

## **Statement of Basis, Specific Statutory Authority, and Purpose**

### **New Rules and Amendments to Current Rules of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1**

This statement sets forth the basis, specific statutory authority, and purpose for new rules and amendments to the Rules and Regulations and Rules of Practice and Procedure (“Rules”) promulgated by the Colorado Oil and Gas Conservation Commission (“COGCC”) on December 11, 2008. These rules are promulgated to protect public health, safety, and welfare, including the environment and wildlife resources, from the impacts resulting from the dramatic increase in oil and gas development in Colorado. They also implement new statutory authority and update existing regulations where appropriate. They are intended to foster the responsible and balanced development of oil and gas resources.

Unless otherwise specified, the new rules and amendments become effective on May 1, 2009 on federal land and April 1, 2009 on all other land.

In adopting the new rules and amendments, the Commission relied upon the entire administrative record for this rulemaking proceeding, which formally began in March 2008 and informally began in the summer of 2007. This record includes the proposed rules and numerous recommended modifications and alternatives; thousands of pages of public comment, written testimony, and exhibits; and 12 days of public and party hearings. The Commission spent another 12 days deliberating on the rules before taking final action.

#### **Statutory Authority**

The additions and amendments to the rules are promulgated pursuant to the authority granted to COGCC by House Bills (“HB”) 07-1298 and 07-1341, codified at sections 34-60-106 and 34-60-128, C.R.S., of the Oil and Gas Conservation Act (“Act”). Additional authority for the promulgation of the rules is provided by sections 34-60-102, 34-60-103, 34-60-104, 34-60-105, and 34-60-108, C.R.S. of the Act. The Commission also adopted the following statement of basis and purpose consistent with section 24-4-103(4), C.R.S., of the Administrative Procedure Act. This statement is hereby incorporated by reference in the rules adopted.

The rulemaking hearing for these rules was held on May 22, 2008 (initial motions); June 10, 2008 (public testimony); June 23-27, 2008 (public and party testimony); June 30-July 1, 2008 (party testimony); July 15-17, 2008 (party testimony); August 19-20, 2008 (deliberations); September 9-11, 2008 (deliberations); September 22-23, 2008 (deliberations); October 26-27, 2008 (deliberations); and December 9-11, 2008 (deliberations).

#### **Purpose**

##### **Address Growing Impacts of Increase in Oil and Gas Activity**

A major reason for adopting these regulations was to address concerns created by the unprecedented increase in the permitting and production of oil and gas in Colorado in the past few years. In 1996, the COGCC, through its Director, approved 1,002 applications for permits to drill (“APD”). In 2004, that number increased to 2,915 approved APDs. In 2007, the COGCC approved 6,368 APDs. The COGCC anticipates that it will approve approximately 7,500 APDs in 2008. This increase in permitting levels generally corresponds to an increase in drilling activity, particularly in the Piceance Basin, where drilling has extended into new areas with more extensive wildlife and water resources, more challenging terrain, and additional people. These

increases require the COGCC to re-evaluate its regulatory scheme to ensure that its rules are appropriate for the heightened level and broader geographic extent of development activity in Colorado. In addition, as the level and extent of drilling activity has increased, so has the public concern for the health, safety and welfare of Colorado's residents. The level of public concern for Colorado's environment and wildlife resources has also risen with the increase in permitting and drilling over the past few years. With the number of approved APDs increasing by approximately 750% in twelve years (and 257% in just four years) and the public concerns engendered by the increased activity, the COGCC's re-evaluation was necessary and appropriate.

#### Implement 2007 Legislation

In 2007, upon the urging and initiative of the Colorado Department of Natural Resources, the General Assembly passed legislation to increase the Commission's regulatory authority and oversight obligations to better address the potential adverse impacts that can accompany oil and gas development. The General Assembly declared that it is in the public's interest to foster the *responsible, balanced* development of Colorado's oil and gas resources consistent with the protection of public health, safety, and welfare, *including protection of the environment and wildlife resources*. C.R.S. § 34-60-102(1) (emphasis added).

The new rules comply with the legislative mandate to: (1) foster oil and gas development consistent with the protection of public health, safety, and welfare, including the environment and wildlife resources; (2) promote the conservation of wildlife habitat in connection with the development of oil and gas; and (3) minimize adverse impacts to wildlife resources affected by oil and gas operations and ensure proper reclamation of wildlife habitat. C.R.S. §§ 34-60-106, 34-60-128.

In order to protect the health, safety, and welfare of the general public, the COGCC staff developed the rules in consultation with the Colorado Department of Public Health and Environment ("CDPHE"). C.R.S. § 34-60-106(11)(a)(II). As directed by the legislature, the rules provide a timely and efficient procedure by which the CDPHE has an opportunity to provide comments during the COGCC's decision-making process. *Id.*

In order to minimize adverse impacts to wildlife resources and ensure proper reclamation of wildlife habitat, the COGCC staff developed the rules in consultation with the Colorado Division of Wildlife ("CDOW"). C.R.S. § 34-60-128(3)(d)(I). As directed by the legislature, the rules: (1) develop a timely and efficient consultation process with the CDOW governing notification and consultation to minimize adverse impacts and other issues relating to wildlife resources; (2) encourage operators to utilize comprehensive drilling plans and geographic area analysis strategies to provide for orderly development of oil and gas fields; and (3) minimize surface disturbance and fragmentation in important wildlife habitat by incorporating appropriate best management practices in certain COGCC orders and decisions. *See* C.R.S. § 34-60-128(d)(I-III).

#### Update Existing Rules Where Appropriate

The COGCC staff also identified existing rules to update in order to enhance clarity, respond to new information, and reflect current practice and procedure. Although the Commission has annually adopted or amended particular rules, the last set of comprehensive amendments occurred more than a decade ago and various rules had become outdated. For example, before amendment some of the environmental and financial assurance rules no longer adequately addressed current needs and conditions. Similarly, before amendment some of the procedural rules did not reflect current COGCC practices. Therefore, the Commission used this as an opportunity to update existing rules where appropriate.

## **Background**

### Development of the Draft Rules

The General Assembly entrusted the Commission with the weighty task of fine-tuning the balancing act between the development of the oil and gas resources and the protection of public health, safety, and welfare, including the environment and wildlife resources. The COGCC staff therefore began the development of the draft rules with the understanding that the continuation of oil and gas development is important to Colorado, as is the protection of Colorado's citizens and environment from the negative impacts of such development.

In the summer of 2007, staff members of the COGCC, CDPHE, and CDOW met and began identifying specific areas where new COGCC regulations were required to properly address identified problems and implement HBs 07-1298 and 07-1341. In addition, the staff members of the three agencies began contacting individuals who participated in drafting HBs 07-1298 and 07-1341 and other people that either expressed an interest in or were believed to potentially be affected by the proposed rulemaking, including representatives from the oil and gas industry, the environmental community, local governments, federal agencies, sportsmen, and property owners.

In November 2007, the COGCC staff circulated a document entitled "Initial pre-draft rulemaking proposal to implement HBs 07-1298 and 07-1341" ("pre-draft proposal") to stakeholders. The COGCC also posted this document on its website. The pre-draft proposal was a conceptual, narrative document, which was intended to frame the issues and facilitate public input prior to development of the draft rules. Once the pre-draft proposal was distributed, all stakeholders and members of the public were given the opportunity to review and comment on the document, and thousands of pages of such comments were received by the COGCC staff. Once the public comment began in December 2007, all public comment pertaining to the rulemaking was posted on the COGCC website as time and resources allowed.

To obtain additional public comment prior to development of the draft rules, the COGCC, CDPHE, and CDOW staffs held five meetings in January 2008 in communities significantly affected by oil and gas development. These meetings were held in Parachute, Greeley, Wray, Durango, and Trinidad, and they were collectively attended by approximately 1,700 people. They provided the staffs with substantial additional input on the pre-draft proposal and rulemaking and apprised the public of the rulemaking process.

Also during January and February 2008, the COGCC staff convened nine technical work groups to discuss some 67 issues associated with the pre-draft proposal. These work groups held a total of 37 meetings, which lasted about 150 hours, and were attended by about 250 stakeholders. Through these meetings, the participants shared their perspectives on a range of issues associated with the pre-draft proposal and the rulemaking, including existing problems, regulatory costs and benefits, efficiency and timing concerns, and alternative approaches. All of these meetings were noticed on the COGCC website, and were open to interested members of the public.

Through the initial meetings, pre-draft proposal, public meetings, and technical work groups, the COGCC staff received broad stakeholder and public input before the draft rules were prepared and the formal rulemaking process began. Local governments, oil and gas companies, environmental groups, sportsmen, and other members of the public received and took advantage of numerous opportunities to offer input regarding the development of the draft rules.

After careful consideration of this input, the COGCC staff in consultation with the CDPHE and CDOW drafted proposed rules which were provided to the Commission and posted on the COGCC website on March 31, 2008 and published in the Colorado Register on April 10, 2008.

The draft rules differed substantially from the pre-draft proposal. Of 21 topics addressed in the draft rules, 17 of them reflected significant changes from the pre-draft proposal. Changes were made to simplify requirements, better differentiate between different geologic basins, further minimize adverse impacts to public health, the environment, and wildlife resources, and ensure timely and efficient action. These changes improved the draft rules and better balanced the development of oil and gas with the protection of public health, safety and welfare, including the environment and wildlife resources.

#### Rulemaking Hearing and Development of the Final Rules

The COGCC staff submitted its prehearing statement in support of the draft rules on April 18, 2008, which included extensive written testimony and exhibits from COGCC, CDPHE, and CDOW staff. This testimony described the problem each draft rule was designed to address, explained how each proposed change would address the problem and result in greater protection for public health or the environment, and evaluated whether the proposed rule would affect industry's ability to develop the resource efficiently and whether it would effectively balance development of oil and gas resources with protection of public health, safety, and welfare, including the environment and wildlife resources.

Eighty-five different individuals or organizations requested party status to this rulemaking, including government organizations, oil and gas companies, conservation groups, and agricultural associations. These parties filed responsive prehearing statements in May 2008. Their responses included thousands of pages of additional written testimony and exhibits. In addition to filing responsive prehearing statements, these parties to the rulemaking were given numerous opportunities to present witnesses and written materials to the Commission throughout the rulemaking hearing, as described below.

On May 16, 2008, the COGCC staff, in consultation with the CDPHE and CDOW, submitted a cost-benefit and regulatory analysis, to provide additional information to the Commission, parties, and public, and to comply with the Administrative Procedure Act, C.R.S. § 24-4-101 *et. seq.* This 182-page analysis addressed each of the proposed rules and described, *inter alia*, the likely beneficiaries of the proposed rule and the nature of any anticipated benefit, the likely costs expected to be incurred as a consequence of the proposed rule, and any adverse effects of the proposed rule on small businesses or consumers. For each proposed rule, the cost-benefit and regulatory analysis compared the overall benefits and costs of the proposed rule to alternative approaches and explained why the alternative approaches had been rejected.

The Commission commenced the rulemaking hearing on May 22, 2008 in Denver, reviewing a prehearing order and considering appeals from any party regarding procedural decisions contained therein. The Commission also addressed initial motions filed by the parties, including motions seeking to bifurcate or limit the proceeding. Both staff and parties to the rulemaking subsequently filed rebuttal prehearing statements in early June 2008.

The Commission heard approximately eight hours of public testimony on June 10, 2008 in Grand Junction, Colorado and approximately four hours of public testimony on June 23, 2008 in Denver, Colorado. The Commission began hearing testimony from parties and party witnesses on June 23, 2008 in Denver. For the next six days, the Commission heard testimony from parties or party witnesses, cross-examination by parties, and answers to Commissioner questions from parties or party witnesses. The Commission reconvened for three more days of testimony, cross-examination, and questioning during July 15-18, 2008 in Denver.

Throughout this period, the COGCC staff was in frequent discussion with parties regarding the draft rules. Based upon these discussions and its own further evaluation, the COGCC staff issued clarifications to several of the proposed rules in May and June 2008. In consideration of arguments and alternative proposals contained in the parties' responsive prehearing statements and rebuttal statements, the COGCC staff issued a comprehensive set of suggested revisions to the proposed rules on June 18, 2008. The Commission invited groups of parties to submit alternative language for the proposed rules by July 30, 2008. Each of the party groups submitted alternative language, and some party groups submitted additional material in support of their proposed alternative approaches. The COGCC staff reviewed these submittals and, on August 11, 2008, submitted alternative recommended language for several of the draft rules.

The Commission closed the evidentiary record and commenced deliberations on August 19-20, 2008 in Denver on those rules for which the COGCC staff had developed alternative recommended language. During these deliberations, the Commission initially approved each of these rules, subject to changes provisionally approved in the deliberations. During these two days of deliberations, the Commission gave initial approval to fifty of the proposed rules.

The COGCC staff then reviewed the parties' July 30, 2008 submittals for the balance of the proposed rules and, on September 3-5, 2008, submitted recommended alternative language for each of the remaining draft rules. The Commission conducted deliberations on these draft rules on September 9-11 and 22-23, 2008 and on October 26-27, 2008. During these deliberations, the Commission gave initial approval to the remainder of the proposed rules.

At the conclusion of the initial deliberations, COGCC staff reviewed the transcripts of the proceedings and prepared final rule language. Where the Commission directed the staff to prepare new language for particular rules, the staff gave the parties an opportunity to review and comment to the Director on that new language. On November 7, 2008, the COGCC staff submitted final rule language for the Commission's review and consideration. The Commission conducted final deliberations on this language and adopted the final rules on December 9-11, 2008.

This was the most extensive rulemaking hearing in the Commission's history. All told, the Commission held twenty-two days of hearings, with some the days lasting almost twelve hours. The Commission heard approximately twelve hours of public comment by approximately two hundred people. It heard from approximately one hundred sixty party and staff witnesses and heard approximately seventy-five hours of testimony, cross, examination, and answers to Commissioner questions on twelve days of hearings. The Commission also considered more than thirty legal motions and conducted nine days of initial and final deliberations totaling more than seventy additional hours. Throughout the hearing, the Commission listened to all of the witnesses, questioned aspects of witnesses' written testimony, directed its staff to work with parties, and asked clarifying questions as necessary. The Commission repeatedly extended the rulemaking hearing in order to hear additional testimony and argument and conduct additional deliberations. It also directed and approved numerous changes to the draft rules that reflect input from the parties.

The Commission believes that the resulting final rules responsibly address the recent increase in oil and gas development, implement the 2007 legislation, and update the prior rules where appropriate. It also believes that these rules will ensure the protection of the public health, safety and welfare, including the environment and wildlife resources, while also fostering the responsible, balanced development, production, and utilization of oil and gas resources. C.R.S. § 34-60-102(1)(b). These rules will, among other things:

- Provide additional protection for public health and the environment through several new measures. These measures include requirements that operators maintain an inventory of chemicals kept onsite for use downhole, restrict operations in areas near drinking water sources, install emission control devices on certain equipment located near homes, schools, and other occupied buildings, and implement additional stormwater management measures. *See* Rules 205, 317B, 805, and 1002;
- Minimize adverse impacts on wildlife resources by requiring operators to work with CDOW regarding site-specific mitigation for sensitive wildlife habitat (mostly located in Western Colorado) and to avoid the most critical habitat areas where technically and economically feasible. *See* Rules 1201-1205;
- Provide for consultation with the CDPHE and CDOW in appropriate circumstances. These consultations will result in recommendations to the COGCC Director on appropriate conditions of approval to protect public health, the environment, and wildlife. For wildlife conditions, the Director's decision will be subject to surface owner consent. *See* Rules 306, 1202;
- Provide for timely efficient permitting through measures such as limiting the duration of CDPHE and CDOW consultation and public comment, expediting approvals under certain circumstances, and Commission review if permitting decisions are not timely issued. The rules also omit earlier proposals to develop an expansive new application form and require wildlife surveys. *See* Rules 216, 303, 305, 306, and 1201;
- Encourage landscape level planning through operator-initiated Comprehensive Drilling Plans, which will facilitate early and collaborative review and in certain circumstances aggregate and expedite regulatory approvals. While such Plans will be optional, the rules contain incentives for their use. *See* Rule 216;
- Provide for enhanced transparency by notifying surface owners, the owners of nearby surface property, local governments, the CDPHE and CDOW, and the public of permit applications and providing them with a minimum 20-day period to submit comments to the Director. *See* Rule 305; and
- Avoid a one-size-fits-all approach by tailoring numerous rules to the individual circumstances of the location or region. This includes rules concerning the requirements for compliance checklists, permit applications, notice, drinking water protection, odor control, and wildlife habitat protection. *See* Rules 206, 303, 305, 317B, 318A, 318B, 805, and 1202-1205.

#### Applicability of Rules to Federal, State and Private Land

The rules are grounded in the police powers of the State and are designed to protect Colorado's public health, safety, and welfare, including its environment and wildlife resources. The Commission believes that such protection is necessary for all lands, regardless of surface ownership.<sup>1</sup> This protection cannot be achieved if it is contingent on surface ownership. Rather,

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<sup>1</sup>The COGCC rules, however, are not intended to alter, impair, or negate the provisions of the Memorandum of Understanding between the Colorado Bureau of Land Management and the COGCC dated August 22, 1991. To clarify this intent, the COGCC added language to Rule 201 regarding Indian trust lands and minerals and the Southern Ute Indian Tribe which was developed by COGCC attorneys at the Office of the Attorney General, attorneys for the Southern Ute Indian Tribe, and attorneys for the Bureau of Land Management.

public health, safety, and welfare, including the environment and wildlife resources, are affected by oil and gas operations regardless of who owns the surface. Therefore, the regulatory protections imposed on oil and gas operations by these rules will apply on private, state, and federal land. *See Aztec Minerals Corporation v. Romer*, 940 P.2d 1025 (Colo. App. 1996) (pursuant to its police power, a governmental entity controls the use of property by the owner for the public good, authorizing its regulation without compensation). *See also California Coastal Comm'n v. Granite Rock Co.*, 480 U.S 572 (1987) (states can impose environmental controls on private mining activities on federally owned land).

The Act provides that “[t]he Commission has jurisdiction over all persons and property, *public and private*, necessary to enforce the provisions of this article, and has the power to make and enforce rules, regulations, and orders pursuant to this article, and to do whatever may reasonably be necessary to carry out provisions of this article.” C.R.S. § 34-60-105(1) (emphasis added). The Act also provides that “[a]s to lands of the United States or lands which are subject to its supervision, [the Act] shall apply . . . to carry out the provisions of sections 34-60-106, 34-60-117(4), 34-60-118, and 34-60-122.” Section 34-60-106(2)(d), C.R.S., states that the COGCC has the authority to regulate “[o]il and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility.” Accordingly, COGCC regulations will apply across the board to all lands on which oil and gas operations are occurring, with limited exceptions.<sup>2</sup>

#### Additional Action

During the rulemaking hearing, the Commission deferred action on a series of subjects to provide additional time for discussion, consideration, and, in some cases, consensus-building. The Commission decided to do this because it believes that spending additional time on these subjects will materially improve the quality of its decisions regarding them.

One subject where the Commission chose to defer action involves the application of these new rules and amendments to projects subject to approval by the Federal Energy Regulatory Commission, to the safety aspects of projects that are regulated by the U.S. Department of Transportation, or to midstream operations until the Commission conducts a further regulatory proceeding to address the manner in which such amendments and new rules shall apply to such projects and operations. Those three categories of projects and operations raise factual and legal issues that are distinct from those involving other oil and gas facilities. Therefore, in the interest of efficiency and timely action, the Commission chose to defer application of the new rules and amendments to such projects and operations, and to defer consideration of certain other proposed rules and amendments regarding such projects and operations specifically, until the Commission can devote its resources to a separate rulemaking to address these topics at a date in the near future.

The Commission also chose to defer action on the following issues: (1) Proposed Rule 521., which involves memoranda of agreements with local governments; (2) setback distances under

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<sup>2</sup>Although the rules are to apply to federal lands as of May 1, 2009, the COGCC staff will work with the Bureau of Land Management and U.S. Forest Service to attempt to develop a Memorandum of Understanding that clarifies how the rules will apply to federal land and that attempts to avoid duplicative and inconsistent regulation.

amended Rule 603.; (3) interim and final reclamation standards under amended Rules 1003 and 1004; (4) development of a list of recommended best management practices for wildlife under new Rule 1202; and (5) expansion of restricted surface occupancy areas to include additional riparian areas under new Rule 1205. During the hearing, the Commission determined that these particular issues should be further developed through a pilot project (memoranda of agreements with local governments) or stakeholder process (setback distances, reclamation standards, best management practices, and restricted surface occupancy area expansion). Because of the complex and important nature of these issues, the Commission wanted them to receive additional attention and consideration before action is taken upon them. Further information on future action regarding these issues is set forth below under the respective rules involved.

### **Amendments and Additions to Rules by Series**

The amendments include those that correct any typographical and grammatical errors. In addition, substantive amendments and additions to 2 CCR 404-1 were made. The general authority for adoption of these rules is set out in the Statutory Authority section above and is generally applicable to all amendments and new rules. The most specific authority and a summary of the purpose for each rule change is set forth below. References to particular factors or testimony is intended to be illustrative and not comprehensive.

### **100-Series Definitions**

As a general note, the revised 100-Series contains many definitions that occur throughout the existing rules and Act that have been moved to, or included in, this Series to improve the usefulness and readability of the Series. Some of these definitions reflect terms used in HBs 07-1298 and 07-1341. Others define terms that are used in new or amended rules that implement these statutes.

#### Amendments

The following definitions were substantively amended:

1. **Cease and Desist Order:**

Basis: The statutory basis for this amendment is section 34-60-121(5), C.R.S.

Purpose: The purpose of this amendment is to clarify that both the Director of the COGCC and the full Commission can issue a cease and desist order under certain circumstances. This is consistent with the statutory language of section 34-60-121(5), C.R.S.

2. **Centralized E&P Waste Management Facility**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to update and clarify the definition consistent with HB 07-1341.

3. **Completion Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This amendment clarifies that completion pits may be used to contain both fluids and solids produced during initial completion procedures.

4. **Emergency Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This definition was amended to clarify the intent of the amended 900-Series Rules.

5. **Flowlines**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to expand the definition of flowlines, in the case of water lines, to include the permitted surface water discharge point. This expansion is more protective of the environment and is consistent with the direction from HB 07-1341.

6. **Intervenor**

Basis: The statutory bases for this amendment are sections 34-60-108, 34-60-106(11)(a)(II), and 34-60-128(3)(d), C.R.S.

Purpose: The purpose of this amendment is to include CDPHE and CDOW as Intervenors to COGCC hearings. CDPHE can intervene to raise environmental or public health, safety and welfare concerns. CDOW can intervene to raise concerns about adverse impacts to wildlife resources. Based on requirements to consult with these agencies, COGCC chose to grant them intervener status as a matter of right.

7. **Multi-Well Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This definition was amended to be consistent with the intent of the amended 900 Series rules and to better distinguish multi-well pits from centralized E&P waste management facility pits. The Commission wishes to emphasize that the terms “treatment, storage and disposal” used in this definition include recycling or reuse. Centralized E&P waste management facility pits are defined to be those in use for more than three (3) years; therefore, multi-well pits should be defined to be those in use for no more than three (3) years to avoid overlap. This distinction is important because the permitting, lining, financial assurance, clean-up, and closure requirements applicable to those two categories of pits differ.

8. **Production Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This definition was amended to update and clarify the definition of production pits.

9. **Reserve Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to expand the definition of reserve pits to include pits used to contain E&P waste generated during initial completion procedures.

10. **Responsible Party**

Basis: The statutory basis for this amendment is section 34-60-124(8)(a), C.R.S.

Purpose: The purpose of this amendment is to clarify that the only entities that can be identified as responsible parties for certain actions are owners and operators of oil and gas operations.

## 11. Sensitive Area

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This amendment clarifies and expands this definition to include certain additional areas that warrant additional protection for water resources.

## 12. Skimming/Settling Pits

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This definition was amended to update and clarify the meaning of this term.

## 13. Well Site

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to expand the definition of well site to include the associated pad of any oil well, gas well, or injection well.

### Additions to the 100-Series

The following definitions were added to the 100 Series of rules:

### 1. Ancillary Facilities

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: The purpose of this addition is to clarify that virtually all facilities associated with oil and gas production are considered ancillary facilities by the COGCC, and are subject to regulation by the COGCC.

### 2. Best Management Practices

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II), 34-60-128(3)(c), and 34-60-128(3)(d), C.R.S.

Purpose: HB 07-1298 required the COGCC to address by rulemaking the use of best management practices to conserve wildlife resources. In addition, “best management practices” is a commonly used term for a variety of techniques selected by operators to minimize impacts to public health, welfare and the environment. A number of provisions in these rules (including those for public drinking water protection and stormwater management) establish requirements for operators to select appropriate best management practices. Therefore, this definition was added to define the term, and is intended to include siting, design, maintenance, and operating practices.

### 3. Chemical

Basis: This statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 205. discusses chemicals. This definition was added to define that term.

### 4. Chemical Inventory

Basis: This statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Amended Rule 205. requires operators to maintain a chemical inventory. This definition makes clear what that term means.

### 5. Chemical Product

Basis: This statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 205. refers to chemical products. This definition was added to clarify that term.

## 6. **Classified Water Supply Segment**

Basis: This statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 317B is a new rule for protecting public drinking water systems. This definition was added to establish the scope of this rule. It creates the basis for protection zones that, when combined with performance requirements applicable within certain distances of classified water supply segments, will ensure adequate protection of public drinking water supplies.

## 7. **Compliance Checklist**

Basis: This statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 206. was amended to provide operators and the COGCC with a tool for ensuring that operators pay regular attention to their compliance status with respect to certain COGCC Rules. Specifically, the Compliance Checklist is intended to remind and assist the operator and COGCC in assuring compliance with the applicable regulatory requirements involving public health and environmental protection. This definition was added to define Compliance Checklist for this purpose.

## 8. **Comprehensive Drilling Plan**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d)(II), C.R.S.

Purpose: HB 07-1298 required the COGCC to address by rulemaking the use of Comprehensive Drilling Plans. In response, the Commission adopted Rule 216., which provides for the preparation and approval of such plans. This definition was added to clarify the meaning of that term.

## 9. **Container**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This definition was added to clarify the difference in the labeling requirements under Rule 210.d between tanks and smaller, portable vessels. It mirrors the definition of “container” from the U.S. Department of Transportation. Containers should already be labeled by their manufacturers, so it is not necessary to subject them to the labeling requirements of Rule 210.d.(1).

