

**MINUTES OF THE REGULAR MEETING OF THE
ARAPAHOE COUNTY PLANNING COMMISSION
TUESDAY, NOVEMBER 12, 2024**

ATTENDANCE	<p>A regular meeting of the Arapahoe County Planning Commission (PC) was called and held in accordance with the statutes of the State of Colorado and the Arapahoe County Land Development Code.</p> <p>The following Planning Commission members were in attendance: Rodney Brockelman; Brooke Howe; Kathryn Latsis; Randall Miller; Dave Mohrhaus, Chair Pro-Tem; Richard Sall; and Lynn Sauve, Chair.</p> <p>Also, present were Robert Hill, Senior Assistant County Attorney; Jason Reynolds, Planning Division Manager; Ava Pecherzewski, Development Review Planning Manager (moderator); Bryan Weimer, Public Works & Development Director; Molly Orkild-Larson, Principal Planner and Kim Lynch, Planning Technician.</p>
CALL TO ORDER	<p>Ms. Sauve called the meeting to order at 6:30 p.m. and roll was called. The meeting was held in person and through the Granicus Live Manager platform with telephone call-in for staff members and public.</p>
GENERAL BUSINESS ITEMS:	
APPROVAL OF THE MINUTES	<p>The motion was made by Mr. Mohrhaus and duly seconded by Mr. Miller to accept the minutes from the October 15, 2024, Planning Commission meeting, as submitted:</p> <p>The vote was:</p> <p>Mr. Brockelman, Yes; Ms. Howe, Yes; Ms. Latsis, Yes; Mr. Miller, Yes; Mr. Mohrhaus, Yes; Ms. Sauve, Yes; Mr. Sall, Abstain.</p>
PUBLIC HEARING ITEMS:	
ITEM 1	<p>CASE NO. LDC23-005, OIL AND GAS REGULATIONS / LAND DEVELOPMENT CODE (LDC) AMENDMENT – AVA PECHERZEWSKI, DEVELOPMENT REVIEW PLANNING MANAGER – PUBLIC WORKS AND DEVELOPMENT (PWD)</p> <p>Ms. Sauve asked the County Attorney if the PC had jurisdiction to proceed. Mr. Hill said that Case No. LDC23-005 had been properly noticed and the PC had jurisdiction to proceed.</p> <p>Mr. Reynolds stated this county-initiated project proposed multiple changes to the LDC that had been adjusted based on the feedback of both the PC and the Board of County Commissioners (BOCC). He said</p>

the most notable changes from the last presented regulations included an expansion of reverse setbacks from 2,000 feet to 3,000 based on PC feedback; requirements for soils sampling at time of reclamation; changes to aquifer testing and air quality testing requirements; and a requirement for alternative location analysis. He reported the BOCC also directed staff to ask the PC for a recommendation again on the amount of financial assurances to require.

Alternative Location Analysis (ALA)

He described how the regulations now included an ALA requirement if a proposed facility is located within one mile of a childcare center, hospital, nursing home, or a preschool, elementary, middle, junior, or high school.

Financial Assurances

He reiterated the BOCC direction for the PC to make a final recommendation on the financial assurance amount, and to choose between the original amount proposed (\$95,000) and the amount based on the Adams County case (\$120,000). He suggested that this could be achieved with the motions made to recommend approval for this case.

Air Quality Requirements

He related the BOCC direction to staff to include the use of electric equipment during the *drilling* phase of operations, and not just during production, *when available*. He confirmed this had been added to the draft regulations. He explained a clause in the regulations had been added noting that the operator and their monitoring consultant were required to provide public access to air quality monitoring data in a manner approved by staff. He discussed the language in the draft regulations which required an operator to test for 7 days straight when a canister-triggering event occurred (and when the Colorado Department of Public Health and Environment (CDPHE) Health Guideline Values were exceeded) had also been changed as directed to “when a canister triggering event happens to require the operator to *immediately install a replacement for the triggered canister*.” He said the regulation that required operators to cease maintenance activities on ozone action days (based on feedback from industry and BOCC direction) was changed “to allow maintenance on ozone action days *when essential to ensure safety*.” He concluded that staff also clarified dust control measures in the access road standards.

Additional Water Quality Monitoring

He explained the regulations required operators to hire a licensed environmental consultant to complete the testing and staff believed that this met the standard of CDPHE and confirmed that when a spill was reported to CDPHE, they did require subsequent testing to confirm the extent of the impact when a leak or spill was detected.

