objective to exercise its fundamental duty to protect public health, safety, welfare, and the environment from potential adverse impacts of oil and gas exploration and development, and to minimize potential land use conflicts between those activities and current or planned land uses.
- B. Development plan review is the permitting procedure for oil and gas operations. This process is in place to recognize these operations involve industrial type activities which by their nature may occur in or near residential and rural areas. Traditional zoning would generally separate these types of uses to mitigate impacts but since this use must occur near the resource separation of uses is not possible and, thus, this Article has been promulgated to address this incompatibility. The purpose is to provide a framework for the responsible exploration and production of oil and gas resources in a manner that is sensitive to surrounding current, planned or future land uses and that mitigates adverse impacts to and protects the public health, safety, welfare, and the environment of the County.
- C. This Article is intended to be consistent with the extent of land use authority over oil and gas operations that the Colorado legislature has provided the County and as has been defined and clarified by Colorado courts. Boulder County recognizes that certain Colorado state agencies and the federal government also have authority to regulate certain aspects of oil and gas operations. The regulations of this Article over the land use aspects of oil and gas operations are intended to be consistent and harmonized with said authority. In particular, this Article is not intended to create and is not be applied so as to cause an operational conflict with the state's exercise of its authority over oil and gas operations, which arises when the effectuation of a local interest materially impedes or destroys the state interest in its regulation of oil and gas operations.

#### 20-200 Authority of Article

This article is authorized by C.R.S. §§ 29-20-101 et seq., 30-28-101 et seq., 34-60-101 et seq., 25-7-101 et seq., and other authority as applicable.

#### 20-300 Effective Date; Pre-Existing Uses

- A. This Article shall become effective on the date specified in the adopting resolution of the Board of County Commissioners. The provisions of this Article shall apply to all oil and gas operations for which a complete application for development plan review has not been accepted by the County as of the effective date.
- B. Boulder County recognizes that there are oil and gas operations that were legally established prior to the effective date of this Article that do not conform to this Article. These non-conforming operations shall be allowed to continue provided the operation remains consistent with its use prior to the effective date of this Article. A nonconforming operation shall not be

1 extended, expanded, or altered in a manner that would otherwise be categorized a substantial  
2 modification under Section 20-1200(E) of this Article. Any substantial modification to a non-  
3 conforming use shall require a new approval under this Article.  
4

- 5 C. Section 20-400(D)(1) of this Article provides that the expedited development plan review for new  
6 oil and gas operations is not available for applications where the applicant fails to conduct the  
7 pre-application conference with the County at least thirty (30) days prior to filing for an  
8 Application for Permit to Drill (APD) from the Colorado Oil and Gas Conservation Commission  
9 (COGCC). The County recognizes, however, that proposed new oil and gas operations have  
10 received APD approval from the COGCC during the development of and prior to the effective  
11 date of this Article. The County encourages the use of the expedited development plan review  
12 process. Accordingly, oil and gas operations with APD approval prior to the effective date of this  
13 Article that otherwise qualify for expedited development plan review may be processed as  
14 expedited development plan review applications.  
15

## 16 **20-400 General Application Procedure**

- 17  
18 A. **Development Plan Review Required.** All oil and gas operations on public and private land within  
19 the unincorporated areas of Boulder County shall comply with this Article. Prior to the  
20 commencement of any oil and gas operations in the unincorporated County, a development plan  
21 review application must be submitted and approved in accordance with this Article. No other  
22 form of discretionary land use review under this Code is required for oil and gas operations  
23 covered by this Article 20. Development plan review approval is also required prior to the  
24 issuance of any County building permits, or associated grading, access, floodplain, or other  
25 County permits necessary for the oil and gas operation. Oil and gas operations which may not  
26 require a building or other associated County permit must still obtain development plan review  
27 approval under this Article.  
28  
29 B. **Expedited Development Plan Review Process.** The expedited development plan review process  
30 is the County's process for applicants who voluntarily choose to meet its objective criteria and to  
31 engage in most effective performance technologies and practices in the planning, development  
32 and operation of new or substantially modified oil and gas operations. The process identifies  
33 specific objective criteria for oil and gas operations. The expedited development plan review  
34 process is optional and, while applicants are encouraged to use it, this Article contains a standard  
35 development plan review process for proposed operations that cannot meet the expedited  
36 development plan review criteria or for applicants who choose the standard development plan  
37 review process. The expedited development plan review process is an administrative process  
38 requiring review and approval by the Director.  
39  
40 C. **Standard Development Plan Review Process.** The standard development plan review process is  
41 a regulatory process based on more subjective criteria for new or substantially modified oil and  
42 gas operations. The standard development plan review process is available for applicants who  
43 choose it and for applications that do not qualify for or which are reclassified from expedited  
44 development plan review to standard development plan review. Such applications shall be  
45 classified as standard development plan review applications and shall be reviewed by the County  
46 and shall require review, public hearing, and decision by the Board of County Commissioners.  
47  
48

- 1 **D. Pre-Application Conference.** Boulder County requires applicants to engage with local  
2 communities, residents and other stakeholders at each phase of an oil and gas operation,  
3 starting prior to exploration or development activity, in order to provide sufficient opportunity  
4 for comment on plans, operations and performance, and to listen to concerns of the community,  
5 and to address all reasonable concerns as a result of its proposed operation. The pre-application  
6 conference will be used to meet this requirement.  
7
- 8     **1. Timing.** A pre-application conference as defined in Article 3-201 of this Code shall be held at  
9 least thirty (30) days prior to the applicant applying for a COGCC APD and prior to the  
10 submission of an application for development plan review. The timing provision for the pre-  
11 application conference is intended to allow the County to harmonize its regulatory  
12 procedures with those of the COGCC. Except for Applications under Section 20-300(c), if the  
13 pre-application conference is not conducted at least thirty (30) days prior to the applicant  
14 applying for the APD, the application cannot qualify for expedited development plan review.  
15
- 16     **2. Conference.** At the pre-application conference, the Director and the applicant will discuss  
17 the points contained in Article 3-201 of this Code and review the County's development plan  
18 review process so that the applicant can plan its proposed oil and gas operation in a manner  
19 that ensures compliance with the development plan regulations and applicable state and  
20 federal regulations. The pre-application conference will also inform the applicant about the  
21 benefits of the expedited development plan review process. The pre-application conference  
22 also allows the applicant and Director to explore site-specific concerns and issues that relate  
23 to the development plan review process, to discuss project impacts and potential mitigation  
24 methods, to discuss coordination of the County process with the state permitting process,  
25 and to allow the applicant to preliminarily raise any potential operational conflict concerns.  
26 Based upon the foregoing, applicants are encouraged to conduct the pre-application  
27 conference with the County prior to completing well siting decisions. Completion of the pre-  
28 application conference qualifies the applicant to submit an application for a development  
29 plan review provided the application is filed within six (6) months of the pre-application  
30 conference.  
31
- 32     **3. Site Visit.** At the discretion of the Director after consultation with the surface owner, the  
33 County may require a site visit as part of the pre-application conference with the applicant to  
34 evaluate well locations, compliance with this Article, or mitigation measures that may be  
35 required to adequately ensure compliance with this Article.  
36
- 37 **E. Classification of Oil and Gas Operation Application.** As part of the completeness determination,  
38 the Director shall also determine whether the application initially qualifies for the expedited  
39 development plan review process or whether the application is a standard development plan  
40 review application. Boulder County encourages applicants to make use of the expedited  
41 development plan review process.  
42
- 43 **F. Application Submission.** The application shall include documentation establishing that the  
44 proposed operation is in compliance with all applicable requirements of this Article. Boulder  
45 County encourages the submission of the application and supporting documentation in an  
46 electronic format. If not electronically submitted, then the applicant shall submit three (3) copies  
47 of the proposed development plan with the completed application form to the Land Use  
48 Department. The application shall contain a certification from the applicant that the proposed  
49 facility complies with all applicable provisions of this Article, and that the information in the  
50 application, as well as in any accompanying documentation, is true and accurate. The application  
51 shall be signed by the same person or entity who will sign the corresponding application to be  
52 submitted to the COGCC. The Director shall determine whether an expedited development  
53 plan review application is complete within ten (10) days after receipt of the application or

1 twenty (20) days if outside consultants or staff other than the Land Use Department assist the  
2 Director with the completeness determination. The Director shall determine whether a  
3 standard development plan review application is complete within twenty (20) days after receipt  
4 of the application or forty (40) days if outside consultants or staff other than the Land Use  
5 Department assist the Director with the completeness determination.  
6

7 **1. Application Deemed Incomplete.** If the application is found to be incomplete, the Director  
8 shall inform the applicant in writing of the deficiencies. No further action shall be taken on  
9 an application determined to be incomplete until the specified deficiencies have been  
10 addressed to the satisfaction of the Director. If the applicant fails to address the deficiencies  
11 within thirty (30) days after the notice of incompleteness, the application shall be deemed  
12 withdrawn, unless the applicant notifies the Department in writing of the need for additional  
13 time. Notwithstanding the foregoing, upon the request of the applicant, the County will  
14 process an application that has been deemed incomplete, however, the expedited  
15 development plan review application will be denied by the director and the standard  
16 development plan review application will receive a recommendation of denial at any hearing  
17 before the Board of County Commissioners.  
18

19 **2. Application Deemed Complete.** If the application is found to be complete, containing all  
20 documentation required by this Article, the Director shall date the application, inform the  
21 applicant of the finding of completeness, classify the application, and then review the  
22 application for compliance with the applicable standards and requirements of this Article.  
23

24 **G. Re-Classification.** At any time prior to administrative action on the expedited development plan  
25 review application, the Director may adjust the review process classification for an application. If  
26 an application is classified standard development plan review, at any point prior to the time the  
27 Department calendars the public hearing before the Board of County Commissioners for the  
28 standard development plan review application, the applicant may tender supplemental  
29 information and documentation and request the Director reconsider the classification decision  
30 for the application.  
31

32 **H. Pre-Application Notice to Surface Owners and Surrounding Landowners.**  
33

34 **1.** Notice shall be mailed no less than ten (10) days prior to the application being submitted to  
35 the Department. Notice of the application shall be made as follows:  
36

- 37 a. To the surface owners of the parcels of land on which the oil and gas operation is  
38 proposed to be located;  
39  
40 b. To the surface owners of the parcels of land within five hundred (500) feet of a  
41 proposed gathering line; and  
42  
43 c. To the surface owners of the parcels of land within fifteen hundred (1,500 feet) of  
44 the parcel on which the oil and gas operation is proposed to be located.  
45

46 The County Land Use Department shall provide the list of surface owners to be notified to  
47 the applicant at the pre-application conference.  
48

49 **2.** The notice shall contain the following:  
50

- 51 a. A description of the proposed operation site location, including a legal description,  
52 as well as a street address for the site, if available from the County's rural  
53 addressing system; the identification of the applicant for the application; the



1 current business address, telephone number, and email address for the applicant; a  
2 vicinity map; and a brief description of the facilities and equipment proposed to be  
3 located at the site when operational.

- 4
- 5 b. The anticipated submittal date of the application to the Department.
- 6
- 7 c. A statement that public comments on the application may be submitted to the
- 8 County Land Use Department after the application submittal date.
- 9
- 10 d. A statement concerning the County's right to enter property that is the subject of
- 11 the application as follows: "For the purpose of implementing and enforcing the
- 12 County's development plan review for oil and gas operation regulations, County
- 13 staff may from time to time need to enter onto the property that is the subject of a
- 14 development plan review application."
- 15
- 16 e. A statement that any entity maintaining any road used for access to the proposed
- 17 operation should contact the applicant to discuss the applicant's transportation
- 18 needs and to discuss the applicant sharing in road improvement and maintenance
- 19 through an agreement between the entity and the applicant.
- 20
- 21 f. A statement informing the recipients of the notice that they may request written
- 22 notification by the operator of the commencement of construction and
- 23 commencement of drilling operations (provided the application is approved).
- 24
- 25 g. The current mailing address, website address, and telephone number for the
- 26 County Land Use Department and the COGCC, as well as a statement that additional
- 27 information on the application is available from the County Land Use Department.
- 28

- 29 **I. Posting Site.** The Applicant shall post a sign on the site in a location visible to the public (i.e.,
- 30 visible from a public road) stating that a development plan review application has been applied
- 31 for and providing the phone number of the County Land Use Department where information
- 32 regarding the application may be obtained. The sign shall be provided to the applicant by the
- 33 County and shall be posted within five (5) days after the application has been deemed complete.
- 34
- 35
- 36

## 20-500 General Application Submittal Requirements

The following information must be submitted with an expedited development review plan application or a standard development review plan application:

- A. County Application Form.**
- B. Mineral Owner.** Certification by the applicant that it is either the owner of the mineral estate or that it has all necessary lease interests in the mineral estate.
- C. Date of APD Filing.** The applicant shall provide the anticipated or actual date of its APD filing with the COGCC.
- D. Pre-application Conference Checklist.**
- E. Proof of Notice.** The applicant shall present proof of notice as required by Section 20-400(H) by submitting a copy of the notice letter, a list of the land owners notified, and certified mail receipts.
- F. Verification of Legal Access and Use of Private Roads.** Information demonstrating that the applicant has the right to use private access roads which are necessary for the operation and that the applicant has entered into an agreement with the private road owner regarding maintenance and reimbursement for damages. Recorded or historically used easements providing access to or across the parcel(s) shall be provided.
- G. Proximity of Other Wells and Other Oil and Gas Operations.** A map showing the location of other wells and other oil and gas operations within one (1) mile of the site.
- H. Site Plan.** A map with north arrow and appropriate scale for the parcel on which the operation is proposed, indicating the following:
  - 1. Well Siting.** The location of wellhead, pumping units, tanks, and treaters. Expedited development plan review applications shall also include information establishing compliance with the well siting criteria of Section 20-601(B).
  - 2. Dimensions of the Site.** Dimensions of the site, indicating area in square feet and acres, and the area of the site to be disturbed for permanent operations and temporary operations.
  - 3. Easements and Rights-of-Way.** Utility line easements and rights-of-way within 150 feet of the proposed site and access road.
  - 4. Improvements.** Existing improvements within 1,500 feet of the location on which the operation is proposed.
  - 5. Existing and Proposed Facilities.** Existing and proposed facilities such as structures, pipelines, tanks, wells, gathering lines, flow lines, staging and storage areas, equipment, temporary use area and permanent well pads.
  - 6. Existing and Proposed Roads.** Existing and proposed roads within the site as well as ingress and egress from public and private roads.