## 10. **First Aid Treatment**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 602. imposes different reporting requirements for incidents at oil and gas operations that require first aid treatment or medical treatment. Definitions for both terms were added. The definition for “first aid treatment” is taken from 29 C.F.R. § 1904.7(b)(5)(ii), which is the analogous federal regulatory definition adopted by the Occupational Safety and Health Administration.

## 11. **Flowback Pits**

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendment clarifies that drilling pits include flowback pits and that such pits may be used to contain both fluids and solids produced during initial completion procedures.

## 12. **Gathering Line**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This term is used in multiple rules. The primary purpose of this addition is to clarify what the term means.

## 13. **Green Completion Practices**

Basis: The statutory authority for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 805., Odors and dust, requires operators to use green completion practices in certain circumstances. This addition makes clear to what that term refers.

## 14. **LACT** (“Lease Automated Custody Transfer”)

Basis: The statutory bases for this addition are sections 34-60-106(10) and 34-60-106(11)(a)(II), C.R.S.

Purpose: LACT is a common term in the oil and gas industry with a generally accepted definition. This addition reflects that definition and adds clarity for operators.

## 15. **Material Safety Data Sheet (MSDS)**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 205. requires operators to maintain MSDSs. This definition makes clear to what that rule is referring.

## 16. **Medical Treatment**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 602. imposes different reporting requirements for incidents at oil and gas operations that require first aid treatment or medical treatment. Definitions for both terms were added. The definition for “medical treatment” is taken from 29 C.F.R. §§ 1904.7(b)(5)(i) and 1904.46, which are federal regulations adopted by the Occupational Safety and Health Administration.

## 17. **Minimize Adverse Impacts**

Basis: The statutory basis for this addition is section 34-60-103(5.5), C.R.S.

Purpose: The purpose of this addition is to incorporate the definition of “minimize adverse impacts” from HB 07-1298.

## 18. **Minimize Erosion**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128, C.R.S.

Purpose: The 1000-Series rules (reclamation rules) require operators to minimize erosion in certain circumstances. This definition makes clear what “minimize” is intended to

mean. This clarification was necessary because erosion is a natural process that cannot be prevented.

#### 19. **Mitigation**

Basis: The statutory basis for this addition is section 34-60-128, C.R.S.

Purpose: The 1200-Series of rules (wildlife rules) require operators to mitigate adverse impacts to wildlife resources. The definition makes clear what that term means, and confirms that it may involve, as appropriate, habitat enhancement, off-site habitat mitigation, or mitigation banking.

#### 20. **Oil and Gas Facility**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Multiple rules refer to this term. This addition makes clear what this term means.

#### 21. **Oil and Gas Location**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Many rules refer to this term. This addition makes it clear to what those rules are referring.

#### 22. **Ordinary High Water Line**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This term is used in Rule 317B. This addition clarifies the method by which an operator can determine which rule provisions apply to its oil and gas location.

#### 23. **Public Water System**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This term is used in Rule 317B. This definition was added to make clear what the term means. Appendix VI of these rules includes a list of Public Water Systems. In addition, the definition clarifies that the term does not include any “special irrigation district” as defined in Colorado Primary Drinking Water Regulations (5 C.C.R. 1003.1).

#### 24. **Reclamation**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: While the concept of reclamation is generally understood in the regulated community, the COGCC believes this addition is helpful to clarify to both surface owners and the regulated community the new standards required to be met under the rules.

#### 25. **Reference Area**

Basis: The statutory bases for this addition are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Multiple rules use this term in connection with reclamation. This addition makes clear what the term means.

**26. Restricted Surface Occupancy Area**

Basis: The statutory basis for this addition is section 34-60-128(3)(d), C.R.S.

Purpose: Several rules, including Rule 1205., use this term in connection with wildlife protection. This addition makes it clear what the term means. Maps of restricted surface occupancy areas are attached as Appendix VII.

**27. Sensitive Wildlife Habitat**

Basis: The statutory basis for this addition is section 34-60-128(3)(d), C.R.S.

Purpose: Several rules, including Rule 1202., use this term in connection with wildlife protection. This addition makes clear what the term means. Maps of sensitive wildlife habitat are attached as Appendix VIII.

**28. Solid Waste**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Multiple rules refer to solid waste. This addition makes clear to what those rules are referring.

**29. Solid Waste Disposal**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Several rules, including Rules 907. and 1004., refer to solid waste disposal. This addition makes clear to what those rules are referring.

**30. Stormwater Runoff**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Multiple rules, including Rule 1002., refer to stormwater runoff. This addition makes clear to what those rules are referring.

**31. Surface Water Intake**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The definition of surface water supply areas refers to this term, which has been added to help define the scope of Rule 317B.

**32. Surface Water Supply Area**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rules 206.b. and 317B., refer to this term. This addition defines the scope of Rule 317B.

**33. Tank**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: While this term is generally understood in the regulated community, this addition will provide additional clarity.

**34. Tier 1 Oil and Gas Location**

Basis: The statutory basis for this addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 1002.f. refers to this term for purposes of stormwater management and thus necessitated its addition.

### 35. **Trade Secret**

Basis: The statutory bases for this addition are sections 24-72-204(3)(a)(IV) and 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 205. refers to this term, and this definition clarifies what is meant by that reference.

### 36. **Trade Secret Chemical Product**

Basis: The statutory bases for this addition are sections 24-72-204(3)(a)(IV) and 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 205. refers to this term, and this definition clarifies what is meant by that reference.

### 37. **Wildlife Resources**

Basis: The statutory basis for this addition is section 34-60-128, C.R.S.

Purpose: HB 07-1298 requires that the COGCC administer the Act so as to minimize adverse impacts to wildlife resources affected by oil and gas operations. This addition mirrors the statutory definition of that term.

#### Other Changes to the 100 Series

The rules on file with the Colorado Secretary of State do not include the COGCC's existing definitions for the terms "well site", "wildcat (exploratory) well", "zone of incorporation", and "all other words". These definitions were previously adopted by the Commission, and they are included with the new and amended rules to conform the rules on file with the Colorado Secretary of State to those on file with the COGCC.

## **200-Series General Rules**

### Amendments to 200-Series

The following rules were amended:

#### 1. Rule 201., EFFECTIVE SCOPE OF RULES AND REGULATIONS

Basis: The basis for the amendments to this rule pertaining to the Southern Ute Indian Tribe is Sec. 5, Public Law No. 98-290 (1984). Additional statutory bases for the amendments are sections 34-60-106(11)(a)(II) and 34-60-128, C.R.S.

Purpose: The primary purpose of these amendments was to clarify the scope of the rules. First, the rule emphasizes the legislative mandate to balance oil and gas development in a manner that protects public health, safety, and welfare, including the environment and wildlife resources. Second, the rule states the current law regarding operational conflict and local government regulation. Third, the rule clarifies the application of the rules to Indian trust lands and minerals and the Southern Ute Indian Tribe based upon existing law and current practice. Finally, the rule contains a severability clause.

#### 2. Rule 205., ACCESS TO RECORDS

Basis: The statutory bases for the amendments to this rule are sections 34-60-105(1) and 34-60-106(11)(a)(II), C.R.S.

Purpose: The general purpose of Rule 205. is to ensure that operators maintain adequate records of their operations in Colorado. As part of its ongoing oversight of oil and gas activities in this state, the COGCC staff conducts investigations into alleged impacts to public health, safety, welfare, including the environment and wildlife, related to these oil and gas activities. To fully investigate alleged impacts thoroughly, COGCC staff must have access to information on chemicals and constituents contained in products and materials during certain oil and gas exploration and production activities. A readily available inventory of chemical products used or stored for use downhole will allow the COGCC staff to complete investigations into alleged impacts from oil and gas exploration and production activities more thoroughly and quickly. Under the former rules, it often would take several weeks or months for an operator to provide requested information, if at all.

Generally, amended Rule 205. requires oil and gas producers, operators and others in Colorado to maintain and make available for inspection certain records. The amendments adopted in this rulemaking require that oil and gas operators maintain certain information regarding chemicals used at a well site. The amendments also include definitions of certain terms to clarify these new requirements, including: Chemical(s), Chemical Inventory, Chemical Product, Material Safety Data Sheet (MSDS), Operator, Trade Secret, and Trade Secret Chemical Product.

As amended, Rule 205. requires that beginning June 1, 2009 (on all lands), operators maintain a chemical inventory of all chemical products brought to a well site and used downhole or stored for use downhole during drilling, completion and workover operations, including fracture stimulation, as well as fuel stored at the well site. The inventory must include each chemical product for which an amount exceeding 500 pounds has been used or stored cumulatively during any quarterly reporting period. The Commission determined as a matter of policy that this threshold provides a reasonable balance between making information about chemical use available for the purposes described below and avoiding an unnecessary reporting burden for small quantities of materials that may be stored or used at oil and gas locations. The chemical inventories are required to be maintained at the operator's local field office and updated quarterly throughout the life of an operation, to assure that the information contained in the inventory remains current.

The delayed effective date for this requirement will provide affected operators adequate time to establish systems and procedures for developing and maintaining chemical inventories. As an interim measure, amended Rule 205. requires that effective May 1, 2009 for federal lands and April 1, 2009 for all other land, operators shall maintain material safety data sheets (MSDSs) for any chemical products brought to a wellsite for use downhole during drilling, completion, and workover operations, including fracture stimulation. This provision is intended to refer to MSDSs prepared in accordance with 29 C.F.R. §1910.1200(g).

The purpose of the new chemical inventory requirements is to provide information that may be useful to COGCC staff, CDPHE, and medical professionals to investigate and address potential public health issues and environmental impacts from oil and gas operations. In addressing a spill or release from a site or a complaint from a potentially adversely impacted land owner, COGCC and CDPHE staff and county health or emergency officials need information regarding the chemicals involved in order to

accurately focus sampling and analysis of potentially impacted media, as well as to determine appropriate remediation and response. Similarly, where individuals have been exposed to chemicals used at a well site, health professionals may need this information immediately to determine appropriate testing and treatment of those individuals.

The Commission heard substantial testimony regarding the legal and practical difficulties posed by the fact that the composition of many chemical products used in the oil and gas industry may be considered trade secrets. Because of the importance of protecting such information, the Commission adopted provisions that require the disclosure of information regarding the chemical constituents contained in a chemical product whose composition is a trade secret only under limited circumstances, and subject to limitations on the use of such information. In particular, such information is required to be disclosed to the Director (for use by COGCC and CDPHE staff or county health or emergency officials as needed) only where necessary to respond to a spill or release of a chemical product or a complaint by a potentially adversely affected landowner. The information is not to be disseminated further than necessary for response to the identified circumstances. The Commission determined that three business days is a reasonable deadline for the provision of chemical inventory information, except in a medical emergency, where the information must be provided immediately upon request, as discussed below.

Similarly, provisions in Rule 205. provide chemical constituent information to health professionals where they have reason to believe that the information is necessary for diagnosis or treatment of an individual exposed to the chemicals. The health professional is generally required to sign a confidentiality agreement, although the rule provides that where necessary for emergency treatment, the information will be provided immediately based on an oral or written acknowledgement of confidentiality. A standardized confidentiality agreement will be developed by the Commission for this purpose with input from interested parties. This agreement will be known as COGCC Form 35, Confidentiality Agreement, and will be available on the COGCC web-site.

The requirement that health care professionals execute a confidentiality agreement is not intended to subject them to an enforcement proceeding by the COGCC or to impose substantive regulatory requirements on them. It merely sets forth a condition for their access to trade secret information, which is analogous to conditions that the Commission has imposed on other categories of persons, such as the designation of representatives by local governments under the 100-Series Rules, compliance with hearing procedures by parties under the 500-Series Rules, and satisfaction of onsite inspection requirements by surface owners under the Onsite Inspection Policy.

Where it is necessary that information regarding the chemical constituents in trade secret chemical products be disclosed, the Commission requires that such information be provided by the vendor or service provider in question, since those entities have more direct access to such information. However, the Commission included a provision stating that the oil and gas operator is ultimately responsible for providing the required information, in the event that the vendor or service provider fails to do so, unless the operator can demonstrate to the Director that it has made a good faith effort to obtain this information from the service provider or vendor and has not been able to do so. In such cases, a good faith effort will include providing evidence as to why it could not obtain this right via a contract agreement with the vendor or service provider and why this common practice couldn't be employed. The Commission has determined that this

provision is necessary to assure that this rule serves its purpose of providing information needed for the protection of public health and the environment.

The Commission determined as a matter of policy that the Rule 205. provisions requiring the disclosure of information regarding trade secret chemical products in the limited circumstances identified strikes a reasonable and appropriate balance between oil and gas operators' interests in maintaining trade secrets and the public's interest in the protection of public health and the environment.

The Commission appreciates representations of support from industry parties regarding the potential future need for studies of the possible public health impacts from oil and gas operations. The Commission also acknowledges industry's commitment to provide in a timely manner the chemical information necessary to complete useful studies once the COGCC staff, in consultation with the CDPHE, determines they are warranted. Relying on these representations, the Commission chose not to include rule language specifically addressing public health studies. Instead, the Commission expects that if such studies are initiated, industry will participate voluntarily to provide the information regarding chemical use that may be needed for those studies. In the event such voluntary efforts to provide information needed for studies are unsuccessful, the Commission will revisit this rule and consider revisions to the chemical inventory related requirements.

Beginning June 1, 2009, Rule 205.'s requirement that operators maintain a chemical inventory by well site will become effective on all lands.

### 3. Rule 206., REPORTS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of Rule 206. is to provide oil and gas operators and the COGCC a tool for ensuring that operators pay regular attention to their compliance status with respect to certain COGCC rules. Specifically, the Compliance Checklist (Form 36) is intended to remind and assist the operator and COGCC in assuring compliance with the applicable regulatory requirements involving public health and environmental protection. This rule currently applies only within Garfield, Mesa, Rio Blanco and Gunnison Counties. Garfield, Mesa, and Rio Blanco Counties are anticipated to receive substantial additional oil and gas development activity, while Gunnison County affirmatively requested that the rule apply there. The Commission acknowledges that if use of the Compliance Checklist serves to reduce non-compliance situations, it may be expanded to other oil and gas development regions of the state, via a rulemaking pursuant to Rule 529.

The Compliance Checklist includes twelve specific but simple questions that an informed on-site representative of the operator should be able to answer relatively easily. Based on past experience, the COGCC understands that when some oil and gas facilities fail to operate in compliance with on-site regulatory requirements on a consistent basis, this failure may have been the result of the lack of knowledge of the on-site operator, or the failure to adequately plan for and implement the requirements. For this reason, the COGCC believes that a Compliance Checklist should serve the primary purpose of ensuring that the operator takes an active approach to compliance with ongoing regulatory requirements. The COGCC expects operators to take the Compliance Checklist seriously and that it be fully updated annually and maintained at the operator's local field office. Therefore, the failure to maintain an up-to-date Compliance Checklist at the operator's local field office, where required, or including false information could

result in a civil enforcement action. However, the Commission intends that such conduct would not result in a criminal enforcement action under section 34-60-121(2), C.R.S. The COGCC believes the rule allows a reasonable time for the initial completion of the Compliance Checklist, enabling the operator to perform the on-site evaluation and to take any necessary action to come into compliance prior to its completion and maintenance at the operator's local field office. As a matter of policy, the Commission believes that the Compliance Checklist is a valuable tool to assist in assuring ongoing compliance with rules.

#### 4. Rule 210., SIGNS AND MARKERS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendments to this rule add the requirement that operators conspicuously label all of their tanks, from the time of initial drilling until final abandonment, with: the name of the operator; the operator's emergency contact telephone number; the tank's containment capacity; the tank's contents; the tank's National Fire Protection Association label; and the tank's identification number from the U.S. Department of Transportation placard or shipping document. All tanks, regardless of construction date, must be labeled in accordance with this rule by September 1, 2009. In addition, this rule was amended to clarify how containers should be labeled. The addition of the definition of "container" was added to the rules to make clear what is considered a tank and what is considered a container. This amendment was necessary because, during the hearing, industry expressed concern that intermodal bulk containers and smaller vessels like drums would be considered tanks, which would be burdensome because such vessels are portable and frequently moved around.

This rule, as amended, is designed to provide additional information to emergency responders so they can quickly identify the hazards of a material(s) involved in an incident and protect themselves and the general public in the first phase of an emergency incident. This is consistent with the COGCC's mandate to ensure that oil and gas operations are conducted in a manner that protects public health safety and welfare. Further, such a requirement is cost-effective because the financial burden on an operator to label its tanks in accordance with Rule 210. is minimal, particularly when compared to the benefit it can provide to enable first responders to effectively respond to an emergency incident.

#### 5. Rule 215., GLOBAL POSITIONING SYSTEMS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to ensure that more accurate results for locating oil and gas facilities are obtained when using global positioning systems.

##### Additions to 200-Series

The following rules were added:

##### 1. Rule 201A, EFFECTIVE DATE OF AMENDMENTS

Basis: The statutory bases for this addition are sections 34-60-106 and 24-4-103(5), C.R.S.

Purpose: Unless otherwise specified, the general effective date of these rules is May 1, 2009 for federal land and April 1, 2009 for all other land. This delay is primarily in

response to the desire of the COGCC to ensure a smooth transition to the new rules and to provide the regulated community with time to prepare appropriately for compliance with the rules. One representative of the regulated community suggested that the rules go in effect on July 1, 2009. Other affected stakeholders argued against this date, saying that Colorado's environment and wildlife resources would be adversely affected each day the rules were not in effect. The Commission listened to both of these concerns and chose May 1, 2009 for federal land and April 1, 2009 for all other land as the general effective dates. These dates allow operators sufficient time to plan their oil and gas activities with the new rules in mind while being protective of the environment and wildlife resources. They also give the COGCC, CDPHE, and CDOW the ability to train employees properly regarding correct and efficient implementation of these rules.

Making the rules generally effective on federal land one month after they become generally effective on other land is intended to provide additional time for the COGCC to work with federal officials to determine the relationship between the COGCC rules and federal regulations on such lands, and to update the existing Memorandum of Understanding between the COGCC and the Bureau of Land Management accordingly.

The Commission also reiterates that the amendments and new rules adopted on December 11, 2008 shall not apply to new or existing gas storage projects or operations that are subject to the jurisdiction of the Federal Energy Regulatory Commission, the safety aspects of projects that are regulated by the U.S. Department of Transportation, or midstream operations until the Commission conducts a further regulatory proceeding to address the manner in which such amendments and new rules shall apply to such projects and operations.

## 2. Rule 216., COMPREHENSIVE DRILLING PLANS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(I)(A), C.R.S. In addition, the basis for this rule is HB 07-1298, as codified at section 34-60-128(3)(d)(II), C.R.S.

Purpose: This rule provides an opportunity for operators, via Comprehensive Drilling Plans (CDPs), to identify reasonably foreseeable oil and gas activities in a defined geographic area and to facilitate early and collaborative planning with broad involvement about associated potential impacts and measures for minimizing them. The rule requirements are designed to offer flexibility and incentives for operators to take this broad approach to oil and gas development planning and permitting, effectively allowing the "bundling" of Form 2A requirements, presented in Rule 303. The Commission intends that if a CDP satisfies all of the informational and procedural requirements for a Form 2A, then no individual Form 2As will be required for wells covered by the CDP. The Commission also wishes to emphasize that satisfaction of the Form 2A informational and procedural requirements by a CDP will need to include measures that are substantially equivalent to those included in the public notice and comment requirements as provided in Rule 305., requirements to consult with CDPHE and DOW, where applicable, as provided in Rule 306., and the basic Form 2A informational requirements listed in Rule 303.

The Commission also intends the rule to allow operators to develop CDPs that are more narrowly focused, effectively allowing the "bundling" of consultation requirements presented in Rule 306. For example and with respect to drinking water protection, an

operator may want to address in a CDP only variances from Rule 317B drinking water provisions. In this case, the CDP would focus only on how the operator plans to mitigate and protect drinking water resources and not necessarily involve other protected resources, such as wildlife. Such a CDP would also involve consultation with CDPHE and thus eliminate the need for consultation with CDPHE regarding drinking water relative to the identified oil and gas wells at any future date, unless the operator wishes to alter the terms of the CDP. As such, subsequent satisfaction of Form 2A procedural and public notice and comment requirements could be tailored to fit the contents of the CDP. However, the Commission wishes to emphasize that the CDP can not “shield” operators from Form 2A and associated public notice and comment, informational and other applicable requirements not otherwise addressed in the CDP. In other words, the operator may develop a draft CDP however it chooses, but the information that is included or not included will have a significant bearing on what kind of procedural benefits result from the CDP. A narrowly focused CDP will result in fewer procedural benefits and thus a broader Form 2A process. This underscores the importance for operators to discuss with the COGCC, CDPHE, and CDOW their plans and expectations for a CDP before initiating work on it.

Thus, the Commission intends CDPs to be a flexible planning and permitting tool, which operators can tailor to their needs and circumstances. In this way, the Commission seeks to encourage landscape level planning and regulatory review as contemplated by HB 07-1298 and supported by a number of parties. This should help to better address cumulative effects, promote efficiently, and facilitate more win-win situations. It is the opposite of a one-size-fits-all approach.

The Commission also recognizes that CDPs by their very nature address more comprehensive oil and gas activity and associated impacts. Furthermore, activities contemplated within the CDP are likely to occur over a potentially longer period of time and involve greater up-front planning and negotiations. In view of this, the Commission believes it is appropriate that the CDP term be extended beyond that for Form 2As; from three to six years, and that the Commission itself consider CDPs through its hearing agenda.

The Commission wishes to clarify how the provision relating to confidentiality in Rule 216.d.(6) works. The rule says the Director will post accepted CDPs on the COGCC web-site, subject to any confidential or proprietary information belonging to the operator being withheld. This means that the Director will not post information the operator designates as confidential. However, if any person makes a Colorado Open Records Act (“CORA”), sections 24-72-100.1 *et seq.*, C.R.S., request for the information, labeling a document “confidential” does not end the inquiry as to whether it is exempt from disclosure. If the COGCC receives a CORA request for information labeled “confidential”, the COGCC staff, as custodian of the records, will independently determine whether such information is exempt from disclosure pursuant to CORA. If the COGCC staff determines a document is exempt from disclosure pursuant to CORA, it will keep such information confidential to the maximum extent allowed by law.

The Commission intends that for purposes of mapping riparian areas when submitting information for a CDP, an operator need only make reasonable good faith effort to identify such areas and they may rely on any appropriate and credible source of information on riparian areas in doing so.

The Commission also intends that if a CDP is approved before Rule 216 becomes effective, then such CDP will be treated the same as CDPs approved after Rule 216 becomes effective. The Commission understands that the staff is already discussing CDPs with several operators in a manner consistent with the Final Draft Rules and encourages this effort. If a CDP is finished before the rule amendments become effective on May 1, 2009 on federal land or April 1, 2009 on other land, it will be treated the same as a CDP adopted after these dates.

### **300-Series Drilling, Development, Producing and Abandonment**

#### Amendments to the 300-Series

The following rules were amended:

### **300-Series Drilling, Development, Producing and Abandonment**

#### Amendments to the 300-Series

The following rules were amended:

1. Rule 302., COGCC FORM 1. REGISTRATION FOR OIL AND GAS OPERATIONS

Basis: The statutory basis for this Rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This amendment pertains to the portion of COGCC Form 1A, Designation of Agent, which deals with the designation of an agent for the operator. The purpose of this amendment is to clarify rule language and to make it clear that when an individual signs this form, such individual is explicitly identifying himself or herself as someone that is authorized by the operator to act on behalf of the operator. The previous rule language stated that “any party may act on or for the behalf of the operator” if such party filed this form. The amended language clarifies the intent of the original language by stating that the individual that signs a designation of agent form must be approved by the operator to do so.

2. Rule 303., REQUIREMENTS FOR FORM 2, APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE; FORM 2A, OIL AND GAS LOCATION ASSESSMENT

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 303. was substantially reorganized and revised to reflect significant changes desired by the COGCC and mandated by HBs 07-1298 and 07-1341. The minor, conforming changes to this rule are not individually addressed.

- a. Rule 303.a – Form 2. Application for Permit-to-Drill, Deepen, Re-Enter, or Recomplete, and Operate

Rule 303.a.(1) was amended to require that an Application for Permit-to-Drill, Form 2 must be accompanied by an Oil and Gas Location Assessment, Form 2A. This existing requirement was reworded and moved to Rule 303.a.(1) from Rule 303.d.(1). In addition, Rule 303.a.(2) previously stated that the Director’s approval of an APD is considered final agency action for purposes of judicial review. This provision was moved to Rule 305.d.(3) and clarified to state that the issuance of an approved Form 2 or Form 2A by the Director is deemed the final decision of the Commission and subject to judicial

review if it is not suspended by a timely request for a Commission hearing submitted by a party with standing.

b. Rule 303.c – Form 2. Application for Permit-to-Drill, Deepen, Re-Enter, or Recomplete and Operate

Prior to amendment, Rule 303.c. required that the Form 2 include: a well location plat or addendum depicting visible improvements within 200 feet of a wellhead or 400 feet of a wellhead in high density areas; a description of surface uses within those distances; and a U.S.G.S. topographic map depicting a radius of at least three miles around the well and showing access from one or more public roads. These requirements have been moved from Form 2 to Form 2A and modified to include depictions of visible improvements and descriptions of surface uses within 400 feet of the wellhead in all areas and eliminate the three mile radius requirement for the U.S.G.S. topographic map. As modified, these requirements are now addressed under Rule 303.d. The Commission intends that subsurface issues will be primarily addressed through Form 2 while surface disturbance will be primarily addressed through Form 2A.

c. Rule 303.d. – Form 2A. Oil and Gas Location Assessment

As amended, Rule 303.d.(1) requires the submittal of a Form 2A for any “new oil and gas location,” and defines that term to mean surface disturbance at a previously disturbed site or surface disturbance that modifies or expands a location existing on the general effective date of the amendments. As amended, Rule 303.d.(2) will exempt from this requirement: surface disturbance occurring within the originally disturbed area at an existing oil and gas facility unless it involves drilling a new well or constructing a drilling or production pit; locations covered by certain CDPs; gathering lines; seismic operations; pipelines for oil, gas, or water; and roads. These rules ensure that a Form 2A is submitted for those oil and gas developments that are most likely to adversely affect public health, safety, and welfare, including the environment and wildlife resources. This balances environmental and wildlife protection with regulatory efficiency as the General Assembly directed.