He reported that Arapahoe County had zero reported spills and no waterways were reported to have been impacted during the last five

years, according to publicly available data. He added staff did not therefore recommend more frequent water testing given that the data did not suggest more frequent testing would yield better results. He stated, with Colorado's arid climate, it was difficult to conduct water sampling on a scheduled basis and if water monitoring had to include perennial, intermittent and ephemeral water bodies this would be difficult to enforce. He noted that it would be more enforceable to use the term based on the Colorado definition as "Waters of the State" (as defined in the Colorado Revised Statutes), which includes these water types. He discussed the current regulations requiring operators to test all four groundwater aquifers as a baseline prior to commencing operations and explained the rationale for changing the requirement to testing only the highest and the lowest aquifers as this would achieve the same goal and decrease costs. He discussed the added language, at the direction of BOCC, to require soils sampling as part of the reclamation process. He explained the regulations prohibited vehicle and equipment maintenance within 500 feet of State Waters and required refueling on impermeable material.

Commercial Injection Wells

He reported that staff had added a code section clarifying that commercial injection well activity was expressly not permitted. He stated the permitted use table had also been updated to reflect this in the draft regulations.

Reverse Setbacks

He affirmed reverse setbacks were applicable to *new development* that was proposed *from* an existing oil and gas facility. He explained the LDC regulation requiring 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, shutin, temporarily abandoned, dry and abandoned, or plugged and abandoned prior to 2014). He said the BOCC directed staff to include administrative ability to reduce these setbacks when a property owner provided an informed consent document that would be recorded as a Notice against the title on the property, but in no case could the setback be any closer than 250 feet. He confirmed staff had included this language in the draft regulations, including a requirement that a Notice needed to be recorded against the property to notify future buyers that an oil and gas facility was planned adjacent to their home or parcel. Finally, he said that based upon discussion with the BOCC at their October 29th study session, staff had been directed to increase the reverse setback from *approved but unconstructed* oil and gas facilities to 3,000 feet, and staff had incorporated that change into the draft regulations.

Inspection Program

He stated, if these regulations were adopted, staff would work on a procedure manual prior to the inspection program going live on July 1,

2025. He reported that Staff had created a matrix of fines and penalties to address PC concerns about the flat rate dollar amount of fines, regardless of infraction, and recommendation for more detailed clarification was now reflected in the draft regulations. He added that language regarding inspection enforcement was also revised to eliminate due process concerns noted in stakeholder meetings with industry.

Ms. Sauve opened the hearing for public comments. There were thirty-four members of the public present who spoke and there were seven callers who spoke both in support of and against the proposed regulations. The public hearing was closed.

There was discussion around the following questions or concerns:

- Methane monitoring concerns.
- Why was the electrification of Oil & Gas operations worded “as available”?
- Explain monitoring cannisters replacement schedule.
- How are financial assurances adjusted for inflation?
- Are all setbacks included in these amendments?
- Will public hearings be an option for those impacted?
- Why is an inspection process for the County included?
- Is there thought given to including language or advice for purchasers of properties in close proximity to O&G sites as currently this is only discoverable in the deed.
- Proposed regs don’t meet citizen requested protective needs. What do you say to this?

Mr. Reynolds confirmed that methane monitoring, while not addressed in changes discussed tonight, were addressed in previously accepted regulations which stated, “air pollutants measured shall include methane and total VOCs including Vtechs”. He explained the language regarding electrification of oil & gas operations was stated as where available and accessible with respect to the existing electric grid. He said this would apply to Lowry CAP type sites that had similar remoteness and access to existing electric lines while recognizing other sites that were truly remote and where providing electricity was not feasible. He added staff would work with energy providers to determine availability and defend those sites that were truly remote. He described how supply chain disruptions and expirations had spurred requirements that a spare monitoring cannister be available by contract with those who provide monitoring of these for operators. He stated that regulations included a clause that tied the Financial Assurance to the Colorado Construction Cost Index so depending on the baseline set that amount would increase with inflation to keep up with construction costs. He confirmed that only reverse setbacks were addressed tonight and these would apply to newly proposed developments only. He said the existing regs allowed for a public hearing process but delegated the

responsibility to choose a public hearing process to the PWD Director so public interest in a hearing was factored into the decision but not applicable in every situation where a site was within 3000 feet of residents. He explained that current state inspections occurred at the rate of 1 inspection every 3 years for most sites. He added that in the last three years only 91 inspections had been completed for the entire county which was inadequate. He said staff was proposing 2 inspections/year for sites in Arapahoe County. He agreed there were legal implications needing to be considered in subsequent purchases of a property and considering how to compel sellers to disclose O&G siting was a good idea to consider in the future. He reported that the 3000-foot setback was the largest setback in Colorado. He stated these regulations accomplished many protections brought up by the public but certainly not all, however, he noted we also heard these regulations are over-restrictive, overreaching and would be a complete disaster for industry and those who choose to pursue this type of development. He concluded as the county developed regulations it was necessary to consider both and balance the public need for additional protections with industry needs to conduct business in our county.

