

# Oil and Gas in Boulder County

Community Planning & Permitting County Attorney's Office Boulder County Public Health Policy Team



# Oil and Gas in Boulder County

No new oil and gas development has occurred in unincorporated Boulder County in over a decade, with no wells drilled since 2012. No operator has submitted an application for a county permit to drill in the county since 2011 and none are pending. Nonetheless, over 100 wells still exist in the eastern part of the County.

The oil and gas team remains active:

- inspecting and monitoring the existing wells (and enforcing against gas leaks that are discovered);
- monitoring plans for new wells near County borders or plans to drill into the county from other locations;
- participating in rulemakings at the Energy and Carbon Management Commission and Air Quality Control Commission;
- participating in legislative efforts; and
- staying current and involved in the development of alternative energy technologies involving drilling of wells, such as deep geothermal electricity production and carbon sequestration.

This report provides statistics and information about the state of oil and gas development and the activities of the oil and gas team in 2024.

## The Oil and Gas Team

- Kim Sanchez, Deputy Director Planning, Community Planning & Permitting and ECMC Local Governmental Designee
- Kate Burke, Senior Assistant County Attorney
- Michael Sylvester, Oil and Gas Regulatory Specialist, Parks and Open Space
- Horace "Rusty" Crane, Oil and Gas Specialist, Boulder County Public Health
- Cindy Copeland, Commissioners' Air Quality and Climate Policy Advisor
- Numerous other staff members across departments in the county

The staff time and equipment that goes into all oil and gas work is funded primarily by the \$2,083 per well annual registration fee that operators pay each summer to do business in Boulder County.

# **Current Statistics**

#### **EXISTING FACILITIES IN UNINCORPORATED BOULDER COUNTY:**

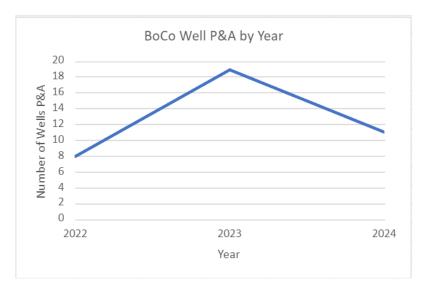
- 165 WELLS (WITH ASSOCIATED EQUIPMENT AND STRUCTURES)
- 56% LISTED IN "SHUT-IN" STATUS (NOT PRODUCING) IN 2024
- APPROXIMATELY 68 SEPARATE TANK FACILITIES





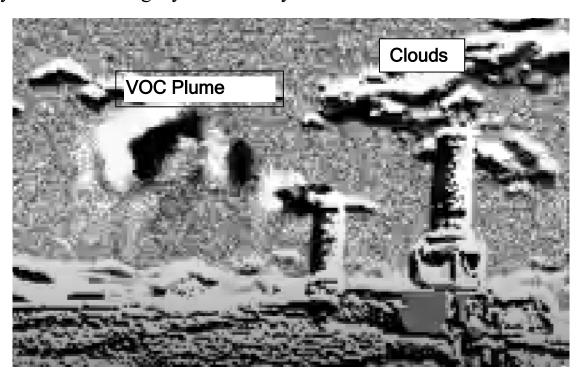
WELLS PLUGGED AND ABANDONED (P&A) IN 2024: 11 (AND 0 DRILLED)

WELLS PLUGGED AND ABANDONED (P&A) 2022-2024: 38



# **Inspection Program**

Under Article 12 of the Land Use Code, Boulder County has a robust inspection program, where staff inspects all existing wells and oil and gas facilities regularly multiple times per year, looking for leaks of gas or liquids, excessive weeds, stormwater runoff concerns, and any other safety or environmental problems. The county owns an optical gas imaging camera that visualizes and records plumes of any gaseous emission and a "sniffer" gas meter that measures concentrations of various gases, including VOCs and methane. Any gas emission greater than 500 parts per million is considered a violation of Article 12 that is subject to a fine of up to \$300 per day, which is the county's maximum fine allowable under state law for air quality violations. Spills of liquids can be subject to larger fines if appropriate under the circumstances. Operators can also be required to pay the cost of environmental analysis and testing by the county's contract environmental firm.



A VOC plume from an enclosed combustor stack at a well pad in Boulder County as caught by the OGI camera. The size of the plume is not an indication of its concentration, so not all apparently large plumes are considered violations.

