Colorado Oil & Gas Conservation Commission Announces $18.25 Million Penalty for Firestone Tragedy

"COGCC’s largest enforcement penalty would fund projects to help to increase public protections"

DENVER - The Colorado Oil and Gas Conservation Commission (COGCC) today announced it is seeking an $18.25 million penalty, against Kerr McGee, a subsidiary of Occidental Petroleum. The penalty for the Firestone tragedy, which occurred April 17, 2017, is the largest enforcement penalty ever sought by the COGCC. The majority of these funds are proposed to be used to help to increase public safety by funding projects relevant to oil and gas flowline monitoring and air emissions.

“On April 17, 2017, an unthinkable tragedy happened in Firestone that forever changed the lives of the Martinez family. Our hearts still grieve for Erin Martinez’s family members who lost their lives,” said COGCC Director Jeff Robbins.

“It is my duty, along with the entire COGCC staff, to ensure that the state of Colorado’s oil and gas operations are conducted in a manner that is protective of the public’s health, safety, welfare, wildlife and the environment as directed by SB 19-181. The COGCC will continue to work to protect every person’s safety in oil and gas operations using our rulemaking process and our enforcement tools.

“Today, COGCC is seeking its largest penalty ever by more than 11 times and due to the violations, and with the loss of lives, it is fair and appropriate.”

The Commission alleges violations of four of COGCC’s in its Notice of Alleged Violation (NOAV). The $18.25 million penalty is the maximum dollar amount possible and, for the first
time, the ‘aggravating factor of death,’ which increased one of the penalties from $3.6 million to $5.4 million.

The next steps in COGCC’s enforcement process is for Kerr McGee (Occidental Petroleum) to answer to the Commission for these violations. The Commission will consider this at its Special Hearing at 1 p.m., April 6, 2020, to be held at the Ralph L. Carr Colorado Judicial Center.

In November 2019, the COGCC increased the protections to the public through stronger and more transparent flowline rulemaking. To learn more about the COGCC, visit our website: www.colorado.gov/cogcc.

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Notice of Alleged Violation (NOAV) for Firestone Tragedy
Fact Sheet

Who:
● Operator: Kerr McGee is the operator, a subsidiary of Anadarko, most recently sold to Occidental Petroleum
● Local Governments: Town of Firestone, Frederick-Firestone Fire Protection District
● Erin Martinez
● Colorado Oil & Gas Conservation Commission (COGCC)

What is COGCC’s role: The COGCC is charged with regulation of oil and gas development in a manner that is protective of the public health, safety, welfare, wildlife and the environment and in doing so, ensuring operators comply with COGCC rules and to use the available enforcement tools and measures when operators do not comply with COGCC rules.

The COGCC must protect the public’s safety in and around oil and gas operations, and we have taken the following steps in response to the Firestone tragedy:

● The November Flowline rulemaking has strengthened current rules and added new regulatory requirements that seek to prevent such a future tragedy.
● This Notice of Alleged Violation (NOAV) holds the operator accountable for its failures.
● COGCC enforcement promotes operator compliance and achieves protections.

What is a Notice of Alleged Violation (NOAV)?
A NOAV is a “Notice of Alleged Violation” as described in Commission Rule 522. If an operator has received one, the Commission has reasonable cause to believe the operator has violated a Commission Rule, Order, permit, or the Oil and Gas Conservation Act, § 34-60-101 et. seq., C.R.S. (“Act”). Click here for the NOAV FAQ: https://cogcc.state.co.us/documents/reg/Enforcement/NOAV_FAQ_20200310.pdf

The Notice of Alleged Violation (NOAV) alleges violations of the following Rules:

1. 324A.a. - “The operator shall take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare . . .”
2. 605.d. - “All valves, pipes and fittings shall be securely fastened, inspected at regular intervals, and maintained in good mechanical condition.”
3. 1102.a. - “(1) Each operator shall take reasonable precautions to prevent failures, leakage and corrosion of pipelines.
4. 1103. – “Each pipeline abandoned in place shall be disconnected from all sources and supplies of natural gas and petroleum, purged of liquid hydrocarbons, depleted to atmospheric pressure, and cut off three (3) feet below ground surface ...”

What are the next steps?