Ms. Sauve suggested multiple motions to split out the question of recommending a financial assurance amount as a separate vote from recommending approval of the proposed amendments.

The motion was made by Ms. Latsis and duly seconded by Mr. Mohrhaus, in the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I have reviewed the staff report, including all exhibits and attachments, and have listened to the presentation and any public comment as presented at the hearing and hereby move to recommend approval of the proposed amendments to the Land Development Code, subject to the following:

- 1. ~~That the financial assurance amount be established at \$95,000 or \$120,000 (pick one).~~ Striking Condition 1 and including Condition 2.**
- 2. That Staff, with the approval of the County Attorney, may correct typographical errors and make such revisions to the Code amendment as are necessary to incorporate the approved amendment into the Land Development Code for publication.**

The vote was:

Mr. Brockelman, No; Ms. Howe, No; Ms. Latsis, Yes; Mr. Miller, No; Mr. Mohrhaus, Yes; Mr. Sall, Yes; Ms. Sauve, Yes.

The motion was made by Ms. Latsis and duly seconded by Mr. Sall, in the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I have reviewed the staff report,

	<p>including all exhibits and attachments, and have listened to the presentation and any public comment as presented at the hearing and hereby move to amend the motion to recommend approval of the proposed amendments to the Land Development Code, subject to include the following:</p> <p>1. That the financial assurance amount be established at \$95,000.</p> <p>The vote was:</p> <p>Mr. Brockelman, No; Ms. Howe, No; Ms. Latsis, Yes; Mr. Miller, No; Mr. Mohrhaus, No; Mr. Sall, Yes; Ms. Sauve, Yes.</p> <p>This motion failed on a vote of 3-4 so another motion was made.</p> <p>The motion was made by Ms. Latsis and duly seconded by Mr. Sall, in the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I have reviewed the staff report, including all exhibits and attachments, and have listened to the presentation and any public comment as presented at the hearing and hereby move to amend the motion to recommend approval of the proposed amendments to the Land Development Code, subject to include the following:</p> <p>1. That the financial assurance amount be established at \$120,000.</p> <p>The vote was:</p> <p>Mr. Brockelman, No; Ms. Howe, No; Ms. Latsis, Yes; Mr. Miller, No; Mr. Mohrhaus, No; Mr. Sall, Yes; Ms. Sauve, Yes.</p> <p>This motion failed also on a vote of 3-4 resulting in the recommendation to the BOCC to recommend approval of the amended regulations with no recommendation for a financial assurance amount.</p>
<p>ADJOURNMENT</p>	<p>There being no announcements or further business to come before the Planning Commission, the meeting was adjourned.</p>



SUBJECT: CASE NO. LDC23-005 – OIL AND GAS LAND DEVELOPMENT CODE AMENDMENT

Ava Pecherzewski, Development Review Planning Manager, Public Works and Development Department

Jason Reynolds, Planning Division Manager, Public Works and Development Department

PURPOSE AND REQUEST

This County-initiated project proposes amending the Land Development Code (LDC), specifically, Section 5-3.6, Use By Special Review, Oil and Gas Facilities. The proposed changes include increased reverse setbacks with an ability to reduce that amount with property owner informed consent, additional requirements for air and water quality monitoring, disallowing commercial injection wells, the creation of an inspection program and a financial assurances requirement. Staff is requesting a recommendation of approval from the Planning Commission on the draft regulations (Attachment 1).

BACKGROUND

In October of 2023, the BOCC directed staff to prepare additional amendments to the Oil & Gas Regulations, including:

- Create requirements for financial assurances;
- Include additional requirements for air and water quality monitoring;
- Disallow commercial injection wells;
- Create an inspection program;
- Increase reverse setbacks (setbacks from new development to oil and gas facilities).
- Related amendments to the Use Table 3.2 (injection wells) and Section 4-1.1, Dimensional Standards (reverse setbacks).