- 1           **7. Site Features.** Site features such as floodplains, water bodies, drainage patterns, ditches,  
2 wetlands or aquatic habitat, vegetative cover, wildlife habitat and wildlife migration  
3 routes, and geologic features within 1,500 feet of the location on which the operation is  
4 proposed.  
5
- 6           **8. Topography.** Existing and proposed topography at five-foot intervals to portray the  
7 direction and slope of the area affected by operation within 1,500 feet.  
8
- 9           **I. Air Quality Plan.** A plan establishing compliance with the air quality provisions of either  
10 Section 20-602(A) (for expedited development plan review applications) or Section 20-703(B)  
11 (for standard development plan review applications).  
12
- 13           **J. Emergency Response Standard and Emergency Preparedness Plan.** A plan establishing  
14 compliance with the Emergency Response provisions of either Section 20-602(B) (for expedited  
15 development plan review applications) or Section 20-703(D) (for standard development plan  
16 review applications).  
17
- 18           **K. Operation Plan.** A plan including the method and schedule for drilling, completion, transporting,  
19 production and post-operation.  
20
- 21           **L. Transportation, Roads, Access Standards, and Fees.** A plan establishing compliance with the  
22 transportation provisions of either Section 20-602(D) (for expedited development plan review  
23 applications) or Section 20-703(K) (for standard development plan review applications).  
24
- 25           **M. Water Quality Plan.** A plan establishing compliance with the water quality provisions of either  
26 Section 20-602(C) (for expedited development plan review applications) or Section 20-703(L)  
27 (for standard development plan review applications).  
28  
29  
30

## 20-600 Expedited Development Plan Review

### 20-601 Process Specific to Expedited DPR

**A. Administrative Action.** An application that qualifies for the expedited development plan review process shall be reviewed and acted upon by the Director.

**B. Eligibility for Expedited Development Plan Review.** A proposed operation will qualify for the administrative expedited development plan review process based upon a determination by the Director that it is located in a manner that meets the following siting criteria:

1. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any occupied structure.
2. The wellhead, pumping units, tanks, and treaters are at least 150 feet from any property line, unless verified written consent is obtained from affected property owners.
3. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any surface water body including, but not limited to, ditches and reservoirs as identified and mapped on the County's Ditch and Reservoir Directory.
4. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any domestic or commercial water wells.
5. The wellhead, pumping units, tanks, and treaters are not located within a platted subdivision or mapped townships.
6. The wellhead, pumping units, tanks, and treaters are not located within a high hazard geologic area as defined in the Comprehensive Plan.
7. The wellhead, pumping units, tanks, and treaters are not located within a floodway.
8. The wellhead, pumping units, tanks, and treaters are not located within wetlands areas.
9. The wellhead, pumping units, tanks, and treaters are not located within mapped significant natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat as defined in the Comprehensive Plan.

**C. Referral by Director.**

1. Following determination that an application for expedited development plan review is complete, the Director shall promptly forward one copy to: the County Transportation, and Parks and Open Space Departments; Boulder County Public Health; the appropriate fire district or County Sheriff; and any appropriate municipality for comment. The Director may also refer the application to other government agencies or entities for review and comment. Referral comments on the proposed development plan shall be returned to the Director within fifteen (15) days from the date of transmittal of the referral. In addition, the Director shall notify the adjacent property owners within 1,500 feet of the proposed oil and gas operation of the receipt of the complete application. The notice shall also identify the classification of the application. The notice shall indicate that a complete development plan

review application has been made and include the phone number of the Land Use Department where information regarding the application may be obtained.

**D. Review by Director.**

1. The Director shall administratively review and make a determination on an application that qualifies for the expedited development plan review process within forty-five (45) days after it is deemed complete. The applicant shall have the ability to extend the foregoing time period. Failure to make a determination on the application within this time period shall result in the application being approved subject to the general oil and gas facility operation requirements and standard conditions of approval contained within this Article at Section 20-800.
2. As part of the review, the Director may conduct a site visit. Following review of the completed application within the time period in Section 20-601(D)(1), the Director may approve, approve with conditions necessary to ensure compliance with this Article, or deny the application based upon noncompliance with the expedited development plan review standards at Section 20-602. The Director shall provide its determination to the applicant in writing. The Land Use Department shall also provide public notice of the Director's decision by posting the Director's determination on the Boulder County website.
3. After approval of a development plan review application, the applicant shall comply with the provisions of Section 20-1200(C), Effect of the Approved Development Plan Review.

## **20-602 Review Standards Specific to Expedited DPR**

All applications for oil and gas facilities that demonstrate compliance with the following standards shall be approved under the expedited development plan review process.

- A. Air Quality.** Air emissions from wells shall be in compliance with the permit and control provisions of the Colorado Air Quality Control Program, Title 25, Section 7, C.R.S., and the fugitive dust regulations administered by Boulder County Public Health. In addition, proposed oil and gas operations shall implement an air quality mitigation plan which establishes compliance with the following mitigation measures of this Section.
1. **General Duty to Minimize Emissions.** All continuously operated equipment, including but not limited to, storage vessels, tanks, separators, pneumatic pumps, dehydrators, and compressors, shall route all natural gas and VOC vapors to a capture or control device with at least a 98% VOC destruction efficiency. The Applicant shall submit to the County manufacture test or other data demonstrating a 98% VOC destruction or control efficiency. Any flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet the 98% VOC destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
  2. **Flares and Combustion Devices.** All flares shall be designed and operated as follows:
    - a. The flare shall be fired with natural gas and shall be operated with a 98% VOC destruction efficiency.

- b. The flare shall be designed and operated in a manner that will ensure no visible emissions, pursuant to the provisions of 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
  - c. The flare shall be operated with a flame present at all times when emissions may be vented to it, pursuant to the methods specified in 40 CFR 60.18(f).
  - d. The flare shall comply with the specifications detailed in 40 CFR 60.18(c)(3)-(6).
  - e. An automatic flame ignition system shall be installed.
  - f. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. If the pilot flame goes out and does not relight, then a visible alarm shall be activated.
  - g. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.
  - h. Any flare, auto ignition system, and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
3. **Fugitive Emissions.** The operator will develop and maintain a leak detection and component repair program, such as a Leak Detection and Repair program or a Directed Inspection and Maintenance program, using most effective performance technologies and practices for equipment used on the well site for permanent operations.
4. **Use of Closed Loop Pitless Systems for the Containment and/or Recycling of Drilling and Completion Fluids.** Wells will be drilled, completed and operated using closed loop pitless systems for containment and/or recycling of all drilling, completion, flowback and produced fluids.
5. **Green Completions.** For each well completion operation with hydraulic fracturing, the operator must control emissions by the operational procedures set forth below.
  - a. For the duration of flowback, route the recovered liquids into one or more storage vessels or re-inject the recovered liquids into the well or another well, and route the recovered gas into a gas flow line or collection system, re-inject the recovered gas into the well or another well, use the recovered gas as an on-site fuel source, or use the recovered gas for another useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.
  - b. If compliance with the prior paragraph is infeasible the operator must capture and direct flowback emissions to a completion combustion device equipped with a reliable continuous ignition source over the duration of flowback, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways or nearby structures. Non-flammable gas may be vented temporarily until flammable gas is encountered where capture or combustion is not feasible.

Completion combustion devices must be equipped with a reliable continuous ignition source over the duration of flowback.

- c. Operators have a general duty to safely maximize resource recovery and minimize releases to the atmosphere during flowback and subsequent recovery / operation.
- d. For wildcat or delineation wells in a location without a pipeline, each well completion operation with hydraulic fracturing at a gas wellhead affected facility must reduce emissions by using a completion combustion device equipped with a reliable continuous ignition source over the duration of flowback.
- e. The operator must maintain a log for each well completion operation at each gas wellhead affected facility. The log must be completed on a daily basis and must contain the records specified in 40 C.F.R. § 60.5420(c)(1)(iii).
- f. The operator of a well must notify the County at least 2 days prior to the commencement of well drilling and completion. The notification shall include contact information for the operator; the API well number, the latitude and longitude coordinates for each well in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983; and the planned date of the beginning of drilling and completion / flowback. The notice may be submitted in writing or in electronic format.

**6. Capture of Produced Gas from Wells.** Gas produced during production shall be captured and not flared or vented.

**7. Pneumatic controllers.** The operator shall use only no bleed pneumatic controllers.

**8. Maintenance During Well Blowdowns.** The operational plan shall require technologies or practices which minimize or eliminate natural gas emissions during well maintenance or blowdowns.

**9. Maintenance of Gathering Lines and Pipelines.** The operational plan shall require technologies or practices which minimize or eliminate emissions or spills during maintenance of pipelines.

**10. Rod-Packing Replacement.** Operators shall replace rod-packing from reciprocating compressors every 26,000 hours or 36 months.

**11. Certification.** An authorized representative for the operator must submit annual reports to the Director certifying compliance with these air quality requirements and documenting any periods of non-compliance, including the date and duration of each deviation and a compliance plan and schedule to achieve compliance. The reports must contain a certification as to the truth, accuracy and completeness of the reports.

**B. Emergency Response.** Oil and gas operations shall not cause unreasonable risks of emergency situations such as explosions, fires, gas, oil or water pipeline leaks, ruptures, hydrogen sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or spills. Each operator with an operation in the County is required to implement an emergency preparedness plan as described in Section 20-703(D).

1 **C. Water Quality Monitoring and Well Testing.** Proposed oil and gas operations shall implement a  
2 water quality monitoring and well testing plan which establishes compliance with the criteria of  
3 this Section.  
4

5 **1. Abandoned Well Assessment.** Assessment and monitoring of plugged and abandoned and  
6 dry and abandoned wells (abandoned wells) within one-quarter (1/4) mile of the projected  
7 track of the borehole of a proposed well.  
8

9 a. Based upon examination of COGCC and other publicly available records, operators  
10 shall identify all abandoned wells located within one-quarter (1/4) mile of the  
11 projected track of the borehole of a proposed well. The operator shall assess the  
12 risk of leaking gas or water to the ground surface or into subsurface water  
13 resources, taking into account plugging and cementing procedures described in any  
14 recompletion or P&A report filed with the COGCC. The operator shall notify the  
15 Director and COGCC of the results of the assessment of the plugging and cementing  
16 procedures.  
17

18 b. Operators shall use reasonable good faith efforts to obtain access to all abandoned  
19 wells identified under Section 20-602(C)(1)(a) above to conduct a soil gas survey at  
20 all abandoned wells located within one-quarter (1/4) mile of the projected track of  
21 the borehole of a proposed well prior to production from the proposed well and  
22 again one (1) year and thereafter every three (3) years after production has  
23 commenced. Operators shall submit the results of the soil gas survey to the  
24 Director and the COGCC within three (3) months of conducting the survey or advise  
25 the Director that access to the abandoned wells could not be obtained from the  
26 surface owner.  
27

28 **2. Water Well Sampling.** Based upon records from the Colorado Division of Water Resources,  
29 the operator will identify and offer to sample all water wells located within one quarter mile  
30 (¼) mile of the projected track of the borehole of a proposed well. If a well owner desires  
31 the well be tested, the operator shall test the well prior to the start of heavy equipment  
32 operations at the site. The water well testing described in this Section shall include testing  
33 for the analytes listed in Table 1.  
34

35 Field observations such as damaged or unsanitary well conditions, adjacent potential  
36 pollution sources, odor, water color, sediment, bubbles, and effervescence shall also be  
37 included. The location of the water well shall be surveyed using a sub meter GPS.  
38

39 a. If free gas or a dissolved methane concentration level greater than two (2)  
40 milligrams per liter (mg/l) is detected in a water well, gas compositional analysis  
41 and stable isotope analysis of the methane (carbon and deuterium) shall be  
42 performed to determine gas type. If the test results indicate biogenic gas, no  
43 further isotopic testing shall be done. If the test results indicate thermogenic or a  
44 mixture of thermogenic and biogenic gas, then the operator shall submit to the  
45 Director and COGCC an action plan to determine the source of the gas. If the  
46 methane concentration increases by more than five (5) mg/l between sampling  
47 periods, or increases to more than ten (10) mg/l, the operator shall notify the  
48 Director, the COGCC and the owner of the water well immediately.  
49

50 b. If BTEX and/or TPH are detected as a result of testing the operator will notify the  
51 Director, the COGCC and the owner of the water well immediately.  
52



- 1 c. Operators shall make a good faith effort to conduct initial baseline testing of the  
2 identified water wells prior to the start of heavy equipment operations at the site;  
3 however, not conducting baseline testing because access to water wells cannot be  
4 obtained shall not be grounds for denial of an Application. Within one (1) year after  
5 completion of the proposed well, a “post-completion” test shall be performed for  
6 the same analytical parameters listed above and repeated three (3) and six (6) years  
7 after the completion of the well. If no significant changes from the baseline have  
8 been identified after the third test (i.e. the six-year test), no further testing shall be  
9 required. Additional “post-completion” test(s) may be required if changes in water  
10 quality are identified during follow-up testing. The Director may require further  
11 water well sampling at any time in response to complaints from water well owners.  
12  
13 d. Copies of all test results described above shall be provided to the Director, the  
14 COGCC and the water well owner within three (3) months of collecting the samples.  
15 The analytical data and surveyed well locations shall also be submitted to the  
16 Director and COGCC in an electronic data deliverable format.  
17

18 **D. Transportation, Roads, Access Standards, and Fees.** Access roads on the site and access points  
19 to public roads as identified in the application materials shall be reviewed by the County  
20 Transportation Department and shall be built and maintained in accordance with the  
21 Transportation Standards. All proposed transportation routes to the site shall also be reviewed  
22 and approved by the County Transportation Department to minimize traffic hazards and adverse  
23 impacts on public roadways. Existing roads shall be used to minimize land disturbance unless  
24 traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise.  
25 All applicable transportation fees shall be paid prior to issuance of a development plan permit  
26 which fee shall be in lieu of the applicant having to create a public road transportation impact  
27 study and mitigation plan.  
28

29 **E. General Oil and Gas Facility Operational Requirements.** The general oil and gas facility  
30 operational requirements set forth at Section 20-800 shall apply to each approved development  
31 plan in the form of conditions of approval.  
32

33 **F. Pipelines.** Any newly constructed or substantially modified pipelines on site must meet the  
34 Additional Provisions listed at Article 4-514(E)(5)(a) – (f). Note: Any newly constructed or  
35 substantially modified pipelines off site may need to comply with all of Article 4-514(E).  
36

## 37 **20-603 Reclassification of Expedited DPR Application to Standard** 38 **DPR Application Following Administrative Denial or Conditional** 39 **Approval** 40

41 Should the Director deny administrative approval or conditionally approve the application in a manner  
42 unacceptable to the applicant, upon written request of the applicant the Director shall reclassify the  
43 application as a standard development plan. The applicant must pay the additional fees associated with  
44 a standard application and file the additional application submittal requirements necessary for standard  
45 development plan review with the County. If the applicant fails to pay the additional fees and file the  
46 additional application submittal requirements with the County within ninety (90) days of the Director’s  
47 determination, the application will be deemed withdrawn. The applicant has no right of judicial review of  
48 a denied or conditionally approved expedited development plan review and must exhaust the  
49 administrative remedy of processing the proposed operation through the standard development plan  
50 review process as a condition precedent to judicial review pursuant to Section 20-1100.

