LIKE OIL AND WATER
2020 COGG RULEMAKING PROTECTIONS FOR PUBLIC WATER SUPPLIES

The Colorado Oil and Gas Conservation Commission (COGCC) Mission Change rulemaking was required by Senate Bill 19-181. Prior to Senate Bill 19-181, the mission of the COGCC was to “foster” (or promote) oil and gas development and protect public health safety and welfare but only after considering cost effectiveness.1 Senate Bill 19-181 changed the COGCC’s mission to protect public health and safety—without consideration of cost effectiveness.2 After nearly a year of work, the COGCC passed the mission change rules on November 23, 2020. The new rules took effect on January 15, 2021.

The “mission change rules” increased protections for Public Water Systems (PWS) by granting water suppliers increased access to the COGCC decision-making process, including increased notice and standing in COGCC hearings. It also granted increased water quality protections by increasing minimum setbacks from PWS in takes to 1,000 feet (five miles up-stream) and created new setbacks of 1,000 feet from PWS alluvial water wells.

NEW RIGHTS FOR WATER PROVIDERS

The new COGCC rules now give additional notice to Public Water Systems and the ability to participate in hearings before the COGCC.

- Rule 303.e – Operators must send a completed Oil and Gas Development Plan application to Public Water Systems with shallow water wells within ½ mile (2,640 feet) or within five miles downstream of the proposed oil and gas location.
- Rule 309.g – Must offer “Formal Consultation” to affected Public Water Systems.
- Rule 303.d – Public Water System has 30 days to comment to COGCC.
- Rule 306.c – The Director of the COGCC must send notice of recommended decision to affected Public Water Systems.
- Rule 507 – Public Water System may request to be a party to the hearing on the oil and gas development plan application.
- Rule 520.c – If dissatisfied with decision of hearing officer, the Public Water System can appeal to full COGCC commission.

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1 Colo. Oil & Gas Cons. Comm’n v. Martinez, 2019 CO 3, 433 P.3d 22 (Colo. 2019). ("Commission is required (1) to foster the development of oil and gas resources, protecting and enforcing the rights of owners and producers, and (2) in doing so, to prevent and mitigate significant adverse environmental impacts to the extent necessary to protect public health, safety, and welfare, but only after taking into consideration cost-effectiveness and technical feasibility.”

2 §36-60-106 C.R.S. (2.5) (a) In exercising the authority granted by this article 60, the commission shall regulate oil and gas operations in a reasonable manner to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources and shall protect against adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations. (b) The nonproduction of oil and gas resulting from a conditional approval or denial authorized by this subsection (2.5) does not constitute waste.”
PROCESS AND TIMELINE FOR COGCC DECISIONS
ON NEW OIL AND GAS LOCATIONS

30 days prior to submitting application
• A Relevant and Proximate Local Government will be given at least 30 days’ notice prior to the submission of an OGDP (Rule 302.e).
• The Relevant Local Government may request pre-application consultation (Rule 301.f).

Application deemed complete
• COGCC will send electronic notification to Relevant and Proximate Local Governments (Rule 303.d) and Operators will mail notice to both as well (Rule 303.e).
• The Operator must also offer “Formal Consultation” to both Relevant and Proximate Local Governments (Rule 302.g).
• a water provider (called a “Public Water System” or “PWS”) will receive notice of a proposed oil and gas location application within ½ mile of a water well or within five miles downstream of a surface intake (Rule 303.e).

30-45 days for public comment
• Depending on the location, the public and local governments have 30 or 45 days to comment (Rule 303.d).
• (If a PWS is dissatisfied with the application and proposed protections, I would encourage my clients to meet with COGCC staff at this point.)

COGCC director recommends decision
• The COGCC Director then recommends a decision and the notice of the recommended decision is sent to Relevant and Proximate Local Governments (Rule 306.c).
• At this point, the local governments have the ability to request to be a party to the hearing on the OGDP and must file at least 30 days before hearing (Rule 507).

Hearing a minimum 60 days later
• Only the Relevant Local Government is granted automatic standing, others must demonstrated that they are an “Affected Person.” (Rule 507). These hearings will likely be before a hearing officer.
• The hearing officer will put forward a written “recommended order” (Rule 520.b).

Exception must be filed within 20 days of written recommended order
• If the local government does not agree with the recommended order, it must file an “exception” pursuant to (Rule 520.c).
• Responses are due within 14 days of exceptions. (Rule 520.c).
• An “exception hearing” goes before the full commission for de novo review.