Over the first half of 2024, staff conducted research on best practices to determine the appropriate requirements for Arapahoe County. Staff shared draft changes to the regulations with the BOCC in July of 2023 and the Board directed staff to conduct public outreach and seek comments. Since there has been a significant increase in oil and gas development in the eastern county and that is anticipated to only increase in the near term, this project has an ambitious schedule. These Phase 2B regulations focus on site operations and monitoring; with pending applications, it is important to have additional protections in place before drilling commences for protection of the public health, safety, and welfare. The Board asked staff to share the draft regulations and public comments with the Planning Commission in a study session on October 15th with a public hearing for a recommendation on November 12th, followed by a public hearing with the Board on December 10th.

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After the public outreach and comment period was concluded, staff reported back to the Board on September 24th what the major themes were in the public and industry comments, and the Board directed staff to make adjustments to the draft regulations based on the feedback.

The Planning Commission held a study session on the proposed regulatory changes at their October 15th meeting. The Planning Commission provide feedback and input regarding the proposed reverse setbacks, the inspection program fines, and recommendations on the amount of financial assurances that should be required for plugging and abandonment.

Staff brough the Planning Commission's feedback, along with stakeholder meeting comments, to the BOCC on October 29th and November 4th. The BOCC directed staff to make adjustments to the draft regulations based on Planning Commission and stakeholder comments, which are before you tonight. The most notable changes, which are detailed below, include an expansion of reverse setbacks from 2,000 feet to 3,000 based on Planning Commission feedback; requirements for soils sampling at time of reclamation; changes to aquifer testing and air quality testing requirements; and a requirement for alternative location analysis. The BOCC also directed staff to ask the Planning Commission for a recommendation again on the amount of financial assurances to require.

PROPOSED REGULATION SUMMARY AND ANALYSIS

Alternative Location Analysis

During the public comment period, we heard public concerns about the potential for oil and gas development near locations with vulnerable populations such as schools and nursing homes. On October 15, 2024, the Colorado Energy and Carbon Management Commission adopted Cumulative Impacts and Enhanced Systems and Practices Rules, which go into effect on December 15, 2024. Those ECMC rules require Alternative Location Analysis if a proposed oil and gas facility is located within one half mile of a residential unit, school facility, or child care center. If those uses are within a disproportionately impacted community, the ALA is required within a one-mile radius. Based on local concerns, the proposed regulations now include an ALA requirement if a proposed facility is located within one mile of a child care center, hospital, nursing home, or a preschool, elementary, middle, junior, or high school.

Financial Assurances

Financial assurances are often required of oil and gas operators to ensure that costs associated with decommissioning an oil and gas facility are covered, in the event the operator defaults on the facility. These financial assurances are typically in the form of a bond, but can also appear as an irrevocable letter of credit, or cash deposit. Currently, the State requires financial assurances from oil and gas operators, however, these amounts are typically low and would not cover the entire costs of plugging and abandonment. The BOCC directed staff to update our provisions to require financial assurances for our county based on best practices. Staff reviewed financial

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assurance requirements in other jurisdictions, completed research on typical costs for plugging and abandonment (“P&A”), and developed a code amendment that requires local financial assurances for new oil and gas well drilling activity. At their July 2024 study session, the Board directed staff to require in the regulations a financial assurance of \$95,000 per pad, to cover the cost of P&A, as this appeared to align with other jurisdictions as well as what the ECMC identified as the average cost of P&A, including surface reclamation on and around the pad site. This amount is to be adjusted for inflation annually dependent on the Colorado Construction Cost Index, which is more applicable to P&A construction activities than an overall consumer price index. Additionally, the draft regulations require operators to provide evidence of general liability insurance with a minimum of \$1 million per occurrence, and environmental liability coverage of at least \$5 million per pollution incident.

General feedback from the public about financial assurances is that the proposed \$95,000 in the draft code is not enough to cover the cost of plugging and abandoning a well and suggestions ranged from \$120-\$130,000 to \$500,000 per well. Others commented that the minimum insurance coverage requirements were not enough and should be raised.

The American Petroleum Institute (API) and Colorado Oil & Gas Association (COGA) submitted a joint comment letter in which they wished to remind the County that their authority does not include downhole work, including plugging and abandoning, as this is within the jurisdiction of the ECMC. The proposed amendment provisions rely on ECMC’s approval of the manner and adequacy of the plugging and abandoning the well and adequate surface reclamation of the pad site as provided in the regulations for purposes of releasing assurance. If the operator does not plug and abandon the well, the financial assurance will provide funding to pay for the plugging and abandoning of the well in accordance with ECMC rules. The proposed regulations do not purport to regulate any down hole activity associated with the plugging and abandoning of a well.