1

<b>Table 1. Water Quality Analytes</b>	
<b>GENERAL WATER QUALITY</b>	Alkalinity Conductivity & TDS pH Dissolved Organic Carbon (or Total Organic Carbon)
	Bacteria
	Hydrogen Sulphide
<b>MAJOR IONS</b>	Calcium Chloride Fluoride Magnesium Potassium Sodium Sulfate Nitrate + Nitrite (total)
<b>METALS</b>	Arsenic Barium Boron Chromium Copper Iron Lead Manganese Selenium Strontium
<b>VOLATILE ORGANIC COMPOUNDS</b>	Methane BTEX compounds (Benzene, Toluene, Ethylbenzene, Xylene)
	Total Petroleum Hydrocarbons (TPH)
<b>OTHER</b>	Water Level Stable isotopes of water (Oxygen-18 and Deuterium)

2

3

## 20-700 Standard Development Plan Review

### 20-701 Application Requirements Specific to Standard DPR

A standard development plan review application shall contain all the general application requirements for the development plan review application at Section 20-500 plus the following assessment and mitigation plans. The assessment and mitigation plans shall be developed based upon the standards in Section 20-703 below and by reference to the Boulder County Comprehensive Plan.

- A. Agricultural Land Mitigation Plan.** An assessment of any agricultural lands potentially impacted by the proposed oil and gas operation and a plan for mitigating said impacts in compliance with Section 20-703(A) herein.
- B. Cultural and Historic Resources Mitigation Plan.** A cultural, historical and archeological survey of the parcel or parcels to be used for the proposed oil and gas operation which demonstrates compliance with the standards of Section 20-703(C).
- C. Geologic Hazard Area Mitigation Plan.** A geologic area mitigation plan which demonstrates compliance with the standards of Section 20-703(E).
- D. Land Disturbance Mitigation Plan.** A plan showing areas of land disturbance, landscaping and revegetation. The plan shall include an analysis of the existing vegetation on the site to establish a baseline for re-vegetation upon temporary or final reclamation or abandonment of the operation. The analysis shall include a written description of the species, character and density of existing vegetation on the site and a summary of the potential impacts to vegetation as a result of the proposed operation. The plan shall demonstrate compliance with the standards of Section 20-703(F).
- E. Natural Resources Mitigation Plan.** Information demonstrating compliance with Section 20-703(G).
- F. Recreational Activity Mitigation Plan.** Information establishing any potential impacts to recreational activities by the proposed oil and gas operation and a plan which demonstrates compliance with the standards of Section 20-703(H).
- G. Scenic Attributes and Rural Character Mitigation Plan.** An assessment of scenic attributes and rural character potentially impacted by the proposed oil and gas operation and a plan for mitigating said impacts in compliance with Section 20-703(I).
- H. Surrounding Land Uses Mitigation Plan** Information establishing surrounding land uses to the proposed oil and gas operation, an assessment of any potential impacts to the adjacent and near land uses, and a plan mitigating said impacts in compliance with Section 20-703(J) herein.
- I. Transportation Plan.** Information establishing compliance with the transportation standards of Section 20-703(K).
- J. Water Quality Plan.** A plan establishing compliance with the water quality provisions of Section 20-703(L). The plan may include details such as the applicant's plans for water quality testing, prevention of stormwater discharge, containment of pollutants, and spill notification as required by federal and state agencies. The provisions of Article 20-602(C) may also be considered and used in the implementation of the plan.

- 1  
2 **K. Wetlands Protection Plan.** Information demonstrating compliance with the standards of Section  
3 20-703(M).  
4

## 5 **20-702 Process Specific to Standard DPR**

6

7 Upon determination that an application is a standard permit review process and that the application is  
8 complete, the Director shall begin review of the application for compliance with this Article.  
9

- 10 **A. Applicant Neighborhood Meeting.** The applicant will be required to conduct a neighborhood  
11 meeting at a convenient public location with adjacent and surrounding land owners and other  
12 interested parties. The meeting must occur no earlier than 30 days in advance of an application  
13 being filed and must be held prior to the scheduling of the Board of County Commissioners' public  
14 hearing. The neighborhood meeting shall be noticed to the County and to all property owners  
15 within 1,500 feet of the parcel(s) on which the operation will occur at least ten days prior to the  
16 meeting. At the neighborhood meeting, the applicant shall provide an overview of its proposed oil  
17 and gas operation and allow those in attendance to provide input as to the proposed operation,  
18 including, but not limited to, well siting and well locations, issues that arise from application of this  
19 Article to the proposed operation, and suggested mitigation to adequately ensure compliance  
20 with this Article.  
21
- 22 **B. Referral Agency Comments.** Following determination that an application is complete, the  
23 Director shall promptly forward one copy to the County Transportation and Parks and Open  
24 Space Departments; Boulder County Public Health; the appropriate fire district or County Sheriff;  
25 and any appropriate municipality for comment. The Director may also refer the application to  
26 other government agencies or entities for review and comment. Referral comments on the  
27 proposed development shall be returned to the Director no later than thirty-five (35) days from  
28 the date of application.  
29
- 30 **C. Consultant Review.** The Director may submit the application for review and recommendation by  
31 consultants retained by the County with the necessary expertise to review technical or other  
32 aspects of the application which are outside the expertise of the Land Use Department. The  
33 applicant shall reimburse the County any costs associated with this consultant review.  
34
- 35 **D. Site Visit.** The Department will conduct a site visit for standard development plan applications to  
36 allow the Director to determine compliance with these standards. When possible this site visit  
37 will be coordinated with site visits required by other governmental agencies.  
38
- 39 **E. Notice of Board of County Commissioner's Hearing.** Not less than fourteen (14) days prior to  
40 the public hearing on the standard permit review, a legal notice of the public hearing before the  
41 Board shall be published in a newspaper of general circulation within the County, and written  
42 notice to the surface owner and adjacent property owners of the time and place of the Board's  
43 public hearing shall be provided pursuant to Article 3-205(C) herein.  
44
- 45 **F. Decision by Board of Commissioners.** The Board of Commissioners shall conduct a noticed public  
46 hearing(s) for review of a standard development plan review application. Any action taken by  
47 the Board of County Commissioners will be based on the entire record of proceedings on the  
48 matter, as that record is maintained by the Land Use Department Director and/or the Clerk of  
49 the Board of County Commissioners, including but not limited to: tape recordings or true  
50 transcripts of public hearings where the proposal was discussed; all written comments of  
51 referral agencies; the review and recommendations of the Land Use Department; and all  
52 written commitments, statements, or evidence made or submitted by or in behalf of the

1 applicants, landowners or interest holders or their agents, and interested members of the  
2 public. The applicant shall have the burden of proof to show that the applicable criteria for  
3 approval have been met. On the basis of the evidence received at such public hearing(s), the  
4 Board shall make its determination to approve, approve with conditions necessary to ensure  
5 compliance with this Article, or deny the application. The Board's action shall contain  
6 appropriate findings or reasons in support of its decision. The Board shall render its decision  
7 on the proposed development plan in writing as soon as practical following conclusion of the  
8 public hearing.  
9

## 10 **20-703 Review Criteria and Standards Specific to Standard DPR**

11  
12 The Board's decision on a standard development plan review application for an oil and gas operation will  
13 be based upon its compliance with all development plan standards.  
14

### 15 **A. Agricultural Land Standards**

- 16  
17 1. **Loss of Agricultural Land.** Oil and gas operations shall be located and conducted so as to  
18 use only as much of the surface as is reasonably necessary for the operation of the  
19 facility and to avoid the unreasonable loss of agricultural land, including farm or ranch  
20 land, or any other vegetated land.  
21
- 22 2. **Impact on Agricultural Operations.** Oil and gas operations shall be located and  
23 conducted in a manner to minimize the impact to agricultural operations.  
24
- 25 3. **Impact on Grazing.** Oil and gas operations shall be located and conducted in a manner  
26 so as to not cause significant impact to livestock, grazing permits or leases, or grazing  
27 permittees or lessees.  
28

### 29 **B. Air Quality Standards.** Air emissions from the wells shall be in compliance with the permit and 30 control provisions of the Colorado Air Quality Control Program, Title 25, Section 7, C.R.S., and the 31 fugitive dust regulations administered by the Boulder County Public Health Department. 32

- 33 1. **General Duty to Minimize Emissions.** All continuously operated equipment, including but  
34 not limited to, storage vessels and tanks, separators, pneumatic pumps, dehydrators, and  
35 compressors, shall route all natural gas and VOC vapors to a capture or control device with  
36 at least a 98% VOC destruction efficiency. Operators shall submit to the County manufacture  
37 test or other data demonstrating a 98% VOC destruction or control efficiency. Any flare, auto  
38 ignition system, recorder, vapor recovery device or other equipment used to meet the 98%  
39 VOC destruction or control efficiency requirement shall be installed, calibrated, operated,  
40 and maintained in accordance with the manufacturer's recommendations, instructions, and  
41 operating manuals.  
42

#### 43 a. **Flares and Combustion Devices** All flares shall be designed and operated as 44 follows: 45

- 46 i. The flare shall be fired with natural gas and shall be operated with a 98% VOC  
47 destruction efficiency.  
48
- 49 ii. The flare shall be designed and operated in a manner that will ensure no  
50 visible emissions, as determined by 40 CFR 60.18(f), except for periods not to  
51 exceed a total of 5 minutes during any 2 consecutive hours.  
52

- iii. The flare shall be operated with a flame present at all times when emissions may be vented to it, as determined by methods specified in 40 CFR 60.18(f).
- iv. The flare shall comply with the specifications detailed in 40 CFR 60.18(c)(3)-(6).
- v. An automatic flame ignition system shall be installed.
- vi. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. If the pilot flame goes out and does not relight, then a visible alarm shall be activated.
- vii. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.
- viii. Any flare, auto ignition system, and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

**2. Fugitive Emissions.** The operator will develop and maintain a leak detection and component repair program, such as a Leak Detection and Repair program (LDAR) or a Directed Inspection and Maintenance program, using most effective performance technologies and practices for equipment used on the well site for permanent operations.

**3. Certification.** An authorized representative for the operator must submit annual reports to the Director certifying compliance with these air quality requirements and documenting any periods of non-compliance, including the date and duration of each deviation and a compliance plan and schedule to achieve compliance. The reports must contain a certification as to the truth, accuracy and completeness of the reports.

**C. Cultural and Historic Resources Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation of cultural or historic resources, of sites eligible for County landmarking, or the National Historic Register.

**D. Emergency Response Standards.**

**1. In General.** Oil and gas operations shall not cause unreasonable risks of emergency situations such as explosions, fires, gas, oil or water pipeline leaks, ruptures, hydrogen sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or spills.

**2. Emergency Preparedness Plan.** Each operator with an operation in the County is required to implement an emergency preparedness plan for each specific facility site. The plan shall be filed with the County and updated on an annual basis or as conditions change (responsible field personnel change, ownership changes, etc.). The emergency preparedness plan shall consist of at least the following information:

- a. Name, address and phone number, including 24-hour emergency numbers for at least two persons responsible for emergency field operations.

1 b. An as-built facilities map in a format suitable for input into the County's GIS system  
2 depicting the locations and type of above and below ground facilities including sizes,  
3 and depths below grade of all oil and gas gathering and transmission lines and  
4 associated equipment, isolation valves, surface operations and their functions, as well  
5 as transportation routes to and from exploration and development sites, for  
6 emergency response and management purposes. The information concerning  
7 pipelines and isolation valves shall be held confidentially by the County's Office of  
8 Emergency Management, and shall only be disclosed in the event of an emergency.  
9 The County shall deny the right of inspection of the as-built facilities maps to the  
10 public pursuant to C.R.S. § 24-72-204.

11  
12 c. Detailed information addressing each potential emergency that may be associated  
13 with the operation. This may include any or all of the following: explosions, fires, gas,  
14 oil or water pipeline leaks or ruptures, hydrogen sulfide or other toxic gas emissions,  
15 or hazardous material vehicle accidents or spills.

16  
17 d. The plan shall include a provision that any spill outside of the containment area or  
18 which has the potential to leave the facility or to threaten waters of the state shall be  
19 reported to the emergency dispatch and the Director immediately.

20  
21 e. Detailed information identifying access or evacuation routes, and health care facilities  
22 anticipated to be used.

