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# Proposed Oil & Gas Regulations Update

## BOCC Study Session

July 22, 2024

**Presenters: Chris Laramie, Energy Specialist**  
**Ava Pecherzewski, Development Review Manager**



# Background



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- ❖ **March 2023** – BOCC directed staff to prepare amendments to the Land Development Code to update Oil & Gas Operation Regulations
- ❖ **October 2023** – Board adopted revised oil and gas regulations, including additional setbacks from public water reservoirs.
- ❖ **November 2023** – Board adopted additional regulations applicable during *site planning* (setbacks, wildland-urban interface, & air/water monitoring)
- ❖ **October 2023** - Board directed staff to prepare additional regulations applicable *during/after permitting* (financial assurance, inspections program, reverse setbacks, & commercial injection wells) – tied to drilling



# Proposed Amendments to the Oil & Gas Regulations



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- ❖ *Create additional requirements for Air Quality Standards and Monitoring*
- ❖ *Disallow Commercial Injection Wells*
- ❖ *Increase Reverse Setbacks*
- ❖ *Require Financial Assurances*
- ❖ *Create an Inspection Program*
- ❖ *Clean up redundant sections of the code*



# Air Monitoring

## Why is air quality monitoring important?

- ❖ Improve Air Quality – monitoring helps to identify areas with poor air quality and the pollutants responsible for it. This information can be used to implement air pollution control measures to improve air quality. Reducing the levels of pollutants in the air can lead to improved health outcomes for the population and a better quality of life.
- ❖ Monitor Compliance with Regulations – air quality sensors and other devices make it possible to keep an eye on the emissions from industrial sources, such as power plants and factories, to ensure they meet the standards set by government agencies and adjust your outdoor activities accordingly.
- ❖ Protect Health – why is air quality monitoring important? Pollution has been linked to a range of health problems, including respiratory and cardiovascular diseases. Air quality monitoring can help to identify areas where the air is polluted and take action to protect public health.



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# Air Quality Standards and Monitoring



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❖ Additional air quality standards and monitoring requirements were added to the Code in collaboration with Arapahoe County Public Health Department. These changes include:

- **Emphasis on Avoidance** - Shifting from minimizing to avoiding harmful emissions and impacts represents a more proactive approach to air quality protection. More details regarding pollutants to be monitored and procedures for baseline testing.
- **Detailed Monitoring Requirements** - Enhanced detail in monitoring requirements ensures more comprehensive and accurate tracking of air quality impacts. Proposed additions add several new requirements aimed at further reducing emissions and ensuring compliance with more stringent standards.
- **Specific Sampling Frequency and Triggers** - Specifying sampling frequencies and automatic triggers for sample collection improves the responsiveness and effectiveness of air quality monitoring.
- **Operational Changes to Minimize Emissions** - Introducing specific operational changes provides clear guidelines for operators to reduce emissions, potentially leading to better compliance and air quality outcomes.
- **Enhanced Reporting Requirements** - More detailed reporting ensures better transparency and accountability, facilitating improved regulatory oversight. These additions are crucial for enhancing the effectiveness of air quality regulations, ensuring better protection for public health and the environment. If the regulations are adopted, a public-facing and frequently updated dashboard would be added to the Arapahoe County website.





# Commercial Injection Wells



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- ❖ In the course of oil and gas drilling, operators may inject used, contaminated water from the hydraulic fracturing process into underground wells placed underground into deep rock formations for disposal.
- ❖ While these injection wells do have layers of protective casing, concerns remain regarding potential leaks and compromising the water table.
- ❖ Commercial injection wells also generate a significant amount of truck traffic and have the potential to draw that traffic from well sites outside Arapahoe County, which would increase wear on county roads.
- ❖ Commercial injection wells have created seismicity in Colorado. While the state responded to those events by requiring slower injection rates and monitoring, prohibiting commercial injection wells for the disposal of wastewater removes the risk altogether.
- ❖ The BOCC directed staff to prohibit the use of commercial injection wells in Arapahoe County, and staff has added a code section clarifying that this activity is not permitted.



# Reverse Setbacks



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- ❖ Reverse setbacks are applicable to new development that is proposed from an existing oil and gas facility.
  
- ❖ Current Requirements:
  - New developments to be set back 250 feet from an oil and gas facility of any status (permitted but not drilled yet, drilling, completing, producing, active gas storage, injecting, shut-in, temporarily abandoned, dry and abandoned, or plugged and abandoned prior to 2014).
  - New developments proposed adjacent to a plugged and abandoned oil and gas well that was abandoned in 2014 or later is 150 feet.
  
- ❖ Proposed Requirements:
  - New developments to be set back 2,000 feet from oil and gas facilities under application review or permitted but not drilled;
  - New developments to be set back 1,000 feet from oil and gas facilities that are actively producing, shut-in or temporarily abandoned
  - New developments to be set back 250 feet from oil and gas facilities that are plugged and abandoned.