At their September 24, 2024, study session, the BOCC directed staff to discuss the proposed financial assurance amount with the Planning Commission and give them a range of options to discuss and recommend for final approval in the regulations. Staff researched the costs of plugging and abandonment in both Colorado and nationwide and provided information to the Planning Commission at their October 15th study session (see copy in Attachment 3). The research included ECMC estimates for P&A (average of \$92,710), a real-life case in Adams County, and a research paper from Carbon Tracker. The Planning Commission was asked to make a recommendation on whether to keep the current proposed amount of \$95,000, or increase that amount to \$120,000 based on a recent case in Adams County, or recommend a higher amount - \$150,000 - based on the Carbon Tracker report. There were six Planning Commissioners present (one was absent), and three commissioners recommended that we retain

the current proposed amount of \$95,000, while three commissioners recommended \$120,000 based on the fact this was based on actual costs of a local case.

At their October 29th study session, the BOCC directed staff to ask the Planning Commission to make a final recommendation on the financial insurance amount, and to choose between the original amount proposed (\$95,000) and the amount based on the Adams County case (\$120,000). With the draft Motion for this Code Amendment, the Planning Commission is being asked to choose one of these options as a recommendation.

Air Quality Requirements

Currently, the State of Colorado requires air and water quality monitoring at oil and gas facilities through the Colorado Department of Public Health and Environment (CDPHE) and the Energy and Carbon Management Commission (ECMC). Feedback from the public at last year's rulemaking hearings suggested the County enact more protective rules for air quality reporting. The BOCC directed staff to further enhance the County regulations adopted in November 2023 for air quality monitoring, and staff conducted extensive research into additional requirements, in collaboration with staff from the Arapahoe County Public Health Department. The proposed regulations focus on best management practices for *avoiding and minimizing* (rather than mitigating) releases of emissions which impact air quality. In current regulations, the operator is required to test for air pollutants prior to drilling to measure for a baseline, and conduct continuous air quality monitoring during the drilling, completion, and production phases.

Feedback from community was that they would like to see real-time public access to the air quality reporting and data. Staff is certainly open to this proposal, once the County has full-time staffing and capacity to create an online reporting system. A suggestion was also made to set up a citizen advisory group or committee to ensure transparency and trust. Other suggestions included requiring operators to require electrification in all steps of the process, given ECMC's recent approval of the Lowry Ranch Comprehensive Area Plan which included a condition requiring electrification for all Lowry Ranch CAP sites. Arapahoe County's existing regulations encourage the use of electric equipment for noise reduction and require electric-powered permanent production equipment, where available. Based on this feedback and the ECMC's mandate for the Lowry Ranch CAP, staff reminds the Commission that the current regulations encourage electric equipment and drill rigs, unless electric power is not available. At their October 29th study session, the BOCC directed staff to include the use of electric equipment during the *drilling* phase of operations, and not just during production, *when available*. This has been added to the draft regulations.

The American Petroleum Institute (API) and Colorado Oil & Gas Association (COGA) submitted a joint comment letter in which they suggested the County clarify what a "health

guideline” is when setting benchmarks; staff did consult with Arapahoe County Public Health and changed that to “CPDHE Health Guideline Values.” They also request that the best management practices outlined in the draft regulations be more flexible and not required but recommended. They also ask for clarification on the requirement for an infrared camera video and ask if there are other alternative methods of evidence delivery that can be used, and they ask for clarification on when quarterly reports would be due so as not to conflict with similar reporting to the State. Staff revised this section to note that that a copy of the State report be sent to Arapahoe County as well in order to avoid redundancy.

At their September 24th study session, the Board directed staff to add a clause in the regulations noting that the operator and their monitoring consultant are required to provide public access to air quality monitoring data in a manner approved by staff. Staff has added this clause to the draft regulations.

Staff held stakeholder meetings in October and one concern noted from industry was the language in the draft regulations which requires an operator to test for 7 days straight when a canister-triggering event occurs (when CDPHE Health Guideline Values are exceeded). Staff discussed this concern with the BOCC at their November 4th study session and noted that random sampling for 7 days isn't as reliable as replacing the canister; more accurate data can be captured by testing the triggered canister in a lab, rather than re-sampling the same canister for 7 days straight, which can lead to errors. Staff was directed to change that language when a canister-triggering event happens to require the operator to *immediately install a replacement for the triggered canister*. Additionally, a previous version of the draft regulations required operators to cease maintenance activities on ozone action days; based on feedback from industry, the BOCC directed staff to allow maintenance on ozone action days *when essential to ensure safety*. Staff also clarified dust control measures in the access road standards.