23  
24 f. Project specific emergency preparedness plans are required for any project that  
25 involves drilling or penetrating through known zones of hydrogen sulfide gas.

26  
27 g. The plan shall include a provision that obligates the operator to reimburse the  
28 appropriate emergency response service providers for costs incurred in connection  
29 with any emergency.

30  
31 h. Detailed information that the operator has adequate personnel, supplies, and funding  
32 to implement the emergency response plan immediately at all times during  
33 construction and operations.

34  
35 i. The plan shall include a provision that obligates the operator to keep on each site and  
36 immediately available current Material Safety Data Sheets (MSDS) for all chemicals  
37 used or stored on a site. The MSDS sheets shall be provided immediately upon  
38 request to the Director, a public safety officer, or a health professional.

39  
40 **E. Geologic Hazard Area.** To the maximum extent practicable, the installation and operation of  
41 any oil and gas operation shall not be located in geologic hazard areas as mapped in the  
42 Comprehensive Plan. If an operation is located within a geologic hazard area, the applicant shall  
43 take all reasonable actions to mitigate impacts to the geologic hazard area.

44  
45 **F. Land Disturbance Standards.** The following mitigation measures shall be used to achieve  
46 compatibility and reduce land use impacts:

47  
48 1. Pad dimensions for a well should be the minimum size necessary to accommodate  
49 operational needs while minimizing surface disturbance.

50  
51 2. Oil and gas operations should use structures and surface equipment of the minimal size  
52 necessary to satisfy present and future operational needs.  
53

3. Oil and gas operations shall be located in a manner that minimizes the amount of cut and fill.
4. Oil and gas operations should use and share existing infrastructure, minimize the installation of new facilities, and avoid additional disturbance to lands in a manner that reduces the introduction of significant new land use impacts to the environment, landowners and natural resources.
5. Landscaping plans should include drought tolerant species that are native and less desirable to wildlife and suitable for the climate and soil conditions of the area. Where buffering is accomplished with vegetation, an irrigation plan shall be required for the first two years after establishment of the vegetation and the operator shall agree to provide a financial guarantee compliant with Section 20-1200(A) or otherwise acceptable to the Director.
6. The application shall include an analysis of the existing vegetation on the site to establish a baseline for re-vegetation upon temporary or final reclamation or abandonment of the operation. The analysis shall include a written description of the species, character and density of existing vegetation on the site and a summary of the potential impacts to vegetation as a result of the proposed operation. The application shall include any COGCC required interim and final reclamation procedures and any measures developed from a consultation with the County Land Use Department staff regarding site specific re-vegetation plan recommendations.

**G. Natural Resource Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to mapped significant natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat as defined in the Comprehensive Plan or identified on site. Among other mitigation measures to achieve compliance with this standard, proposed oil and gas operations shall use the compatibility siting criteria of Section 20-703(J)(1) to prevent degradation of these important County attributes.

**H. Recreational Activity Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to the quality and quantity of recreational activities in the County. Methods to achieve compliance with this standard include, but are not limited to, locating operations away from trails and from property used for recreational purposes. .

**I. Scenic and Rural Character Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to the scenic attributes and rural character of Boulder County. The following standards are methods to prevent degradation to the scenic attributes and rural character of Boulder County:

1. **Buffering from Sensitive Visual Areas.** The operation should be buffered from sensitive visual areas (i.e., roads, property lines, or residences) by providing landscaping along the perimeter of the site between the surface equipment and the sensitive visual area.
2. **Existing Vegetation.** The operation should be located in areas that maximize the amount of natural screening available for the facility. Natural screening includes, but is not limited to, the use of existing vegetation as a background, the construction of the operation near screening stands of vegetation, or placement in valleys allowing topographic screening. The operation should be constructed in a manner to minimize the removal of and damage to existing trees and vegetation. If the operation requires clearing trees or vegetation, the edges of the cleared vegetation should be feathered



1 and thinned and the vegetation should be mowed or brush-hogged while leaving root  
2 structure intact, instead of scraping the surface.  
3

4 3. **Compatibility Siting Criteria.** Use of the compatibility siting criteria of Section 20-  
5 703(J)(1) will also prevent degradation to the scenic attributes and rural character of  
6 Boulder County.  
7

8 4. **Low Profile.** To the maximum extent practicable, oil and gas operations should use low  
9 profile tanks or less intrusive equipment.  
10

11 **J. Surrounding Land Uses Standards.** Oil and gas operations shall be sited and operated in a  
12 manner so that the operation is compatible with surrounding land uses to the maximum extent  
13 practicable. The following techniques or actions shall be used in order to achieve compatibility  
14 between the proposed oil and gas operation and surrounding land uses.  
15

16 1. **Compatibility Siting Criteria.** Distance from surrounding land uses shall most effectively  
17 ensure compatibility between proposed oil and gas operations and existing land uses. In  
18 addition, locating the operation based upon the following site-specific characteristics  
19 will assist in creating a compatible operation:  
20

21 i. Oil and gas operations shall be located as far as possible from surrounding land  
22 uses.  
23

24 ii. Oil and gas operations shall be sited away from prominent natural features  
25 such as distinctive rock and land forms, vegetative patterns, river and streams  
26 and other landmarks or other identified visual or scenic resources, designated  
27 environmental resources, trails, or distinctive vegetative patterns as identified  
28 in the Comprehensive Plan, or identifiable on or near the site.  
29

30 iii. Oil and gas operations shall be located with consideration being given to  
31 prevailing weather patterns, including wind directions to mitigate compatibility  
32 concerns.  
33

34 iv. Oil and gas operations shall avoid being located on or across hilltops and ridges,  
35 shall avoid silhouetting, and, where possible, should be located at the base of  
36 such slopes.  
37

38 v. Oil and gas operations should use acoustically insulated housing, a cover to  
39 enclose the motor or engine, or an acoustically insulated building to enclose  
40 the installation.  
41

42 vi. Any equipment used in drilling, completion, or production of a oil and gas  
43 operation must comply with the maximum permissible noise levels set forth at  
44 C.R.S. § 25-12-103 for residential zones (all unincorporated areas of Boulder  
45 County are residential zones).  
46

47 **K. Transportation.**  
48

49 1. **Transportation Standards.** Access roads on the site and access points to public roads as  
50 identified in the application materials shall be reviewed by the County Transportation  
51 Department and shall be built and maintained in accordance with the Transportation  
52 Standards. All proposed transportation routes to the site shall also be reviewed and  
53 approved by the County Transportation Department to minimize traffic hazards and

adverse impacts on public roadways. Existing roads shall be used to minimize land disturbance unless traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise. All applicable transportation fees shall be paid prior to issuance of a development plan review construction permit.

2. **Multi-modal Transportation Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to the public roads within Boulder County and shall comply with the Multi-modal Transportation Standards.

**L. Water Quality Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to surface or ground waters within Boulder County.

**M. Wetlands Protection Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to wetlands within Boulder County.

**N. General Oil and Gas Facility Operational Requirements.** The general oil and gas facility operational requirements set forth at Section 20-800 shall apply to each approved development plan in the form of conditions of approval.

**O. Pipelines.** Any newly constructed or substantially modified pipelines on site must meet the Additional Provisions listed at Article 4-514(E)(5)(a) – (f). Note: Any newly constructed or substantially modified pipelines off site may need to comply with all of Article 4-514(E).

## 20-800 Standard Conditions of Approval

The following general oil and gas facility operational requirements shall apply to all oil and gas facilities in the form of conditions of approval applicable to each approved development plan review permit:

- A. Anchoring.** All mechanized equipment associated with oil and gas operations shall be anchored so as to minimize transmission of vibrations through the ground.
- B. Applications and Permits.** Copies of local, state and federal applications required for the operation, and permits, when issued shall be provided to the County.
- C. Burning of Trash.** No burning of trash shall occur on the site of any oil and gas operation.
- D. Chains.** Chains from heavy equipment shall be removed before entering a County road.
- E. Chemical Disclosure.** Disclosure to the County in table format of the name, CAS number, volume, storage, containment and disposal method for all drilling and completion chemicals (solids, fluids, and gases) used on the proposed well site.
- F. Color.** Facilities shall be painted in a uniform, non-contrasting, non-reflective color, to blend with the surrounding landscape and, with colors that match the land rather than the sky. The color should be slightly darker than the surrounding landscape.
- G. Discharge Valves.** Open-ended discharge valves on all storage tanks, pipelines and other containers shall be secured where the operation site is unattended or is accessible to the general public. Open-ended discharge valves shall be placed within the interior of the tank secondary containment.
- H. Dust Suppression.** Dust associated with traffic on access roads and the site shall be suppressed throughout construction, drilling and operational activities such that there are no visible dust emissions from access roads or the site to the extent practical given wind conditions.
- I. Electrification.** All permanent operation equipment shall be electrified.
- J. Exhaust.** The exhaust from all engines, motors, coolers and other mechanized equipment shall be vented up or in a direction away from the closest existing residences.
- K. Fencing.** Onsite fencing shall consist of basic, two-rung fence of welded iron pipe around the well heads unless safety or agricultural concerns require additional fencing around the operation.
- L. Flammable Material.** All land within twenty five (25) feet of any tank, pit or other structure containing flammable or combustible materials shall be kept free of dry weeds, grass or rubbish.
- M. Lighting.** Except during drilling, completion or other operational activities requiring additional lighting, down-lighting is required, meaning that all bulbs must be fully shielded to prevent light emissions above a horizontal plane drawn from the bottom of the fixture. A lighting plan shall be developed to establish compliance with this provision. The lighting plan must indicate the location of all outdoor lighting on the site and any structures, and must include cut sheets (manufacturer's specifications with picture or diagram) of all proposed fixtures.
- N. Maintenance of Machinery.** Routine field maintenance of vehicles or mobile machinery shall not be performed within three hundred (300) feet of any water body.

- 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52
- O. Mud Tracking.** Tracking of mud or debris onto roads is prohibited.
  - P. Reclamation Plan.** Any application for an oil and gas operations shall include any COGCC required interim and final reclamation procedures.
  - Q. Removal of Debris.** When an oil and gas operation becomes operational, all construction-related debris shall be removed from the site for proper disposal. The site shall be maintained free of debris and excess materials at all times during operation. Materials shall not be buried on-site.
  - R. Removal of Equipment.** All equipment used for drilling, re-drilling and maintenance of the facility shall be removed from the site within thirty (30) days of completion of the work, unless otherwise agreed to by the surface owner. Permanent storage of equipment on well pad sites shall not be allowed.
  - S. Spills.** Chemical spills and releases shall be reported in accordance with applicable state and federal laws, including the Emergency Planning and Community Right To Know Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Oil and Pollution Act, and the Clean Water Act, as applicable. Spills that have the potential to threaten waters of the state or residences must be reported immediately to the Director and Emergency Dispatch.
  - T. Stormwater Control Plan.** A stormwater control plan that establishes that all operations shall use most effective performance techniques and practices and best management practices to minimize impacts to surface waters from erosion, sediment, and other sources of nonpoint pollution. The stormwater control plan required by COGCC Rule 1002(f) may be provided to establish compliance with this provision.
  - U. Temporary Access Roads.** Temporary access roads associated with oil and gas operations shall be reclaimed and re-vegetated to the original state.
  - V. Transportation Permits.** Applicant shall obtain all applicable transportation permits, including but not limited to County access, driveway, utility construction, oversize and overweight permits, as well as all appropriate Colorado Department of Transportation (CDOT) access permits pursuant to the CDOT State Highway Access Code.
  - W. Traffic Control Plan.** A Traffic Control Plan shall be provided to the County Transportation Department prior to facility pad construction, drill rig movement commencement of construction, mobilization, demobilization, or any other disruption of two-way traffic.
  - X. Weed Control.** The applicant shall be responsible for ongoing weed control at oil and gas operations, pipelines, and along access roads during construction and operation, until abandonment and final reclamation is completed per County or other applicable agency regulations. The appropriate weed control methods and species to be controlled shall be determined through review and recommendation by the County Weed Coordinator by reference to the Boulder County Noxious Weed Management Plan and in coordination with the requirements of the surface owner.
  - Y. Well Abandonment.** The operator shall comply with any COGCC rules regarding well abandonment. Upon plugging and abandonment of a well, the operator shall provide the County with surveyed coordinates of the abandoned well and shall leave onsite a physical marker of the well location.

- 1       **Z. Representations.** The approved development plan review applications shall be subject to all  
2 conditions and commitments of record, including verbal representations made by the applicant,  
3 and in the application file, including without limitation compliance with all approved mitigation  
4 plans.  
5

## 6       **20-900 Operational Conflict Waiver**

- 7  
8       **A.** Boulder County recognizes that the COGCC regulates oil and gas operations and that Colorado  
9 courts have determined that a County regulation must yield to a state regulation where the  
10 application of the County regulation to the oil and gas operation would conflict with a state  
11 statute, regulation or other requirement and where the conflict results in the material  
12 impediment or destruction of the state's interest in the responsible, balanced development,  
13 production and utilization of oil and gas consistent with protection of public health, safety, and  
14 welfare, including protection of the environment and wildlife resources. Accordingly, if an  
15 operational conflict would arise by application of this Article and upon request of the applicant,  
16 the County will waive application of the operationally conflicting standard.  
17  
18       **B.** The applicant may make a written request to the Land Use Department for an Operational  
19 Conflict Waiver hearing before the Board of County Commissioners at any time during the  
20 development plan review process, but no later than ten (10) days following a final decision on  
21 the development plan review application. An Operational Conflict Waiver application shall be  
22 heard in a noticed public hearing by the Board of County Commissioners. Notice of the hearing  
23 shall be in accordance with Section 3-205(C). The hearing shall allow the applicant the  
24 opportunity to develop a full evidentiary record concerning the alleged operational conflict  
25 between the County regulation and the state regulation. The County shall also provide notice of  
26 the hearing to the COGCC and request it to provide information to the Board relative to its  
27 position as to the alleged operational conflict. At the hearing, the applicant shall have the burden  
28 of pleading and proving an actual operational conflict between the requirements of these  
29 regulations and those of the COGCC in the context of the specific application. If the Board  
30 determines that an operational conflict exists, it will waive the County requirement or standard  
31 to the extent necessary to negate the operational conflict. The Board may also condition the  
32 approval of the Operational Conflict Waiver as necessary to protect the public health, safety and  
33 welfare by mitigating any adverse impacts arising from the grant of approval. Any such condition  
34 shall be designed and enforced so that the condition itself does not operationally conflict with the  
35 requirements of the COGCC. If aggrieved by the decision of the Board on the Operational  
36 Conflict Waiver request, the applicant may seek review of that decision based upon the fully  
37 developed evidentiary record pursuant to Rule 106 (a)(4) of the Colorado Rules of Civil  
38 Procedure.  
39

## 40       **20-1000 Other Waivers**

- 41  
42       **A.** At any time during the application process, the Director may waive one or more of these  
43 regulations if the applicant demonstrates to the satisfaction of the County one of the following:  
44  
45       1. **No Economical Technology.** There is no economical technology commercially available to  
46 conduct the oil and gas operation in compliance with the standard(s);  
47  
48       2. **Protection of Public Health, Safety, Welfare and the Environment.** Waiving the standard  
49 will not result in unreasonable damage to public health, safety, welfare and the  
50 environment; or  
51

- 1           3. **Alternate Approach Preferable.** Protection of public health, safety, welfare and the  
2           environment will be enhanced by an alternate approach not contemplated by the standard.