Decision rendered within 30 days after hearing
The final agency decision by the COGCC is entered within 30 days and then may be challenged by judicial review. (Rule 501.d; 521.b).
NEW PROTECTIONS FOR PUBLIC WATER SYSTEMS

The new COGCC rules now require 1,000 foot setbacks for surface water intakes as well as for shallow ground water wells. These are important new protections for Public Water Systems.

Rule 411.a – Provides a setback of 1,000 feet from surface water that is utilized by a Public Water System within 5 miles downstream. There are also additional water quality protections required out to 2,640 feet (1/2 mile)
Rule 411.b – Provides a setback of 1,000 feet for shallow water wells (in Type III aquifers). There are also additional water quality protections required out to 2,640 feet (1/2 mile)
Rule 411.b(5) – Operator must give notice of reportable spills to all potentially affected Public Water Systems within 48 hours.

SELECT COGCC RULES

Complete COGCC Rules can be found at: https://cogcc.state.co.us/reg.html/#/rules

100 Series Definitions

PUBLIC WATER SYSTEM ("PWS") means a system to provide to the public water for human consumption through pipes or other constructed conveyances, if such systems have at least 15 service connections or regularly serve an average of at least 25 individuals daily at least 60 days out of the year or the entity that administers such a system. The definition of PWS includes:
a. Any collection, treatment, storage, and distribution facilities under control of the PWS operator of such system and used primarily in connection with such system; and
b. Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.

The definition of PWS does not include any "special irrigation district," as defined in the Colorado Water Quality Control Commission’s ("WQCC") Colorado Primary Drinking Water Regulations, 5 C.C.R. § 1002-11:11.3(77) ("WQCC's Primary Drinking Water Regulations").

400 Series Operations and Reporting

411. PUBLIC WATER SYSTEM PROTECTION

a. Surface Water Supply Areas.

(1) Definition. A Surface Water Supply Area is the buffer zones listed in Rule 411.a.(1).B surrounding a Classified Water Supply Segment that includes 5 stream miles upstream from a Public Water System surface water intake.

A. Calculating Buffer Zone Distances. Operators will identify buffer zones by measuring from the ordinary high-water mark of a Classified Water Supply Segment to the nearest edge of the Working Pad Surface.

B. Buffer Zones.
i. The internal buffer zone is located between 0 and 1,000 feet hydraulically upgradient from a Classified Water Supply Segment.

ii. The intermediate buffer zone is located between 1,001 and 1,500 feet hydraulically upgradient from a Classified Water Supply Segment.

iii. The external buffer zone is located between 1,501 and 2,640 feet hydraulically upgradient from a Classified Water Supply Segment.

C. The buffer zones identified by Rule 411.a.(1).B. may be modified by the Commission as a component of reviewing a proposed Oil and Gas Development Plan pursuant to Rule 307 or a hearing pursuant to Rule 503.a to include additional tributaries, including ephemeral streams, if the Director, Public Water System, or CDPHE demonstrate that modification is necessary to protect the Public Water System surface water intake from risks of spills or releases. In making such a determination, the Commission will consider whether Best Management Practices the Operator proposes to employ will provide sufficient protections to tributaries such that modifying the buffer zones is not necessary.

(2) **Protections.** Operators will comply with the standards established in Rules 411.a.(2).A–C below for the buffer zone in which the Working Pad Surface is proposed or located, and with all standards for zones farther from the Classified Water Supply Segment.

A. **Internal Buffer Zone.**

   i. After January 15, 2021, Operators will not conduct any new surface disturbance within the internal buffer zone of a Surface Water Supply Area identified in Rule 411.a.(1).B.i.

   ii. Operators of any existing Oil and Gas Locations located within the internal buffer zone of a Surface Water Supply Area identified in Rule 411.a.(1).B.i will submit a Form 2A to the Director prior to conducting any new surface disturbing activities, or a Form 4 prior to conducting any subsequent well operations pursuant to Rule 312 or making significant changes to the Oil and Gas Operations at the existing locations.

      aa. The Director will review the Form 4 and may add any conditions of approval necessary and reasonable to protect public health, safety, welfare, the environment, and wildlife resources from potential impacts of the surface disturbance, subsequent well operations, or significant changes.