Additional Water Quality Monitoring

The proposed regulations require more robust baseline water sampling requirements for both groundwater and surface water by requiring a sampling and monitoring plan, with testing required within a half-mile radius of the facility of both upgradient and downgradient water bodies. Operators are also required to conduct water sampling and monitoring within six months of drilling and every 12 months after production. If contamination is noted, a follow-up test and inspection is required within six months.

Feedback from community indicates that they would like monitoring to occur more frequently than once every 12 months after production, with suggestions ranging from once every six months to every three months. It was also requested that monitoring be done by an independent third-party consultant. Currently, the regulations require operators to hire a licensed environmental consultant to complete the testing and staff believes that this meets the standard

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for a third-party, as they are required to put their stamp on their report. Others commented that they would like water sampling to be extended as far as two miles and that continuous sampling should be required at the Lowry Landfill. Finally, it was recommended that all data should be accessible to the public.

At their September 24th study session, the BOCC directed staff to investigate with the State as to whether it would be appropriate or necessary to conduct water monitoring more frequently than every 12 months after a well has completed production, and whether there are any requirements to test water sources further out if a leak is detected. Staff checked with the Colorado Department of Public Health and Environment (CDPHE) and were informed that when a spill is reported to CDPHE, they do require subsequent testing to confirm the extent of the impact when a leak or spill is detected.

Staff researched data on the frequency of leaks that impacted surface water from wells in the State. ECMC data on Arapahoe and Adams counties over a five-year period revealed that there was only one instance of a leak that impacted surface water in Adams County in 2021 (15 bbls) and three instances in 2023 (9 gallons, 3 gallons, and unknown quantity based on the report). Arapahoe County had zero reported spills and no waterways were reported to have been impacted during the last five years, according to publicly available data. Accordingly, staff does not recommend more frequent water testing given that the data does not suggest more frequent testing will yield better results. Moreover, with Colorado's arid climate, it is difficult to conduct water sampling on a scheduled basis. For example, the Lowry Landfill conducts annual stormwater sampling or when there is a rain event. However, there is often no data to gain because there isn't much water available to test. The same premise can be applied with water sampling in proximity to a well that is in post-production; testing more frequently than once every 12 months may not yield any different results.

The initial draft regulations specified that water monitoring had to include perennial, intermittent and ephemeral water bodies. The American Petroleum Institute (API) and Colorado Oil & Gas Association (COGA) submitted a joint comment letter in which they suggested the definitions for ephemeral stream and intermittent stream be defined to be more closely in alignment with EPA definitions, and they recommended this section be more refined on when testing of intermittent and ephemeral waters is necessary, and they note that data from that testing is likely to be flawed because these streams are dependent on inconsistent weather conditions. At their September 24th study session, the Board discussed this with staff and staff noted that it would be more enforceable if we defined the term based on the Colorado definition as "Waters of the State" (as defined in the Colorado Revised Statutes), which includes these water types. The Board directed staff to revise the draft regulations to remove those terms and replace with "Waters of the State", and these are included in the draft regulations.

The initial draft of the regulations required operators to test all four groundwater aquifers as a baseline prior to commencing operations. Feedback from stakeholder meetings indicated that not only was this extremely costly, it is also unnecessary because of State requirements for casing. And, there was a potential to contaminate the aquifers each time a new well is drilled. Staff consulted with a water supply expert in Colorado who noted that there not been a documented contamination in any groundwater aquifer in Arapahoe County as a result of oil and gas operations. Based on this low risk assessment, the consultant recommended that only testing of the uppermost and lowermost aquifers was necessary. For example, if there is a surface leak, it would only potentially affect the uppermost aquifer, while if a leak occurs below the aquifers, it would be detectable at the lowermost aquifer. Based on direction from the BOCC at their November 4th meeting, staff has clarified this language in the draft regulations. Community stakeholders had requested soils sampling; staff has added language, at the direction of BOCC, to require soils sampling as part of the reclamation process. The state requires soils sampling for any spills and releases.

To prevent spills into waterways from vehicles, the regulations prohibit vehicle and equipment maintenance within 500 feet of State Waters and require refueling on impermeable material.

Commercial Injection Wells

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. Finally, 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. The permitted use table has also been updated in the draft regulations.