## 3 **20-1100 Judicial Review**

4  
5 A final decision by the Board of County Commissioners on a development plan is subject to judicial review  
6 pursuant to Rule 106(a)(4) of the Colorado Rules of Civil Procedure.  
7

## 8 **20-1200 Procedures Following Approval of Permit**

- 9  
10 **A. Financial Guarantees.** The applicant shall provide one (1) form of the following security (bond,  
11 irrevocable letter of credit or equivalent financial security acceptable to the County) to ensure  
12 compliance with this Article in an amount equal to the actual estimated cost plus ten percent (10%)  
13 to implement the operation consistent with the requirements of this Article and any applicable  
14 conditions of approval. Operations may be released from the performance security requirement  
15 after the applicant demonstrates to the Director's satisfaction that all conditions of approval have  
16 been met and the operation is in compliance with this Article. If the installation of plant and  
17 landscape materials is required as mitigation measures under this Article, the performance  
18 security for these measures shall remain in place for two years after installation. This Section is  
19 not meant to address COGCC Application for Permit to Drill permitting requirements nor does it  
20 replace the COGCC's financial assurance requirements.  
21  
22 **B. Right to Enter.** The applicant shall provide the telephone number of a contact person who may  
23 be reached twenty-four (24) hours a day for purposes of being notified of any proposed County  
24 inspection under this Section. Any site under an approved development plan may be inspected  
25 by the County at any time, to ensure compliance with the requirements of the approved  
26 development plan, provided that twenty-four (24) hours prior notice is given to the contact  
27 person at the telephone number supplied by the applicant. Each approved development plan  
28 shall contain the following statement: "Applicant hereby consents to allow the County the right  
29 of inspection of this approved operation provided the County contacts the operator with twenty-  
30 four (24) hours prior notice of such inspection."  
31  
32 **C. Effect of the Approved Development Plan.** After approval of a development plan and following  
33 compliance with any applicable conditions of approval, the County Land Use Department shall  
34 issue a development plan review construction permit for the proposed oil and gas operation.  
35 Following receipt of the development plan review construction permit, the applicant shall be  
36 entitled to have processed any necessary building, grading, access, floodplain, or other County  
37 permits and is authorized to otherwise proceed with the proposed oil and gas operation. The  
38 approval of a development plan review under this Article does not result in the vesting of  
39 development rights, nor does it permit the violation of any County or state regulations or  
40 preclude the County Building Official or Transportation Department from refusing to issue a  
41 permit if the plans and specifications do not comply with applicable County regulations.  
42  
43 **D. Duration of the Approved Development Plan.** An approved development plan shall remain  
44 effective for a period of two (2) years. If the operation is not commenced within the effective  
45 period of the development plan, the permit shall expire and the applicant will have to reapply for  
46 a new permit prior to undertaking operations.  
47  
48 **E. Amendments to Development Plan.** Any proposal to change an approved development plan  
49 shall require an application to the Land Use Department to determine whether the proposed  
50 change constitutes a substantial modification to the approved development plan.  
51

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

1. In determining whether the proposed modification to a development plan approval is substantial, the Director shall consider the record of the development plan approval, including any express conditions, limitations, or agreements governing the approved development plan and the nature, character, and the extent of additional land use impacts of the proposed modification. The addition of a new well on an existing pad shall be considered a substantial modification to the entire pad and the entire pad shall be required to come into compliance with this Article, to the extent practical. Other changes shall be considered substantial if they significantly alter the nature, character, or extent of the land use impacts of the development plan approval.
2. If the Director determines that the change constitutes a substantial modification, no such change shall be allowed to proceed until an application to amend the approved development plan is filed with the Director and approval granted in accordance with this Article. The applicant or its successor may appeal the Director's decision to require an amended development plan to the Board of County Commissioners, provided that any such appeal shall be in writing and shall be filed with the Director no later than thirty (30) days following the date of the Director's decision to require a development plan amendment.

## 20-1300 Enforcement

- A. In addition to any other remedy authorized under this Resolution to enforce the provisions of this Article, the Director shall be entitled to draw on any financial guarantee provided by an applicant pursuant to this Article, if the applicant violates any term or condition of an approved development plan. If the Director has reason to believe that a violation of an approved development plan for which a financial guarantee has been provided has occurred, the Director shall provide written notice to the applicant describing the violation, and stating a reasonable time within which the violation must be corrected. If, within that time period, the applicant has not either corrected the violation or filed a written appeal with the Board of County Commissioners, the Director shall be entitled to enter upon the site to take any reasonable measures to correct the violation, and may draw on the financial guarantee to cover the costs of corrective measures.
- B. If the applicant files a timely appeal with the Board of County Commissioners, the Board shall schedule a hearing on the appeal at the soonest possible time of which the applicant shall receive reasonable prior notice. If the Board confirms at the hearing that the violation has occurred and has not been corrected, the Board in its discretion may give the applicant additional time to correct the violation, or may specify the time at which the Director may take appropriate action to have the violation corrected and draw on the financial guarantee to cover the costs of corrective measures.
- C. To insure the Director's ability to enforce the provisions of any approved development plan, the Director shall not release any financial guarantee provided under this Article for an individual development plan, until the Director confirms that all operations have been completed and all provisions of the plan complied with. The Director shall not release any blanket bond or other blanket financial guarantee provided under this Article unless he is satisfied that the person providing the bond has adequately declared its intention to conduct no further oil and gas operations in Boulder County in the foreseeable future. The Director shall also be empowered to release a financial guarantee if a successor to an applicant provides satisfactory guarantees in accordance with this Article.
- D. In addition to the foregoing enforcement measures, Boulder County has the right to any and all other enforcement measures and remedies provided by law.



## 20-1400 Definitions

Terms used herein are defined below. Any terms not specifically defined herein may be defined in Article 18.

**Abandonment.** The permanent abandonment of a well, which shall be determined at the time of the operator's filing of the appropriate abandonment form with the COGCC.

**Agent.** One authorized to make binding representations on behalf of the applicant.

**Adverse Effect or Adverse Impact.** The impact of an action, after mitigation, that is considerable or substantial, and unfavorable or harmful; includes social, economic, physical, health, aesthetic, historical impact, and/or biological impacts, including but not limited to, effects on natural resources or the structure or function of affected ecosystems.

**Applicant.** Person, corporation or other legal entity possessing the legal right to develop the mineral resource who has applied for an oil and gas operation permit.

**BTEX and/or TPH.** Benzene, Toluene, Ethylbenzene, Xylene and Total Petroleum Hydrocarbons.

**Chemical(s).** Any element, chemical compound or mixture of elements and/or compounds.

**Closed Loop Drilling Process or System.** A closed loop mud drilling system typically consists of steel tanks for mud mixing and storage and the use of solids removal equipment, which normally includes some combination of shale shakers, mud cleaners and centrifuges sitting on top of the mud tanks. This equipment separates drill cutting solids from the mud stream coming out of the wellbore while retaining the water or fluid portion to be reused in the continued drilling of the well bore. The solids are placed in containment provided on location. The system differs from conventional drilling where a reserve pit is used to allow gravitational settling of the solids from the mud which can then be reused. A Closed Loop Drilling System does not include use of a Conventional Reserve Drilling Pit.

**Completion combustion device.** Any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions.

**Corridor.** Tracts of land within which a pipeline right-of-way is located.

**County.** Boulder County, Colorado, its officers, staff, employees and agents.

**Degradation.** Lowering in grade or desirability; lessening in quality.

**Delineation well.** A well drilled in order to determine the boundary of a field or producing reservoir.

**Department.** Boulder County Land Use Department.

**Drilling Operation.** Any work or actual operation undertaken for the purposes of carrying out any of the rights, privileges or duties of a lessee for drilling of an oil well, gas well, or cathodic protection well, including but not limited to the actual operation of drilling in the ground.

1 **Equipment.** Machinery or structures located on well pads or rights-of-way including, but not limited to,  
2 wellheads, separators, dehydration units, heaters, meters, storage tanks, compressors, pumping units,  
3 internal combustion engines, and electric motors.  
4

5 **Exploration and Production Waste or “E and P Waste”:** Wastes associated with Oil and Gas  
6 Operations to locate or remove oil or gas from the ground or to remove impurities from such  
7 substances and that are uniquely associated with and intrinsic to oil and gas exploration,  
8 development or production operations that are exempt from regulation under the Resource  
9 Conservation and Recovery Act (RCRA).  
10

11 **Flow Line.** Pipeline connecting individual well sites to gathering lines.  
12

13 **Gas Well.** Well capable of producing natural gas.  
14

15 **Gathering Line.** Pipeline transporting produced gas, oil, or water from multiple well sites to a centralized  
16 facility.  
17

18 **Grading Plan.** Plan view and cross-section of existing and proposed contours, cuts and fills, topsoil  
19 storage location and stabilization methods, and maximum slopes.  
20

21 **Ground Water.** Subsurface waters in a zone of saturation.  
22

23 **Heavy Equipment.** Drilling rigs, completion rigs, construction equipment, and individual truck/trailer  
24 combination vehicles with a gross vehicle weight exceeding five tons.  
25

26 **Improvement.** Any new construction activity or addition of equipment or materials to a site.  
27

28 **Mitigation.** One or more of the following actions which are prioritized in order of preference:  
29

30 **Avoiding Impacts.** Avoiding an impact by not taking a certain action or parts of an action; or  
31

32 **Minimizing Impacts.** Limiting the degree or magnitude of the action or its implementation, or  
33 by changing its location; or  
34

35 **Rectifying Impacts.** Repairing, rehabilitating, or restoring the impact area, facility or service; or  
36

37 **Reducing or Eliminating Impacts.** Reducing or eliminating the impact over time by  
38 preservation and maintenance operations; and  
39

40 **Other Provisions for Addressing Impacts.** Using alternative means not contemplated by this  
41 Article to provide equivalent biological, social, environmental and/or physical mitigation  
42 actions.  
43

44 **Most Effective Performance Techniques and Practices.** The application of proven and emerging  
45 techniques, technologies or other Best Management Practices used in conducting oil and gas exploration  
46 and development which avoid, neutralize, exclude, eliminate, mitigate or minimize adverse on and off-  
47 site impacts to public health and the environment, landowners, and natural resources, and which may  
48 reduce conflicts between potentially impacted landowners and the oil and gas industry.  
49

50 **Occupied Structure.** Any building or structure that requires a certificate of occupancy or building or  
51 structure intended for human occupancy.  
52

1 **Oil and Gas Facilities.**

2  
3 Site and the equipment associated with a site used for the production, transportation, treatment,  
4 and/or storage of oil and gas and waste products; or

5  
6 An individual well pad built with one or more wells and operated to produce liquid petroleum  
7 and/or natural gas, including associated equipment required for such production; or

8  
9 Gathering lines, and ancillary equipment including but not limited to drip stations, vent stations,  
10 pigging facilities, chemical injection stations and valve boxes; or

11  
12 Temporary storage and construction staging yards in place for less than six months; or

13  
14 Any other oil and gas operation which may cause significant degradation.

15  
16 **Oil and Gas Operations.** Exploration for oil or gas, including but not limited to conventional oil and gas;  
17 the siting, drilling, deepening, recompletion, reworking, refracturing, closure or abandonment of an oil  
18 and gas well; production facility and operations including the installation of flow lines and gathering lines;  
19 construction, site preparation, reclamation and related activities associated with the development of oil  
20 and gas resources.

21  
22 **Oil Well.** Well capable of producing crude petroleum oil.

23  
24 **Operation.** Oil and Gas Operations.

25  
26 **Owner or Operator.** Person who has the right to drill into and produce from a pool and to appropriate  
27 the oil or gas produced either for such owner or operator or others.

28  
29 **Permanent Equipment.** Equipment located onsite for a duration of time greater than six months effective  
30 one year after the drilling and completion of a well.

31  
32 **Person.** Any individual, partnership, corporation, association, company, or other public or corporate  
33 entity, including but not limited to the State or Federal governments, and any of their political  
34 subdivisions, agencies, or instrumentalities.

35  
36 **Pit.** Any natural or man-made depression in the ground used for oil or gas exploration or production  
37 purposes; a pit does not include steel, fiberglass, concrete or other similar vessels which do not release  
38 their contents to surrounding soils.

39  
40 **Platted Building Envelope.** Area of land within a buildable lot within which all site structures, buildings  
41 and other hardscape elements shall be contained, except driveways.

42  
43 **Regulation(s).** Article 20 of the Boulder County Land Use Code.

44  
45 **Referral Agency.** An agency, organization, or technical consultant deemed appropriate and necessary, by  
46 the County, to review an application and provide professional analysis and recommendations, including  
47 without limitation other County offices and departments, municipal, state, or federal agencies having an  
48 interest in or authority over all or part of the application or permit and legal consultants.