The Commission anticipates that a Form 2A will be submitted for a location concurrent with the submittal of the first Form 2 for a well at that location. Subsequent Form 2s for additional wells at that location may reference the Form 2A. This should promote efficiency for the COGCC, permit applicants, and other regulatory participants by providing for one review of surface disturbance associated with a new location rather than repetitive reviews of such disturbance with each application for a permit to drill an individual well there.

As amended, Rule 303.d.(3) specifies the information required in a Form 2A. Some of this information was required under the prior version of Rule 303.d. Other information was previously required under Rule 303.a., and has been moved from Form 2 to Form 2A as discussed above. Other information is new, such as: a list of major equipment components used in conjunction with drilling and operating the wells and a description of any pipelines for oil, gas, or water; information regarding water resources and reclamation; and information on the surface owner and any surface use agreement. Still other information is not required under all circumstances, but only where particular circumstances exist, such as: where the location is sited on a steep slope, is within sensitive wildlife habitat or a restricted occupancy area, or is within a public drinking

water buffer zone established to protect public drinking water; where the location involves multiple wells on a single pad; where the applicant proposes BMPs or requests a variance; or where the location is covered by a CDP. Thus, the Form 2A requirements are tailored to the individual circumstances of the location, do not reflect a one-size-fits-all approach, and should generally require more information in the Piceance Basin than in other areas of the state. In the interest of efficiency, amended Rule 303.d.(3) also specifies that if the required information is included in certain federal documentation, then the applicant may attach such documentation to the Form 2A.

The Commission intends that for purposes of mapping riparian areas when submitting information for a Form 2A, an operator need only make reasonable good faith effort to identify such areas and they may rely on any appropriate and credible source of information on riparian areas in doing so.

The Commission believes that the additional information in Form 2A will help the COGCC to better evaluate the potential for proposed oil and gas locations to adversely impact public health, safety, and welfare, including the environment and wildlife resources, and to develop special conditions where appropriate to minimize such impacts and ensure appropriate reclamation as directed by the General Assembly, while ensuring a timely and efficient process. This additional information will also help the COGCC to monitor the extent of surface disturbance and the number and location of certain equipment components, which should improve the COGCC's ability to assess the cumulative impacts associated with oil and gas development. These information requirements are substantially fewer than the initial Form 34 concept that was included in the COGCC staff's November 2007 pre-draft proposal, and they have also been revised from the March 2008 draft rules. After considering extensive testimony on this subject, the Commission believes that these information requirements are reasonable and appropriate under the current circumstances.

As amended, Rule 303.d.(4) requires approval of the Form 2A prior to approval of a Form 2 or other permit under the following circumstances: where the proposed location will disturb more than one acre and is within Garfield, Mesa, Rio Blanco, or Gunnison Counties; where consultation with the CDPHE or CDOW occurs; or where an ancillary facility would serve multiple wells and is not otherwise approved by the COGCC. In other circumstances, Form 2A is merely an informational report. Garfield, Mesa, and Rio Blanco Counties were the site of approximately half of the Form 2s issued in 2007, and they are currently the location of approximately three-quarters of the drilling rigs operating in Colorado, while Gunnison County affirmatively requested that the Form 2A approval requirement apply there. In addition, these counties all pose more challenging public health and welfare, environmental, and wildlife resource issues. Therefore, the Commission concluded that requiring approval of Form 2As in these counties will help to ensure that adverse impacts to the environment and wildlife resources are minimized. The Commission also concluded that requiring Form 2A approval where consultation occurs with the CDPHE or CDOW and where large ancillary facilities would not otherwise be subject to COGCC approval will likewise help to ensure that the environment and wildlife resources receive appropriate protection under those circumstances.

The Commission considered extensive staff and party testimony and public comment in deciding to adopt these amendments. Some participants requested much more extensive

and restrictive regulatory changes, while others urged far fewer and less restrictive changes. The amendments reflect the Commission's policy decision, which seeks to balance the need for additional consideration and protection of public health and welfare, the environment, and wildlife resources with the need to maintain a timely and efficient permitting process as directed by the General Assembly.

d. Rule 303.e. - Processing Time for Approvals

As amended, Rule 303.e. sets forth the timelines by which applicants can expect a decision on a Form 2 or, where approval is required under Rule 303.d.(4), a Form 2A. It requires the Director to make such a decision within 30 days if the proposed location is covered by a CDP and no variance is requested. It also provides that whether or not the location is covered by a CDP the applicant may request an expedited hearing before the Commission if the Director has not made a decision within 75 days. This expedited hearing, however, will not occur before proper notice is given under the Act. *See* C.R.S. § 34-60-108.

The shorter processing period for Form 2s and Form 2As covered by a CDP is intended to create an incentive for the development of such plans and thereby promote landscape level planning. The Commission believes that expedited processing of such Forms is feasible because the CDP should identify actions and conditions to minimize adverse impacts to the environment and wildlife resources. The ability to request an expedited hearing if a decision on a Form 2 or Form 2A is not made within 75 days is intended to ensure that the approval process remains timely and efficient as directed by the General Assembly and to address industry concerns that applications will routinely require many months to process. It is also intended to make the timing of Commission decisions more predictable for industry, which will assist in industry's business planning.

The Commission understands that the current permitting process has recently averaged more than 60 days to complete. It believes that this average can and should be reduced consistent with COGCC staffing levels and the number of applications that are filed. Although the Commission has provided for a hearing if the process extends beyond 75 days, the Commission intends that a 75 day process would be the exception and not the rule. The Commission encourages the staff to work to reduce the current application backlog as additional staff are added in 2009.

e. Rule 303.g. – Revisions to Form 2 or Form 2A

As amended, Rule 303.g. authorizes the Director to request supplemental information when non-substantive revisions are made by an operator to an approved Form 2 or Form 2A. Prior to this amendment, the authority of the Director to request such information was unclear and created potential uncertainty.

f. Rule 303.h. – Incomplete Applications

As amended, Rule 303.h. states that incomplete Form 2s and Form 2As will not be reviewed. As noted above, the COGCC currently receives thousands of permit applications a year. Applicants have the responsibility to comply with all required regulations, and the COGCC should not use its limited resources to evaluate an incomplete application. This amendment gives operators notice that incomplete applications will not be considered, and it thereby creates an incentive for operators to ensure the applications are complete before they are submitted. Rule 303.h. was also amended to provide that where a Form 2 or Form 2A is covered by a CDP the COGCC

will shorten its completeness review period from ten days to three business days. This is intended to create an additional incentive for operators to develop CDPs and thereby to further promote landscape level planning.

g. Rule 303.i. – Information Requests After Completeness Determination

Rule 303.i. is a new provision that clarifies the Director’s authority to ask the operator for additional information that is needed to review a Form 2 or Form 2A, notwithstanding that the Form was determined to be technically complete. This amendment simply codifies current COGCC practice and is not intended to change that practice. The amendment also states that such a request will not affect the applicant’s right to request a hearing before the Commission if the Director does not make a decision within 75 days after the Form 2 or Form 2A was originally determined to be complete under Rule 303.h.

h. Rule 303.j. – Permit Expiration

As amended, Rule 303.j. retains the current one year term for approved Forms 2 and creates a new three year term for approved Forms 2A. The Commission retained the one year term for Forms 2 to ensure that the special conditions remain current where drilling operations are not commenced within a year. In addition, the Act promotes the development of oil and gas resources, and the Commission wants to deter operators from sitting on their rights and not developing the minerals as authorized. The Commission created a three year term for Forms 2A to provide operators with additional time to develop oil and gas locations.

i. Rule 303.m. - Special Circumstances for Withholding Approval of Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A

As amended, Rule 303.m. authorizes the Director to withhold approval of a Form 2A as well as a Form 2 under certain circumstances and expands those circumstances to include a material threat to wildlife resources. In addition, the rule previously required the Director to withhold such approval when a request for a hearing on the permit is made by a local governmental designee and stated that such a hearing would be expedited. These provisions have been deleted as unnecessary because under amended Rule 305.d. the Director must suspend the approval when a timely hearing request is made by the local government designee. Because the approval can now be suspended, there is no longer a need to withhold it under these circumstances, and the timing of the hearing has been addressed in the 500-Series consistent with other hearings on a Form 2 or Form 2A.

3. Rule 304., FINANCIAL ASSURANCE REQUIREMENTS

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(I)(A) and 34-60-106(13), C.R.S.

Purpose: The amendment to this rule expands the authority of the Director and enables him to withhold approval of a Form 2A if an operator’s existing wells are not in compliance with the 700-Series rules (Financial Assurance). This is appropriate because an operator should not be able to disturb the surface of land for its operations if it cannot ensure that proper reclamation will occur.

4. Rule 305., NOTICE, COMMENT, APPROVAL (formerly NOTICES OF OIL AND GAS OPERATIONS)

Basis: The statutory bases for this rule are sections 34-60-106(11)(a)(II) and 34-60-106(14), C.R.S.

Purpose: Current COGCC rules provide individualized notice of Form 2 applications only to the local government designee. Although the COGCC notifies the public of such applications by posting a summary notice on the COGCC web-site, anyone wishing to review an application must do so at the COGCC offices. Surface owners receive notice before certain operations are undertaken, but not of permit applications. Amended Rule 305. significantly enhances the transparency of the permitting process by providing that the entire Form 2A will be posted on the COGCC web-site, by extending individualized notice to the CDPHE, CDOW, surface owners, and the owners of surface property within 500 feet of the location, and by providing at least a 20 day period for receipt and consideration public comment. These and other changes summarized below are intended to result in permitting decisions that are better informed and more protective of public health, safety, and welfare, including the environment and wildlife resources.

Amended Rule 305. directs operators to provide the surface owner and the owners of surface property within 500 feet of the proposed oil and gas location with a copy of the Form 2A and limited information about major equipment components, visible surface improvements, and road access. Operators must also provide the surface owner with certain additional information concerning the owner's rights under COGCC rules and policies. The Commission heard testimony that many local governments provide or require notice to adjacent landowners of land use applications. It determined that requiring notice to the surface owner and the owners of surface property within 500 feet is appropriate as a matter of policy because those individuals are the most directly affected by the proposed activity and may therefore have information on issues regarding public health, safety, and welfare, including the environment and wildlife resources. The Commission emphasizes that the complete Form 2A need not be used for this purpose and that operators may rely on local tax records to identify the recipients of the notice. In addition, the requirement to provide notice to the owners of surface property within 500 feet will not apply to areas covered by Rules 318A or 318B. Because surface locations in those areas are identified in detail in the rules, and because those rules were the subject of extensive public discussion when they were adopted, nearby landowners are essentially on notice of the likelihood of oil and gas operations already. While the Commission appreciates that requiring additional notice to surface owners and the owners of surface property within 500 feet will impose certain additional costs on operators, it believes that such costs are reasonable under the circumstances.

Amended Rule 305 also directs that a Form 2A will be posted on the COGCC web-site once it is determined to be complete, and that the COGCC will provide concurrent electronic notice of such posting to the relevant local governmental designee and, where consultation is triggered under Rule 306., to the CDPHE and CDOW. Where the proposed oil and gas location is covered by an accepted Comprehensive Drilling Plan, the web-site posting will include directions for the review of that Plan. Posting the Form 2A itself rather than a summary notice of the application will make it easier for interested members of the public to review the Form and obtain information on the proposed development. Providing concurrent electronic notice of the posting to the local government designee, CDPHE, and CDOW will facilitate their ability to timely consult. The Commission wishes to emphasize that to avail itself of these and many other rights

under the rules, a local government must provide the COGCC with a written designation identifying its local government designee.

The web-site posting of the Form 2A will initiate a 20-day period during which the COGCC will accept and post any comments it receives on the Form 2A or any associated Form 2. Although the COGCC will consider such comments, it does not anticipate responding to them. This 20-day comment period may be extended to 30 days upon a written request received during the 20-day period from the local governmental designee, the CDPHE, the CDOW, or a landowner who receives notice under the amended rule as described above. This 20-day comment period represents a balance between several competing interests and considerations. Some parties urged a longer comment period such as 30 days or more, while others urged a shorter period or no comment period at all. The 20-day period represents a policy decision by the Commission that is intended to strike an appropriate balance between transparency and expediency. The Commission believes that a 20-day comment period responds to legislative direction to provide a timely and efficient procedure for the review of APDs.

Upon the conclusion of the comment period and, where applicable, consultation with the CDPHE or CDOW, the Director may attach technically feasible and economically practicable conditions of approval to the Form 2A or Form 2. The COGCC will promptly provide notice of the Director's decision on the Form 2 or Form 2A to parties with standing to request a hearing under Rule 503. The Director's approval of a Form 2 or Form 2A will be suspended if a party with standing under Rule 503. requests a hearing within ten days after the Director's decision is issued. In such event, the Director will set the matter for an expedited hearing, consistent with the notice requirements of the Act. This ten-day period is intended to allow parties with standing to review the Director's decision and decide whether to exercise their hearing rights, while still allowing for a timely and efficient procedure. If no party with standing to request a hearing does so within ten days after the decision is issued, then the permit will issue as proposed by the Director and the Director's decision is deemed a final decision of the Commission, subject to judicial appeal. If the decision were immediately deemed final, then this could preclude parties with standing from exercising their hearing rights under Rule 503.

Amended Rule 305. retains provisions from the previous rules for providing notices of drilling activities (called the "advance notice" in the amended rules), appointing agents, notifying tenants, and providing surface owners with notices of subsequent well operations, drilling during irrigation seasons, and commencement of final reclamation. The amended Rule adds to the waiver section a provision stating that surface owners and their successors in interest may rescind that waiver to the extent allowed under applicable law. Finally, the amended Rule directs an operator to post a sign at the intersection of the lease road and the public road providing access to the well site at least 30 days before commencement of drilling. This represents a policy decision that refines the previous requirement that notice be posted "on or near the proposed drillsite" and will ensure that those in the vicinity who do not receive individual notice are notified of upcoming drilling activities.

Amended Rule 305. reflects a series of policy decisions by the Commission based on extensive input from the staff, parties, and public. After considering this input, the Commission concluded that the amendments will increase transparency and improve decision making while still ensuring that the approval process remains timely and

efficient. The Commission also believes that facilitating input from the local governmental designee, the CDPHE, the CDOW, the surface owner, the owners of surface land within 500 feet, and the public will help ensure protection of public health, safety, and welfare, including the environment and wildlife resources, by helping to identify potential issues, impacts, or conflicts early in the permitting process. By notifying these persons and the general public of an application, and by soliciting comment from them before a decision is made, the COGCC may learn of issues or problems that would not otherwise be considered. The notice and comment provisions of Rule 305. should thus result in permitting decisions that are better informed and more protective of important state resources.

## 5. Rule 306., CONSULTATION

Note: Rule 306. was reorganized and revised to reflect significant changes authorized and mandated by HBs 07-1298 and 07-1341.

Basis: The statutory bases for this rule are sections 34-60-106(1)(f), 34-60-106(11)(a)(II) and 34-60-128(2)(d), C.R.S.

Purpose: Rule 306. reflects the Commission's response to the General Assembly's directive that the CDOW and CDPHE have a consultative role in certain aspects of COGCC decision-making and the Commission's belief that such consultation will lead to better informed decisions. The Commission heard extensive testimony regarding the nature of, participants in, and timeframe for such consultation and arrived at what it believes is a balanced, effective and fair approach to implementing the consultation directive. The cornerstone of the Commission's policy approach toward consultation has two key elements: (1) to allow CDOW to consult on oil and gas development in sensitive wildlife habitat (which is primarily located in western Colorado) in order to minimize adverse impacts to Colorado's wildlife resources; and (2) to allow CDPHE to consult in more limited circumstances to ensure that public health, safety, welfare and the environment are protected. The Commission's policy approach also recognizes the key role the operator and surface owner have in oil and gas development decisions, while emphasizing the need for timely and efficient decision-making and the importance of developing oil and gas resources.

As amended, Rule 306.a. describes the consultation process between the operator and the surface owner or the surface owner's agent. This provision restates and clarifies language from the existing rule, which was previously set forth in the introductory paragraph and subsections 306.a.(1) and (2). Amended Rule 306.b. describes the consultation process with local governments, and it restates and clarifies existing Rule 306.a.(3). Amended Rules 306.e. and 306.f. address final reclamation consultation and consultation with tenants, and they restate and clarify existing Rules 306.c. and 306.d.

Amended Rule 306.c. adds a new consultation process with the CDOW. Such consultation will occur where: (1) consultation is specifically required by the 1200 Series Rules (i.e., where the location would occur in sensitive wildlife habitat); (2) the operator seeks a variance from a requirement under the 1200 Series Rules (e.g., where a variance is sought from the restricted surface occupancy area limitations); (3) the CDOW requests consultation because the location would occur in known occurrence or habitat of a federally threatened or endangered species; or (4) the operator seeks to increase well

density to more than one well per 40 acres or the Commission develops a basin-wide order involving wildlife.

Amended Rule 306.d. adds a similar new consultation process with the CDPHE. The circumstances where consultation with the CDPHE occurs are more limited because the CDPHE already administers numerous rules and regulations for protecting public health, safety, welfare, and the environment. Therefore, consultation with the CDPHE will occur only where: (1) the local government designee requests participation by the CDPHE because of health, safety, welfare, or environmental concerns; (2) the operator seeks a variance from a one of certain rules intended to protect public health, safety, welfare, or the environment (e.g., rules pertaining to public water system protection, underground disposal of water, setback requirements in high density areas, coalbed methane wells, odors and dust, E&P waste management, and stormwater management); or (3) the operator seeks to increase well density to more than one well per 40 acres or the Commission develops a basin-wide order involving public health, safety, welfare, or the environment.

In amending Rules 306.c. and 306.d., the Commission intended to ensure that the permitting process remains timely and efficient. Therefore, the amendments establish a 40-day time period for consultation by the CDOW and CDPHE. This 40-day period will begin concurrent with the start of the public comment period, and if consultation does not occur within such 40-day period then the consultation requirement is waived. Therefore, consultation with the CDOW and CDPHE will occur simultaneously with the public comment period and the COGCC staff's review of the Form 2 and Form 2A, and it should therefore not significantly extend the decision-making period. The Commission also encourages and expects that for particular applications the CDOW and CDPHE may complete their consultations in less than 40 days.

In amending Rules 306.c. and 306.d., the Commission also recognized the importance of predictability for operators. To this end, the amendments set forth standards that the CDOW and CDPHE will use in making recommendations regarding conditions of approval and variance requests. The amendments also provide standards that the Director will use in considering such recommendations. The Commission intends that the Director will give due consideration to the recommendations of CDOW and CDPHE, but that the Director will remain responsible for deciding whether to approve permits or variances and whether to impose special conditions on such approvals.

These amendments reflect substantial input from the staff, parties, and public on these issues. After considering all of the testimony, comment, and other evidence, the Commission determined as a matter of policy that these amendments strike an appropriate balance between protecting public health, safety, and welfare, including the environment and wildlife resources, and ensuring that the approval process remains timely, efficient, and predictable. It also believes that the amendments will improve COGCC decision making by providing the Director with expert input from the CDOW and CDPHE regarding those applications that raise the most significant issues regarding public health, the environment, and wildlife resources.

6. Rule 312., COGCC Form 10. CERTIFICATE OF CLEARANCE AND/OR CHANGE OF OPERATOR

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendment to this rule clarifies the circumstances under which an operator must file a Form 10 with the addition of Rule 312.i., which requires a completed Form 10 for any change of operator for all oil and gas facilities except those that are covered by Form 12 (i.e., gas gathering systems, gas-processing plants, and gas storage facilities).

7. Rule 317., GENERAL DRILLING RULES

Basis: The statutory basis for this rule are sections 34-60-106(1)(f) and 34-60-106(11)(a)(II), C.R.S.

Purpose: The purpose of this amendment is to ensure that the production casing is properly in place, ensuring that the public safety is protected. This practice is technically feasible and cost-effective.

8. Rule 318A., GREATER WATTENBERG AREA SPECIAL WELL LOCATION, SPACING AND UNIT DESIGNATION RULE

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule was amended by the addition of section 318A.k., which clarifies that the new notice provisions of Rule 305.e. that pertain to the owners of surface property within 500 feet of the proposed oil and gas location do not apply to oil and gas operations that are regulated by Rule 318A. Those operations have their own location and notice requirements, and are in an area with a history of oil and gas development.

9. Rule 318B., YUMA/PHILLIPS COUNTY SPECIAL WELL LOCATION RULE

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule was amended by the addition of section 318B.g., which clarifies that the new notice provisions of Rule 305.e. that pertain to the owners of surface property within 500 feet of the proposed oil and gas location do not apply to oil and gas operations that are regulated by Rule 318B. Those locations, too, have their own location requirements, and they, too, are in an area with a history of oil and gas development.

10. Rule 319., ABANDONMENT

Basis: The statutory basis for this Rule is section 34-60-106(11)(a)(II).

Purpose: This rule was amended to clarify subsection b. That subsection deals with shutting-in and temporarily abandoning wells. Shut-in wells are wells that are capable of production but have been voluntarily shut-in by an operator. Abandoned wells are wells that are not capable of production and pose a potential threat to public health, safety, and welfare. Minor changes were made to the subsection to clarify several requirements and correct a cross reference.

Prior to the amendment, this requirement applied to both shut-in and abandoned wells. The rationale for deleting references to shut-in wells in this Rule is that operators must account for all shut-in wells every month on Form 7, Operator's Monthly Report of Operations. While the COGCC has a great interest in the status of shut-in wells, it does not need to require operators to submit such information twice (monthly on a Form 7 and annually on a Form 4).

11. Rule 324A., POLLUTION

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendments to this rule follow the language of HBs 07-1298 and 07-1341. In addition, the amendments clarify that operators must follow all applicable state and federal laws regarding pollution while conducting oil and gas operations.

The Commission wishes to emphasize that this rule continues to require that operators take precautions to prevent significant adverse impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, and to prevent the unauthorized discharge or disposal of oil, gas, exploration and production waste, chemical substances, trash, discarded equipment or other oil field waste. Therefore, if the Commission or Director has reasonable cause to believe an operator is violating this rule, remedial action may be taken.

## 12. Rule 324B., EXEMPT AQUIFERS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendment to this rule states that CDPHE must be notified when the COGCC is requested to designate an aquifer or a portion thereof as an exempted aquifer. This is appropriate because CDPHE has expertise to provide input (if it so chooses) on aquifer exemption classification.

## 13. Rule 333., SEISMIC OPERATIONS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Prior to the amendment, Rule 333. referred to an “occupied building”. The Rules do not define “occupied building”. Therefore, the rule was amended to refer to a “building unit”, which is a defined term in the COGCC rules.

### Additions to the 300-Series

The following rules were added:

### 1. Rule 317B., PUBLIC WATER SYSTEM PROTECTIONS

Basis: The statutory bases for this rule are sections 34-60-102 and 34-60-106, C.R.S.

Purpose: In adopting this new rule, the Commission’s primary objective was to minimize the potential for accidental contamination, including from sedimentation or chemicals, of public drinking water supplies due to oil and gas operations in Colorado. The first opportunity for protecting drinking water supplies is to protect the source water itself. As such, the Commission decided that, as a matter of policy, adequate protection of public drinking water supplies requires the creation of protection zones combined with performance requirements applicable within certain distances of classified water supply segments. To clarify and support this policy approach, the Commission established several new definitions, including those for: Classified Water Supply Segment, Ordinary High-Water Line, Public Water System, Surface Water Intake, Surface Water Supply Area, Drilling Completion Production and Storage (DCPS) Operations, Non-Exempt Linear Feature, Existing Oil and Gas Location, New Oil and Gas Location and New Surface Disturbance. This policy approach was supported by a number of parties and public comments.

The approach to protecting public drinking water reflected in the rules adopted by the Commission includes establishment of an “Internal Buffer Zone”, applicable to Drilling, Completion, Production, and Storage (“DCPS”) Operations located within 300 feet of a

Classified Water Supply Segment. This most protective zone serves essentially as a drilling exclusion zone or “setback”, unless an operator satisfies the stated variance criteria, which include offering substantially equivalent protection of drinking water quality (see below). The premise for establishing this zone is that a significant release in these areas would likely contaminate surface water used as drinking water source quickly, thereby not allowing the public water system, the oil and gas operator, nor the COGCC enough time to respond effectively to protect the public water system. As part of these new drinking water protection provisions, the Commission also decided that enhanced drilling and production requirements should apply in areas beyond the Internal Buffer Zone and up to ½ mile from the Classified Water Supply Segment. To this end, the Commission established Intermediate and External Buffer Zones and associated operating requirements applicable to DCPS Operations.

The definition of Surface Water Supply Area was originally proposed to include groundwater under the influence of surface water as well as seeps and springs to extend the protections of Rule 317B to those particular waters that serve as sources of public water systems. At the request of COGCC and CDPHE staff, the Commission has deleted the reference to these waters from the definition of Surface Water Supply Area because of the identification of issues that relate to the physical differences between surface water segments and groundwater under the influence of surface water, and the need to ensure that the protections afforded all public water systems under Rule 317B are consistent. It is the Commission’s intent that public water systems that utilize groundwater under the influence of surface water, seeps, and springs enjoy the protections under Rule 317B, therefore the Commission expects staff to report back to the Commission by the Fall of 2009 with its recommendations regarding the appropriate means to protect these public water systems.

With respect to roads, gathering lines and pipelines, the intent of Rule 317B is to exempt them from the rule, except for most of those within the Internal Buffer Zone. Specifically, the rule allows those roads, gathering lines or pipelines that are necessary to cross a stream or connect or access a well or gathering line to be located within the Internal Buffer Zone. The operator will have to confirm on its Form 2A that the feature will be located within the Internal Buffer Zone and that it is necessary to cross a stream or connect or access a well or gathering line. For purposes of this rule, such a feature cannot be considered necessary simply because it is the most proximate and least expensive method for gaining access or moving material through a pipeline. Instead, the operator must factor in other reasonably proximate options for placing these linear features. Conversely the Commission intends that roads, gathering lines or pipelines within the internal buffer zone which are not necessary to cross a stream or connect or access a well or gathering line not be allowed, unless a variance is granted. The Commission further intends that staff will grant a variance request for this purpose only if the operator demonstrates that locating the feature outside the Internal Buffer Zone would pose a greater risk to public health, safety, or welfare, including the environment and wildlife resources. Finally, the Commission expressly intends that this rule apply only to roads, gathering lines or pipelines that did not exist on May 1, 2009 for federal lands and April 1, 2009 for all other lands.