For the most part, no negative feedback was provided about the plan to disallow commercial injection wells. It was noted that trucking out produced water does lead to increased traffic. However, the increased traffic is not expected to be significant and would outweigh the negative risks associated with injecting produced water underground, which include the potential for induced seismicity. Further, allowing injection wells in Arapahoe County could attract heavy truck traffic from other jurisdictions, increasing wear on our already stressed road network.

Concerns were also raised about where the receiving sites were located and what those sites do with the water; because the receiving sites are not located within Arapahoe County, we do not have jurisdiction to regulate such matters.

Finally, there were several comments in general about the amount of water required for fracking and whether there is sufficient water available in Colorado with dwindling aquifers. One of the code amendments requires operators to provide the County with evidence of an adequate water supply, including a requirement for an executed Water Delivery Agreement.

Reverse Setbacks

The existing regulations set minimum distances that new oil and gas facilities must be set back from existing structures and bodies of water. Reverse setbacks are applicable to *new development* that is proposed *from* an existing oil and gas facility. Currently, the Land Development Code requires 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). The reverse setback for new developments proposed adjacent to a plugged and abandoned oil and gas well that was abandoned in 2014 or later is 150 feet (the state adopted more rigorous P&A standards in 2014). During community discourse last year, there was concern raised that these setbacks were too close and it was recommended that the reverse setbacks be expanded. The initial draft regulations proposed expanding the reverse setback requirement from 250 feet to 2,000 feet for oil and gas facilities under application review or permitted but not drilled; or to 1,000 feet for oil and gas facilities that are actively producing, shut-in or temporarily abandoned; or 250 feet from oil and gas facilities that are plugged and abandoned. The larger setback addresses the parts of the oil and gas development process with the highest impact: drilling noise, odors, lighting, traffic, etc. Once a facility is in the production phase, nearby land use impacts are significantly reduced, which is why the proposed production setback is shorter. There is a provision noting that the reverse setback only applies to *building permits* for occupied structures and does not preclude an owner from filing applications for subdivisions and development in proximity to an oil and gas facility.

Feedback from community was that they felt the proposed reverse setbacks were appropriate but could be even larger – 3,000 feet. However, staff reached out to developers within range of existing and proposed oil and gas facilities for comment. Generally speaking, those from the development community are not in favor of increasing the reverse setbacks as this could have implications for their projects. The developer of the Prosper development near Bennett submitted comments that the proposed changes could impact their project since a Preliminary Development Plan was approved with a specified 350-foot reverse setback from existing oil and gas facilities allowed within their development plan. The Sky Ranch developer also provided feedback on the

proposed reverse setbacks, noting potentially severe economic impacts to development projects if the setbacks are adopted as originally drafted. Comment letters are provided in Attachment 2.

Staff shared this feedback with the BOCC at their September 24th study session, and the Board directed staff to include administrative ability to reduce these setbacks when a property owner provides an informed consent document that will be recorded as a Notice against the title on the property, but in no case can the setback be any closer than 250 feet. Staff has included this language in the draft regulations, including a requirement that a Notice needs to be recorded against the property to notify future buyers that an oil and gas facility is planned adjacent to their home or parcel.

At their October 15th study session, the Planning Commission inquired about why reverse setbacks were shorter than setbacks from existing buildings, wondering, if it's safer to be further away from the home, why wouldn't it be safer to construct a home further away from an oil and gas facility? Staff shared this feedback with the BOCC at their October 29th study session, and the Board agreed with this premise and directed staff to increase the reverse setback from approved but unconstructed oil and gas facilities to 3,000 feet, and staff has incorporated that change into the draft regulations.

Inspection Program

Currently, the State of Colorado conducts inspections on oil and gas wells (both ECMC and CDPHE). However, there are relatively few inspectors for the large number of well pads throughout the state. The BOCC directed staff to look into setting up a County inspection program to be funded by operators through fees. While the operators pay the state for inspection, this County program would be an enhancement to the state's program that is not able to keep up with the inspection demands and therefore increase the level of service (i.e. inspection performed). County inspectors would be responsible for enforcing County regulations. Staff has included a section in the attached code amendment, which allows the County to establish an inspection program.

The draft code amendment sets forth fines leaks, spills, and emissions from a pad and sets up an inspection program to assurance compliance with adopted operational regulations. Separately from the regulations, the Board will consider an inspections fee schedule. The draft regulations allow the Public Works Director to shut down activities under emergency situations. The Director is authorized to issue an initial fine of up to \$15,000 for each prohibited leak, spill, or emission and up to \$15,000 per day for continuing such leaks, spills, or emission from a pad. The draft regulations do not specify how often each oil and gas facility would be inspected.