49  
50 **Residential.** All property within unincorporated Boulder County, Colorado.

1 **Right-Of-Way.** The legal right to pass through grounds or property owned by another, or land, property  
2 or interest therein usually in a strip, acquired for or devoted to transportation purposes.

3  
4 **Security Fencing.** Six-foot chain link fence topped by three strands of barbed wire, or the equivalent, with  
5 a gate that can be secured.

6  
7 **Setback.** Distance between the following, including but not limited to, a wellhead, intermediate line,  
8 gathering line or major facility structure boundary and the closest projection of a residential, commercial,  
9 or industrial building structure, a lot or property line, a permitted facility, or a platted building envelope in  
10 a platted subdivision-

11  
12 **Significant.** Of considerable or substantial consequence.

13  
14 **Site.** Lands, including the surface of a severed mineral estate, on which exploration for, or extraction and  
15 removal of oil or gas is authorized under a lease.

16  
17 **Surface Owner.** Owner of the surface property on which the facility will be constructed.

18  
19 **Surrounding.** Within one-half mile of a proposed oil and gas operation.

20  
21 **Temporary Use Area.** Disturbed lands immediately adjacent to the well pad or right of way used by an  
22 operator during the construction or maintenance of a well, pipeline or other facility that will be reclaimed  
23 for permanent operations.

24  
25 **Transmission Line.** Pipeline transporting oil, natural gas or any other products derived from oil and gas  
26 production, which is defined as a transmission line by the U.S. Department of Transportation regulations  
27 under the Natural Gas Pipeline Safety Act of 1968, as amended.

28  
29 **VOC.** Volatile organic compounds.

30  
31 **Water Body.** A water body is any surface waters which are contained in or flow in or through Boulder  
32 County, but does not include ephemeral streams, roadway ditches, water in sewage systems, water in  
33 treatment works of disposal systems, water in potable water distribution systems, stock ponds or  
34 irrigation ditches not discharging to live streams, and all water withdrawn for use until use and treatment  
35 have been completed.

36  
37 **Well or Wellhead.** Equipment attached to the casing of an oil, gas or injection well above the surface of  
38 the ground.

39  
40 **Well Blowdown.** Maintenance activity designed to remove unwanted fluids from mature wells during  
41 which time gas is often vented to the atmosphere.

42  
43 **Well Completion.**

44 The process that perforates well casing, stimulates the reservoir using various techniques including but  
45 not limited to acid treatment and hydraulic fracturing, allows for the flowback of petroleum or natural gas  
46 from wells to expel drilling and reservoir fluids, and tests the reservoir flow characteristics, which may  
47 vent produced hydrocarbons to the atmosphere via an open pit or tank.

48  
49 **Well Pad.** Area in which permanent operations for the well takes place and shall always include, at a  
50 minimum, that portion of the pad area occupied by permanent production equipment. Well pads may  
51 contain one or more wellheads and associated equipment.

1  
2  
3  
4

**Wildcat or Delineation Well.** A well outside known fields or the first well drilled in an oil or gas field where no other oil and gas production exists.

DRAFT

# ATTACHMENT A.2

## Proposed Amendments to Article 4-500 (use definitions)

### 1. Amend Article 4-506 Industrial Uses to add new use category:

#### D. Major Oil and Gas Operations

1. Definition: Water injection wells and facilities, centralized water transfer stations, centralized water pump stations, storage yards and construction staging yards in place for longer than six months, and any other oil and gas operation the location of which is not dependent upon development of the mineral resource or subject to Article 20.
2. Districts Permitted: By Special Review in GI
3. Parking Requirements: None
4. Loading Requirements: None
5. Additional Provisions: None

Re-order remaining items and update cross-references as needed.

### 2. Amend Article 4-508 Mining Uses by deleting current Sections 4-508(B) and 4-508(C) and replacing with new Section 4-508(B):

#### B. Oil and Gas Operations

1. Definition: See Article 20-1400
2. Districts Permitted: By development plan review for oil and gas operations in all districts (Article 20)
3. Parking Requirements: None
4. Loading Requirements: None
5. Additional Provisions: None

Re-order remaining items and update cross-references as needed.

### 3. Amend Article 4-514 Utility and Public Service Uses:

Add a new use "Gas and/or Hazardous Liquid Pipelines":

#### E. Gas and/or Hazardous Liquid Pipelines

1. Definition: Pipelines for the collection and transmission of natural gas or other hazardous liquids.
2. Districts Permitted: In all districts by Limited Impact Special Review, or review under Article 8 (areas and activities of state interest), as applicable. Gathering lines and flow lines which are part of new oil and gas development and which are located on the same parcel or parcels as the well head, pumping units, tanks and/or treaters will be subject to Development Plan Review under Article 20 of this Code.
3. Parking Requirements: None
4. Loading Requirements: None
5. Additional Provisions:
  - a. This use is not required to be located on a building lot, or comply with the minimum lot size requirement for the district in which it is located.
  - b. Flow lines, gathering lines, and transmission lines shall be sited a minimum of fifty (50) feet away from general residential, commercial, and industrial buildings, as well as the high-water mark of any surface water body. This

distance shall be measured from the nearest edge of the pipeline. Pipelines and gathering lines that pass within 150 feet of general residential, commercial, and industrial buildings or the high water mark of any surface water body shall incorporate leak detection, secondary containment, or other mitigation, as appropriate.

- c. To the maximum extent practicable, pipelines should be aligned with established roads in order to minimize surface impacts and reduce habitat fragmentation and disturbance.
- d. To the maximum extent practicable, operators shall share existing pipeline rights-of-way and consolidate new corridors for pipeline rights-of-way to minimize surface impacts.
- e. Operators shall use boring technology or alternative director-approved most effective performance techniques and practices when crossing streams, rivers or irrigation ditches with a pipeline to minimize negative impacts to the channel, bank, and riparian areas.
- f. During pipeline construction for trenches that are left open for more than five (5) days and are greater than five (5) feet in width, install wildlife crossovers and escape ramps where the trench crosses well-defined game trails and at a minimum of one-quarter (1/4) mile intervals where the trench parallels well-defined game trails.
- g. The Department may require an applicant for a pipeline to provide a risk-based engineering study for all or part of its proposed pipeline right of way that may require the implementation of more stringent construction or operation standards or space between the pipeline and other structures.

Re-order remaining items and update cross-references as needed.

Modify current section 4-514(P) "Utility Service Facility" as follows:

P. Utility Service Facility

- 1. Definition: Any electrical distribution lines, natural gas distribution lines, minor gas regulator stations, cable television lines, telegraph and telephone lines, ~~and gathering lines,~~ or other minor service facilities.
- 2. Districts Permitted: By right in all districts
- 3. Parking Requirements: None
- 4. Loading Requirements: None
- 5. Additional Provisions:
  - a. This use is not required to be located on a building lot, or comply with the minimum lot size requirement for the district in which it is located.
  - b. No buildings shall be associated with this use.
  - c. This use is limited to the following sizes:
    - i. gas lines less than 12 inches; and
    - ii. electric lines of less than 115,000 volts.

# ATTACHMENT A.3

## Proposed Amendment to Board of Adjustment provisions

Add New Section 4-1205 as follows:

No appeals to the Board of Adjustment or requests for variances before the Board of Adjustment are permitted for any matters under Article 20, Development Plan Review for Oil and Gas Operations.

DRAFT



# ATTACHMENT A.4

## Proposed Amendments to Article 18 (Land Use Code Definitions)

1. Replace current text of 18-181 with the following:

**“Oil and Gas Operations.** Exploration for oil or gas, including but not limited to conventional oil and gas; the siting, drilling, deepening, recompletion, reworking, refracturing, closure or abandonment of an oil and gas well; production facility and operations including the installation of flow lines and gathering lines; construction, site preparation, reclamation and related activities associated with the development of oil and gas resources.”

2. Delete 18-196 “Site (Oil & Gas)” due to new definition of same in Article 20.
3. Amend any other definitions as necessary (e.g., 18-166 “Gas Transmission Pipeline”).

## ATTACHMENT A.5

### Clerical changes necessary to conform rest of Land Use Code to DC-12-0003

1. Delete Article 4-900 (current “Development Plan review for Oil and Gas Operations”)
2. Update Table of Contents and associated cross-references in Code as necessary.
3. Update use tables as necessary.
4. In all of the Article 4 zoning district regulations, for each district, under the listed Mining Uses: substitute “Oil and Gas Operations” for the two uses currently listed (Oil and Gas Drilling and Production, on subdivided land, and Oil and Gas Drilling and Production, on unsubdivided land).
5. Make current Article 4-900A (“Development Plan Review for Subsurface Mining”), Article 4-900. Change Table of Contents and associated cross-references in Code accordingly.
6. All other clerical amendments necessary to conform entire Land Use Code to primary text amendments approved in DC-12-0003 (Article 20, etc.).

**RESOLUTION 2012-16**

A RESOLUTION IMPOSING A TEMPORARY MORATORIUM ON BOULDER COUNTY'S PROCESSING OF APPLICATIONS FOR PROPOSED OIL AND GAS DEVELOPMENT IN ALL OF THE UNINCORPORATED COUNTY PENDING CONSIDERATION OF AMENDMENTS TO COUNTY REGULATIONS

A. **WHEREAS**, oil and gas exploration and production is a rapidly developing and evolving industry nationwide, across Colorado, and within Boulder County, with both substantial advances in technology and significant modifications to the laws governing the industry occurring during the past few years; and

B. **WHEREAS**, the western edge of one of the most actively drilled oil and gas producing formations along the Front Range underlies the eastern portion of Boulder County; and

C. **WHEREAS**, oil and gas operations have the potential for significant and immediate impacts on the health, safety, and welfare of the citizens of Boulder County ("the County") through increased noise, odor, dust, traffic, noxious weeds, and other disturbance, as well as the potential to significantly impact the County's air, water, soil, biological quality, geology, topography, plant ecosystems, wildlife habitat, wetlands, floodplains, water, stormwater and wastewater infrastructure, drainage and erosion control, parks and open space lands, transportation infrastructure, emergency response plans, and other aesthetic values and community resources; and

D. **WHEREAS**, in its capacity as surface owner of lands managed as open space where oil and gas drilling development has occurred and continues to occur, the County Parks and Open Space Department has recently witnessed new areas not previously developed being developed by oil and gas companies, an increase in notices of intent to drill from oil and gas companies, technological changes in drilling operations that in some cases result in more land disturbance per well pad, differences in hours of operation, and associated increased impacts on plant ecosystems, wildlife habitat and migration corridors, among other environmental and natural resources; and

E. **WHEREAS**, in its role administering County floodplain regulations, the County Transportation Department is concerned about increased interest in developing oil and gas in mapped floodplain areas, posing potentially serious risks to public health and safety; and

F. **WHEREAS**, in its role managing the County transportation system under the duly adopted Boulder County Multimodal Transportation Standards, through issuance of access permits to ensure safe ingress and egress to the system, issuance of oversize/overweight vehicle permits, and other methods for managing the public rights-of-way, the County Transportation Department is concerned about a potential increase in impacts due to oil and gas development, including increased wear and tear on roads from heavy truck traffic resulting in greater need for road and bridge improvements and maintenance; and

G. **WHEREAS**, the Colorado Oil and Gas Conservation Act, C.R.S. §§ 37-60-101 et seq., declares that it is in the public interest to foster the responsible, balanced development, production, and utilization of the natural resources of oil and gas in the state of Colorado in a

manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources; and

H. **WHEREAS**, the Colorado Oil and Gas Conservation Act grants the Colorado Oil and Gas Conservation Commission (“COGCC”) authority to adopt statewide rules and regulations concerning the development and production of oil and gas resources and the COGCC has done so; and

I. **WHEREAS**, the Colorado Oil and Gas Conservation Act provides that it is not intended to establish, alter, impair, or negate the authority of local and county governments to regulate land use related to oil and gas operations; and

J. **WHEREAS**, Colorado courts have recognized on several occasions that the Colorado Oil and Gas Conservation Act does not expressly or impliedly preempt all aspects of a county’s authority to enact land use regulations applicable to oil and gas development and operational activities within the county, and thus the County’s regulations pertaining to matters mentioned in the Colorado Oil and Gas Conservation Act are legal and valid as long as their express or implied conditions do not irreconcilably conflict with state law on the basis of operational conflicts that materially impede or destroy the state’s interest; and

K. **WHEREAS**, the County Planning Act, C.R.S. § 30-28-106, gives the County the authority to process and adopt a master plan for the physical development of the unincorporated territory of the County, and the duly adopted Boulder County Comprehensive Plan recognizes the potential impacts of oil and gas exploration, development, and production and all accessory activities and encourages such activities to be located and performed to minimize disturbance to land and water resource systems, with affected areas reclaimed and restored once the activities are completed and all other impacts minimized via all appropriate regulatory measures to the extent authorized by law; and

L. **WHEREAS**, the current Boulder County Comprehensive Plan sections addressing oil and gas activities have not been updated in many years and merit a review to determine whether amendments are necessary to reflect today’s industry, its practices, and impacts on land use, transportation, public health, parks and open space areas, and other environmental and natural resources across the County; and

M. **WHEREAS**, the Local Government Land Use Control Enabling Act, C.R.S. §§ 29-20-101 et seq., provides the County with the broad authority to plan for and regulate the use of land in order to provide for orderly development and a balancing of basic human needs of a changing population with legitimate environmental concerns, all in a manner consistent with constitutional rights; and

N. **WHEREAS**, the Local Government Land Use Control Enabling Act authorizes each local government within its respective jurisdiction to plan for and regulate the use of land by, among other actions, regulating development and activities in hazardous areas; protecting lands from activities which would cause immediate or foreseeable material danger to significant wildlife habitat and would endanger a wildlife species; preserving areas of historical and archaeological importance; regulating the use of land on the basis of the impact thereof on the community or surrounding areas; and otherwise planning for and regulating the use of land so as to provide planned and orderly use of land and protection of the environment in a manner consistent with constitutional rights; and