# Current vs Proposed Reverse Setbacks

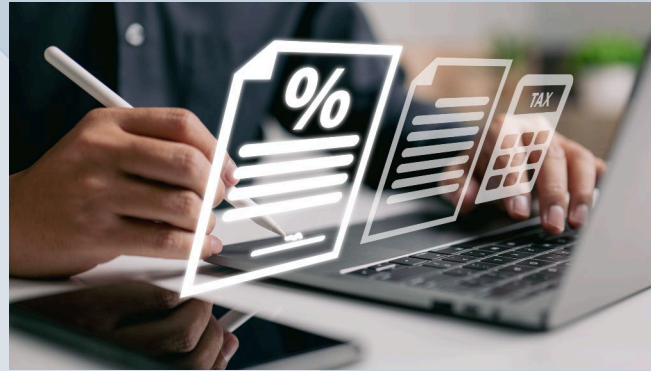


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# Financial Assurances



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❖ Financial Assurance requirements were added to the Code to augment current state requirements. The proposed financial assurance section of Arapahoe County provides more specific details on the amount of financial assurance, types and amounts of required insurance, and specific procedures for low-producing wells and corrective actions. Proposed requirements include:

- **Amount** – The financial assurance must be at least \$90,000 multiplied by the number of approved wells on the pad, adjusted annually for inflation. This ensures there are sufficient funds to cover the costs of plugging and abandoning and site reclamation, protecting the environment and public interest.
- **Term** – The assurance lasts until all wells are properly plugged, abandoned, and the site is reclaimed to the standards, or until alternate assurance is provided and approved by the PWD Director. This ensures ongoing financial coverage throughout the lifecycle of the project reducing potential liabilities for Arapahoe County.
- **Insurance Requirements** – Specifies mandatory insurance coverage to protect against operation risks, such as bodily injury, property damage, and environmental pollution. Additional insured endorsements extend protection to Arapahoe County and its officials, minimizing financial risks associated with operational hazards.
- **Low Producing Wells** – Requires financial assurance for wells that become low-producing, ensuring ongoing financial responsibility regardless of well productivity.
- **Corrective Actions** – Stipulates forfeiture of the performance bond if corrective actions are needed due to Operator non-compliance, covering expenses incurred by Arapahoe County.
- **Transfer/Sale of Facility** – Requires assessment of compliance status before transfer. With plans for any necessary corrective actions. This ensures continuity of financial responsibility through ownership changes, preventing gaps in regulatory compliance.



# Arapahoe County Inspection Program

In a regulated environment, the oil and gas industry is committed to safeguarding human well-being, environmental health, and safety. Inspections serve as a linchpin in upholding compliance with a myriad of regulations set forth by diverse governing bodies.

The role of oil and gas inspections is to make sure the industry is adhering to proper standards, environmental mandates, and industry-specific codes of conduct. By conducting regular inspections, the industry diligently uncovers any potential deviations from compliance requirements.



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# Inspection Program



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- ❖ Proposed Code Amendment includes the establishment of an Inspection Program for Arapahoe County.
- ❖ Staff has researched inspection programs in other municipalities and has found that there are two different approaches for implementing an inspection program:
  - An independent County inspection program - A full-time employee with equipment, process and procedure development, training and salary fully funded by the County.
    - **Advantages:** *Local control and the ability to design the County's inspection program specific to the needs and concerns of the County's residents and environment.*
    - **Disadvantages:** *Initial high costs, longer implementation time, limited expertise, heavy reliance/coordination with Operators for site access, and potential duplication of efforts with the States inspection program.*
  - The second approach is to enter into an IGA (Intergovernmental Agreement) with the State ECMC.
    - **Advantages:** Technical advisement through the staffing process, an established training program, access to an Energy & Carbon Management Commission (ECMC) field supervisor for assistance with technical aspects of inspection, access to the State's database, established processes, a quicker program implementation, and cost savings associated with training, equipment procurement and process development.
    - **Disadvantages:** Shared control which may limit decision making and enforcement.



# Decision Point



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- Staff would like direction from the BOCC as to which structure they would prefer for the inspection program.
- Staff is recommending entering into an IGA with the ECMC because of the support, training, and ability to implement the program sooner.
- Packet includes anticipated inspection program costs.
- Staff would like direction on a proposed fee program.





# Tentative Schedule



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July 22, 2024	BOCC Study Session
Week of July 29, 2024	Post Draft Regulations on Website & Open Comment Period
Week of August 19, 2024	Hold Public Meeting
Week of August 26, 2024	Website Comment Period Closes
August 26 – September 6	Update Regs based on Comments
September 17, 2024	Planning Commission Study Session
October 1, 2024	Planning Commission Hearing
October 22, 2024	BOCC Adoption



# Questions? Discussion?



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