The Commission recognizes that, as a matter of policy, there is a clear need to balance protection of drinking water with development of energy resources. Therefore, the Commission included allowances for oil and gas operations that existed prior to the

rulemaking that are within the Internal Buffer Zone to remain in place and to expand these operations under certain conditions. Again, recognizing the need for balance, the Commission established rule provisions for those situations where a variance can be requested for placement of new oil and gas operations in the Internal Buffer Zone.

The Commission heard testimony from representatives of the oil and gas industry that these rules were unnecessary and that there were no documented incidents of releases from oil and gas facilities that had adversely impacted public water systems. Testimony, however, was also provided by CDPHE staff recounting recent spills that had affected surface water. In one case, a private groundwater well that was under the influence of surface water had been contaminated by oil and gas operations. Given these occurrences and the rapid pace of oil and gas development in Colorado, the Commission concluded that it would be imprudent not to establish rules for protecting public drinking water supplies. The Commission believes Rule 317B strikes a balance between reducing the possibility of a serious impact to a public water system from an oil and gas operation before such an accident occurs and allowing development of oil and gas resources to continue.

In addition, the Commission heard testimony from industry representatives that advocated that the Internal Buffer Zone be considered a “Consultation Zone”, where there would be an assumed presumptive right to operate in the Internal Buffer Zone unless COGCC staff and CDPHE can demonstrate that allowing the operator to operate in the zone will result in inadequate protection of public health, welfare, and the environment. The Commission considered this proposed “Consultation Zone” approach and rejected it, concluding that public drinking water is among the most significantly valued resources in Colorado and as a result must enjoy paramount protection. Thus, Rule 317B reflects the Commission’s policy that it is entirely appropriate that new operations are not to be allowed in the Internal Buffer Zone without an operator requesting a variance and meeting high standards for receiving one, as discussed below.

The Commission also considered rule language reflecting the basis for granting variance requests, particularly those requests involving a demonstration of “substantially equivalent protection of drinking water quality”. In doing so, the Commission deliberately did not specify which BMPs would be required to meet variance criteria because of widely varying site-specific circumstances encountered at oil and gas locations. The intent of this rule language is to allow operators to choose BMPs necessary to meet the “substantially equivalent” test, thereby preserving their flexibility to exercise site-specific judgment. The Commission envisions that operators would identify BMPs to demonstrate how their application would result in substantially equivalent protection of drinking water quality. A few examples of what categories of BMPs might be considered to demonstrate “substantially equivalent” protection include increased monitoring frequency, limited surface disturbance, additional spill prevention, additional fluid containment, closed loop drilling procedures, protective stimulation technologies, protective chemical storage and additional tank safety procedures. The intent is to provide protection for the drinking water supply, while allowing some flexibility in exceptional cases demonstrated by the operator, using variance procedures.

The Commission recognizes that the flexibility provided by this rule requires operators to exercise judgment and does not provide certainty as to what specific protective measures may be required at each oil and gas location. Many factors may affect the selection of

appropriate BMPs for a particular location and the approval of their use, including but not necessarily limited to, topographic relief, soil erosion potential, presence of vegetative or other erosion-resistant cover, facility size, local hydrology, and the nature of the materials used at the site. Many forms of guidance documents regarding the selection of BMPs for oil and gas operations are available and the Commission encourages oil and gas operators to rely on them when selecting appropriate BMPs. Examples that provide useful guidance include, but are not limited to:

- BMP manuals such as Urban Drainage and Flood Control District's Volume III ([www.udfcd.org/downloads/down\\_critmanual.htm](http://www.udfcd.org/downloads/down_critmanual.htm)) and Colorado Department of Transportation's BMP Manual (<http://www.dot.state.co.us/Environmental/envWaterQual/wqms4.asp>)
- Guidelines in BLM's Oil and Gas Exploration and Development Gold Book
- Civil engineering design manuals for roads, drainage, culverts, etc., which specify appropriate design specification for stable infrastructure.

The Commission adopted Appendix VI to this Rule 317B. It identifies the Public Water Systems that will initially be subject to the protections of Rule 317B and presents the Interim Public Water System Surface Water Supply Area Map. The Commission anticipates updating, through rulemaking, Appendix VI prior to April 1, 2009 to reflect further verification of public water system locations and the protection areas around them. Thereafter, the Commission intends to periodically update Appendix VI through rulemaking so that future public water systems are afforded protections available to them by this rule. Additionally, operators can use the Public Water Systems Surface Water Supply Area Applicability Determination Tool (located on the COGCC Web-site) to determine specifically whether and how Rule 317B applies to oil and gas locations.

The Commission also encourages staff to consider the development of additional informational guidance following the finalization of this rule, which may help operators identify additional useful reference material and select effective site specific BMPs.

## 2. Rule 341., BRADENHEAD MONITORING DURING WELL STIMULATION OPERATIONS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Almost all wells in Colorado are stimulated in some way to increase oil and gas production. Hydraulic fracturing is a stimulation technique where fluid is pumped into a well at high pressure, causing the producing rock formation to physically split (fracture) and thereby release more oil and natural gas for production from the well. Acidizing stimulates the well by pumping acid into the producing formation to eliminate scale deposits or cementing damage. Thousands of these and other types of stimulations are performed each year in Colorado with no adverse impact to groundwater or the surface environment. In a small number of cases, however, surface owners have alleged contamination of their groundwater due to these stimulation techniques. Although these allegations have never been proven by the COGCC, this rule requires operators to keep specific records regarding bradenhead pressures recorded during the stimulation process to ensure no groundwater is affected. The result is greater protection for groundwater resources and the public health, safety, and welfare.

Rule 341. requires operators to monitor bradenhead pressure during the stimulation process and to report any high bradenhead pressure increase to the COGCC. Monitoring bradenhead pressures will help indicate if a hydraulic fracturing procedure or another stimulation procedure was not completely contained in the producing reservoir. A high bradenhead pressure may indicate the stimulation fluid has entered the open space between the steel well casing and the drilled hole. Any stimulation fluid entering this space could contaminate groundwater. In lieu of monitoring bradenhead pressure, the bradenhead valve may be left open to monitor the annulus. However, prior approval by the Director is required to use this alternate method in certain circumstances, and abnormal flow must be reported.

This rule includes a provision authorizing an operator to seek a variance from the bradenhead monitoring, recording, and reporting requirements under appropriate circumstances. The Commission discussed situations in which an operator may prefer to monitor the annulus for flow during stimulation rather than recording annulus pressure. If an operator proposes to do so, the Director could require the operator to report any abnormal flow in the same manner as a pressure increase.

#### **400-Series Unit Operations, Enhanced Recovery Projects, and Storage of Liquid Hydrocarbons**

No additions or amendments were made to the 400-Series of rules.

#### **500-Series Applicability of Rules of Practice and Procedure**

##### Amendments to the 500-Series

The following rules were amended:

1. Rule 501., APPLICABILITY OF RULES OF PRACTICE AND PROCEDURE

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This amended rule incorporates what used to be Rule 514., JUDICIAL REVIEW, into subsection c. This amendment takes into account amended Rule 305.d.(2), which clarifies that Director approval of an APD or Form 2A becomes final agency action if a hearing is not requested by those with standing in Rule 503.b.(6) within ten days after the application is approved. Those with standing will be required to exhaust administrative remedies and ask for a hearing in a timely manner before being able to seek judicial review. *See Colorado Water Quality Control Commission v. The Town of Frederick*, 641 P.2d 958, 964 n. 9 (Colo. 1982).

2. Rule 502., PROCEEDINGS NOT REQUIRING THE FILING OF AN APPLICATION

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This amendment clarifies the standard for variances. The amendment makes clear that variances can be requested from rules, regulations, or orders. Prior to the amendment, Rule 502. stated variances could be requested from rules only.

3. Rule 503., ALL OTHER PROCEEDINGS COMMENCED BY FILING AN APPLICATION

Basis: The statutory bases for these amendments are sections 34-60-104(2)(a)(1) and 34-60-106(11)(a)(II), C.R.S.

Purpose: Amended Rule 503.b. expands the universe of parties who can request a hearing before the COGCC on the approval of an APD, and also allows the same parties to request a hearing before the Commission on the approval of a Form 2A. Prior to the amendments, Rule 503.b. only allowed the relevant local government to request a hearing on the approval of an APD, and Rule 303.k. only allowed the operator to request a hearing if the Director either withheld or suspended approval of such an Application. Because Oil and Gas Location Assessments were not approved, no one could request a hearing on them. As amended, Rule 503.b. allows a hearing to be requested on either the approval of an APD or Form 2A, as applicable. In addition to the relevant local government and the operator, the surface owner of the affected land, the CDPHE, and the CDOW may also apply for such a hearing. The surface owner's right to a hearing will be limited to alleged noncompliance with the Commission rules or statute, or potential adverse impacts to public health, safety, and welfare, including the environment and wildlife resources, that are within the Commission's jurisdiction to remedy. The CDPHE's right to a hearing will be limited to issues regarding protection of health, safety, and welfare of the general public and the environment. The CDOW's right to a hearing will be limited to issues involving minimizing adverse impacts to wildlife resources. The operator's right to apply for a hearing will no longer be limited to the withholding or suspension of approval of an Application, but will also encompass matters such as the Director's imposition of special conditions, consultation disagreements under Rule 306., and delay in making decisions under Rule 303.e.

These changes reflect a policy decision by the Commission that balances a variety of competing considerations. These considerations include providing access to the COGCC for those individuals and entities that are most significantly affected by the Director's action; such access is important because it may be more efficient, faster, and less costly than a judicial challenge. These considerations also include ensuring that the regulatory process remains timely and efficient as mandated by HBs 07-1298 and 07-1341, that the issues raised in a hearing do not exceed the COGCC's authority, and that the COGCC is not overwhelmed by hearing applications given the thousands of approvals that are issued annually. In balancing these considerations, amended Rule 503.b. allows surface owners to request hearings, but only where they allege noncompliance with Commission rules or statute or potential adverse impacts to public health, safety and welfare, including the environment and wildlife resources, that are within the Commission's jurisdiction to remedy. Surface owners may not request hearings merely to oppose oil and gas development or to raise issues involving reasonable accommodation or contract interpretation.

Amended Rule 503.b. will also allow the CDPHE and CDOW to request hearings, but only where the issues involve health, safety, and welfare of the general public and the environment, or minimizing adverse impact to wildlife resources, as applicable. These issues, too, are cognizable by the COGCC under the Act. This will not delegate any decision making authority to the CDPHE or CDOW. Rather, it will merely provide them with access to the Commission where they disagree with the Director's resolution of health, safety, welfare, or wildlife issues. Such access will be equivalent to that granted to local governments and surface owners and more limited than that granted to operators. The Commission urges and expects the CDPHE and CDOW to exercise this procedural right judiciously and to request a hearing only where significant health, safety, welfare, or resource protection issues or policies are at stake.

As amended, Rule 503.b. will not allow nearby landowners or members of the public to apply for a hearing. However, such persons will have various other means of providing input to the Director and COGCC regarding Applications and Assessments of concern to them. For example, members of the public can submit comments to the Director and staff under Rule 305.c. They can file a written complaint with the Director and staff under Rule 303.m. They can ask the local government or the CDPHE or CDOW to request a hearing under Rule 503.b. If a hearing is requested, they can intervene under Rule 509.a. or submit an oral or written statement under Rule 510.a.

In adopting these changes, the Commission considered a wide range of input from the parties. For example, oil land gas parties argued that standing to request a hearing before the Commission on a Form 2 or Form 2A should be limited to the operator and the local government. In contrast, environmental and wildlife groups argued that standing should be further expanded to include anyone who alleges that they would be adversely affected or aggrieved. The Commission believes that the amendments adopted reflect an appropriate balance of the competing considerations at this time.

The Commission wishes to emphasize that it expects a party that requests a hearing to specify the basis for its objection to the Director's decision. This should include a specific description of the noncompliance with Commission rules or statute or the potential adverse impacts to public health, safety, and welfare, including the environment and wildlife resources, which the party alleges. Further, the Commission wants to make clear that it has the authority to remedy only issues that are within its jurisdiction. The Commission cannot, for example, remedy issues related to the interpretation or enforcement of surface use agreements or other contracts between surface owners and operators governing surface use or the application of the reasonable accommodation doctrine codified in section 34-60-127, C.R.S. Finally, the Commission notes that it has authority under Rule 501.b to take appropriate action in the event that a party's use of Rule 503.b constitutes an abuse of process. Such an abuse of process may include requesting hearings on Form 2s that raise identical or substantially identical issues to those that were previously rejected by the Commission in a hearing on the Form 2A for that location or on a prior Form 2 for a well at that location.

#### 4. Rule 507., NOTICE FOR HEARING

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The main purpose of these amendments is to ensure that proper notice for hearings is given to CDPHE and CDOW when appropriate. These amendments are necessary to ensure that the public health, safety, and welfare, including the environment and wildlife resources, are properly protected. If CDPHE and CDOW did not receive notice of certain applications, then the provisions of HB 07-1298 and HB 07-1341 would be undermined.

#### 5. Rule 508., LOCAL PUBLIC FORUMS, HEARINGS ON APPLICATIONS FOR INCREASED WELL DENSITY AND PUBLIC ISSUES HEARINGS

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 508. creates a public forum process for applications that: (1) would result in more than one well site or multi-well site per forty acre nominal governmental quarter-quarter section; or (2) would result in more than one well site or multi-well site per forty

acre nominal governmental quarter-quarter section within existing units not previously authorized by COGCC order. Public forums may be initiated by the Commission or certain identified persons. The primary purpose of the amendments to this rule is to clarify the roles of CDPHE and CDOW in such proceedings. Neither agency could initiate a public forum, but they would be notified of, and could participate in, public forum proceedings initiated by others. Specifically, CDPHE may participate in such proceedings to raise public health, safety, and welfare issues, including protection of the environment, and CDOW may participate in such proceedings to raise wildlife resource issues. This will enable the participants in the public forum to receive input from the CDPHE and CDOW, which should help to ensure appropriate protection for the environment and wildlife resources consistent with HBs 07-1298 and 07-1341.

6. Rule 509., PROTEST/INTERVENTION/PARTICIPATION IN ADJUDICATORY PROCEEDINGS

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: The primary purpose of the amendments to this rule is to clarify the roles of CDPHE and CDOW in hearings. It specifies that the entities can only intervene in hearings in which they have an interest (i.e., environmental and public health concerns for CDPHE and wildlife resource concerns for CDOW). In addition, the amendments state that parties may be directed to engage in a prehearing conference in certain circumstances. The amendment simply codifies current COGCC practice.

7. Rule 510., STATEMENTS AT HEARINGS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The amendment to this rule furthers public participation in the COGCC hearing process by explaining that a form for submitting a written statement regarding any COGCC matter is available on the COGCC web-site. As a matter of policy, the COGCC wants the public to participate in public business to the fullest extent possible. This amendment to the rule is an easy way to help achieve that goal.

8. Rule 511., UNCONTESTED HEARING APPLICATIONS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 511. pertains to hearing applications that receive no protests or interventions. In the past, administrative hearings for uncontested items were held by a COGCC hearing officer and the applicant. At that time, the hearing officer heard evidence and asked questions. As the number of applications increased, it became onerous for a hearing officer to conduct these hearings for every application. It became particularly onerous because many of the applications were identical in many relevant respects. For instance, multiple applications each month included the same pictures, the same spacing, the same basin, the same formation, and the same geologic setting. Requiring an administrative hearing on every application was not always necessary.

The amendments to this rule allow the hearings manager the ability to simplify the uncontested hearing application process when appropriate. This process is already employed in Wyoming. Specifically, the amendments give the hearings manager the ability to confer with applicants and decide between two options on the best way to deal with the uncontested application. The first method, described in Rule 511.d., codifies the

current COGCC practice. Under this method, the applicant will have an administrative hearing before the hearing officer. At the end of this hearing, the hearing officer and Director may recommend approval of the uncontested application by the full Commission. This option is expected to be employed when an application is unique.

The second option, described in Rule 511.c., allows the hearings manager to streamline the uncontested application process when appropriate. This option only requires that the applicant submit certain evidence to the hearing officer, but does not require an administrative hearing. At the end of the evidence review by the hearing officer, the hearing officer and Director may recommend approval of the uncontested application by the full Commission. This option is expected to be employed when all of the relevant evidence is so well-known in the industry that the need for a full-blown administrative hearing is unnecessary.

These amendments result in an efficient process that is expected to save time and money for both the COGCC and all affected operators. In addition, these amendments allow all affected parties the ability to have due process in the form of a truncated hearing. Such truncated hearings are allowed in Colorado. *See Colorado Water Quality Control Commission v. The Town of Frederick*, 641 P.2d 958 (Colo. 1982).

9. Rule 512., COMMISSION MEMBERS REQUIRED FOR HEARINGS AND/OR DECISIONS

Basis: The statutory bases for this amendment are sections 34-60-104(2)(a)(I) and 34-60-106(11)(a)(II), C.R.S.

Purpose: By statute, the Commission now has nine members. This amendment changes the quorum from four Commissioners to five Commissioners, ensuring a majority of Commissioners are available before the Commission can transact business.

10. Rule 514., JUDICIAL REVIEW (Deleted)

Basis: The basis for this deletion is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule stated that a Commission order was considered final agency action for purposes of judicial review and that the time period for filing and appeal for such action began the day the Commission order was entered. That concept, with minor revisions, is now in amended Rule 501.

11. Rule 520., TIME OF HEARINGS AND HEARING/CONSENT AGENDA

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The main amendment to Rule 520. (there were other clerical amendments) was added to clarify that any Commissioner may request clarification from either the Director or the attorney or other representative of the applicant for any matter on the consent agenda. In recent months, the Commissioners have expressed hesitation at approving items on the consent agenda when representatives for the applicants are not available for the Commissioners to ask questions. The amendment makes clear that an item may not be approved if the Commissioners are not able to seek the clarification for which they are looking on an item on the consent agenda. As a matter of policy, the Commissioners want to ensure that they have the ability to make the most informed decisions on all matters that come before them, which is why this addition to Rule 520. is appropriate.

12. Rule 522., PROCEDURE TO BE FOLLOWED REGARDING ALLEGED

## VIOLATIONS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 522. deals with the procedures the COGCC follows when alleged violations are committed by operators.

While the COGCC can investigate alleged violations on its own, complaints that request the Director issue a Notice of Alleged Violation (NOAV) may be made by those most likely to be affected by a violation committed by an operator: the mineral owner, surface owner or tenant of the lands upon which the alleged violation took place; other state agencies; the local government within whose boundaries the lands are located upon which the alleged violation took place; or any other person who may be directly and adversely affected or aggrieved by the alleged violation.

The amendments to Rule 522. fall into two general categories. First, some amendments are clarifying in nature, making sure it is clear who carries the burden of proof in hearings dealing with alleged violations. Second, some amendments deal with the policy decision of the COGCC to allow complainants a broader set of rights in alleged violation matters. Pursuant to the amendments, complainants have the right to ask for a hearing for an Order Finding Violation in certain circumstances. This right exists even if the operator and COGCC staff have entered into an Administrative Order by Consent, which is akin to a settlement agreement, on the alleged violation. The rationale for this extended right is to give the individual affected by the alleged violation more of a voice in the administrative process and to ensure the complainant has a forum to formally get information on a record if the complainant so wishes.

### 13. Rule 523., PROCEDURE FOR ASSESSING FINES

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-121, and 34-60-128(3)(d), C.R.S.

Purpose: This rule was amended for three reasons: (1) to update the base fines for rule violations while keeping within the limits in the Act; (2) to update the base fine schedule to include all new rules; and (3) to add significant damage to wildlife resources as an aggravating factor when determining the fine amount.

### 14. Rule 524., DETERMINATION OF RESPONSIBLE PARTY

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-124(7), C.R.S.

Purpose: The Act defines “responsible party” as “any person who conducts an oil and gas operation in a manner which is in contravention of any then-applicable provision of this article, or of any rule, regulation, or order of the commission, or of any permit that threatens to cause, or actually causes, a significant adverse environmental impact to any air, water, soil, or biological resource.” “Responsible party” includes any person who disposes of any other waste by mixing it with exploration and production waste that threatens to cause, or actually causes, a significant adverse environmental impact to any air, water, soil, or biological resource. The primary purpose of the amendments to Rule 524. is to clarify that only those employees designated to accept responsibility for a company (in accordance with amended Rule 302.) can be found by the Commission as being responsible parties, as opposed to contractors of an operator. Further, potential

responsible parties are clarified as being those that have or should have submitted financial assurance for oil and gas operations pursuant to the 700-Series.

#### 15. Rule 529., PROCEDURES FOR RULEMAKING PROCEEDINGS

Basis: The statutory basis for this amendment is section 34-60-108, C.R.S.

Purpose: Prior to the amendments, Rule 529.c. mandated that Commission rulemaking hearings could only be noticed for 20-60 days in the Colorado Register before they commenced. The Administrative Procedure Act does not limit the number of days proposed rules can be noticed before the rulemaking hearing commences. *See* C.R.S. § 24-4-103. The 60-day limit was removed in order to simplify the rulemaking process (i.e., only the Administrative Procedure Act’s deadline needs to be followed). In addition, prior to the amendments, Rule 529.d. said, “The rulemaking hearing shall not be held until the expiration of six (6) months from the date of the application unless the Commission, in its discretion, decides that an earlier hearing is appropriate.” This six month period was rarely followed. Because the subsection stated the Commission could use its discretion to follow this rule, and because the six month waiting period was rarely invoked, the subsection was not useful and removing it was appropriate.

#### 16. Rule 530., INVOLUNTARY POOLING PROCEEDINGS

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-116, C.R.S.

Purpose: Involuntary pooling is a complicated issue. This amendment is an attempt by the COGCC to make the involuntary pooling process a bit clearer to both operators and mineral owners. For instance, the rule makes clear that an application for involuntary pooling can be filed at any time prior to or after the drilling of any well and that any involuntary pooling order issued by the Commission shall be retroactive to the date the application is filed unless otherwise agreed to by the payor.

#### Additions to the 500-Series

The following rule was added:

#### Rule 513., GEOGRAPHIC AREA PLANS

Basis: The statutory bases for this amendment are sections 34-60-104(2)(a)(I) and 34-60-106(11)(a)(II), and 34-60-128(3)(d)(ii), C.R.S.

Purpose: Section 34-60-128(3)(d)(ii), C.R.S., directed the Commission to promulgate rules that address geographic area planning. Geographic area planning allows the COGCC to address potential activities by multiple operators, better identify cumulative adverse impacts caused by oil and gas operations, and require appropriate mitigation for such impacts. It also enables the COGCC to tailor regulatory standards to different areas of Colorado, which may raise different geologic, hydrologic, environmental, and wildlife issues. The Commission previously developed basin-wide rules on occasion, including Rules 318A. and 318B., but prior to the addition of Rule 513., the COGCC rules did not specify the process for, or the content of, such plans. Under Rule 513., such plans would be initiated by the Commission, and they would be adopted through a formal rulemaking process under Rule 529.

The identification of cumulative adverse impacts caused by oil and gas operations will benefit the general public, the regulated industry, and State agencies. The general public

will benefit from geographic planning because it will identify activities to occur in a defined geographic area, identify potential cumulative adverse impacts, and identify appropriate mitigation for such impacts. This will result in better protection of public health, safety, and welfare, including the environment and wildlife resources. The regulated industry will benefit because the rule defines a process for adopting geographic area plans, which will include public notice, a public hearing, and consultation with CDPHE, CDOW, and the relevant local governments.

During the hearing, the Commission stressed that they intend this rule to be implemented in such a way that hearings, or a portion of hearings, associated with geographic area plans should be held in the geographic area covered by the plan. Such implementation furthers the Commission's commitment to serve all of the citizens of Colorado.

The following rule was proposed but not adopted:

Rule 521., MEMORANDA OF AGREEMENT WITH LOCAL GOVERNMENTS  
(Proposed but not adopted)

Basis: The statutory basis for this proposed addition is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 521. was proposed to help address the growing concerns surrounding the issue of state preemption of local regulations. The rule laid out a procedure by which a local government could work with the Commission to enter into a memorandum of agreement regarding the interplay between the local government's land use processes and the COGCC's regulations. Some parties supported the proposed rule, including conservation groups and certain local governments. Other parties opposed the proposed rule, including oil and gas companies and other local governments. The issues raised included both legal and practical concerns. Because of these issues, the Commission chose not to take action upon the proposed rule at this time. Instead, the Commission directed the COGCC staff to offer to work with La Plata County on a pilot memorandum to explore how this concept would function in practice. The Commission further directed that such work should include opportunities for input from other interested parties. Depending upon the outcome of this effort, the Commission may subsequently initiate another rulemaking process to adopt proposed Rule 521 or a similar rule.

## **600-Series Safety Regulations**

### Amendments to the 600-Series

The following rules were amended:

#### 1. Rule 602., GENERAL

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This Rule discusses basic safety requirements applicable to all oil and gas operations. The amendment to this rule requires that any accident that requires medical treatment for an employee or member of the public must be reported to the Director. Further, it requires that a Form 22, Accident Report, be filed with the Director within ten days of such accident. Form 22 already exists and this amendment simply clarifies the scope of this requirement and codifies current practice.

The definitions of "medical treatment" and "first aid treatment" are taken from the definitions of these terms by the Occupational Safety and Health Administration.

## 2. Rule 603., DRILLING AND WELL SERVICING OPERATIONS AND HIGH DENSITY AREA RULES

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 603. concerns requirements for statewide drilling and well servicing operations and high density area rules. In addition to clerical amendments, there were primarily three subsections amended: Rule 603.e.(3), Rule 603.e.(12), and Rule 603.(j). As explained below, these amendments are intended to better protect public health, safety, and welfare, including the environment and wildlife resources. The Commission also considered proposals by certain parties and Commissioners to increase the setback distances under Rule 603.a. Instead of taking action upon these proposals, the Commission directed the COGCC staff to convene a stakeholder group during the first quarter of 2009 to discuss and attempt to develop greater consensus on an increase to the setback requirements. Based upon the outcome of this stakeholder process, the Commission may initiate a subsequent rulemaking process during 2009 to further address this issue.