O. **WHEREAS**, the Board believes it has not only the right but the responsibility to plan for and regulate the use of land for the purposes laid out in the Local Government Land Use Control Enabling Act as well as those purposes specified in other applicable state and federal statutes and common law grants of authority, to best protect and promote the health, safety, and general welfare of the present and future inhabitants of Boulder County and to guide future growth, development, and distribution of land uses within Boulder County; and

P. **WHEREAS**, to that end, and pursuant to the Local Government Land Use Control Enabling Act, the County Planning Act, and various other state and federal statutory and common law grants of land use authority, the Board has from time to time adopted planning, zoning, and other regulations governing land use in the unincorporated territory of the County; and

Q. **WHEREAS**, the current regulations concerning oil and gas development in §§ 4-900 to 4-913 of the Boulder County Land Use Code were last updated years ago, prior to various changes in oil and gas production practices, prior to changes to state statutes and regulations, and prior to several relevant Colorado court decisions concerning local regulation of oil and gas activities, and therefore are ripe for review for potential amendments in light of the current significant concerns over the impacts of continuing oil and gas development activities within the County; and

R. **WHEREAS**, Boulder County staff have begun to analyze whether the existing zoning and other land use regulations pertaining to oil and gas activities are sufficient to protect the public health, safety, and welfare; and

S. **WHEREAS**, the Board estimates that the time needed to perform the prerequisite studies and planning and analyze regulatory amendments that may be necessary to mitigate the impacts of oil and gas exploration, development, and production activities, may take approximately six months to complete; and

T. **WHEREAS**, the Board reasonably anticipates that applications for additional oil and gas development may be filed in the coming months while the study is undertaken and before the County has had the opportunity to consider the outcome of the study and adopt appropriate regulatory changes; and

U. **WHEREAS**, the Board finds that it is inconsistent with its responsibilities to protect the local environment and population of the County to continue to process and review applications for oil and gas development in piecemeal fashion without thoroughly examining the current County regulations to reflect changes in state law and oil and gas production practices; and

V. **WHEREAS**, the Board is aware of the potential for further changes in state law during the 2012 legislative session, and that legislative proposals in the oil and gas regulatory area, if enacted this session, may further clarify the bounds of County regulatory jurisdiction; and

W. **WHEREAS**, if applications requesting approval to conduct oil and gas exploration, development, and production activities within the unincorporated County are submitted prior to the County having adequate time to conduct the appropriate studies, make necessary revisions to its Comprehensive Plan, be aware of any forthcoming 2012 legislative changes, and consider and process any indicated regulatory amendments, the Board believes irreparable harm may be done to the public health, safety and welfare; and

X. **WHEREAS**, the U.S. Supreme Court and the Colorado Supreme Court recognize that in the field of land use regulation, temporary moratoria of reasonable duration are often employed to preserve the status quo in a particular area while developing a long-term plan for development; indeed, in countering the incentive of property owners to develop their property quickly to avoid the consequences of an impending land use plan for the jurisdiction, moratoria are a crucial tool for local governments and, therefore, pursuant to express and implied authority granted by the Colorado Revised Statutes and multiple Colorado and federal appellate decisions upholding temporary moratoria on land use applications while amendments are considered, the Board has the legal authority to adopt a temporary moratorium in this situation; and

Y. **WHEREAS**, in light of the foregoing recitals and findings, circumstances warrant the immediate enactment of this Resolution establishing a temporary moratorium to protect the public health, safety, and welfare, and to avoid development which, during the County's planning and land use regulation amendment process, may contravene the results of this study and process put the public at risk; and

Z. **WHEREAS**, the Board further determines that it will schedule and hold a public hearing on this temporary moratorium and related matters as soon as practicable after this Resolution's adoption, for the purposes of receiving public comment on the moratorium and considering whether to terminate, extend, or otherwise amend the moratorium.

**NOW THEREFORE, BE IT RESOLVED** by the Board of County Commissioners of Boulder County:

1. The submittal of notices of intent to drill and land use applications requesting approval to conduct oil and gas development activities within the unincorporated territory of the County limits is imminent. The County may not have updated regulations in place that adequately mitigate impacts of this activity or that incorporate the County's full ability to regulate in this area under evolving state statutes, regulations, and case law to protect and preserve the public health, safety and welfare. Therefore, a temporary moratorium on accepting applications is reasonable and necessary.
2. This temporary moratorium shall take effect immediately. The County Land Use Department is directed not to accept, process, or approve any applications under Article 4-900 of the Land Use Code after the effective date of this Resolution.
3. This temporary moratorium shall remain in place until August 2, 2012, unless earlier terminated or extended.
4. County staff is hereby directed to continue analyzing whether the existing County Comprehensive Plan and existing County regulations pertaining to oil and gas activities are sufficient to protect the public health, safety, and welfare, or whether an amended Comprehensive Plan and amended regulations will be necessary to adequately mitigate impacts.
5. The Board intends to hold a public hearing to take testimony on the merits of the temporary moratorium imposed by this Resolution and to determine whether the moratorium should be terminated, extended, or otherwise amended on Thursday, March 1, 2012, at 4:00 p.m., in the Board's public hearing room on the third floor of the Boulder County Courthouse, 1325 Pearl Street, Boulder, Colorado. Notice of this hearing shall be published in a newspaper of general circulation in Boulder County at

least 14 days prior to the hearing date. Should this hearing be rescheduled for any reason, the Board will publish notice of the new time, date, and location of the hearing in a newspaper of general circulation in Boulder County at least 14 days prior to the hearing date. If necessary, at the Board's discretion, this hearing may be continued one or more times.

6. The Board reaffirms that any oil and gas operations conducted without all necessary County approvals may be in violation of the Boulder County Land Use Code or other applicable County regulations.
7. This Resolution does not apply to the following:
  - a. Any complete application for oil or gas exploration, development, or production currently being processed by the Land Use Department, which may continue to be processed and reviewed as provided in the Land Use Code.
  - b. Any application for oil or gas exploration, development, or production already approved by the Land Use Department prior to the effective date of this Resolution where such approval is validly maintained thereafter.
  - c. Development which possesses either a statutory or common law vested right.
  - d. Minor modifications to existing permits.

A motion to approve the foregoing Resolution imposing a temporary moratorium was made at the duly noticed public business meeting held on February 2, 2012 by Commissioner Toor, seconded by Commissioner Gardner, and passed by a 3-0 vote of the Board.

ADOPTED on this 2 day of February, 2012, effective immediately.

BOARD OF COUNTY COMMISSIONERS  
OF BOULDER COUNTY:



Cindy Domenico, Chair



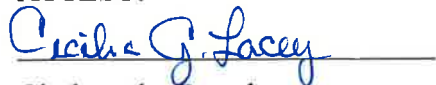
Will Toor, Vice Chair



Deb Gardner, Commissioner



ATTEST:



Clerk to the Board



**RESOLUTION 2012-46****A RESOLUTION CONFIRMING AND EXTENDING RESOLUTION 2012-16 IMPOSING A TEMPORARY MORATORIUM ON BOULDER COUNTY'S PROCESSING OF APPLICATIONS FOR PROPOSED OIL AND GAS DEVELOPMENT IN ALL OF THE UNINCORPORATED COUNTY PENDING CONSIDERATION OF AMENDMENTS TO THE COUNTY COMPREHENSIVE PLAN AND REGULATIONS**

**WHEREAS**, in Resolution 2012-16, adopted and effective on February 2, 2012, the Board of County Commissioners of Boulder County ("the Board") adopted a temporary moratorium for a period of six (6) months, until August 2, 2012, and directed the County Land Use Department during this period to not accept, process, or approve any Development Plan Review application for oil and gas operations under Article 4-900 of the Land Use Code ("the Temporary Moratorium"); and

**WHEREAS**, the Board approved the Temporary Moratorium to allow County staff the time to analyze whether the existing County Comprehensive Plan and County regulations pertaining to oil and gas activities are sufficient to protect the public health, safety, and welfare, and whether an amended Comprehensive Plan and amended regulations are necessary to adequately mitigate impacts; and

**WHEREAS**, the Board fully specified in Resolution 2012-16 the reasons why it undertook this immediate action to impose the Temporary Moratorium, including, without limitation, the accelerated development and evolution of the oil and gas industry nationwide and in the Wattenberg Basin in the eastern portion of Boulder County and neighboring Weld County; the rapidly changing technology surrounding oil and gas drilling, involving primarily the controversial method of hydraulic fracturing ("fracking") of horizontally drilled wells; and the widespread, growing public concern over the land use, environmental, and public health impacts of fracking focusing on deteriorating air and water quality, questionable waste disposal practices, noxious odor and dust generation, intensification of erosion and other land disturbance impacts, proliferation of industrial-style extraction developments in rural and agricultural areas, increased heavy truck traffic with consequent damage to public roads, aggravation of geologic hazards such as earthquakes, safety concerns related to development in floodplains and floodways, and accelerated consumption of natural resources such as water, open space, productive agricultural land, and plant and wildlife habitat; and

**WHEREAS**, in enacting Resolution 2012-16 the Board scheduled a follow-up public hearing on the Temporary Moratorium, to be duly noticed and held on March 1, 2012, at 4:00 p.m. ("the Public Hearing"), so that the Board could receive public comment on the appropriateness of the Temporary Moratorium, and consider whether to terminate, extend, or otherwise amend the Moratorium; and

**WHEREAS**, between the time of the Board adopting the Temporary Moratorium and the Public Hearing, County staff collected information and held numerous meetings to proceed with the study and analysis directed by the Board under the Moratorium, and worked diligently to prepare and compile substantial background materials for the Board's review at the Public Hearing; and



**WHEREAS**, at the Public Hearing the Board considered the staff materials and background testimony presented by representatives of the County Land Use Department, County Parks and Open Space Department, County Transportation Department, and County Public Health, as well as the comments of many concerned members of the public, and spokespersons for environmental groups, the Colorado Attorney General's Office, and the University of Colorado's Environmental Engineering program, and other speakers; and

**WHEREAS**, following several hours of testimony, the Board indicated the need for additional time to absorb the extensive information provided at the Public Hearing before it would be in a position to give direction to County staff regarding the nature and scope of the proposed oil and gas master planning and regulatory effort; and

**WHEREAS**, at the end of the Public Hearing the Board, by spoken consensus, confirmed the necessity of keeping the Temporary Moratorium in effect until the Board had the opportunity to reflect and act upon the information from the Public Hearing; and

**WHEREAS**, the Board scheduled a continuation of the Public Hearing, for purposes of deliberating on, and giving direction regarding, the Temporary Moratorium, to be held on April 16, 2012, at 4:00 p.m., which was denominated a public meeting as no additional public testimony was then to be taken; and

**WHEREAS**, at the April 16 public meeting the Board received updated information from County staff on certain topics raised at the Public Hearing, and proceeded to provide direction regarding how County staff should proceed with the study and analysis of the County's planning and regulatory efforts addressing future oil and gas operations in unincorporated Boulder County, and further, in light of that direction, confirmed and extended the duration of the Temporary Moratorium, all as set forth in this Resolution, below.

**NOW THEREFORE, BE IT RESOLVED** by the Board of County Commissioners of Boulder County, based upon the Public Hearing on the Temporary Moratorium, as follows:

1. The Public Hearing has amply demonstrated that serious and legitimate concerns exist regarding the land use, environmental, and public health impacts of future oil and gas operations in the unincorporated County. Based on the Public Hearing, the Board believes that the responsible state and federal agencies may not be adequately addressing these impacts. Moreover, the County's existing planning and regulatory efforts in this area appear outdated and may not be sufficiently protecting the public health, safety, and welfare within the scope of the County's legal authority.
2. In the land use planning context, County staff, with the assistance of outside consultants (who may be retained as deemed appropriate and approved by the Board), is directed to process: (a) appropriate amendments to the Boulder County Comprehensive Plan, subject to the authorization of the County Planning Commission which County staff shall request; *and* (b) appropriate amendments to the Boulder County Land Use Code, consistent with the County's legal authority, including but not limited to considering the amendments suggested in the County Land Use Director's March 1, 2012 background paper (pp. 14-15) prepared for the Public Hearing, as well as possible transportation infrastructure/road impact fees, setbacks from open water sources, zoning to allow oil and gas operations in areas that will have the least impact, and lighting and noise controls.

The Board also authorizes staff to schedule a joint public meeting or hearing between the Board and the Planning Commission, if staff determines that such a proceeding will facilitate this land use planning and regulatory amendment process.

3. The Board emphasizes the importance of addressing the environmental impacts of oil and gas operations on air, water, and soil quality, on odor production, and from waste disposal, as well as in the context of promoting “clean” or “green” energy. The Board directs staff to consider whether such impacts and concerns can, and should, be addressed through the Land Use Code, or through possible Public Health regulations, or through alternative County efforts such as coordinating with other governmental agencies’ regulatory efforts, entering into memoranda of understanding or intergovernmental agreements with other agencies, promoting state or federal legislation, performing public education or outreach, and/or partnering with other involved organizations in the public and private sectors.
4. The Board urges staff to consider the full range of tools and responses that may be available to the County to address legitimate concerns over the impacts of oil and gas operations, particularly in areas where the County may be legally preempted from exercising its regulatory authority, or where other governmental entities are in a significantly better position to exercise their regulatory authority.
5. The Board reserves the ability, based on forthcoming information, to add planning or regulatory areas related to oil and gas development in the unincorporated County that are not specified in this Resolution, should the Board or the Planning Commission determine that other issues are important to encompass within this effort.
6. In light of the extensive work that the Board envisions staff will need to undertake to implement this Resolution, the Board concludes that the Temporary Moratorium’s length of six months, initially imposed in Resolution 2012-16, is insufficient. The Board determines, based on present information, that another six months will be necessary to appropriately amend the County’s Comprehensive Plan and Land Use Code in light of the Board’s direction herein provided. *Therefore, the Board approves extending the duration of the Temporary Moratorium as stated in Resolution 2012-12, to and including February 4, 2013.*
7. In approving this extension of the Temporary Moratorium through February 4, 2013, the Board urges staff to move expeditiously on this project, so that the Board can end the Temporary Moratorium sooner if appropriate plans and regulations are in place. Conversely, the Board reserves the right to extend the Temporary Moratorium if forthcoming circumstances indicate that additional time is reasonably necessary to study, process, and enact appropriate plans and regulations. Any change in the duration or other terms of the Temporary Moratorium shall occur at a duly noticed public hearing of the Board.