      bb. If an Operator proposes to construct an access road, pipeline, or other necessary infrastructure, the Operator will describe the necessity of the proposed infrastructure on the Form 4, and the Director will evaluate whether the proposed infrastructure is necessary for ongoing Oil and Gas Operations.

      cc. The Operator will provide the Form 4 to the administrator of all potentially impacted Public Water Systems at the same time Operator submits the Form 4 to the Director.
iii. Only the Commission may grant a variance to Rules 411.a.(2).A.i & ii. If an Operator seeks a variance from Rules 411.a.(2).A.i or ii, the Operator will consult with CDPHE and the Public Water System prior to the Commission holding a hearing to grant or deny the variance pursuant to Rule 502.b. The Commission will only grant a variance to Rules 411.a.(2).A.i or ii if the Operator demonstrates that the proposed Oil and Gas Operations and applicable Best Management Practices and operating procedures will result in substantially equivalent protection of drinking water quality for the Surface Water Supply Area. If the relevant Public Water System(s) agree to waive the requirements of Rules 411.a.(2).A.i or ii, the Operator will provide evidence of the waiver to the Commission. A waiver from all relevant Public Water Systems will create a presumption that a variance will be granted if the Operator also demonstrates that Best Management Practices and operating procedures will result in substantially equivalent protection of drinking water quality.

B. Intermediate Buffer Zone. After January 15, 2021, at all new and existing Oil and Gas Locations within a Surface Water Supply Area intermediate buffer zone identified in Rule 411.a.(1).B.ii, in addition to the protections required by Rule 411.a.(2).C, Operators will:

i. Contain Flowback and Stimulation fluids in Tanks that are placed on a Working Pad Surface in an area with downgradient perimeter berming;

ii. Construct lined berms or other lined containment devices pursuant to Rule 603.o around any new crude oil, condensate, and produced water storage Tanks that are installed after January 15, 2021;

iii. Inspect the Oil and Location on a daily basis, unless a Form 2A approved prior to January 15, 2021 provides for less frequent inspections pursuant to any prior Commission Rule;

iv. Maintain adequate Spill response equipment at the Oil and Gas Location during drilling and completion operations; and

v. Not construct or utilize any Pits, except that Operators may continue to utilize existing Pits that were properly permitted, constructed, operated, and maintained in compliance prior to January 15, 2021.

C. External Buffer Zone. After January 15, 2021, at all new and existing Oil and Gas Locations in the Surface Water Supply Area external buffer zone identified in Rule 411.a.(1).B.iii, Operators will:

i. Utilize pitless drilling systems; and

ii. Conduct baseline surface water sampling prior to drilling or completing any new Wells, or re-completing or restimulating any existing Well.

   aa. Sampling Location. Operators will sample from the Classified Water Supply Segment immediately downgradient of the Oil and Gas Location.

   bb. Sampling Timing. Operators will take one sample prior to drilling a Well, and at least one follow-up sample from the same location 90 days after the Wells at the Oil and Gas Location are completed.
cc. **Sampling Methods.** Operators will obtain analysis of the water samples from laboratories that maintain state or nationally accredited programs and utilize currently-applicable EPA-approved analytical methods.

dd. **Reporting Data.** Operators will submit a Form 43, Analytical Sample Submittal to the Commission containing the results of each sample analysis within 60 days of collecting the sample. Operators will simultaneously submit the Form 43 to the administrator of all potentially impacted Public Water Systems.

ee. **Analytes.** Operators will analyze samples collected pursuant to this Rule 411.a.(2).C.ii for the following constituents:

1. pH;
2. Alkalinity (total bicarbonate and carbonate as CaCO$_3$);
3. Specific conductance;
4. Major cations (calcium, iron, magnesium, manganese, potassium, sodium);
5. Major anions (bromide, chloride, fluoride, sulfate, nitrate and nitrate as N, and phosphorus);
6. Total dissolved solids;
7. BTEX compounds (benzene, toluene, ethylbenzene, and total xylenes);
8. Diesel Range Organics (DRO – C$_{10}$ to C$_{36}$) and Gasoline Range Organics (GRO – C$_6$ to C$_{10}$);
9. Polycyclic Aromatic Hydrocarbons (including those listed as Organic Compounds in Soils in Table 915-1); and
10. Metals (including those listed as Metals in Soils in Table 915-1).