### a. Rule 603.e.(3) – Setbacks for production equipment

Rule 603.e.(3) provides setback requirements on production tanks and production equipment in a high density area. Prior to amendment, Rule 603. did not address pits. Pits used in the oil and gas industry have the potential to impact public health, safety, and welfare, including the environment and wildlife resources. Leaking pits can impact shallow groundwater, pits that overflow or overtop can impact surface waters, and pit odors and volatile organic compound emissions can impact public health. Therefore, the amendments apply setback requirements to pits. In addition, Rule 603.e.(3) used to apply setbacks only during initial installation. The amendments also apply the setbacks during construction, which is more protective of the safety of the public because it will include facility modifications and upgrades. Finally, prior to amendment, Rule 603.e.(3) required production tanks to be at least five hundred feet from certain structures only if requested by the local governmental designee. Now, the amendments require production tanks, pits, or associated on-site production equipment to be at least five hundred feet from such structures in all circumstances where the operator has legal control.

### b. Rule 603.e.(12) – Berm construction

Rule 603.e.(12) pertains to berm construction. Berms and secondary containment devices are used as fire walls to maintain spilled or released flammable liquids on location, which protects public health and safety. The containment devices also limit the spread of the released material which is protective of surface waters, vegetation and wildlife resources.

Prior to amendment, it was unclear if Rule 603.e.(12) only applied at the time berms were constructed. In addition, prior to amendment, Rule 603.e.(12) discussed berms but did not indicate that other forms of secondary containment were available and suggested that remote impounding was a preferred method of containment. Remote impounding is not a preferred method because the design and construction, operation and maintenance of retention ponds can be very difficult. The construction of ponds in high density areas is also not recommended. In addition, prior to amendment, Rule 603. did not address the permeability of the containment materials or containment area. If the berm is constructed out of highly permeable materials, then spilled or released substances may leach through and impact stormwater and surface waters. Also, if the containment area is not

sufficiently impermeable then spills or releases may infiltrate and impact shallow groundwater. The rule was also clarified to confirm that it also includes produced water tanks. Finally, the old Rule did not include requirements for inspections and maintenance of secondary containment devices or berms.

The amendments clarify that Rule 603. applies to all containment berms and not only newly-installed or replaced berms. They also require berms or secondary containment areas to be maintained in good condition. Further, language referring to remote impounding was removed and language discussing secondary containment devices was inserted. Finally, language was added to include requirements that the secondary containment berms or devices and the secondary containment areas be sufficiently impervious to contain the released material.

As amended, Rule 603.e.(12) effectively balances development of oil and gas resources with protection of public health, safety, and welfare, including protection of the environment and wildlife resources. Berms in high density areas are currently required around crude oil, and condensate, and produced water tanks. Berms and secondary containment devices are widely implemented throughout the oil and gas industry to promote safety and protect the environment.

c. Rule 603.j. – Statewide equipment, weeds, waste, and trash requirements

Waste disposal and burning of waste materials are covered under federal and state statutes. Additionally, local governments may have waste disposal requirements, restrictions on burning of materials and waste management regulations. Compliance with waste disposal laws is complicated and, prior to the amendment, the rule was oversimplified and misleading. Improper disposal of waste materials can impact public health, safety, and welfare, including the environment and wildlife resources. It also has the potential to create a regulatory and liability issue for the surface owner, who might inadvertently allow the unlawful burial or burning of waste material.

d. “Occupied” building amendment

Prior to amendment, Rule 603.a.(1) and 603.b. included the term “occupied” building. There was no definition for “occupied”, which created the potential for misinterpretation of setback and high density requirements. For example, residential structures that are seasonally occupied may not have been included in review when operators were determining whether a site was in a high density area, and appropriate setbacks might not have been employed. These portions of Rule 603. were amended to include the term “building unit”, which is defined in the 100-Series.

3. Rule 604., OIL AND GAS FACILITIES (formerly PRODUCTION FACILITIES)

Basis: The statutory bases for these amendments are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 604. deals with the requirements applicable to all oil and gas facilities. The amendments add new requirements that will provide more protection for public health, welfare, and safety, including the environment and wildlife resources. The non-clerical amendments are described below.

a. Rule 604.a. – crude oil and condensate tanks

Rule 604.a. was revised to clarify that the tank specifications and secondary containment

requirements refer to condensate tanks and crude oil tanks whereas previous regulations only referenced crude oil tanks.

Prior to amendment, Rule 604.a.(3) included a requirement that tanks be a minimum of 200 feet from “residences, normally occupied buildings, or well defined normally occupied outside areas.” There was no definition for those terms, which created a potential for misinterpretation of statewide set back requirements. This rule has been amended to replace those terms with “building unit”, which is defined in the 100-Series.

b. Rule 604.b. – fired vessel, heater-treater

Rule 604.b. was amended by the addition of Rule 604.b.(7), which specifically addresses the protection of migratory birds. The U.S. Fish and Wildlife Service, Office of Law Enforcement, determined that heater-treaters associated with oil and gas operations create a widespread environmental hazard to migratory birds. The Migratory Bird Treaty Act (MBTA) of 1918, as amended, implements various treaties and conventions between the U.S. and other countries for the protection of migratory birds. Under the MBTA, the taking, killing, capturing, or possessing migratory birds, whether intentionally or unintentionally, is unlawful. After March 1, 2007, responsible parties that contribute to migratory bird deaths in heater-treaters will be subject to criminal prosecution resulting in up to a \$15,000 fine per bird mortality and six months’ imprisonment. *See U.S. v. Apollo Energies, Inc. and Dale Walker d/b/a Red Cedar Oil*, Slip. Op., 2008 WL 4369300 (D. Kan. 2008).

Rule 604.b.(7) is designed to provide additional protection to biological resources by requiring operators to equip fired vessels, including heater-treaters, with screens or other devices to prevent migratory birds from entering stacks, vents or other openings. This is consistent with the General Assembly’s mandate that the COGCC establish standards for minimizing adverse impacts to wildlife resources affected by oil and gas operations. The Commission previously adopted a number of rules that require operators to conduct various activities associated with oil and gas operations so as to protect biological resources. The intent of the new rule language is to clarify the type of equipment (i.e., equipment designed to prevent entry by wildlife, including migratory birds) that should be used to cover openings. It is not intended to imply that a rule violation will occur automatically if wildlife gets into stacks, vents, or other openings that are equipped with properly installed equipment. The Commission stresses, however, that while a rule violation may not occur in such a case, operators are still subject to the provisions of the MBTA and might be found criminally liable under that statute.

c. Rule 604.e. – buried or partially buried tanks, vessels or structures

Rule 604.e. was amended to add a requirement that buried or partially buried tanks, vessels, or structures not only be properly designed and installed but also properly operated. This change was necessary to clarify the application of Rule 604.e., and to further public health, safety, and welfare.

d. Rule 604.f. – produced water pits, special use and buried or partially buried vessels or structures

Rule 604.f. is a new subsection that adds a statewide setback requirement of 200 feet for produced water and special use pits and buried or partially buried vessels or structures. This addition provides additional protection for public health, safety, welfare.

In addition, amended Rule 604.f provides additional protection to the environment by requiring operators to provide adequate secondary containment for bulk oil containers and tanks. This is also consistent with the General Assembly's mandate to minimize adverse impacts to wildlife resources.

#### Additions to the 600-Series

The following Rule 608. was added:

#### Rule 608., COALBED METHANE WELLS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Since the onset of coalbed methane ("CBM") production in Colorado, there have been instances where improperly plugged and abandoned ("P&A") oil and gas wells, unplugged orphaned wells, and conventional wells in which the coal seams have not been properly isolated have acted as conduits for the migration of CBM gas into groundwater and surface water and to the ground surface. In addition, the seepage of methane from the outcrops of the coal seams has the potential to create explosive conditions if it accumulates in confined spaces and to stress and kill vegetation, thereby impacting wildlife habitat and property values. Since methane is a colorless and odorless gas, even at explosive concentrations, it can go unnoticed unless testing and monitoring equipment are used to detect its presence.

The COGCC has regulated CBM wells since 1990 by adopting numerous orders, including 112-156, that require operators of CBM wells in the Colorado portion of the San Juan Basin to conduct various monitoring activities, including, but not limited to: bradenhead pressure testing; water well sampling and analysis; coal outcrop, gas seep, and spring mapping and testing; assessment of plugging procedures for and soil gas surveys around previously P&A wells; and post completion pressure build-up testing. Rule 608. codifies these orders and expands their application to operators of all CBM wells regardless of their location, thus providing the COGCC with a mechanism to obtain data consistently across the state. These data will be used to verify that water wells, ground and surface waters, and residents of the CBM producing basins are adequately protected and that impacts, should they occur, are quickly identified and mitigated.

Rule 608. requires operators to assess and to monitor P&A wells within one-quarter mile of proposed CBM wells. The Commission heard testimony that there have been two relatively recent incidents involving the migration of methane, one up a P&A well and another up an orphaned well. These incidents resulted in accumulation of methane in homes, causing explosions and personal injuries. If Rule 608. had been in place when those incidents occurred, it is likely that this migration would have been detected and mitigated.

In addition, operators are required to conduct soil gas surveys around these wells periodically to identify any changes. This periodic monitoring is crucial because initially there may not be any gas detected around a plugged and abandoned or orphaned well, but as production in the nearby CBM wells continues and gas begins to desorb from the coal seams, the gas may eventually find a migration pathway up the old wellbore into aquifers and to the ground surface.

Rule 608. also requires operators to monitor water wells in proximity to conventional, plugged and abandoned, or CBM wells to determine whether the drilling, completion,

and production of the CBM are having an effect on the groundwater resources of the area. The Rule also states that if a proposed CBM well is within two miles of the outcrop of the stratigraphic contact between the coal-bearing formation and the underlying formation or within two miles of a coal mine, the operator will be required to conduct coal outcrop and coal mine monitoring. The Commission heard testimony that in recent years methane seepage in some areas of Colorado appears to have increased dramatically. Where seepage is substantial, methane gas has the potential to accumulate and create a risk of explosion to structures and people. The methane in these areas also has the potential to migrate into groundwater and affect water wells.

Operators will be required to equip well heads with appropriate and safe fittings to access the annular space between the production casing and the surface casing and any intermediate casing. This will allow the safe and convenient measurement of pressure and fluid flow. Bradenhead tests will be performed on all wells on a biennial basis unless the operator meets certain conditions described in Rule 607.e. The Commission heard testimony that in the San Juan Basin bradenhead testing has been instrumental in the identification and subsequent remediation of defective wellbores and other mitigation strategies. Bradenhead tests are relatively inexpensive and are a quick way to identify wells that may not have complete isolation of the gas producing zones from overlying aquifers and other formations. There is an indication from the analytical data obtained from the water well sampling program in the San Juan Basin, that methane concentrations in groundwater in certain areas appear to be decreasing. This decrease presumably is a result of the remediation of defective wellbores and the plugging and abandonment of orphaned wells.

The final version of Rule 608. reflects significant revisions to the rule as initially proposed. The Commission believes that as revised Rule 608. will help ensure that CBM development occurs in a responsible and balanced manner that will protect public health, safety, and welfare, including the environment and wildlife resources. The Commission also wishes to emphasize that the survey and monitoring requirements in Rule 608. are informational, and Rule 608. does not create new obligations for operators to remedy seepage of methane at outcrops or coal mine locations, nor does the rule itself impose liability upon the operators for such seeps.

## **700-Series Financial Assurance**

### Amendments to the 700-Series

The following rules were amended:

#### 1. Rule 703., SURFACE OWNER PROTECTIONS

Basis: The statutory bases for this amendment are sections 34-60-106(3.5), 34-60-106(11)(a)(II), 34-60-106(13), and 34-60-128(d)(II), C.R.S.

Purpose: Prior to amendment, Rule 703. required operators to provide financial assurance to protect surface owners who are not parties to a mineral lease, a surface use agreement, or other relevant agreement. This financial assurance is required to be posted to protect surface owners from “unreasonable crop losses or land damage”. C.R.S. § 34-60-106(3.5). The pre-amendment bonding amounts varied on the type of land owned by the surface owner. Those bonding amounts were not increased. Instead, the rule was amended to clarify that an operator is financially responsible for damages to the surface owner’s land if the amount of damage exceeds the amount of the financial assurance that

was provided to the Commission. During the hearing, industry expressed concern that if this was not clarified, the Commission might instead use the Oil and Gas Conservation and Environmental Response Fund to pay for the damages. As the industry funds the Oil and Gas Conservation and Environmental Response Fund, the industry wanted it to be clear that only the individual operator would be liable for the damages.

## 2. Rule 704., CENTRALIZED E&P WASTE MANAGEMENT FACILITIES

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), and 34-60-128(d)(II), C.R.S.

Purpose: The financial assurance amount for these facilities was raised from \$50,000 to an amount equal to: the estimated cost necessary to ensure the proper reclamation, closure and abandonment of such facility as set forth in Rule 908.g.(1); or an amount voluntarily agreed to with the Director; or an amount determined by order of the Commission.

During the rulemaking process, the Commission received testimony that there are twenty-one active centralized E&P waste management facilities. Eight of these facilities are primarily landfarms treating impacted soils or drilling muds and cuttings. The other thirteen are located on the western slope and are evaporative ponds or water storage sites for the disposal or recycling of produced water.

Maximum capacity for these evaporative ponds or water storage sites range from 75,000 to 420,000 barrels. Estimated transportation and disposal costs for these maximum volumes would range from \$450,000 to \$2,520,000. Estimated transportation and disposal costs for ¼ of the maximum volumes would range from \$112,000 to \$630,000. Estimated costs to close and reclaim the permitted centralized facilities in most cases far exceed the \$50,000 financial assurance that was required prior to the amendment.

Operators of centralized E&P waste management facilities permitted prior to May 1, 2009 on federal land and April 1, 2009 on all other land will be required to be in compliance with amended Rule 704. by July 1, 2009.

## 3. Rule 706., SOIL PROTECTION AND PLUGGING AND ABANDONMENT

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), 34-60-121, and 34-60-128(d)(II), C.R.S.

Purpose: Rule 706. was amended to update the required amounts of financial assurance posted for active oil and gas wells as well as prior to the drilling of wells. Every oil and gas operator in Colorado must post financial assurance to “ensure the protection of the soil and the proper plugging and abandonment of the well”. During the rulemaking process, the Commission received testimony that the amounts of financial assurance had not increased since 1996 and did not accurately reflect the current cost of plugging and abandoning a well. This testimony further indicated that since 1996 the COGCC has plugged and reclaimed well sites using the money from 36 bonds posted by operators. The total plugging and reclamation costs for these wells were \$984,968 while the total amount from bond claims was \$498,907, indicating the short fall of the bonding levels.

In response, the amended rule increases the amount of financial assurance posted for individual wells from \$5000 per well to \$10,000 for shallow wells below 3000 feet of depth, or \$20,000 for wells drilled deeper than 3000 feet of depth. The rule also increases statewide blanket financial assurance from \$30,000 to \$60,000 for oil and gas operators

that operate less than 100 wells. The rule did not change the financial assurance amount for operators that operate more than 100 wells because that amount (\$100,000) more accurately reflects the actual plugging costs in the state.

The increase in bonding levels will result in less state money being expended for plugging operations. Although the State has the Oil and Gas Conservation and Environmental Response Fund to provide funds that can be used for the plugging and abandonment of orphaned wells, as well as other environmental cleanup, and this fund may be used by the State for projects supervised by the State, higher financial assurance levels will minimize the necessity to draw on this fund. Further, the Commission heard testimony that this addition is consistent with financial assurance levels in Wyoming, Utah, and New Mexico.

After receiving testimony on both sides of the issue, the Commission chose to apply the amended financial assurances to existing wells (except domestic gas wells). If an operator finds itself in a situation where it cannot meet the requirements of Rule 706., Rule 706.c. specifies that an operator can seek a variance from this provision. A variance may be appropriate if surety bonds for the increased amount are not commercially available upon reasonable terms.

Oil and gas wells (except domestic gas wells) with financial assurance posted prior to May 1, 2009 on federal lands and April 1, 2009 on all other lands must have financial assurance in compliance with amended Rule 706. by July 1, 2009.

#### 4. Rule 707., INACTIVE WELLS

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), 34-60-121, and 34-60-128(d)(II), C.R.S.

Purpose: Rule 707. was amended to update the required amounts of financial assurance posted for inactive oil and gas wells. Because this Rule is dependent on financial assurance amounts required by Rule 706., Rule 707. needed to be amended to be consistent with Rule 706.

The amended rule updates financial assurance calculations for operators with inactive wells. COGCC regulations require operators to post additional bonding when the number of their operated inactive wells exceeds the possible number of plugging jobs their blanket financial assurance will cover. Inactive wells are defined as any well that is shut-in or temporarily abandoned for a specific time period. Additional financial assurance may be required if an operator's posted financial assurance is less than the theoretical plugging liability of their inactive wells multiplied by the appropriate individual plugging bond that would need to be posted for the inactive wells. The amended rule increases the individual plugging bond amounts to be in conformance with the higher bond amounts required by rule 706.

The increase in bonding levels will result in less State money being expended for plugging operations. Although the State has the Oil and Gas Conservation and Environmental Response Fund to provide funds that can be used for the plugging and abandonment of orphaned wells, as well as other environmental cleanup, and this fund may be used by the State for projects supervised by the State, higher financial assurance levels will minimize the necessity to draw on this fund.

5. Rule 708., GENERAL LIABILITY INSURANCE (formerly PUBLIC HEALTH, SAFETY AND WELFARE)

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), 34-60-121, and 34-60-128(d)(II), C.R.S.

Purpose: Rule 708. was amended to more accurately reflect potential liability amounts. The prior distinction between high density and non-high density areas was determined to be unnecessary for this purpose and so the rule was amended to eliminate the distinction.

6. Rule 709., FINANCIAL ASSURANCE

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), 34-60-121, and 34-60-128(d)(II), C.R.S.

Purpose: Rule 709. was amended by the addition of subsection d., which states that the Director will not approve a new Operator Registration or a new Certificate of Clearance when wells are sold or transferred until the successor operator has filed satisfactory financial assurance under the 700-Series rules. The amendment is necessary to ensure continued responsible practices at an existing oil and gas location by new operators. The assurance of such continued responsible practices will protect public health, safety, and welfare, including the environment and wildlife resources.

7. Rule 710., ENVIRONMENTAL RESPONSE FUND

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II), 34-60-106(13), 34-60-121, and 34-60-128(d)(II), C.R.S.

Purpose: The purpose of this amendment is to keep the language of the rule consistent with section 34-60-122, C.R.S., as amended. First, House Bill 05-1285 combined the Oil and Gas Conservation Fund and the Environmental Response Fund into one fund, the Oil and Gas Conservation and Environmental Response Fund. Second, Senate Bill 06-142 put a \$4 million cap on the two year average of the un-obligated portion of the combined fund. Amended Rule 710. reflects these legislative changes.

Additions to the 700-Series

The following Rule 712. was added:

Rule 712., SURFACE FACILITIES AND STRUCTURES APPURTENANT TO CLASS II COMMERCIAL UNDERGROUND INJECTION WELLS

Basis: The statutory basis for this rule is section 34-60-106(13), C.R.S. In addition, there exists a Memorandum of Understanding (“MOU”) between the Hazardous Materials and Waste Management Division (HMWMD) of the CDPHE and the COGCC regarding the disposal of eligible wastes at Commercial Class II Injection Wells. In accordance with the MOU, the HMWMD will defer to COGCC regulation of E&P wastes at Class II commercial injection well disposal sites, including COGCC regulation of E&P wastes placed in surface structures appurtenant to such wells, prior to disposal of Class II wastes down the well.

Purpose: This rule requires financial assurance for operators of Class II Underground Injection Control wells in the amount of \$50,000 for each facility, or in an amount voluntarily agreed to with the Director, or in an amount to be determined by order of the Commission. This rule applies to the surface facilities and structures appurtenant to the

Class II commercial injection well and used prior to the disposal of E&P wastes into such well. A separate financial assurance requirement still applies for the plugging and abandonment of such wells as specified in Rule 706.

As one example of the need for this rule, there was testimony during the hearing that Conquest Oil Company operates five commercial Class II UIC wells in Weld County. Operations at these facilities have resulted in impacts to soils and shallow groundwater beneath two of these sites. In each case, there has been a Site Investigation and Remediation Workplan, Form 27, submitted to and approved by COGCC staff. Remediation and groundwater monitoring at these sites is ongoing. Currently, Conquest Oil Company only has a \$30,000 blanket plugging bond posted with the COGCC, which is not sufficient.

## **800-Series Aesthetic and Noise Control Regulations**

### Amendments to the 800-Series

The following rules were amended:

#### 1. Rule 803., LIGHTING

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 803. used to refer to “occupied” buildings. There was no definition for “occupied”, which created a potential for misinterpretation of set back and high density requirements. This term was amended to “building unit”, which is defined in the 100-Series.

#### 2. Rule 804., VISUAL IMPACT MITIGATION

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Prior to amendment, Rule 804. exempted production facilities constructed or substantially repainted prior to May 30, 1992, from mitigating visual impacts. As amended, the rule mandates that all long-term production facilities be painted to minimize visual impacts from a location typically used by the public such as a public highway. This amendment is consistent with the recent legislative mandate to protect public welfare and minimize adverse impacts to wildlife resources. Mitigating visual impacts will improve the appearance of the scenic landscape and thus benefit the general public. In addition, production facilities painted with uniform, non-contrasting, non-reflective color tones, and with colors matched to but slightly darker than the surrounding landscape may lessen impacts upon wildlife activity. Recognizing the need for operators to have sufficient time to implement this requirement, the Commission deferred its effective date until September 1, 2010.

### Additions to the 800-Series

The following Rule 805. was added:

#### Rule 805., ODORS AND DUST

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The Commission adopted Rule 805. to respond to increasing concern over odors and nuisance-like conditions where oil and gas development occurs near residences, neighborhoods, and other occupied structures. Testimony during the hearing confirmed

that growth in oil and gas development has caused noteworthy increases, particularly in the Piceance Basin (Garfield, Mesa, and Rio Blanco Counties), in complaints about odor and impacts on the use and enjoyment of property. For example, state and local government complaint logs showed that from 2004 to 2007, Garfield County received 374 complaints, 94 of which were oil and gas-related odors (25%). From 2006 to the present, the COGCC received 496 complaints, 121 of which were oil and gas-related odors (24.3%). The Commission believes Rule 805. strikes a balance between allowing resource development and protecting public welfare by allowing the oil and gas development to occur near residences and other populated buildings, provided that certain development activity/equipment employ air emissions controls and work practices that reduce odor causing pollutants to enter the air.

Odors can emanate from day-to-day operations of the oil and gas equipment. Rule 805. addresses odor-related concerns from day-to-day operations in the three Piceance Basin Counties: Garfield, Mesa and Rio Blanco, by requiring emission controls to be placed on certain odor causing equipment (tanks, pits and glycol dehydrators) located within ¼ mile of residences or occupied dwellings. The rule also requires operators to hold a valid permit from the CDPHE for affected tanks and glycol dehydrators to assure rule effectiveness and enforcement capabilities. The Commission recognizes that without such a permit requirement, there would be little assurance that required emission control devices are installed and operated properly, rendering the rule essentially ineffective and unenforceable. The Commission understands that the operational requirements that are typically in Air Pollution Control Division permits to ensure rule effectiveness would include: (1) a requirement that control equipment be correctly piped to the control devices; (2) a requirement that control equipment be correctly sized to handle the emissions being controlled; (3) a requirement that all vents or thief hatches be appropriately sealed; (4) confirmation that the control devices are operational; and (5) verification that the pilot lights for the equipment are working.

Odors can also emanate from “flowback” occurring during the well completion phase. Prior to the adoption of Rule 805., well completion practices included allowing well contents to flow into open tanks or pits, thus allowing natural gas and condensate to disperse into the atmosphere. This practice not only creates odors but also disperses methane, a greenhouse gas, to the atmosphere, which can be a waste of valuable natural resources. The rule addresses this by requiring operators to use green completion practices, where practicable, to reduce odors and methane emissions associated with well development.

Compliance with certain provisions of Rule 805.b.(2)A, B, and C requires purchase and installation of control equipment on both existing and new oil and gas equipment if the operations are in certain locations and if certain conditions are met. Because existing condensate tanks, crude oil and produced water tanks and glycol dehydrator are subject to this rule, the Commission decided to phase in the rule’s effectiveness to allow for equipment to be ordered and installed. Specifically, operators will not be required to comply with requirements for condensate, crude oil and production tanks, or glycol dehydrators until October 1, 2009, giving operators ample time to order and install the control equipment.

Compliance with Rule 805.b.(2).D is required only for qualifying pits constructed after May 1, 2009 on federal land or after April 1, 2009 on all other land because the

Commission does not intend for pits in existence on those dates to be moved or eliminated.

The Commission wrote Rule 805.b.(2). A, B and C to expressly apply to existing equipment. This approach is necessary because it is the best way to respond to existing odor complaints and public welfare concern, raised repeatedly in hearing testimony. The Commission believes applying these rule sections retroactively is not only necessary, but strikes a balance between oil and gas development and public health, safety, and welfare protection. The Commission also notes that because the legislative declaration in the Act represents a remedial change, it thereby allows rules that pertain to the protection of public health, safety and welfare to be applied to existing operations. *See In re Estate of Moring v. Colo. Dep't of Health Care Policy & Fin.*, 24 P.3d 642 (Colo. App. 2001). In short, the evidence presented during the hearing regarding the existing negative impacts odors are having on public health, safety, and welfare bolstered the Commission's belief that this problem is best remedied by applying this rule to existing oil and gas operations.

The Commission also included provisions requiring operators of control equipment installed pursuant to 805b.(2)A, B and C to hold a valid permit from the CDPHE Air Pollution Control Division (APCD). The Commission believes an APCD permit is necessary to assure odor control equipment is not only installed at the site, but operated in a manner that actually reduces the odor causing VOCs. Without this provision there would be no mechanism for requiring the emission control equipment to operate properly; in other words there would be no method for enforcing against an operator who does not operate the control equipment in compliance with these provisions. The Commission's intent here is to ensure that APCD issued permits for this equipment contain uniform and reasonable conditions that address the requirements described above.