A motion to provide direction to the County staff, as stated above, and to confirm the Temporary Moratorium and extend its duration through February 4, 2013, was made at the April 16, 2012 public meeting (convened to act on the information presented at the March 1, 2012 Public Hearing), by Commissioner Toor, seconded by Commissioner Gardner, and passed by a 3-0 vote of the Board.

**ADOPTED** on this 1st day of May, 2012, nunc pro tunc the 16<sup>th</sup> day of April, 2012.



**BOARD OF COUNTY  
COMMISSIONERS OF BOULDER  
COUNTY:**

A handwritten signature in cursive script, reading "Cindy Domenico", written over a horizontal line.

Cindy Domenico, Chair

A handwritten signature in cursive script, reading "Will Toor", written over a horizontal line.

Will Toor, Vice Chair

A handwritten signature in cursive script, reading "Deb Gardner", written over a horizontal line.

Deb Gardner, Commissioner

ATTEST:

A handwritten signature in cursive script, reading "Cecilia J. Lacey", written over a horizontal line.

Clerk to the Board

*The Boulder County Planning Commission adopted the following policies as an amendment to the Boulder County Comprehensive Plan's Geology Element on August 15, 2012 (Docket BCCP-12-0001). **They are now in effect.** The next step will be to schedule a hearing before the Boulder County Commissioners to request their acknowledgement and acceptance of the Planning Commission's action. The Commissioners may ask the Planning Commission to reconsider, amend, and/or include additional language for the policies. If so, the staff will take that request back to Planning Commission for their consideration at a public hearing. Because Colorado statutes give authority over county comprehensive plans to county planning commissions, they may accept some, all, or none of the county commissioners' requests.*

*The policies are to provide guidance for the drafting of oil and gas regulations to be included into the Boulder County Land Use Code. However, it is important to keep in mind that there are a number of other ways to take action with the policies in addition to amending the Code, since not all of the policies can be easily translated into regulations. These other strategies include memorandums of understanding, intergovernmental agreements, lobbying, introducing legislative initiatives, working with stakeholders, impact fee agreements, and so on. Policies GE 4.01 and 4.08 provide some direction on a multi-prong approach the county may take in both the short term and over longer periods of time to advance the outcomes the policies address.*

## **Boulder County Comprehensive Plan Oil and Gas Policy Amendments**

**Adoption by Boulder County Planning Commission August 15, 2012**

### **Oil and Gas Exploration and Development**

The Boulder County Comprehensive Plan's Geology Element is amended to incorporate the following policies. These policies are consistent with the goals of the BCCP, the various Elements and maps that make up the body of the Plan – in particular the Transportation, Environmental Resources, Agriculture, Open Space and Sustainability Elements - the Boulder County Commissioners' Resolution 2005 – 137 Adopting a Sustainable Energy Path for Boulder County, and the authority granted counties under the County Planning Act (CRS 30-28-101 *et seq*) and Local Government Land Use Enabling Act (CRS 29-20-101 *et seq*). They are to be applied to the fullest extent allowable under current Colorado law.

The term **“oil and gas exploration and development”** as used in the following policies is synonymous with and encompasses all on and off-site activities related to oil and gas exploration, extraction, development, infrastructure, site closure, completion, reclamation and transportation.

The term **“most effective performance technologies and practices”** as used in the following policies refers to the application of proven and emerging techniques, technologies or other Best Management Practices used in conducting oil and gas exploration and development which avoid, neutralize, exclude, eliminate, mitigate or minimize adverse on and off- site impacts to public health and the environment, landowners, and natural resources, and which may reduce conflicts between the goals and policies of

the BCCP, potentially impacted landowners, and the oil and gas industry. These technologies and practices should be required at every level and stage of oil and gas exploration and development.

**OBJECTIVE:** Boulder County recognizes the existence of oil and gas mineral rights within its unincorporated areas. It is the county's objective to exercise its fundamental duty to protect public health, safety and welfare and the environment from adverse effects of oil and gas exploration and development, and to minimize potential land use conflicts between those activities and current or planned land uses.

All policies, procedures and regulations dealing with oil and gas exploration and development shall be based on the implementation of the "precautionary principle" so as to ensure the safety, public health and protection of Boulder County's residents, environment, infrastructure, and resources with respect to local and cumulative, short and long term considerations.

**Policy GE 4.01:** Boulder County is dedicated to promoting, requiring and implementing programs, policies and practices that provide benefit to the well-being of current and future residents as well as protecting the integrity of the air, water and ecosystems on which all life depends. Consequently, it is county policy to pursue the following actions regarding the exploration and development of oil and gas resources:

- a) Where oil and gas exploration and development is regulated by the federal and/or state government alone, both currently and in the future, advocate for requiring use of the most effective performance technologies and practices;
- b) For oil and gas exploration and development activities in areas of shared regulatory authority, provide direction, leadership and support for incorporating the most effective performance technologies and practices into the applicable jurisdiction's rules and regulations; and
- c) For those oil and gas exploration and development activities subject primarily or solely to county jurisdiction, establish and maintain a comprehensive planning basis for amending, revising and updating the Land Use Code as well as the full array of regulatory tools and procedures available to the county as they are identified and found to be consistent with the Objective of these policies.

**Policy GE 4.02:** Areas where the county has an interest in assuring that the most effective performance technologies and practices are applied include, but may not be limited to:

- a) Transportation impacts on roads and their users
- b) Development impacts on county open space lands and conservation easements
- c) Impacts on and consumption of environmental resources, including
  - Wildlife and wildlife/plant habitat
  - Wetlands
  - Riparian areas
  - Surface and subsurface water – sources, volumes, and consumptive vs. non-consumptive use
  - Aquifers – casing that isolates and protects aquifers, due diligence in finding abandoned wells, and protective setbacks from areas of outcropping aquifers
  - Air quality – greenhouse gas emissions, ozone precursors, and toxic air pollutants affecting local residents, visitors and users of nearby public facilities

- Water quality
  - Soil quality and productive integrity
- d) Geologic hazards
  - e) Wildfire mitigation
  - f) Storm water, drainage and erosion controls
  - g) Solid and liquid wastes management
  - h) Noise, lighting and odor controls
  - i) Land restoration and reclamation
  - j) Agricultural land preservation
  - k) Irrigation ditches, drain tiles, laterals, ponds and other water resource systems associated with agricultural operations
  - l) Fencing, both temporary and replacement
  - m) Noxious weed control
  - n) Floodplain and floodways
  - o) Visual impacts and preservation of scenic views
  - p) Access roads/facilities removal upon well closures/abandonment
  - q) Historic/archeological/cultural protection
  - r) Emergency response planning and capabilities
  - s) Adjacent landowner concerns
  - t) Other areas of public health, safety and welfare as they may be identified

**Policy GE 4.03:** Measures the county will look for in assessing whether an application for oil and gas exploration and development is adhering to most effective performance technologies and practices will include, but not be limited to, the following:

- use of closed loop systems for the containment and/or recycling of drilling and completion fluids;
- use of emissions controls, prevention capture/co-benefits producing systems, and other green completion or reduced emissions systems to minimize or eliminate the release of volatile organic compounds, hazardous air pollutants, and greenhouse gases;
- use of electric motors or muffled internal combustion engines in pumping and production operations;
- extensions of setbacks from adjacent land uses, water bodies, water courses, riparian areas and other important environmental resources as determined on a case-by-case and site-by-site basis;
- air quality baseline testing and monitoring at wellheads, condensate tanks, pipelines, compressor stations and other potential gaseous emissions sources;
- soil structure and condition baseline testing and documentation within and adjacent to the drill pad area prior to commencing pad preparation and construction;
- surface, groundwater, and well water quality and level baseline testing and monitoring within and adjacent to the drill pad area prior to commencing pad preparation and construction;
- extensions of setbacks to achieve public health, safety and welfare objectives as determined on a case-by-case and site-by-site basis;
- submittal of comprehensive drilling and phasing plans for oil and gas holdings within and adjacent to Boulder County;
- preparation of plugged and abandoned hydrocarbon well integrity surveys within an adequate distance along the full length of the bore hole and production casing for proposed new wells

and existing wells to be reopened for production, to identify potential integrity problems and remedies for improperly plugged wells or where plugs and well casings have failed over time;

- use of temporary, removable, low-impact “laydown” roads or similar methods for access to sites from local, county, state and/or federal roads;
- dark sky lighting measures;
- odor, dust and noise reduction/suppression measures;
- complete reclamation and restoration of all disturbed areas, including roads, to their pre-exploration and development conditions;
- sharing of transportation, drilling, production, transmission and access facilities among operators to minimize duplication of activities and potential impacts;
- use of existing easements and infrastructure where appropriate and allowed by easement holders for the surface and subsurface infrastructure necessary for drilling, extraction, production and transmission operations;
- “fair share” compensation for impacts on county roads, county open space lands and other county infrastructure or properties

**Policy GE 4.04:** In addition to the county’s expressed interest in eliminating methane and other greenhouse gas emissions from oil and gas development into the atmosphere, the county strongly supports all efforts at all levels to further study and ultimately eliminate such emissions resulting from oil and gas operations whether through legislative, regulatory, voluntary or other means.

**Policy GE 4.05:** The county shall consider requiring operators to use and share existing infrastructure, to minimize installation of new facilities, and to avoid additional disturbance to lands to the greatest extent possible in order to forego introducing significant new land use and cumulative impacts to the environment, landowners and natural resources.

**Policy GE 4.06:** Applicants for oil and gas exploration and development shall provide the Boulder Office of Emergency Management and affected emergency response agencies with as-built facilities maps in a format suitable for input into the county’s GIS system depicting the locations, sizes, and depths below grade of all oil and gas gathering and transmissions lines and associated equipment, surface facilities and their functions, as well as transportation routes to and from exploration and development sites, for emergency response and management purposes in case of an incident or accident involving transmission or transportation presenting an immediate or potential hazard to the public and environment.

4.06.01 Operators shall cooperate with local emergency response agencies in planning and conducting on-site emergency preparedness exercises that simulate industrial incidents and accidents that may, in the opinion of the emergency response agencies, take place on site.

4.06.02 Operators shall disclose all hazardous chemicals used in their operation to the Boulder Office of Emergency Management and all affected emergency response agencies.

4.06.03 All unintended releases of hazardous chemicals, shall be immediately reported to the Boulder Office of Emergency Management and all affected emergency response providers.

**Policy GE 4.07:** The county will encourage and provide appropriate assistance to landowners seeking expert advice for negotiating surface use agreements or leasing arrangements for oil and gas exploration and development.

**Policy GE 4.08:** Achieving the county's Objective regarding oil and gas activities requires not only a thorough review of local regulations but also communication and cooperation between the county, other levels of government and organizations involved in the oil and gas industry and in the study of oil and gas development and exploration. To this end the county has appointed a Local Governmental Designee pursuant to Rule 214 of the Colorado Oil and Gas Conservation Commission. In addition, the county is committed to working with stakeholders, regulators and interested parties to:

- a) Identify and address deficiencies in regulating detrimental land use and surface impacts as well as environmental and health impacts;
- b) Continue review of studies, data and other information to ensure regulations and implementation measures are presently addressing or need revising to incorporate the most contemporary research on impacts and technological advances;
- c) Monitor state and federal legislation and policies, to be followed when deemed necessary by lobbying, letters of support and advocacy, and dissemination of information to enhance local protection for land use, surface impacts, public health and the environment;
- d) Investigate the feasibility and utility of entering into memoranda of understanding (MOUs), intergovernmental agreements (IGAs) or other accords with industry, the state, and other public or private sector interests where the outcome will help facilitate the implementation of these policies; and
- e) Consider addressing impacts of oil and gas development by acquiring and retiring mineral estates interests on a willing seller-willing buyer basis where appropriate.

**Policy GE 4.09:** The county will require that applicants for oil and gas exploration and development directly engage with local communities, residents and other stakeholders at each phase of a development plan, starting prior to exploration, in order to provide sufficient opportunity for comment on plans, operations and performance, listen to concerns, and respond appropriately and promptly.

**Policy GE 4.10:** Boulder County shall not lease or sell any of its current or future water rights for oil and gas exploration and development.

**Policy GE 4.11:** Agricultural land preservation and conservation is a core goal and value of the BCCP. Oil and gas operations will be required to restore and reclaim all on and off-site agricultural lands impacted by any activity related to exploration, development, infrastructure installation, closure, and transportation to the soil tilth, productivity, and/or drainage patterns that were in place prior to the initiation of oil and gas operations.

**Policy GE 4.12** Boulder County will require explicit commitments by applicants to accept responsibility and liability for compensation and/or mitigation of directly and indirectly related costs, nuisances, damages and adverse impacts as a condition for issuance of permits dealing with oil and gas resource exploration and production.

---



## **ADDITIONAL AMENDMENT RECOMMENDATIONS**

**\* Retain Policy GE 2.06, Geology Element, with the following revision:**

GE 2.06 The county shall regulate the exploration for, development of, and production of geothermal resources as well as all accessory activities related thereto, to the extent permitted by state statutes.

**\* Retain, Policy AG 2.01 *et seq*, Agricultural Element, with the following revision:**

### **Infrastructure Development on Agricultural Land**

**AG 2.01** The county shall discourage the placement of new utility infrastructure upon agricultural lands. The county supports using existing easements or other public rights-of-way to minimize the impacts to agriculturally productive land.

- **AG 2.01.01** If a thorough analysis of alternatives concludes that routing/siting of facilities is necessary on or across agricultural lands, all construction activities will be located and performed so as to minimize disturbance to agricultural resources.
- **AG 2.01.02** If the infrastructure location is determined necessary, infrastructure construction activities across agricultural lands should not occur during the growing season.
- 
- **AG 2.01.03** Any agricultural lands and water resource systems disturbed by infrastructure construction shall be restored to their former productivity.