General feedback from the public is that facilities should be shut down with a single violation regardless of the scale, and it was recommended that inspections occur monthly or quarterly at a minimum. Other recommendations from the public include shutting down a facility after five neighbor complaints in a 24-hour period about a particular issue. Others commented that they felt the \$15,000 per day per occurrence was not enough to deter operators and recommended a higher amount, some as high as \$100,000 per day.

At their October 1st study session, the BOCC directed staff to add language in this section noting that if inspection fees are in arrears, the applicant may not file any further applications with the County until the fees are paid. The Board also asked staff to create a procedure manual for the inspections program to include details about levels of violations and fines. If these regulations are adopted, staff will work on a procedure manual prior to the inspection program going live on July 1, 2025.

At their October 15th study session, the Planning Commission expressed concern about the flat-rate amount of fines, regardless of infraction, and recommended more detailed clarification. Staff have created a matrix of fines and penalties to further refine that information, and this is reflected in the draft regulations. Language regarding inspection enforcement was also revised to eliminate due process concerns noted in stakeholder meetings with industry.

Regulation Clean-Up

Staff have taken the time to clean-up the formatting of the regulations, typos that were found, clarified previous regulations where needed, removed a duplicate section, and moved provisions to more appropriate applicable sections in the regulations. All of these changes documented in the proposed amendment in Attachment 1.

PUBLIC AND REFERRAL COMMENTS

The proposed regulations (Attachment 1) were posted on the County's website between July 29th to September 6th, 2024, for public comment. The website provided a portal in which the public could submit comments directly to the website or upload a prepared letter. An email blast was mailed out to all stakeholders on July 29th and advertisement of the draft regulations was posted on the County's social media accounts and mentioned in County newsletters. In sum, there were a total of 73 comments in the website portal and 21 individual letters submitted from stakeholders, all of which are collated in Attachment 2 under Stakeholder Comments.

An open house was held at the Arapahoe County Fairgrounds on Tuesday, September 3rd, 2024, from 5:30-7:00 p.m. Email blasts and reminders were sent out to stakeholders and the meeting was advertised on County newsletters and social media accounts. Approximately 100 attendees

were present. Staff provided “stations” where the public could comment on different aspects of the draft oil and gas regulations by writing down comments/questions on sticky notes. In sum, there were a total of 252 sticky notes with comments from the public, which are transcribed and summarized in Attachment 2 under Stakeholder Comments.

Staff held stakeholder meetings in October with community and industry groups and provided their feedback to the BOCC who in turn, recommended changes to the draft regulations to address those concerns, which have been noted above.

STAFF FINDINGS

The proposed changes will add additional preventative measures to mitigate the impacts of oil and gas development on the community while allowing the industry to exercise their mineral rights.

STAFF RECOMMENDATION

Considering the findings and other information provided herein, Staff recommends approval of Case No. LDC23-005, Oil and Gas Regulations, subject to the following stipulation:

1. Staff, with approval of the County Attorney, may correct typographical errors and make such revisions to the Code amendment as are necessary to incorporate the approved amendment into the Land Development Code for publication.

ALTERNATIVES

The Planning Commission could take the following actions:

1. Recommend approval of the Land Development Code amendment as proposed or with modifications.
2. Continue the amendment to a time and date certain for more information.
3. Recommend denial of the Land Development Code amendment.

DRAFT MOTIONS

Recommend Approval

In the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I have reviewed the staff report, including all exhibits and attachments, and have listened to the presentation and any public comment as presented at the hearing and hereby move to recommend approval of the proposed amendment to the Land Development Code, subject to the following stipulations and specific recommendations:

1. That the financial assurance amount be established at \$95,000 or \$120,000 (*pick one*).
2. That Staff, with the approval of the County Attorney, may correct typographical errors and make such revisions to the Code amendment as are necessary to incorporate the approved amendment into the Land Development Code for publication.

Recommend Denial

In the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I have reviewed the staff report, including all exhibits and attachments, and have listened to the presentation and any public comment as presented at the hearing and hereby move to recommend denial of the proposed amendment to the Land Development Code.

1. *State any reason for denial.*

Continue to Date Certain:

In the case of LDC23-005, Oil and Gas Regulations, Land Development Code Amendment, I move to continue the hearing to [date certain], 6:30 p.m., to obtain additional information and to further consider the information presented.

ATTACHMENTS

1. Proposed LDC Amendments, redlined draft
2. Stakeholder Comments
3. Financial Assurances Research