After hearing testimony from a variety of parties during the hearing, the Commission concludes that adoption of Rule 805. will result in greater public welfare protections in the three counties within the Piceance Basin where such protections are most needed. It also believes that the adopted provisions provide the basis for protections elsewhere if and when the need arises and would consider using Rule 805. as a foundation for expanding its applicability through a subsequent rulemaking. The public welfare protections reflected in these amendments result from reduced emissions of volatile organic compounds from the larger-emitting oil and gas production sources located near human-occupied structures. Limiting the dispersion of these compounds benefits people living in the area with cleaner air that has a much lower likelihood of affecting the use and enjoyment of their property in proximity to oil and gas operations. The Commission also notes the additional benefit of limiting the greenhouse gases released to the atmosphere, and preserving the natural resources of the state that would result from these regulations. Applying a ¼ mile radius for application of the relevant emissions control requirements will afford a significant benefit for persons in occupied structures within that area in this region, and will also provide a benefit to persons beyond that radius, for example, in such structures between ¼ and ½ mile radius of that same equipment.

The Commission also finds that Rule 805. will not hinder the oil and gas industry's ability to develop oil and gas resources. The control equipment contemplated by Rule 805. is commonly used, and the record shows operators voluntarily use this equipment to reduce impacts on the nearby populations. Rule 805. does not require specialized equipment on wells that do not produce at a sufficient volume and pressure to flow

through this equipment, making it a narrowly tailored rule. Rule 805. also allows operators to request a variance if they believe employing control equipment or green completion practices or other control equipment is not feasible. In instances where green completions are not technically feasible or are not required, operators shall employ BMPs to reduce odor causing emissions.

After reviewing the record, the Commission believes Rule 805. effectively balances the protection of public welfare with the development of oil and gas resources by minimizing hydrocarbons released to the atmosphere in proximity to occupied structures while allowing operators to continue to complete wells and operate in a normal manner. Upon consideration of all of the evidence, the COGCC concludes that these regulations as adopted are responsive to the directives set forth in HB 07-1341.

The Commission also heard testimony regarding the need for, and recognizes the value of, studies to better understand the impacts on Colorado citizens of oil and gas development. The evidence in the record reflects questions and concerns about public health effects of oil and gas operations. The Commission believes that it would be beneficial to develop additional information regarding the relationship between oil and gas development and public health, particularly where such industrial development occurs in close proximity to residential developments. The Commission therefore is instructing staff, in collaboration with the CDPHE, to initiate a public health literature review to determine the status or current information and knowledge about this issue, identify data gaps, and guide the definition and scope of future targeted public health studies; and to report back and offer recommendations to the Commission during in the last quarter of 2009.

The Commission also acknowledges a need to fill significant air quality data gaps from oil and gas activities in the oil and gas regions of Colorado, especially in the western Colorado oil and gas basins. This is true both for air quality monitoring data, as well as projected air quality loading and airshed impacts, typically evaluated via modeling exercises. These data gaps need filling to facilitate effective air quality planning. Specifically, the Commission believes there is a need for monitoring data to characterize current air quality conditions and to monitor the air quality impacts of oil and gas-related activities into the future. This need stems from the rapid and broad growth in oil and gas activities in the last five years in western Colorado and neighboring states, and the projected future rapid growth in oil and gas activities over the next 20 or more years, combined with the new, more stringent national ambient air quality standard for ozone. The collection of this data can provide a scientific basis for further mitigation efforts if necessary to prevent degradation of the state's air quality or addressing potential non-compliance with health-based air quality standards that could arise from this significant and widespread industrial activity.

The Commission directs staff to work with parties to this rulemaking to define air quality information needs and methods and costs for meeting them; and report back by the fall of 2009. The Commission intends for staff to develop recommendations in collaboration with CDPHE and using appropriate means. The Commission understands that agency resources are limited at this time, and that resources from the oil and gas industry as well as those of other government agencies may be available. The Commission expects that, if appropriate, recommendations may include a strategic plan for conducting and funding monitoring and studies.

Condensate tanks, crude oil and produced water tanks, and glycol dehydrators within ¼ mile of certain building units that are in existence on May 1, 2009 on federal land and April 1, 2009 on all other land must be in compliance with amended Rule 805. by October 1, 2009.

## **900-Series Exploration and Production (E&P) Waste Management**

### General Introduction to 900-Series

The rules and regulations of the 900-Series establish the permitting, construction, operating and closure requirements for pits, methods for managing E&P waste, procedures for spill/release response and reporting, and sampling and analysis requirements for remediation activities. These rules have been developed to fulfill the COGCC's mission to foster the responsible development of oil and gas resources and to protect public health, safety and welfare including protection of the environment and wildlife. The 900- Series rules are applicable only to E&P waste, as defined in section 34-60-103(4.5), C.R.S., or other solid waste where the CDPHE has allowed remediation and oversight by the Commission. The COGCC is an implementing agency for water quality standards and classifications adopted by the Water Quality Control Commission (WQCC) for groundwater protection. This authority was provided by Senate Bill 89-181, and is restated and clarified by a Memorandum of Agreement between the agencies. The jurisdictional authority over exploration and production waste was granted to the COGCC through Senate Bill 95-017.

The occurrence and distribution of Colorado's water resources are linked to its geography and underlying geology. The ultimate source of groundwater is recharge through precipitation. Precipitation that does not evaporate or immediately flow into surface waters percolates into groundwater. Groundwater is the primary water source for 75% of the public water supply systems in the state. The increasing reliance on groundwater by public and domestic water wells and private water systems in a water-short state mandates a greater degree of protection for groundwater quality.

### Retroactive Applicability of 900-Series

The Commission expressly intends that the amendments to the 900-Series Rules not be retroactive, except where specifically stated (e.g., skim pits). Moreover, the Commission notes that the future closure and remediation of pits existing on or after May 1, 2009 on federal land or on or after April 1, 2009 on all other land will be subject to the concentration levels of Table 910-1, as amended. Nonetheless, the Commission recognizes that there is a large and growing number of E&P waste management operations in Colorado, including more than 10,000 pits. The Commission also acknowledges that pits existing at the time these rules become effective (May 1, 2009 for federal lands and April 1, 2009 for all other lands) must be managed such that public health and the environment are protected. To this end, the Commission directed staff to exercise, where appropriate, its existing authority under Rule 901.c., which allows the Director to, with reasonable cause, impose additional requirements on existing pits. This rule establishes that, if the Director observes an act or practice being performed which may violate Table 910-1 or water quality standards or classifications established by the WQCC, he may impose additional requirements, including but not limited to sensitive area determination, sampling and analysis, remediation, monitoring, permitting and the establishment of points of compliance.

The Commission directs staff to implement a two phase approach for implementing its existing authority under Rule 901.c with respect to existing pits. First the COGCC staff will review existing information to identify existing pits from which seepage may be reaching the underlying aquifer or waters of the state at contamination levels in excess of applicable standards or which may otherwise be violating Table 910-1 or water quality standards or classifications established by the WQCC. The staff will then require the operators of such pits to submit appropriate information demonstrating that such seepage or other violations are not occurring. Second, the staff will review the information that is submitted in response to this requirement to determine whether there is reasonable cause to believe that seepage is reaching the underlying aquifer or waters of the state at such contamination levels or that the pit is otherwise violating Table 910-1 or water quality standards or classifications. If the staff finds reasonable cause for such belief, then it will require the operator to take appropriate corrective action, which may include closing or lining the pit. The staff will develop a schedule for implementing this approach, which will reflect both the need to protect public health and the environment and the time required for staff to review existing and responsive information and for operators to develop information and take corrective action. The Commission understands that this work may require the staff to obtain additional funding. Commission requests staff to report on these efforts at least quarterly during regularly scheduled Commission meetings.

#### Amendments to the 900-Series

The following Rules were amended:

1. Rule 901., INTRODUCTION

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 901. provides a general discussion of overall objectives of the 900-Series Rules and responsibilities for oil and gas operators. The rule provides a detailed discussion of the additional requirements that the director may impose and what actions could trigger these additional requirements.

The Commission amended the rule to expand the method for identifying sensitive areas. The Commission wishes to emphasize that this expanded methodology is needed to protect the environment, surface water and groundwater resources. Operators will be required to provide appropriate geologic and hydrogeologic data to evaluate the potential for impact to groundwater and surface water rather than use the existing Sensitive Determination Decision Tree. This evaluation will improve sensitive area determinations by, among other things, causing operators to take the complex geology and hydrogeology into account along with identifying key indicators of sensitive environmental areas including wetlands, seeps, springs, surface water features, and groundwater protection areas and designated groundwater basins.

Prior to amendment, Rule 901.d. implied that risk-based approaches could be proposed as an alternate cleanup goal. There are no other provisions for risk-based approaches in the rules, and the COGCC staff testified that it has never approved such an approach. Testimony also indicated that risk-based corrective action programs are only successful at protecting public health, safety welfare and the environment through knowledge of and rigorous controls on future property uses. As the implementing agency for groundwater standards pursuant to Senate Bill 181, the COGCC is required to implement and enforce

groundwater standards as established by the WQCC. Any modifications of these standards could require a hearing before the WQCC. Amended Rule 901.d. no longer refers to “risk-based approaches” and, therefore, avoids potential regulatory confusion

The Commission understands from COGCC staff testimony that the Sensitive Area Determination Decision Tree (Figure 901-1) which existed prior to this amendment was not adequate to evaluate the potential for oil and gas operations to impact water resources. For instance, this simplistic approach allowed a site where groundwater is greater than 20 feet below total pit depth to be considered a non-sensitive area even if the site were underlain by an unconfined aquifer or recharge zone such as the outcrop area of the Ogallala Formation and aquifer in eastern Colorado. Under amended Rule 901, the Sensitive Area Determination Decision Tree will no longer be used for this purpose. Instead, an operator must present appropriate geologic and hydrogeologic data to evaluate the potential for impacts to groundwater or surface water. If the data indicates that the potential is high, the site is likely located in a sensitive area. If the data indicates that the potential is low, the site may be considered a non-sensitive area.

## 2. Rule 902., PITS – GENERAL AND SPECIAL RULES

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 902. covers general and special rules for the operation and maintenance of pits used for exploration and production of oil and gas. Rule 902. introduces and explains the requirement that pits be constructed and operated in manner that is protective of public health, safety, and welfare, including the environment and wildlife resources. It also includes a series of preventive measures.

The Commission heard testimony about pit overfills that have resulted in discharges of the pit contents to the environment, and that COGCC staff members have responded to numerous complaints regarding pit odors. The source of the odors is often: oil or condensate on the pits that has not been removed by the operator; or residual oil around the edge of the pit that remains even after the pit has been skimmed. COGCC staff members have also responded to complaints associated with odors created by bacterial growth in pits.

The amendments require operators to develop a method for monitoring and maintaining freeboard, which should reduce the incidence of spills and releases caused by overtopping pits. This requirement should also benefit the industry by reducing its exposure to the costs for the remediation of spills and releases to the environment. Examples of freeboard monitoring methods include simple, low-cost methods such as painting a line on the pit wall. The amendments also require operators to clean residual oil or condensate from the edge of the pit. This requirement not only reduces a potential source of nuisance odors, but also removes a risk to wildlife, especially migratory birds, and the potential fines associated with migratory bird mortalities. The amendments also require operators to treat the contents of pits when necessary to control the growth of bacteria, which will reduce another potential source of nuisance odors.

Amended Rule 902.e. provides that pits used for storage, recycling, reuse, treatment or disposal of E&P waste or fresh water may be permitted under Rule 903 to service multiple wells, subject to Director approval. This clarifies and continues the Director’s existing authority to permit pits that serve multiple wells under Rule 903 rather than as centralized E&P waste management facility under Rule 908. The Commission decided

as a policy matter to continue this authority because of concern that the definition of centralized E&P waste management facility may encompass pits for which the regulatory requirements of Rule 908 outweigh the public health, safety, and welfare risks. The Commission was also concerned that eliminating this authority could deter operators from consolidating pits and fluids and thereby cause additional surface disturbance.

The Commission also wants to ensure that this authority is exercised judiciously, and that pits that would meet the definition of a centralized waste management facility are permitted under the less protective provisions of Rule 903. only if this will not result in greater impacts to public health, welfare and the environment. The Commission expects the Director in exercising this authority to consider the following factors when determining applicable permitting requirements: characteristics and volume of the waste to be placed in the pit, the anticipated length of time that the pit will operate, proximity to sensitive areas, local geologic conditions, and other pertinent environmental factors. In addition, the Commission expects that the Director will add appropriate conditions of approval to pit permits under Rule 903 where such conditions are needed to protect public health, welfare, and the environment, considering the listed factors, above.

The purpose of adding the three (3) year temporal requirement is to further clarify the difference between: centralized E&P waste management facility pits that must be permitted under Rule 908; and other pits for the storage, recycling, reuse, treatment, or disposal of E&P waste from multiple wells that may be permitted under Rule 903. The Commission intends that Rule 903 not be used to permit pits that store, recycle, reuse, treat, or dispose of E&P waste from multiple wells and that will be in use for more than three (3) years unless the Director grants a variance. This is because the Commission believes that such pits generally present greater risks to public health, safety, welfare, and the environment which are better addressed under Rule 908. However, a variance may be appropriate where such a pit would not present such risks because, for example, it only contains produced water. This clarification also provides additional clarity and consistency to Rule 902.e.

#### Rule 903., PIT PERMITTING/REPORTING REQUIREMENTS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: The dramatic increase in oil and gas operations in the state, including the use of a wide variety and large number of pits, has led the COGCC to update its approach to regulating, permitting, and tracking pits. Rule 903. addresses the permitting and reporting of pits used for exploration and production of oil and gas. The amendments clarify and simplify the explanation of which pits need to be permitted by the COGCC before they are constructed and which pits may be reported to the COGCC after they are constructed. As under the current Rule, operators use the Earthen Pit Construction Report/Permit, Form 15, for both of these purposes.

The Commission understands that the oil and gas industry has developed systems for managing E&P wastes that reduce surface disturbance and oil field traffic, minimize dust, and include waste minimization practices such as the re-use and recycling of drilling and completion fluids. These waste minimization practices are encouraged by COGCC and reduce demand on water resources. If operated in a manner that is protective of public health, safety, and welfare, including the environment and wildlife resources, these practices provide a cost-effective way to produce a needed natural resource.

One such system that has been developed is the use of a pit located at a common point to dispose of produced water from more than one well through evaporation and percolation. These pits reduce surface disturbance and traffic, and allow for cost effective operation of oil and gas wells with marginal production.

Testimony also indicated that multi-well pits have also been employed for the purpose of disposing of water from more than one well. These pits are used during drilling, completion and production and may contain several forms of E&P waste. They also have a limited lifecycle based on the drilling program. A thorough permitting process is necessary to ensure that multi-well pits: are used for either produced water disposal or the storage of fresh water and re-use/recycling of drilling and completion fluids; and are constructed and operated in manner that is protective of public health, safety, and welfare, including the environment and wildlife resources.

Before amendment, Rule 903. created a complex process for identifying which pits must be permitted before construction. This process was based on many factors, including the type of pit, pit construction, hydrocarbon and chloride concentrations of drilling fluids, produced water volumes, and sensitive area determination. The Commission amended Rule 903 to eliminate the sensitive area determination requirement and, as a matter of policy, base pit permitting principally on pit type. As amended, the rule requires that all production pits must be permitted. So must special use pits, except for flare pits used when there is no chance of condensate accumulation and emergency pits used during in the initial phase of an emergency response. So must drilling pits where the hydrocarbon concentration exceeds 10,000 parts per million (ppm) or the chloride concentration at total well depth exceeds 15,000 ppm. So must multi-well pits which contain produced water, drilling fluids, or completion fluids that will be recycled or reused, except those pits where reuse consists only of moving drilling fluids from one location to another for reuse there; this will require permitting for multi-well pits that are used for fresh water storage or reuse or recycling of drilling, completion, and frac flow back.

The Commission concluded that requiring these categories of pits to be permitted is appropriate because of the potential environmental risks and concerns associated with them. Permitting will provide the COGCC with increased documentation and tracking for these categories of pits. In addition, this will provide an opportunity for COGCC staff to interact with operators to discuss E&P waste management at these sites as well as a means for field inspectors to track operations and closure of these facilities. After considering the record on this issue, the Commission believes that the amendments to Rule 903 strike an appropriate balance between development of oil and gas resources and protection of the environment.

The Commission wishes to emphasize that pits used at a single wellsite where drilling fluids are collected from more than one well for use in drilling and completing the well at that wellsite are not multi-well pits. This is because the purpose of such pits is not storage, treatment or disposal of E&P wastes. Rather, the purpose of the pit is for temporary collection of fluids for immediate use in the drilling of such well. Therefore, such pits do not require a permit pursuant to amended Rule 903.a.(4). Such pits might not need a permit pursuant to amended Rule 903.a.(3) either, if the hydrocarbon or chloride concentration of the fluids in the pits does not meet the threshold in that provision. The Commission also wishes to emphasize that if an operator has a question about what type of pit it is using, it can work with the COGCC staff.

### 3. Rule 904., PIT LINING REQUIREMENTS AND SPECIFICATIONS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II).

Purpose: The purpose of the pit lining requirements is to minimize public health and environmental impacts from the thousands of waste pits used by oil and gas developers in Colorado to treat, store and dispose of E&P waste.

The Commission heard extensive testimony on the merits of and circumstances under which pits should and should not be lined and adopted a package of lining requirements it believes strikes the appropriate balance between protection of public health and the environment and development of oil and gas resources. More specifically, the Commission adopted a package of requirements that establishes lining requirements that vary with pit contents, pit duration and pit use.

This package of requirements includes a deferral until 2011 of the applicability of pit lining requirements for production pits and for multi-well pits used to contain produced water that will be recycled or reused located in Washington, Logan, Morgan, Yuma, Huerfano and Las Animas Counties. The reason for this deferral is to allow COGCC and CDPHE staff to work with operators and local governments to evaluate further the basis, need and appropriate nature of production pit lining requirements for these Eastern Colorado locations, given the variety of uses for the water, surface and groundwater quality considerations and current oil field liquid waste management practices. As part of this process, operators may seek to demonstrate that production pit percolation in certain areas will not adversely affect surface or ground water, or operators and local governments may seek modification of the applicable surface and ground water standards by the WQCC.

The Commission recognizes there are a variety of pit types, a diversity of pit uses, and that the environment (e.g. surface and groundwater quality) where pits are placed is not the same throughout the state. In view of this, the Commission built certain key flexibilities into the pit lining requirements. These requirements are summarized in the matrix below.

The Commission established the regulations in a tiered approach with varying permitting, design, construction, operation, contingency, and closure requirements commensurate with pit service duration, the danger of the wastes/liquids managed in the pits, and the number of operators served by the pits. The regulations are intended to minimize or eliminate the release of E&P waste into the environment, while also protecting human health.

In addition, the Commission intends that the regulations define the minimum liner requirements, and the allowable liner design flexibility, for each type of pit. The liner requirements and flexibility were developed to account for site specific conditions, while still being protective of human health and the environment. The regulations define the minimum liner specifications that are acceptable for use at a particular type of pit. They also provide that operators may use alternative liner systems if they demonstrate to the Director's satisfaction that such alternative systems offer equivalent protection to public health, safety, and welfare, including the environment and wildlife resources. Liner system flexibility was intended to accommodate the inherent natural protectiveness of certain pit locations or alternate engineered liner configurations. For example, consideration may be given for portions of the state where there is a significant distance

to groundwater, where a very low permeability layer prevents pit percolation from reaching groundwater, or where alternate engineered and layered configurations of composite liners are used to match the minimum liner protectiveness requirements. The Commission intends that these rules provide that a minimum level of protectiveness is always maintained whether the minimum liner configuration or an alternate design is approved.

These rules as amended by the Commission recognize two major groups of pits: production, drilling, special purpose and multi-well pits, which have a shorter service life; and centralized E&P waste management facility pits, which have a potentially much longer service life and that serve multiple operators. In addition, these rules have been amended to include provisions for new and improved design, construction, operations/monitoring, contingency and closure criteria for all pits.

The Commission adopted liner requirements for all pits that are intended to protect against discharges into, and contamination of, the environment, and to prevent the risk of exposure to contaminants. The minimum liner requirements are more robust for centralized E&P waste management facility pits because of the greater risks these pits pose: centralized E&P waste management facility pits are intended to be used for longer periods of time, to contain larger volumes of fluid, and may be used to manage a wider variety of E&P wastes. Centralized E&P waste management facility pits typically have a service duration commensurate with the production life of the oil/gas field, which may be several decades. These pits service multiple wells rather than an individual well, such that the size of these pits can be significant. More rigorous pit liner requirements for these types of pits are warranted to provide the appropriate level of protection. The Colorado Solid and Hazardous Waste Commission adopted regulations pertaining to Section 17, Commercial Exploration and Production (EP) Waste Impoundments in November, 2008. This section requires liners for pits accepting E&P waste to meet a hydraulic conductivity less than or equal to  $1 \times 10^{-7}$  cm/sec.

Production pits, other than skim pits (which always need to be lined pursuant to Rule 904.a.(4)), need to be lined unless the operator can demonstrate that the pit will not adversely impact surface water or groundwater. This includes produced water pits, percolation pits, and evaporation pits. The Commission understands that a properly functioning percolation pit cannot be lined. Therefore, for a pit to function as a percolation pit (which requires that it be unlined), the operator will need to demonstrate to the Director's satisfaction that: (1) the quality of water in the percolation pit is equivalent to, or better than, the underlying groundwater; or (2) that seepage from the percolation pit will not reach groundwater or waters of the state at contamination levels in excess of applicable standards, and then the pit will not need to be lined. If the operator cannot meet either of those requirements, then the pit must be lined and cannot be used for percolation purposes.

Pit Category & Use	Pit Types	Liner Required	Exceptions
Production Pits* (TSD)**	Skimming/ Settling Produced Water Evaporation Percolation	Yes Yes Yes Yes Yes	Except for skim pits, no liner required if quality of the produced water is 1) equivalent to or better than underlying groundwater, or 2) seepage will not reach groundwater or waters of the state at contamination levels in

			excess of applicable standards.
Drilling Pits (TS)	Ancillary Completion or Flowback Reserve	Yes: THP>10,000 ppm or Cl >15,000 ppm at TD	THP<10,000 ppm or Cl <15,000 ppm at TD
Special Purpose Pits (TSD)	Blowdown Flare Emergency Sediment/ Tank bottom Workover Plugging	Yes Yes Yes Yes Yes Yes	No liner required if for emergency pits during initial response and flare pits w/o condensate
Multi Well Pits*** (used for less than 3 years) (TSD)	Production pits Drilling pits	Yes –production water, drilling fluids and completion fluids	No liner required for pits with production fluids, drilling fluids, or completion fluids that will not be recycled or reused and where reuse consists only of moving drilling fluids from one oil and gas location to another location for reuse there.
Centralized Pits (Used for greater than 3 years) (TSD)		Yes	None

Notes:

\* Lining requirements do not apply in Washington, Yuma, Logan, Morgan, Huerfano or Las Animas Counties prior to dates in 2011 specified in rule.

\*\* TSD = Treatment, storage and disposal activities, including recycling and reuse

\*\*\* Lining requirements do not apply to multi-well pits used to contain produced water that will be recycled or reused located in Washington, Logan, Morgan, Yuma, Huerfano, and Las Animas Counties constructed before dates in 2011 specified in rule.

4. Rule 905., CLOSURE OF PITS, AND BURIED OR PARTIALLY BURIED PRODUCED WATER VESSELS

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Existing Rule 905, authorized an oil and gas operator to leave a synthetic pit liner in place after closure of the pit if the liner was buried on-site and if the landowner had given his/her permission for the on-site burial. As amended, Rule 905 eliminates this authorization. The basis for the Commission’s decision to remove this provision from the rules is that while E&P waste are exempt from solid and hazardous waste requirements, synthetic pit liners are not unique and intrinsic to the oil and gas industry. Therefore, these waste liners are not E&P waste and are, therefore, not exempt from solid waste requirements. Under existing law, all solid waste must be placed into approved and properly permitted solid waste disposal facilities. Closing pit liners in place, even if they are shredded or otherwise breached, represents improper and unpermitted solid waste disposal and cannot, therefore, be allowed.

Nonetheless, if the closing pit is being converted to another use, such as a stock watering pond or fresh water storage pond, then the liner has not become a waste and can be left in place until its use for a purpose consistent with its design and intent ceases.

#### 5. Rule 906., SPILLS AND RELEASES

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule deals with all aspects of spills and releases, including required measures to avoid them and actions that must be taken to contain them.

Prior to amendment, Rule 906. specified that spills/releases exceeding five barrels, including those contained within unlined berms, had to be reported in writing on a Form 19, Spill/Release Report, but the rule did not require a written report (Form 19) for spills contained within lined berms. Although most operators do submit a written report (Form 19) for spills/releases of this size that are contained in lined berms, not all do. Spills of this size, even if they are contained within a lined berm, still pose a potential threat to public health, safety, welfare, and the environment, including wildlife and surface water resources, and need to be tracked by the COGCC to ensure proper and timely remediation.

Amended Rule 906. also clarifies that all spills/releases exceeding twenty barrels or those of any size that impact or threaten to impact waters of the state, residence or occupied structure, livestock, or public byway, must be: (1) reported verbally to the Director; and (2) reported in writing (Form 19). Although most operators do submit a written report (Form 19), not all do unless a specific request is made by COGCC staff.

The amendments also specify that a topographic map showing the location of the spill/release must be included with the Form 19. Without this amendment, COGCC staff members could not ensure that they were accurately locating the site of the spill/release and were not able to evaluate the potential for a spill/release to impact water resources.

Further, the amendments require operators to notify CDPHE about spills/releases that impact or threaten to impact surface waters. In addition, the amendments state that spills and releases that impact or threaten a public drinking water supply intake shall be verbally reported to the emergency contact for that facility immediately after discovery.

Prior to the amendments, Rule 906. did not require the operator to notify the surface owner or the owner's appointed tenant of reportable spills. Although operators frequently do notify the surface owner or the owner's appointed tenant, not all do. As a result, surface owners and tenants may happen to come upon spills/releases about which they have not been notified. Such surface owners would often contact the COGCC to voice their concerns about impacts from spills/releases and the thoroughness of the remediation activities. This unnecessary aggravation of the surface owner and tenants often could likely have been avoided if the operator had notified them of the incident and its plans for mitigating the impacts and remediating the site, which is why the amended rule requires such notification as soon as practicable and not more than 24 hours after discovery. The amended rule also clarifies that verbal reports to the Director must be made as soon as practicable and not more than 24 hours after discovery.