(3) **Consultation.** If an Operator submits a Form 2A for a proposed Oil and Gas Location within a Surface Water Supply Area identified in Rule 411.a.(1), the Operator will engage in a Formal Consultation Process with any potentially impacted Public Water System pursuant to Rule 309.g. The Formal Consultation Process will address any additional Best Management Practices that should be applied for the protection of the Public Water System. If the Public Water System determines that the proposed Oil and Gas Location may impact ephemeral streams upstream and in direct hydraulic communication with a Surface Water Supply Area, the Formal Consultation Process will address the necessity of applying setbacks or mitigation measures to ephemeral streams.

(4) **Spill and Release Notification & Emergency Response.**
A. **Applicability.** This Rule 411.a.(4) applies to Operators of all new and existing Oil and Gas Locations with a Working Pad Surface within 2,640 feet of surface water that is 15 miles or less upstream from a surface water Public Water System intake.

B. **Emergency Response Plan Requirements.** Emergency response plans maintained by Operators pursuant to Rule 602.j will include current contact information for the administrators of all Public Water Systems with a surface water intake within 15 miles downstream.

C. **Spill and Release Notification.** No later than when the Operator provides the Director with notice pursuant to Rule 912.b.(1), the Operator will notify the administrators of all Public Water Systems with a surface water intake within 15 miles downstream in the event of a Spill or Release if the Spill or Release is reportable pursuant to Rule 912.b.(1)A and has the potential to impact the Public Water System.

b. **Groundwater Under the Direct Influence of Surface Water & Type III Aquifer Wells.**

   (1) **Definitions.**

   A. Groundwater Under the Direct Influence of Surface Water (“GUDI”) means any water beneath the surface of the ground with:

   i. Significant occurrence of insects or other macro-organisms, algae, or large-diameter pathogens such as Giardia lamblia or Cryptosporidium; or

   ii. Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH, which closely correlate to climatological or surface water conditions.

   B. Groundwater Under the Direct Influence of Surface Water Well (“GUDI Well”) means a Public Water System that is supplied by a well under the direct influence of surface water.

   C. Type III Aquifer means an Aquifer that consists of unconsolidated geologic material including alluvial, colluvial or other unconsolidated materials, as defined in the Colorado State Board of Examiners of Water Well Construction and Pump Installation Contractors, Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction, 2 C.C.R. § 402-2:5.2.2.3 (2020) (hereinafter “State Engineer’s Water Well Construction and Permitting Rules”). Only the January 15, 2021 version of the State Engineer’s Water Well Construction and Permitting Rules applies to this Rule; later amendments do not apply. All materials incorporated by reference in this Rule are available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, the State Engineer’s Water Well Construction and Permitting Rules are available from the State Engineer’s Office, 1313 Sherman St., Suite 821, Denver, CO 80203, and are available online at [https://dwr.colorado.gov/services/well-construction-inspection#water-well-construction-rules](https://dwr.colorado.gov/services/well-construction-inspection#water-well-construction-rules). Type III Aquifers may contain localized impermeable layers that do not act as hydraulic boundaries between distinct Aquifers. A common example of a Type III Aquifer is an alluvial Aquifer.

   D. Type III Well means a Public Water System supply well completed in a Type III Aquifer.

   (2) **Buffer Zones.**
A. The internal buffer zone is located between 0 and 1,000 feet from a GUDI Well or Type III Well.

B. The intermediate buffer zone is located between 1,001 and 1,500 feet from a GUDI Well or Type III Well.

C. The external buffer zone is located between 1,501 and 2,640 feet from a GUDI Well or Type III Well.

(3) Protections. Operators will comply with the standards established below for the buffer zone in which the Working Pad Surface is proposed or located and with all standards for zones farther from the GUDI Well or Type III Well.

A. Internal Buffer Zone.
   i. After January 15, 2021, Operators will not conduct any new surface disturbance within the internal buffer zone of a GUDI Well or Type III Well identified in Rule 411.b.(2).A.

   ii. Only the Commission may grant a variance to Rule 411.b.(3).A.i. If an Operator seeks a variance from Rule 411.b.(3).A.i, the Operator will consult with CDPHE and the Public Water System prior to the Commission holding a hearing to grant or deny the variance pursuant to Rule 502.b. The Commission will only grant a variance to Rule 411.b.(3).A.i if the Operator demonstrates that the proposed Oil and Gas Operations and applicable Best Management Practices and operating procedures will result in substantially equivalent protection of drinking water quality for the GUDI Well or Type III Well. If the relevant Public Water System(s) agree to waive the requirements of Rule 411.b.(3).A.i, the Operator will provide evidence of the waiver to the Commission. A waiver from all relevant Public Water System(s) will create a presumption that a variance will be granted if the Operator also demonstrates that Best Management Practices and operating procedures will result in substantially equivalent protection of drinking water quality.

   iii. Operators of new Oil and Gas Locations within the internal buffer zone of a GUDI Well or Type III Well identified in Rule 411.b.(2).A will adhere to all requirements for operations within the internal buffer zone of a Surface Water Supply Area pursuant to Rule 411.a.(2).A.