Boulder County has the **premier inspection program** in the state. By inspecting each facility 2-3 times per year and imposing fines for emissions below the level the state would consider a violation, the County goes beyond other local governments and the state in its regulation of air quality from oil and gas facilities.

## 2024 Inspections by the Numbers:

- 505 inspections performed (at approx. 233 distinct facilities)
- 113 separate emissions identified
- 17 emissions (15% of total) measured above 500 parts per million of VOCs or methane and considered violations of the Land Use Code
- 10 leaks fixed at the time of the inspection
  - o Remainder fixed later and revisited for inspection
- After the plugging of one well and resolution of another emission discovery, 15 Notices of Violation issued, including fines
- \$4,500 collected in fines

## The Data Management Project

- With the help of skilled IT Department staff, the inspections team did a major re-work of its inspections data management
- Due to complexities and inaccuracies in the state's database for wells and facilities, it has been extremely difficult to be accurate in identifying each facility and ensuring that inspection information is properly tracked
- After hundreds of hours of work, the team now has a clean, consistent listing of each facility in the County and is able to tie all inspection and other information accurately to locations
- This will also enable the generation of reports with higher degrees of reliability
- Next steps include creating a full database with a public-facing aspect

# **Development Plans Near Boulder County**

Although there are no pending drilling projects within unincorporated Boulder County, in 2024 we were monitoring four projects with well sites across the county line in Weld County and its municipalities that planned to drill horizontally west to develop minerals from under portions of Boulder County.

When a well site is more than 2000' from the Boulder County line, state law does not give Boulder County regulatory authority over the well pad. The County can only provide comments to the state or county or municipality where the wells themselves are proposed.

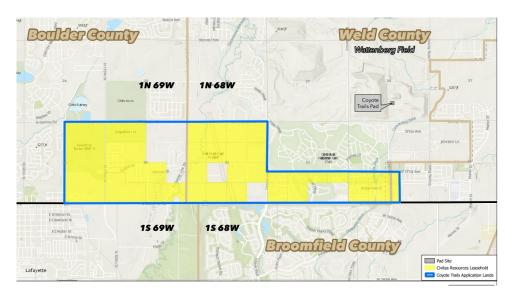
If the County itself does not own minerals that would be accessed by the wells, it has no authority over the wellbores, either. Only the ECMC can regulate the "downhole" or subsurface activities of oil and gas operators. If the operator has a valid lease to access the minerals in Boulder County, along with all other necessary permits and ownership rights, the County cannot regulate the drilling inside and underneath its jurisdiction. It's important to recognize that the horizontal wellbores coming into the County this way will be 1.5-2 miles beneath the surface.

Despite these legal limitations, the Oil and Gas Team carefully monitors these projects to determine what, if any, participation it can have in ECMC proceedings and to evaluate whether the operators are meeting all requirements.

Four such projects were under scrutiny in 2024 as described in the following pages.

## The Coyote Trails Pad

In January 2023, Extraction Oil & Gas proposed to expand an existing well pad in Weld County near the town of Erie, known as the Coyote Trails pad. The site is more than two miles east of the Boulder County line. Extraction proposed to add 7 new wells to the existing 27 wells and to use those new wells (along with an intended 11 future wells) to drill minerals from under portions of Boulder County as shown in blue and yellow below.



The hearing at the state Energy and Carbon Management Commission (ECMC) was delayed for various reasons until February 2024. Representatives of Erie, Broomfield and Boulder County objected to the expansion of the Coyote Trails pad because the original approval for the site dated from before new and improved state safety rules and because development around the site had increased significantly since the original pad was approved. The ECMC ultimately held that any expansion of the Coyote Trails pad would require a new round of scrutiny and permitting. Extraction has not initiated those proceedings, so this project is not currently active.

### The Draco Pad

In January 2024, Extraction Oil and Gas proposed a new 26-well pad in Weld County two and a half miles from the County line and close to the borders of the town of Erie. The project is called the Draco Pad. These wells would drill minerals from under Boulder County as outlined in blue and yellow below. The orientation of the project and drilling area are shown below.



Residents of the area surrounding the proposed pad, together with representatives of Erie and Boulder County, objected to the proposal because it was close to a number of existing homes as well as a future housing development and the planned location of a future school. Using the analysis Boulder County staff has long urged them to use, the ECMC found the site threatened too many adverse impacts and put the Draco application on hold, directing Extraction that it needed to examine other possible locations that would have fewer impacts on residents. That further examination is currently taking place and we may see a revised Draco pad proposal in the future.