Prior to amendment, Rule 906. did not require containment around tanks containing produced water if the total dissolved solids (TDS) of the water are less than 10,000 mg/l. Spills/releases from storage tanks of produced water, regardless of the TDS of the water,

have the potential to impact surface and groundwater unless properly contained and promptly remediated. Therefore, the TDS threshold for secondary containment was changed from 10,000 mg/l to 3,500 mg/l, and additional specifications for secondary containment were added.

Collectively, these amendments will improve the COGCC's ability to track spills/releases and ensure that proper remediation has occurred by clarifying which spills/releases must be reported in writing by the operator and by requiring the inclusion of a topographic map showing the location of the spill. In addition, these amendments will better protect the public and wildlife because when spills/releases are reported, both the COGCC and the operator can use the provided data to analyze the cause of the spills/release and work collaboratively on developing long term strategies for preventing spills/releases from reoccurring in the future.

These amendments also protect water resources. Produced water, regardless of the TDS, cannot be allowed to impact surface or groundwater resources. Produced water frequently has a TDS higher than surface water and most shallow groundwater and, if it is produced from reservoirs that contain liquid hydrocarbon or wet-gas, it will contain dissolved hydrocarbon compounds, such as benzene, toluene, ethyl benzene, and xylenes. Therefore, requiring secondary containment around all produced water tanks will result in greater protection to surface and groundwater resources. By requiring operators to notify immediately the operators/emergency contacts of public water supplies with surface water intakes that are threatened by a spill/release, the oil and gas and the water operators can work together jointly to ensure all necessary precautions are taken to protect water users and to remediate any impacts promptly.

#### 6. Rule 907., MANAGEMENT OF E&P WASTE

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule deals with the proper management of E&P waste. Within the last several years, mismanagement of drilling fluids and non-incorporation of the fluids when used as a soil amendment has resulted in at least eleven incidents in the Greater Wattenberg Area of Weld County. Mismanagement issues included excessive loading of drilling mud at several locations resulting in offsite migration of fluids. Six of these drilling mud incidents impacted surface water including the Cache La Poudre River. Laboratory results of a drilling mud sample collected at one of these incident sites indicated residual petroleum hydrocarbons.

This amendment should result in enhanced E&P waste management practices by industry and thereby reduce environmental impacts. For instance, the new requirement that drying and burial of drilling fluids in drilling pits on non-crop land with the resulting concentrations required to not exceed the allowable concentrations and levels in Table 910-1 will be more protective of the environment. Similarly, the clarification to the reuse and recycling requirements will help ensure that the Director receives appropriate information to review proposed waste management plans, and the clarifications to the waste generator requirement will help the COGCC to track waste transportation. The management practices required by this amendment better balance the development of oil and gas resources with protection of the environment. Faster incorporation of drilling mud into soils when used as a beneficial amendment will result in less potential for offsite migration into surface waters.

The Commission also amended Rule 907.c to reduce from 5,000 mg/l to 3,500 mg/l the allowable TDS concentration in produced water used for road dust suppression. The Commission made this change after considering testimony from the CDPHE and several parties. Specifically, the Commission learned that some operators dispose of produced water on roads in excess of amounts needed to suppress dust. The CDPHE suggested that some operators also apply produced water for dust suppression during rain events, suggesting that operators are simply "dumping" the produced water. Testimony also indicated that water with TDS concentrations above 3,500 mg/l can have detrimental effects on livestock that drink it, which is why the state water quality standard for agricultural/livestock use is 3,500 mg/l. The Commission also learned that watering roads with TDS concentrations in the 3,500 mg/l and higher ranges can actually increase road dust over time due to the interaction of TDS in the water with road material. However, the Commission also heard testimony from certain local government parties expressing a desire to keep the limit at 5,000 mg/l TDS because lowering it could reduce the amount of available water for dust suppression.

Balancing all the testimony it received on this issue, the Commission decided that the COGCC limit should be consistent with the state water quality standard for agricultural/livestock use. While the Commission believes this to be the appropriate TDS threshold for the reasons stated above, it also requests staff to work with CDPHE and those Counties desiring to use produced water for dust suppression. The Commission anticipates an update from staff or CDPHE by the end of the calendar year 2010.

Rule 907.f., Other E& P Wastes, outlines acceptable waste disposal practices for wastes from natural gas plant sweetening and dehydration, pipeline pigging, tank bottoms and work over fluids. These wastes have shown greater likelihood to be toxic. To ensure public health, safety, and welfare, including the environment and wildlife resources, additional controls and oversight is required for these wastes. Under Rule 907.f., onsite land treatment and landfarming for these types of wastes (unless at a permitted commercial facility or centralized waste management facility) will not be allowed unless approved by the Director.

#### 7. Rule 908., CENTRALIZED E&P WASTE MANAGEMENT FACILITIES

Basis: The statutory basis for the amendments to this entire rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 908 addresses the regulation of centralized E&P waste management facilities. The amendments update and revise a number of these regulatory requirements, including those for design, operation, monitoring, emergency planning, financial assurance, and closure. As a matter of policy, the Commission concluded that the amendments are appropriate because they will help ensure that such facilities properly protect public health and the environment. The amendments will also make the COGCC requirements more consistent with the CDPHE requirements for commercial E&P waste management facilities, which often have similar environmental issues. The Commission determined that although these amendments will impose some additional expense and burden on the industry, they strike an appropriate balance and are reasonable under the current circumstances.

##### a. Rule 908.b., Permit requirements

Rule 908.b.(7) pertains to facility design and engineering. The amendments will require the submittal of more comprehensive information regarding the site characteristics, including geologic and hydrologic data. This additional information is intended to assist the COGCC staff in reviewing and evaluating permit applications and in developing appropriate conditions to protect public health and the environment.

Rule 908.b.(8) deals with operating plans. The amendments include a requirement that such plans address noise and odor mitigation. This requirement is intended to avoid or minimize noise and odor complaints and better protect the public welfare.

Rule 908.b.(9) addresses groundwater monitoring. The amendments set forth detailed water well sampling and analysis criteria. They also require operators to make good faith efforts to identify and obtain access to water wells known to the operator or registered with the State Engineer for sampling purposes and clarify what happens if access is denied. The Commission believes that these amendments provide important additional protection for public health, safety, and welfare, including the environment and wildlife resources.

The amendments also add Rules 908.b.(10) and (11). Subsection (10) requires surface water monitoring under certain circumstances. The Commission believes that this addition will better protect surface water quality. Subsection (11) requires a contingency plan that includes emergency response and contact information. The Commission believes that this addition will better protect public health and the environment.

b. Rule 908.d., Financial assurance

Rule 908.d. was amended to clarify that the financial requirement applies to all centralized E&P waste management facilities and not just land treatment facilities and that such financial assurance must be submitted before the operating permit is issued.

c. Rule 908.f., Annual permit review

Rule 908.f. was amended to require submittal of an annual report by the operator that includes the types and volumes of waste handled at the facility. Such information could then be verified by COGCC staff if necessary, and it will keep the COGCC better informed on the facility's operations.

d. Rule 908.g., Closure

Rule 908.g. was amended to specify certain information that must be included in the preliminary and final closure plans to help ensure proper protection of public health and the environment. Prior to amendment, a closure plan was required to be submitted, but there was no guidance as to what information was required. The requirement that the operator provide cost estimate information is intended to help ensure that the necessary funding will be available to close and reclaim the facility. The references to collecting samples as needed are intended to reflect that the collection of soil and groundwater samples will be governed by Rule 910.b, and that such samples may not be required in all circumstances.

e. Rule 908.h., regarding local requirements

Local governments and other agencies impose their own requirements on these facilities. Prior to amendment, Rule 908.h. simply stated that operators needed to provide the Director with copies of notifications to local governments or other agencies. As

amended, Rule 908.h requires that operators provide verification of approval from these other entities prior to COGCC approval. This will ensure that operators are in compliance with all necessary regulatory requirements.

8. Rule 909., SITE INVESTIGATION, REMEDIATION AND CLOSURE

Basis: The statutory basis for the amendments to this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 909 applies to: the closure and remediation of pits other than drilling pits; the investigation, reporting and remediation of spills/releases; permitted waste management facilities including treatment facilities; plugged and abandoned wellsites; sites impacted by E&P waste management practices; or other sites as designated by the Director. Only minor, conforming amendments were made to this rule.

9. Rule 910., ALLOWABLE CONCENTRATIONS AND SAMPLING FOR SOIL AND GROUNDWATER

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 910. addresses the cleanup standards for groundwater and soils impacted by E&P wastes. Table 910-1 was substantially amended to make the soil standards consistent with those used by CDPHE – Hazardous Materials and Waste Management Division for clean up of impacts to soil from similar materials and reflect the most current toxicological information and analysis. In addition, language was added to Table 910-1 clarifying that consideration will be given to background levels in native soils and groundwater, and other language was added to the rule clarifying that analytical parameters will be selected based on site-specific conditions and process knowledge and must be approved by the Director.

Prior to these amendments, the standards for the remediation of impacted soils used by the COGCC for oil and gas operations were different than those used by CDPHE – Hazardous Materials and Waste Management Division. Now, consistent standards are applied.

The rapid spread of rural residential development and expansion of urban areas contributes to changes in land use from agricultural, rangeland, and forest to residential and commercial. Current soil cleanup standards that were adequate for the original use may not be protective of the new and future uses, necessitating this amendment.

In addition, prior to this amendment, the COGCC's cleanup standards for soils were not definitively protective enough of groundwater quality by limiting leaching potential. The COGCC is the implementing agency for groundwater standards and classifications set by CDPHE – Water Quality Control Commission. The amendments pertaining to cleanup standards for groundwater are those set by the WQCC; these amendments do not change those groundwater standards.

The new standards are beneficial to the public welfare because they allow for unrestricted future use of the property and are protective of water quality.

The amendments provide a greater incentive for operators to prevent spills and releases and to remediate them in a timely manner. Rapid response and remediation will minimize the volume of waste that the operator must treat or remove for disposal, reduce

the potential for exposure of the public and wildlife, and reduce the risk of impacting ground and surface water resources.

#### Table 910-1

As amended, Table 910-1 establishes new soil and groundwater cleanup standards for oil and gas operations. The Commission set the allowable concentrations presented in the table at levels to assure that contamination clean up efforts by operators are sufficient to allow remediated property to be available for unrestricted future use. More specifically, the standards facilitate protective cleanups without long-term liabilities or responsibilities to the oil and gas operators and no potential for unacceptable risks affecting public health or the environment. After receiving extensive comment addressing a variety of perspectives on the merits of establishing appropriate soil and groundwater cleanup standards, the Commission decided that amended Table 910-1 represented a balanced and fair approach to allowing oil and gas development to occur while protecting public health and the environment.

The Commission also deliberated on the merits of removing from the rules a seldom used provision that authorized operators to seek permission from the Director to undertake “risk-based” cleanups. In reaching its decision, the Commission reasoned that while “risk-based” cleanup approaches can allow higher levels of contamination to be left behind at a contaminated site, and can thus be a less expensive clean-up option, they likely could result in the need to place limitations on how that land can be used in the future. Accounting for the fact that a large percentage of Colorado’s oil and gas development activity occurs on lands not owned by the oil and gas operators, and on lands where residential, agricultural and/or commercial uses occur in close proximity to the oil and gas development, the Commission, after weighing the evidence, decided that “risk based” cleanups are not currently appropriate because of the potential for future exposure to the contaminant that might be left onsite. Risk-based cleanups rely heavily on risk assessments to calculate the risk presented to the public and to the environment from exposure to the contamination under various future scenarios. These risk assessments are complex and resource intensive, and they require specialized toxicological and risk assessment experience. The COGCC does not have the resources needed to conduct such risk assessment evaluations. In addition, the Commission does not have independent statutory authority to impose and enforce land use controls in the form of “environmental covenants” that must accompany cleanups to restrict future uses where remaining contamination could be dangerous. Absent this authority there would be no effective means for assuring that future uses of the contaminated site would remain restricted to prevent exposure to the harmful levels of contaminants remaining onsite.

In the future if the COGCC obtains the required statutory authority and resources, the Commission could revisit this issue and amend these rules to include less restrictive cleanup standards in Table 910-1 and/or a risk-based evaluation process that industry could use to justify alternative cleanup standards. For the time being the Commission has decided that as a matter of policy, the public health and environmental protection approach reflected in Table 910-1 is most appropriate.

As with all of the COGCC rules, an operator may seek a variance from the provisions of Rule 910 or the concentration levels in Rule 910-1, pursuant to Rule 502.b, under appropriate circumstances. The Commission also notes that the future closure and remediation of pits existing on or after May 1, 2009 on federal land or on or after April 1,

2009 on all other land will be subject to the concentration levels of Table 910-1, as amended.

10. Rule 911., BURIED OR PARTIALLY BURIED PRODUCED WATER VESSEL, BLOWDOWN PIT, AND BASIC SEDIMENT/TANK BOTTOM PIT MANAGEMENT REQUIREMENTS PRIOR TO DECEMBER 30, 1997

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 911. addresses the management, operation, closure, and remediation requirements for certain pits that were constructed more than a decade ago. The rule was amended by the addition of the following language: “In December, 2008, Figure 901-1 was deleted from the 900-Series Rules.” This amendment is consistent with the amendments to Rule 901, which eliminate the Sensitive Area Determination Decision Tree.

11. Rule 912., VENTING OR FLARING NATURAL GAS

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II), C.R.S.

Purpose: This rule addresses the venting or flaring of natural gas. Flaring is used as a means of converting natural gas constituents into less hazardous and atmospherically reactive compounds. Depending on the composition of the natural gas, the venting process may release hydrocarbons other than methane, such as ethane, propane, butane, pentane and hexane, into the atmosphere. Natural gas may also contain the EPA-designated Hazardous Air Pollutants (HAPs) benzene, toluene, ethyl benzene and xylenes (BTEX). HAPS can account for 0.3 - 0.6 % of the natural gas composition. Depending on the formation, natural gas may also contain nitrogen, carbon dioxide or sulfur compounds, such as hydrogen sulfide (H<sub>2</sub>S).

The amendments to this rule require that under certain circumstances flared gas be directed to a controlled flare or other combustion device operated as efficiently as possible to provide maximum reduction of air contaminants where practicable and without endangering the safety of well site personnel and the public. This will reduce the amount of HAPS and other hydrocarbons released into the atmosphere and thereby help protect public health, safety, and welfare.

Additions to the 900-Series

The following Rule 907A. was added:

Rule 907A., MANAGEMENT OF NON-E&P WASTE

Basis: The statutory basis for this rule is section 34-60-106(11)(a)(II).

Purpose: The purpose of new Rule 907A is to clarify how different oil and gas development waste is defined and by whom it is regulated. These provisions address confusion that can surround the definition of “E&P waste”. More specifically, many wastes generated in the normal course of oil and gas exploration and production are not considered E&P wastes and are, therefore, subject to state and federal solid and hazardous waste regulations administered by CDPHE and EPA. The Commission believes this clarification will facilitate the proper handling and disposal of such waste.

**1000-Series Reclamation Regulations**

Amendments to the 1000-Series

The following rules were amended:

1. Rule 1001., INTRODUCTION

Basis: The statutory bases for the amendments to this Rule are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 1001.c was amended to provide that compliance with Rules 1002.e.(1) & (4), 1002.f, and 1004.c.(4) & (5) will still be required even if the operator has entered into an agreement with the surface owner regarding topsoil protection and reclamation of the land. This is because the rules in question do not involve reclamation standards or objectives, but minimization of dust and erosion (Rule 1001.e.(1)), construction and use of access roads (Rule 1001.e.(4)), management of stormwater (Rule 1002.f), notice of final reclamation (Rule 1004.c.(4)), and inspection of final reclamation (Rule 1004.c.(5)). The Commission concluded that continued compliance with these rules should not restrict future land use or interfere with the surface owner's rights.

2. Rule 1002., SITE PREPARATION AND STABILIZATION (formerly SITE PREPARATION)

Basis: The statutory bases for the amendments to this Rule are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: The purpose of these amendments is to ensure proper site preparation and stabilization. Accordingly, Rule 1002.'s title was expanded from site preparation to site preparation and stabilization.

a. Rule 1002., all subsections except 1002.f.

Except for subsection f., most of the amendments to Rule 1002 primarily pertain to soil removal and segregation and should simplify site preparation and enhance reclamation efforts. The USDA - Natural Resources Conservation Service no longer uses the A, B, and C soil horizon nomenclature, but instead directs that, "topsoil" should be used to cover an area so that vegetation can be established and maintained. Surface soil layers are generally preferred for topsoil because of the organic matter, which increases the absorption and retention of moisture and nutrients and improves the growth of plants. Therefore, the amendments eliminate references to the A, B, and C soil horizons and require that topsoil be segregated on non-crop land. This should add clarity and facilitate faster reclamation.

The amendments also call for improved methods of site preparation, which should aid in interim and final reclamation. For example, the amendments require operators to reduce adverse impacts on wildlife resources by using directional drilling where feasible and to avoid or minimize wetland and riparian impacts and consolidate facilities and rights-of-way to the extent practicable. The Commission concluded that these are reasonable requirements that properly balance oil and gas development with protection of the environment and wildlife resources consistent with HBs 07-1298 and 07-1341.

b. Rule 1002.f., Stormwater management

The Commission added this rule to include requirements for developing and implementing stormwater management plans for most ongoing operations of oil and gas production facilities.

The amended rule applies to the post –construction operation of oil and gas producing facilities. It requires all oil and gas locations to employ BMPs that are tailored to reflect local conditions. Stormwater controls for protecting water quality during the construction of a facility are addressed separately in the CDPHE/Colorado Water Quality Control Division’s (“WQCD”) stormwater permitting requirements in the Colorado Discharge Permit System Regulations (5 CCR 1002-61).

The Commission recognizes that some oil and gas locations have certain characteristics that do not warrant development of a stormwater management plan. They include those with a the slope of less than 5 %, vegetative cover or permanent erosion resistant cover greater than 75%, a distance from a perennial stream or Classified Water Supply Segment greater than 500 feet, a location size less than one acre, measured by the amount of surface disturbance at the time of the termination of a construction stormwater permit issued by CDPHE and soil with low erosion potential. While all soils have the ability to erode, soils with both a high percentage of clay and little or no silt content are generally considered to have low erosion potential. An example of an oil and gas location with these characteristics could include a cultivated field.

The amended rule provisions are not intended to be as rigorous as those for stormwater management plans required under stormwater construction permits issued by the CDPHE/WQCD. For instance, the stormwater plan under these rule amendments must be site-specific only to the extent necessary to describe implementation where general operating procedures and descriptions are not adequate to clearly describe the implementation and operation of BMPs. Furthermore, stormwater management plans are not required at locations where soil erosion potential is low, vegetative cover is high, disturbed land is less than an acre, and slope is less than 5%. Also, the amended rule does not identify a specific inspection schedule, but leaves it to the operator to determine the inspection schedule appropriate for the particular location.

Based on the evidence in the hearing record, the Commission decided that these rule amendments are necessary because they fill a regulatory gap that would otherwise allow storm and non-storm related discharges from oil and gas operations, including pollutants such as sediment from roads/pads and chemicals associated with an oil and gas production site or associated support facilities. Prior to this amendment, such discharges were not regulated. The amended rule requires operators to employ “common sense”/good engineering approaches to prevent run-on and run-off from oil and gas locations and associated roads from entering surface waters. Significantly, these requirements are consistent with those included in stormwater permits required for ongoing operation in other industrial sectors, such as metals mining.

Rule 1002.f. sets forth the general requirements that balance protection of the environment with development of oil and gas resources. Requirements include those for implementing BMPs, without attempting to specify which BMPs are required in the widely varying site-specific circumstances encountered at oil and gas locations. The intent is to identify the categories of BMPs that need to be addressed, while preserving flexibility for the operator to exercise site-specific judgment as to the specific BMPs applied.

The Commission recognizes that the flexibility provided by this approach requires operators to exercise judgment and does not provide certainty as to what is required at each operational location. Many factors may affect decisions on which and to what

degree BMPs may be appropriate at particular locations, including but not necessarily limited to, topographic relief, soil erosion potential, presence of vegetative or other erosion-resistant cover, facility size, local hydrology, and the nature of the materials used at the site. Many forms of guidance documents regarding the selection of stormwater BMPs are available and the Commission encourages oil and gas operators to rely on them when selecting appropriate BMPs. Examples that provide useful tools for selecting BMPs include, but are not limited to:

- BMP manuals such as Urban Drainage and Flood Control District's Volume III ([www.udfcd.org/downloads/down\\_critmanual.htm](http://www.udfcd.org/downloads/down_critmanual.htm)) and CDOT's BMP manual (<http://www.dot.state.co.us/Environmental/envWaterQual/wqms4.asp>)
- Guidelines in BLM's Oil and Gas Exploration and Development Gold Book
- Civil engineering design manuals for roads, drainage, culverts, etc., which specify appropriate design specification for stable infrastructure.

In addition, the Commission encourages staff to consider developing additional informational guidance following the finalization of this rule, which may help operators identify additional useful reference material and select effective site specific BMPs.

The Commission notes that the appropriate timing of stormwater BMP inspections will vary with site-specific circumstances. For example, inspection frequency generally does not need to be as frequent during a stable operational phase as during a construction period where more surface disturbance is occurring. The factors listed above will also be relevant in determining inspection frequency, determined by the operator.

This rule is not intended to hold oil and gas operators responsible for minimizing or controlling discharges to state waters of sediment from natural erosion that occurs beyond the oil and gas location. Operators will, however, be responsible for implementing and maintaining BMPs to control pollutant sources associated with oil and gas operations, even when BMPs may be impacted by off-site pollution sources, including sediment from natural erosion.

The Commission intends that the standard applied by staff in overseeing and enforcing implementation of these stormwater requirements be one of reasonableness. Recognizing that considerable site-specific judgment is required, the Commission expects staff to apply the test of whether the operator has exercised a good faith effort to implement BMPs intended to serve the purposes of this rule. Where appropriate and desired by the operator, staff can and should work with an operator to identify additional BMPs that may be appropriate at a particular facility.

Rule 1002.f. is not intended to be seen as overlapping with the CDPHE/WQCD stormwater permitting requirements, referenced above. Once an oil and gas facility has achieved final stabilization and a CDPHE stormwater construction permit is no longer required, the operator must inactivate the stormwater permit coverage. CDPHE issues field permit certifications that allow multiple oil and gas facilities to be covered under the same certification. These field permit certifications cover CDPHE-regulated construction activities within a specific geographical area, as identified in an oil and gas facility's stormwater management plan. The Commission understands from CDPHE that prior to the effective date of this Rule, CDPHE will implement measures to allow for inactivation of portions of permit coverage for specific facilities/areas covered under a field permit

certification. Once the CDPHE stormwater permit is inactivated for a specific location the stormwater requirements under this new rule will become effective for that location.

### 3. Rule 1003., INTERIM RECLAMATION

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 1003. pertains to interim reclamation. The amendments to Rule 1003. provide for more effective interim reclamation, which will result in less potential for erosion and potentially faster restoration of wildlife habitat consistent with HB 07-1298. As a matter of policy, the Commission concluded that these amendments are appropriate as an initial package of measures to improve the interim reclamation of wildlife habitat. However, the Commission directed the COGCC staff to convene a stakeholder process during the first quarter of 2009 to discuss and attempt to develop consensus on additional and more extensive regulatory amendments to better ensure the timely and appropriate interim and final reclamation of wildlife habitat. Based upon the outcome of the stakeholder process, the Commission may initiate a subsequent rulemaking proceeding during 2009 to further address this issue.

#### a. Rule 1003.a. – General

Rule 1003.a. was amended to delete language that allowed material to be burned or buried on site under certain circumstances. Burning of material at a site would require a permit from the local government or the Air Pollution Control Division of the CDPHE. Burial of material would violate the Regulations Pertaining to Solid Waste Sites and Facilities of the Hazardous Materials and Waste Management Division of the CDPHE unless prior approval were received.

Rule 1003.a. was also amended to clarify that all wellsites and surface production facilities shall be maintained in accordance with Rule 603.j. As a matter of policy, the Commission chose to occasionally cross-reference rules to ensure compliance with all relevant rules.

#### b. Rule 1003.b. – Interim reclamation of areas no longer in use

Prior to amendment, Rule 1003.b. allowed operators up to twelve months to perform interim reclamation on non-cropland for areas no longer in use. That provided a long window of time for erosion to occur and for noxious weeds to grow. This twelve-month period was decreased to six months, which better protects the environment by reducing the potential for erosion and noxious weed growth. Rule 1003.b. was also amended to require areas reasonably needed for production operations to be stabilized to control dust and minimize erosion to the extent practicable. This language reflects the Commission's belief that erosion is a natural process that cannot be entirely avoided.

#### c. Rule 1003.d. –Drilling pit closure

Rule 1003.d was amended to add a requirement that operators ensure that soils in drilling pits meet the standards set forth in Table 910-1. Additionally, the amendments specify that operators must close and reclaim drilling pits no later than three months after drilling and completion activities conclude on crop land and no later than six months after such activities conclude on non-crop land. These amendments intended to ensure more timely interim reclamation.

d. Rule 1003.e. – Restoration and vegetation

Rule 1003.e was amended to add a performance standard for interim reclamation. Under this standard, interim reclamation is considered complete when: all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized to the extent practicable; or a uniform vegetative cover has been established that reflects pre-disturbance or reference area forbs, shrubs, and grasses with total plant cover of at least 80% of pre-disturbance or reference area levels, excluding noxious weeds. Reseeding alone is not sufficient. The Commission’s adoption of this standard reflects a policy decision based evidence in the hearing record and the mandate of HB 07-1298. CDOW staff and conservation group parties testified that an 80% standard is achievable and protective of wildlife resources. Although the Commission understands that certain other regulatory programs use a 70% standard, it notes that the programs in question are not directed to the proper reclamation of wildlife habitat and that other regulatory programs do use an 80% standard. Nor should complying with a 70% standard for other purposes prevent or obstruct an operator from complying with an 80% standard for reclamation. Therefore, after considering wide-ranging input on this issue, the Commission concluded that the standard adopted will best ensure proper reclamation of wildlife habitat as contemplated by HB 07-1298.