B. Intermediate Buffer Zone. After January 15, 2021, Operators of new Oil and Gas Locations within the internal buffer zone of a GUDI Well or Type III Well identified in Rule 411.b.(2).B will adhere to all requirements for operations within the intermediate buffer zone of a Surface Water Supply Area pursuant to Rule 411.a.(2).B.

C. External Buffer Zone. After January 15, 2021, Operators will utilize pitless drilling systems at all new and existing Oil and Gas Locations within the external buffer zone of a GUDI Well or Type III Well identified in Rule 411.b.(2).C.

(4) Consultation. If an Operator submits a Form 2A for a proposed Oil and Gas Location within 2,640 feet of a GUDI Well or Type III Well, the Operator will engage in a Formal Consultation Process with the administrator of the Public Water System that operates the GUDI Well or Type III Well pursuant to Rule 309.g. The Formal Consultation Process will address:

   A. Any Best Management Practices that should be applied;
B. Whether Groundwater monitoring is necessary. Although the Operator and Public Water System may determine that Groundwater monitoring is necessary in other circumstances, at a minimum Groundwater monitoring will be necessary if:

i. The Public Water System determines that Groundwater monitoring is necessary;

ii. Installation of one or more Groundwater monitoring wells does not pose significant, unusual, or unique risks of contamination to the Aquifer; and

iii. Suitable locations for one or more Groundwater monitoring wells exist between the proposed Oil and Gas Location and the GUDI Well or Type III Well and in other appropriate locations to determine groundwater gradient; and

C. Whether protection of recharge facilities is necessary. If the Public Water System determines that the proposed Oil and Gas Location may impact engineered structures that enable recharge to the Public Water System in the vicinity of a GUDI Well or Type III Well, the Formal Consultation Process will address the necessity of applying setbacks or mitigation measures to such recharge facilities.


A. Applicability. This Rule 411.b.(5) applies to Operators of all new and existing Oil and Gas Locations with a Working Pad Surface within 2,640 feet of a GUDI Well or Type III Well.

B. Emergency Response Plan Requirements. Emergency response plans maintained by Operators pursuant to Rule 602.j will include current contact information for the administrators of all Public Water Systems with a GUDI Well or Type III Well within 2,640 feet of the Working Pad Surface.

C. Spill and Release Notification. No later than when the Operator provides notice to the Director pursuant to Rule 912.b.(1), the Operator will notify the administrators of all Public Water Systems with a GUDI Well or Type III Well within 2,640 feet of a Spill or Release that is reportable pursuant to Rules 912.b.(1).A, F, G, or J.

(6) Reporting Groundwater Monitoring Data. If Groundwater monitoring is required pursuant to Rule 411.b.(4).B, the Operator will submit a Form 43 to report data from the monitoring well(s) for each of the analytes listed in Rule 411.a.(2).C.ii.ee at a frequency specified as a condition of approval on the Operator’s Form 2A.

SPEAKER BIOS

Matt Sura is an oil and gas attorney who represents local governments, community organizations, and landowners in their negotiations and disputes with the oil and gas industry. Matt represented local governments and conservation interests on the Governor’s Oil and Gas Task force during 2014-2015 and has participated in nearly every COGCC rulemaking since 2007 – including the recent “COGCC Mission Change Rulemaking” of 2020. Matt is the co-author of “Protecting Source Water in Colorado During Oil and Gas Development”

Paul Hempel has served as the Colorado Rural Water Association’s source water protection program manager for the past eight years. The Colorado Rural Water Association (CRWA) is a non-profit corporation that provides technical assistance and training to Colorado’s public and private water and wastewater systems having populations less than 10,000. CWA’s role is to provide technical assistance in order to coordinate and facilitate the process of developing a Source Water Protection Plan and to promote communication and collaboration between public water providers, communities, and government agencies. www.crwa.net.