## The File Pad

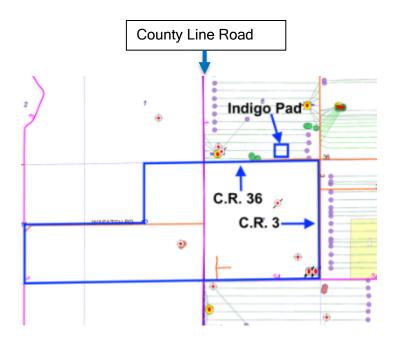
In June 2024, Crestone Peak Resources proposed an expansion of an existing well pad known as the File project. Twenty-eight new wells would be added to the twenty existing wells on this site in the town of Frederick, a mile and a half from the Boulder County line. Some of the File wells would drill minerals from underneath portions of Boulder County, in addition to areas of Weld County, as outlined in blue and yellow below.



County staff are working with representatives of Frederick and Erie to determine if there are specific environmental, health, or safety issues associated with the proposed File pad site. Staff will stay involved as this proposal moves forward.

# The Indigo Pad

In November 2024, Kerr-McGee proposed a 12-well pad in Weld County, approximately three-quarters of a mile from the Boulder County line. This project is called Indigo, and its wells would drill minerals from beneath portions of Boulder County, as shown by the blue drilling area outlined below.



This project is in its early stages and County staff are monitoring its progress under Weld County and state rules.

# Work at the Legislature



#### 24SB-185 PROTECTIONS MINERAL INTEREST OWNERS FORCED POOLING

- Exempting local government-owned minerals from forced pooling by operators
- Amending pooling procedures to make the process more fair and effective
- County staff were instrumental in initiating and shepherding this bill

#### HB24-1346 ENERGY AND CARBON MANAGEMENT IN COLORADO

- Authorizing ECMC to regulate deep geothermal electricity production
- County staff assisted in strengthening environmental measures and protections for disproportionately impacted communities

#### SB24-229 OZONE MITIGATION MEASURES

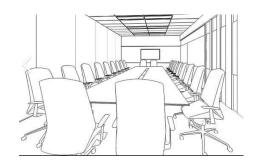
- Imposing new air quality protections, including
  - \$5,000,000 additional per year for ECMC to plug orphan and marginal wells,
  - Requirements for ECMC to improve protections for disproportionately impacted communities, and
  - A codified 50% NOx reduction target by 2030

#### SB24-230 OIL AND GAS PRODUCTION FEES

 Imposing new fees and allocating 80% of revenue generated to transit, including local transit grant program, and 20% to land conservation

<sup>\*</sup> SB24-229 and SB24-230 were agreed on as parts of a deal between the Polis administration and industry and environmental entities to simplify oil and gas legislative efforts. The deal (1) eliminated a number of proposed ballot measures on oil and gas topics; and (2) put a pause on any new proposed legislation that would "threaten" oil and gas development through 2027

# Work at State Agencies



# Energy and Carbon Management Commission

## Deep Geothermal Rulemaking

 County staff worked with local government allies to ensure that future deep geothermal operations would be conducted in the safest possible manner.

## Cumulative Impacts Rulemaking

- County staff worked with local government allies and made significant progress to ensure ECMC takes a 360 view of the accumulated impacts of oil and gas operations in light of other existing and foreseeable development.
- Boulder County was particularly successful in educating the ECMC on how to analyze proposed projects using a matrix that requires an operator first avoid negative impacts, then minimize negative impacts that are not avoided, and only then mitigate negative impacts.

## Carbon Storage (Class VI Well) Rulemaking

 County staff worked with local government allies to ensure that future Class VI operations for the injection and sequestration of carbon dioxide would be conducted in the safest possible manner.

# Air Quality Control Commission

## Greenhouse gas rule and APEN fee

 Responding to a directive from HB21-1266 to establish a greenhouse gas emissions fee for permitted sources in order to fund CDPHE's climate programs.

## Oil and gas midstream sector rule

- Requiring midstream facilities to achieve a 20.5% reduction in greenhouse gas emissions, meeting the carbon pollution reduction goals mandated by the Environmental Justice Act (HB21-1266).
- Despite Boulder County's efforts with its allies, the final rule failed to require any emissions reductions in Colorado's most polluted and most vulnerable communities or to mandate any emissions reductions prior to 2030.