Rule 1003.e was also amended to clarify that disturbed areas must be reseeded in the first favorable season following rig demobilization, and to add a requirement that operators submit an interim reclamation completion notice with photographic evidence of reclamation success. This notice is intended to assist the COGCC staff in monitoring interim reclamation and ensuring that such reclamation is completed in a timely manner.

e. Rule 1003.f. – Weed control

Prior to amendment, Rule 1003.f. stated that all disturbed areas shall be kept “reasonably” free of noxious weeds. That term was ambiguous and made it hard for the COGCC to enforce that rule. As amended, Rule 1003.f. provides better guidance to operators in controlling noxious weeds and authorizes the Director to require a weed control plan. For instance, the rule now specifies that weed control measures must comply with the Colorado Noxious Weed Act and its implementing regulations, recommends that operators consult with local authorities to assure proper weed control, and requires operators to monitor disturbed areas and reclaimed sites for noxious weed infestations. The Commission believes that these amendments are appropriate and will further interim reclamation efforts.

4. Rule 1004., FINAL RECLAMATION OF WELL SITES AND ASSOCIATED PRODUCTION FACILITIES

Basis: The statutory bases for this amendment are sections 34-60-106(11)(a)(II) and 34-60-128(3)(d), C.R.S.

Purpose: Rule 1004. pertains to final reclamation. The amendments to Rule 1004. provide for more effective final reclamation, which will result in less potential for erosion and potentially faster restoration of wildlife habitat consistent with HB 07-1298. As a matter of policy, the Commission concluded that these amendments are appropriate as an initial package of measures to improve the final reclamation of wildlife habitat. However, as noted above, the Commission has directed the COGCC staff to convene a stakeholder process during the first quarter of 2009 to discuss and attempt to develop

consensus on additional and more extensive regulatory amendments to better ensure the timely and appropriate interim and final reclamation of wildlife habitat. Based upon the outcome of the stakeholder process, the Commission may initiate a subsequent rulemaking proceeding during 2009 to further address this issue.

a. Rule 1004.a. – Well sites and associated production facilities

Rule 1004.a. was amended to delete language that broadly allowed material to be burned or buried on site. In its place, language was added to clarify that any such burning or burial must comply with applicable local, state, or federal solid waste disposal regulations, must satisfy the 900 Series Rules, and must be authorized in writing by the surface owner. Language was also added to specify that equipment, supplies, weeds, rubbish, and other waste material must be removed from the site. These amendments are intended to clarify final reclamation requirements and thereby further final reclamation efforts.

b. Rule 1004.c. - Final reclamation threshold for release of financial assurance

Rule 1004.c. was amended to specify that on non-crop land, final reclamation is considered complete when: all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized to the extent practicable; or a uniform vegetative cover has been established that reflects pre-disturbance or reference area forbs, shrubs, and grasses with total plant cover of at least 80% of pre-disturbance or reference area levels, excluding noxious weeds. The Commission's reasoning in adopting this amendment is the same as that set forth above under amended Rule 1003.e. The amendments also specify that the final reclamation notice must describe any changes in the landowner's designated final land use.

c. Rule 1004.d – Untitled

Rule 1004.d was added to provide a performance standard for final reclamation. Under this standard, final reclamation, like interim reclamation, is considered complete when: all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized to the extent practicable; or a uniform vegetative cover has been established that reflects pre-disturbance or reference area forbs, shrubs, and grasses with total plant cover of at least 80% of pre-disturbance or reference area levels, excluding noxious weeds. Reseeding alone is not sufficient. The Commission's reasoning in adopting this standard is the same as that set forth above for adoption of the interim reclamation standard under amended Rule 1003.e.

d. Rule 1004.e. – Weed control

Rule 1004.e was added to impose weed control requirements on areas undergoing final reclamation identical to the requirements that apply to areas during drilling, production, and interim reclamation under amended Rule 1003.f. The Commission believes that this addition is appropriate and will further final reclamation efforts.

Additions to the 1000-Series

There were no additions to the 1000-Series of rules.

**1100-Series Pipeline Regulations**

Amendments to the 1100-Series

The following rules were amended:

1. Rule 1101., INSTALLATION AND RECLAMATION

Basis: The basis for this amendment is COGCC Order No. 1R-103.

Purpose: Rule 1101 was amended to reflect rulemaking action by the Commission on September 18, 2006, to delete Rule 1101.a, *see* Order No. 1R-103, and to bring the Secretary of State's rules in conformance with the Commission's rules and rulemaking actions. The Commission's September 18, 2006 rulemaking deleted Rule 1101.a and redesignated Rules 1101.b through 1101.f as Rules 1101.a through 1101.e. The Commission previously stated the purpose for that rulemaking as follows:

"On March 15, 2006 (after the Commission promulgated amendments to the 100- and 1100-Series Rules on October 31, 2005) the U.S. Department of Transportation, Office of Pipeline Safety (USDOT), revised its definition of gathering lines and outlined a new process to determine which lines are subject to its minimum safety standards. The Colorado Public Utilities Commission (CPUC) is responsible for enforcing federal pipeline safety regulations in this state and will be promulgating rules to comport with the federal program.

"There is duplication and conflict between the Commission's 100 and 1100 Series Rules and the March 15, 2006 rules promulgated by USDOT primarily because of the definition of "gathering lines" by each agency. Therefore, there is likely to be duplication and conflict between the Commission's 100 and 1100 Series Rules with rules promulgated by CPUC to implement the federal program.

"The Commission wants to rescind rules that may duplicate or conflict with CPUC's rules. The Commission considered alternatives to rescinding its rules that apply to "gathering lines," including suspending their effectiveness until the CPUC promulgates its rules. However, due to the length of time anticipated for the stakeholder process, public comment, and drafting proposed rules, the Commission determined it was more efficient to rescind its rules as they apply to "gathering lines" until such time and the CPUC delineates those pipelines that are subject to its jurisdiction."

2. Rule 1102., OPERATIONS, MAINTENANCE, AND REPAIR

Basis: The statutory basis for this amendment is section 34-60-106(11)(a)(II), C.R.S.

Purpose: Rule 1102 was amended to require operators of pipelines over which the COGCC has jurisdiction to become a member of the Utility Notification Center of Colorado ("UNCC") and to participate in Colorado's One Call notification system.

The primary purpose of the UNCC is to act as a messaging center for Colorado between excavators and underground facility operators to locate requests when excavation activity is needed and to educate the industry and general public on the Colorado One-Call notification system.

The requirements of Colorado's One-Call notification system are codified at sections 9-1.5-101 *et seq.*, C.R.S. The purpose of the system is to prevent injury to persons and damage to property from accidents resulting from damage to underground facilities, including those used for the storage or conveyance of oil and gas, by excavation. This purpose is facilitated through the creation of a single statewide notification system that is administered by an association of the owners and operators of underground facilities.

Through the association, excavators are able to obtain crucial information regarding the location of underground facilities prior to excavating and are thereby able to greatly reduce the likelihood of damage to any such underground facility or injury to any person working at an excavation site.

The addition of these requirements will allow operators and other interested parties to work together to: (1) reduce damage to underground facilities; (2) promote safe digging practices; and (3) promote the use of the one-call system. As a result, these additions will ensure better protection of public health, safety, and welfare, including protection of the environment.

Prior to the amendment, Rule 1102. required participation in Colorado's One-Call notification system but did not specifically mention what association administers the program. This association is the UNCC. This amendment was necessary because a recent audit of active oil and gas operators identified several hundred companies that are not UNCC members.

#### Additions to the 1100-Series

There were no additions to the 1100-Series of rules.

### **1200-Series Protection of Wildlife Resources**

The adoption of the 1200-Series Rules is intended to implement the legislative declaration stated in HB 07-1298 to “plan and manage oil and gas operations in a manner that balances development with wildlife conservation in recognition of the state’s obligation to protect wildlife resources and the hunting, fishing, and recreational traditions they support, which are an important part of Colorado’s economy and culture.” *See* § 33-60-102(1)(a)(IV), C.R.S. The Commission has been mindful throughout the current rulemaking process of its obligation to address those competing interests by adopting regulations that provide an appropriate balance and will responsibly “minimize the adverse impacts to wildlife resources” affected by oil and gas operations. *See* § 33-60-128(3)(d), C.R.S.

In considering and choosing between the various regulatory proposals that have been presented throughout this proceeding, including those by the COGCC staff, the industry parties, the environmental parties and wildlife groups, local governments, and representatives of Colorado agriculture and surface owners, the Commission made policy choices that it believes will minimize adverse impacts to wildlife resources where reasonably practicable and taking into consideration cost effectiveness and technical feasibility while also maintaining an appropriate balance between development of state oil and gas resources and conservation of state wildlife resources.

#### Additions of the 1200-Series

The following rules were added to comprise the 1200-Series:

1. Rule 1201. – IDENTIFICATION OF WILDLIFE SPECIES AND HABITATS

Basis: The statutory basis for this Rule is section 34-60-128(3)(d), C.R.S.

Purpose: In order to administer the Act and the COGCC regulations in a way that minimizes adverse impacts to wildlife resources, the COGCC must first know which wildlife resources could be impacted by oil and gas development activities. The Commission heard numerous proposals to accomplish this, and it initially considered a

proposal that would have required operators to conduct site surveys for wildlife species and habitat types. This approach raised issues as to whether such a site-specific survey requirement would place an unnecessary burden on oil and gas operators and whether it would lead to public disclosure of information property owners would prefer to keep confidential.

After hearing testimony from a wide range of interests and conducting deliberations, the Commission determined as a matter of policy that the most appropriate mechanism for identifying wildlife species and habitats was to require operators to review information already produced and maintained by the DOW as part of its statewide wildlife management activities. The CDOW has and maintains a statewide classification and mapping system that identifies such “restricted surface occupancy areas” and “sensitive wildlife habitats” throughout Colorado. The definitions for “restricted surface occupancy areas” and “sensitive wildlife habitats” provide that the extent of these areas may be subject to periodic update and may be modified only through the Commission’s rulemaking process as provided in Rule 529. If conditions warrant, the CDOW may come forward with a request for rulemaking to change the “restricted surface occupancy areas” and “sensitive wildlife habitats” maps. Also, the Commission believes that if serious issues arise affecting the continued viability or the listing of a species under the Endangered Species Act, then the CDOW may request that the Commission amend the “restricted surface occupancy areas” and “sensitive wildlife habitats” maps through a rulemaking.

Rule 1201 requires operators to review maps and special data maintained on the COGCC website and maps attached as Appendices VII and VIII to the COGCC rules of sensitive wildlife habitat and restricted surface occupancy areas to determine whether a proposed oil and gas location is within an area identified by one of these two maps. This information will be maintained in a format and at a scale that can be used by operators to complete the identification requirement stated in Rule 1201. This determination is to be made prior to preparation of a Comprehensive Drilling Plan or submittal of a Form 2A.

Once such review is completed, the operator is required to include the location of and information on restricted surface occupancy areas and sensitive wildlife habitats as part of the Form 2A or Comprehensive Drilling Plan. The determination of whether the proposed oil and gas location is within a restricted surface occupancy area or area of sensitive wildlife habitat will be used to determine whether the requirements of Rules 1203. and 1205. apply to the proposed oil and gas location and are the primary basis for a consultation, if necessary, under Rules 306 and 1202.

## 2. Rule 1202. - CONSULTATION

Basis: The statutory basis for this Rule is section 34-60-128(3)(d), C.R.S.

Purpose: HB 07-1298 specifically recognized the importance of consultation with the CDOW in minimizing adverse impacts to wildlife resources affected by oil and gas operations. *See* § 34-60-128(3)(d)(I), C.R.S. Accordingly, the COGCC has incorporated such a consultation process with the CDOW into its regulatory scheme. It is the intent of the Commission that such consultation will ensure that permitting decisions reflect an appropriate balance between development of oil and gas resources and minimization of adverse impacts on wildlife resources through a discussion of the issues involving the COGCC, the CDOW, the operator, and the surface owner.

The Commission believes this consultation process provides the most appropriate mechanism whereby the Director of the COGCC can determine whether conditions of approval are necessary to minimize adverse impacts from proposed oil and gas operations in sensitive wildlife habitat or, where allowed, restricted surface occupancy areas. It is also the intent of the Commission that this consultation will provide the appropriate mechanism for the Director of the COGCC to determine whether variances from other provisions in the 1200-Series, including Rules 1203., 1204., and 1205., can be granted while still ensuring that adverse impacts to wildlife resources are minimized.

Other regulatory proposals were presented to the COGCC for incorporation into its consultation process, including the establishment of baseline restrictions, such as timing limitations, that would apply in particular wildlife habitats unless otherwise waived or modified as part of the consultation process. After considering a wide range of testimony by staff, the parties, and the public on this issue, the Commission concluded as a matter of policy that a case-by-case evaluation and discussion without imposing any unnecessary sidebars to that discussion, such as timing limitations, is a more appropriate mechanism to ensure that the interests of all parties are appropriately taken into consideration and that the Director is able to achieve an appropriate balance between oil and gas development and conservation of wildlife resources.

The Commission also recognizes and provides for what it considers appropriate exceptions to the otherwise required consultation process. As otherwise noted above, the purpose of the consultation process is to ensure that adverse impacts to wildlife resources are minimized within the identified sensitive wildlife habitats or restricted surface occupancy areas, in an order increasing well density, in a basin-wide order involving wildlife resources, or where the operator seeks a variance to a provision of the 1200-Series rules. Rule 1202 thus provides that consultation under Rule 306.c will not be required where minimization of such adverse impacts has already been considered as part of a prior COGCC action, such as previous approval of a Form 2A, Comprehensive Drilling Plan or variance, or where the CDOW has already approved a wildlife mitigation, protection, or conservation plan for the area in question. Consultation under Rule 306.c will also not be required where the proposed new well would involve a one-time increase of surface disturbance of one (1) acre or less per well site at or immediately adjacent to an existing well site; the Commission determined that such activity is expected to generate only de minimis impacts. Consultation will also not be required where the CDOW has waived consultation or where the consultation would otherwise be unwarranted, such as when an operator demonstrates that the wildlife species or habitat otherwise intended to be protected is not present. Finally, consultation will not be required where an operator seeks and obtains a Commission order that will significantly limit the extent of development within a section and where ground-disturbing activities will be limited during a biologically appropriate period of up to ninety (90) consecutive days as determined by the Director. While the period during which ground-disturbing activities are limited for wildlife habitat protection may be up to ninety (90) consecutive days for some species, it may be as few as thirty (30) days for other species. This exemption from consultation, however, will not apply to operations in occupied greater or Gunnison sage grouse sensitive wildlife habitat in certain counties identified in the rule, as these species in these areas are particularly sensitive to disturbance and vulnerable to adverse impacts from ground disturbing activity. The Commission was careful in adopting these exceptions because operators who are not covered by them are only

required to consult with the CDOW and COGCC and are not automatically subjected to timing restrictions or other limitations on their operations.

Central to the consultation process will be the COGCC Director's determination of appropriate permit conditions. Such conditions are to be generally guided by a list of best management practices, which will be collaboratively developed by stakeholders and the CDOW as discussed below. To ensure the proper evaluation and selection of conditions of approval, the Commission has also established specific factors which it believes the Director should consider, among other case-by-case considerations, in establishing appropriate permit conditions. These factors are intended to ensure that the adverse impacts and means to minimize those adverse impacts are appropriately evaluated by the COGCC Director in determining any conditions of approval deemed necessary to minimize adverse impacts to wildlife resources.

As required by HB 07-1298, Rule 1202 provides that no permit-specific condition of approval for wildlife habitat protection shall be imposed without surface owner consent. This prohibition includes permit-specific conditions for wildlife habitat protection that modify, add to, or differ materially from the general operating requirements in Rules 1203 and 1204. The Commission anticipates that if the surface owner does not consent to a permit-specific condition recommended by the CDOW, then the COGCC Director will consider whether minimizing adverse impacts from the proposed activity can be acceptably achieved through alternative conditions to which the surface owner will consent. The Commission also expects that if such alternative conditions cannot be identified, then the Director will weigh the impact to wildlife resources if the condition in question is omitted versus the impact to the operator and the State if the permit or approval is withheld. In some circumstances, the Director may issue the permit or approval without the condition. In other circumstances, the Director may withhold the permit or approval because unacceptable impacts to wildlife resources would otherwise result. In no event, however, would the permit or approval be issued with permit-specific wildlife conditions to which the surface owner has not consented. This decision would be made on a case-by-case basis and will be subject to review by the Commission. The Commission believes that this approach is consistent with the statutory mandate to balance recovery of the oil and gas resource with protection of Colorado's wildlife resources.

The Commission intends that the list of best management practices will be developed in the following manner. By January 1, 2009, COGCC staff will form a stakeholder group to develop a compilation of science-based, technologically, and economically feasible practices for minimizing adverse impacts from oil and gas operations in sensitive wildlife habitat. This group will include COGCC and CDOW staff as well as representatives of the oil and gas industry, wildlife and outdoor groups, and surface and mineral owners. Subgroups may be formed to address different types of sensitive wildlife habitat or different oil and gas development basins as appropriate. The participants will seek to develop consensus recommendations for presentation to the Commission by June 2009. The Commission will consider the resulting recommendations at one of its regularly scheduled meetings, and it will take such action on them as it deems appropriate. After approval by the Commission, the list of best management practices will be published in a guidebook, maintained on the Commission's website, and updated periodically as appropriate.

3. Rule 1203. – GENERAL OPERATING REQUIREMENTS IN SENSITIVE WILDLIFE HABITATS AND RESTRICTED SURFACE OCCUPANCY AREAS

Basis: The statutory basis for this Rule is section 34-60-128(3)(d), C.R.S.

Purpose: As noted above, the Commission recognizes that each producing basin may have or otherwise require the implementation of different best management practices to minimize adverse impacts from oil and gas development activities to wildlife resources. The Commission also recognizes that application of these best management practices is often best completed as part of a case-by-case analysis. However, the Commission believes there are also general operating conditions that can reasonably be applied across the state in sensitive wildlife habitats and, where development is allowed, in restricted surface occupancy areas. These conditions will help to minimize adverse impacts to wildlife resources in those sensitive wildlife habitats and restricted surface occupancy areas.

Rule 1203 sets out sixteen (16) general operating requirements with which operators must comply when conducting oil and gas operations within sensitive wildlife habitat and restricted surface occupancy areas. They include educating employees about wildlife conservation practices, minimizing rig mobilization and demobilization, consolidating new facilities, roads, and rights-of-way, using boring instead of trenching across perennial streams considered critical fish habitat, and other measures. Several of the provisions of Rule 1203 had been originally proposed for applicability state wide, such as treating waste water pits to control mosquito larvae that may spread West Nile Virus or installing wildlife crossovers and escape ramps for certain trenches created during pipeline construction. The Commission determined, however, that requiring these practices only in sensitive wildlife habitat and restricted surface occupancy areas would strike the appropriate balance at this time between development of the oil and gas resource and minimization of adverse impacts to wildlife resources.

The Commission believes that these general operating requirements are cost effective and technically feasible means of avoiding, minimizing or mitigating some of the adverse impacts of oil and gas development to wildlife resources. The Commission also believes that these general operating requirements can be practically and economically incorporated into standard industry practices, and the Commission heard evidence that in certain cases operators already have undertaken or have incorporated the activities in question into their operations.

The Commission recognizes that there are some costs associated with the implementation of these requirements. However, the Commission believes that most of the practices required by the general operating requirements for sensitive wildlife habitats and restricted surface occupancy areas in Rule 1203 are simply good operating practices that can be addressed through more effective planning of oil and gas operations. The Commission believes that in many instances, the actual cost of implementing these requirements is de minimis, such as requiring “wildlife appropriate” seed mixes or fencing when undertaking seeding or fencing already required under the COGCC regulations. The Commission also believes that the costs of such requirements can be effectively minimized by the operator through better planning. Further, the Commission believes the costs of compliance, where present, are outweighed by the benefits provided to wildlife. Lastly, the Commission notes that the industry parties themselves proposed the regulatory adoption of most of these general operating requirements for sensitive

wildlife habitats.

For several of the operating practices required for activities within sensitive wildlife habitat and restricted surface occupancy areas, the Commission provided that they must be utilized only where allowed by the surface owner. This includes using wildlife-appropriate fencing, mowing or brushhogging vegetation, or using topographic features and vegetative screening to create seclusion areas. The Commission believes that these provisions provide appropriate protection for the interests of surface owners while also minimizing adverse impacts to wildlife resources.

The Commission also recognizes that, despite their generally applicable nature, in some specific situations there may be need for relief from these general operating requirements. The need for case by case variance is something the COGCC has historically acknowledged and these generally applicable operating requirements would be subject to modification through the consultation process under Rule 306.c.

#### 4. Rule 1204. – OTHER GENERAL OPERATING REQUIREMENTS

Basis: The statutory basis for this Rule is section 34-60-128(3)(d), C.R.S.

Purpose: Rule 1204 provides for 5 general operating requirements that will be required for oil and gas operations statewide to minimize adverse impacts to wildlife resources. They include installation and utilization of bear-proof dumpsters and trash receptacles for food-related trash in certain areas of the state, disinfecting certain equipment to kill whirling disease spores when conducting operations in designated Cutthroat Trout habitat, planning new transportation networks and new oil and gas facilities to minimize surface disturbance and the number and length of oil and gas roads, establishing staging and chemical storage areas outside of riparian areas and floodplains, and using minimum practical construction widths for new rights-of-way where pipelines cross riparian areas, streams and critical habitats.

Again, the Commission recognizes that there is some cost associated with the implementation of these requirements. The Commission believes that most of the general operating requirements are simply good operating practices, can be addressed through more effective planning of oil and gas operations and that the costs of such requirements can be minimized by the operator through more effective planning. As above, the Commission heard evidence that in certain cases operators already have undertaken or have incorporated the activities in question into their operations. The Commission also believes the minimal costs of compliance are outweighed by the benefits provided to wildlife and are clearly the types of reasonable requirements that the General Assembly would expect to be part of the COGCC's implementation of HB 07-1298. Lastly, the Commission once again notes that the industry parties themselves supported the regulatory adoption of most of these general operating requirements, although the industry parties sought to limit the application of the requirements to sensitive wildlife habitat.

The Commission also recognizes in Rule 1204 that, despite their generally applicable nature, in some specific situations there may be need for relief from these general operating requirements. The need for case by case variance is something the COGCC has historically acknowledged and these generally applicable operating requirements would be subject to modification through consultation under Rule 306.c.

#### 5. Rule 1205. – REQUIREMENTS IN RESTRICTED SURFACE OCCUPANCY AREAS

Basis: The statutory basis for this Rule is section 34-60-128(3)(d), C.R.S.

Purpose: The Commission believes there are some areas and species that require more protection in order for the COGCC to satisfy its statutory charge to minimize the adverse impacts of oil and gas development to wildlife resources. These are areas that are critical to the conservation of the species or habitats in question and, as such, are entitled to a higher level of protection, and oil and gas development within those areas is to be avoided to the maximum extent technically and economically feasible when planning and conducting new oil and gas development operations. The Commission anticipates that if an operator seeks to construct an oil and gas location in a restricted surface occupancy area notwithstanding the admonition in Rule 1205 to avoid such an area, the operator will either make an affirmative showing to the Director that avoidance of the area is either technically or economically infeasible, or that they fit within one of the exceptions set out in Rule 1205.a and described below. The Commission does not anticipate that such an operator would need to enter into a consultation with the CDOW as to whether it is technically or economically feasible to avoid a restricted surface occupancy area, although consultation may be required to determine conditions of approval for such location.

The Commission, however, recognizes that there are instances where deviations from the requirements of restricted surface occupancy areas are and should be appropriately allowed. One exception allows for deviation from the requirements of restricted surface occupancy areas to address a risk to public health safety, welfare or the environment and is intended to allow the Director to balance the risk to the wildlife resource from allowing deviation from the requirements of the restricted surface occupancy area with the risk to public health, safety, welfare or the environment posed through enforcement of the requirements. It is the intent of the COGCC to conserve wildlife resources where possible, but where such conservation itself poses a risk to public health, safety, welfare or the environment or would otherwise prevent the Director from appropriately addressing that risk, the Director must be able to take whatever action is necessary to address the risk, while continuing to conserve wildlife resources where possible. The other exceptions are similar to and have been adopted for the same reasons as the analogous exceptions to consultation under Rule 1202. These include exceptions from the general requirement to avoid restricted surface occupancy areas where activities in such an area have been authorized following consultation under Rule 306.c or as part of a Comprehensive Drilling Plan, upon a demonstration that the identified habitat is not present, or when specifically exempted by the CDOW.

The Commission also wanted to ensure that the creation of restricted surface occupancy areas would not unduly impair existing and routine oil and gas operations and has adopted a regulatory provision to accomplish that. Existing wells that are located within areas now defined as restricted surface occupancy areas can continue production and operation, and routine maintenance, repairs, and replacements may take place. Also, emergency operations in restricted surface occupancy areas may be undertaken as necessary to prevent a risk to public health, safety, welfare or the environment. Further, activities at such location which are intended to benefit wildlife, such as reclamation or habitat improvement, can also be undertaken. However, any new ground disturbing activities are to be avoided in restricted surface occupancy areas, including construction, drilling and completion, non-emergency workovers, and pipeline installation activity, unless one of the exceptions noted above applies. The Commission considered the effect

the provisions of Rule 1205 would have on non-emergency workovers of wells, including uphole recompletions, within restricted surface occupancy areas and anticipates that such activities would be allowed upon Director approval. The Commission intends that such workovers would be scheduled to occur during a period and in a manner that minimizes impacts to the species for which the restricted surface occupancy area was created, developed in coordination with the CDOW.

Lastly, to accommodate ongoing or pending permit activity, Rule 1205. will not apply to a Form 2 or 2A approved by the Director prior to May 1, 2009 on federal land or April 1, 2009 on all other land. In order to accommodate and incentivize early consultations on oil and gas locations in restricted surface occupancy areas, Rule 1205. also does not apply until January 1, 2010, for any oil and gas location where the operator has in good faith initiated and is diligently pursuing consultation begun prior to May 1, 2009 on federal land or April 1, 2009 on all other land, pursuant to Rule 306.c. or Rule 216.

The Commission notes that restricted surface occupancy areas include areas within 300 feet of Cutthroat Trout habitat as well as areas within 300 feet of Gold Medal streams and lakes. A number of parties testified that additional riparian areas should be designated as restricted surface occupancy areas because of their importance to fish and wildlife. The Commission decided not to designate additional riparian areas as restricted surface occupancy areas at this time. Instead, the Commission directed the COGCC staff to convene a stakeholder process during the first half of 2009 to discuss and attempt to develop consensus on this issue. Based upon the outcome of that stakeholder process, the Commission may initiate a subsequent rulemaking proceeding during 2009 to further address the issue.