- The next steps in this process are that Kerr McGee (Occidental) will answer to the Commission for these violations.
- The Commission will consider this at a special Commission Hearing to be held 1 p.m, April 6, 2020, at the Ralph L. Carr Colorado Judicial Center.

About the penalty:

- This NOAV results in a $18.25 Million penalty
- The number of days of violation alleged for each violation is 365 days.
- The maximum daily penalty is assessed for each violation
  - $15,000 per day for Rule 324A.a.
  - $10,000 per day for Rules 605.d., 1102.a. and 1103
  - No discount is applied to any of the violations
- Staff has applied an aggravating factor of death; which is the first time it has been used by the COGCC. The aggravating factor increases one of the penalties from $3.6 million to $5.4 million.
- A majority of these penalties will fund special projects relevant to flowline monitoring and air emissions.

Staff is applying an aggravating factor of death:

- As a result of the Firestone tragedy, this became a rule in December 2018. It serves as a multiplier in the calculation of the penalty. Kerr McGee/ Occidental has agreed to the application of the aggravating factor of death.
- It is appropriate that it is applied to this NOAV.
- It is the first time it has been used by COGCC for a NOAV.

What is the next highest penalty ever issued by COGCC?:

- $18.25M penalty is higher than the next highest, which was for a $1.6M violation in 2018, with Noble Energy.
  - Noble was penalized for the Mechanical Integrity Test (MIT), which looks at the health of the well and whether it has integrity, (i.e. it is not leaking).
  - An MIT is the test that allows operators to know whether the well can withstand the pressure that it is put under.

What are the Proposed Special Public Projects to be included?

The COGCC proposes the following public projects be funded from monies from settlement of the Kerr-McGee/Occidental enforcement matter. The projects would be administered by either the COGCC or the Colorado Department of Public Health and Environment (CDPHE). All costs are estimates.
1. **Aerial Survey Project:** Perform aerial surveys at least once per year for two years in the D-J Basin, which is part of the North Front Range ozone nonattainment area. Aerial surveys have the potential to identify and significantly reduce leaks from pipelines/flowlines, production pads, tanks, central gathering facilities, compressor stations. Identifying and resolving these leaks not only results in reduced exposure to organic compounds that can affect public health and emissions of ozone precursors, it prevents the economic waste of the product. Aerial surveys may also be expanded to other oil and gas basins in Colorado. Cost $2,000,000.

2. **Mobile Air Monitoring Van:** Acquire a mobile air monitoring van to measure pollutants, and help determine and locate leaks. The van would be a supplement not only to CDPHE’s Colorado Air monitoring Mobile Lab (CAMML), but also to APCD inspectors. This mobile air monitoring van would be driven past oil and gas facilities and operations, as well as near flowlines/pipelines. As the van detects leaks, measures are taken to specifically locate the leak and promptly notify the responsible operator. Cost $1,595,000 plus $250,000 per year for 2 years operational expenses.

3. **Intrinsically Safe Optical Gas Imaging Cameras:** Currently CDPHE and COGCC use this specialized type of camera to visualize natural gas that is emitted at oil and gas facilities. These cameras can help in identifying leaks and equipment malfunctions that result in uncontrolled emissions. The cameras are nearing the end of their useful life and must be replaced. In addition there is new technology that allows the cameras to quantify (measure) the amount of gas emitted. Cost for 9 cameras and necessary equipment $1,100,000.

4. **Satellite and Remote Sensing Technology:** Over the past two years, an E&E Lab Research Fellow (embedded at CDPHE) and the team of faculty and researchers at University of Chicago have been working closely with CDPHE to identify opportunities to leverage new technology and advanced analytics to improve air quality. The E&E Lab is developing machine learning models to help CDPHE improve effectiveness and efficiency of monitoring and inspections through better resource targeting. The E&E Lab is also supporting CDPHE in assessing opportunities emerging from advances in remote sensing (e.g., satellite, drone and aircraft-mounted sensors), which are poised to drastically lower the cost of emissions monitoring while improving measurement precision. The E&E Lab is working with CDPHE to create proofs-of-concept and develop policies to leverage state-of-the-art technology to help achieve emissions reductions; and to measure the impact and effectiveness of the technology-informed approach to enforcement. Cost $1,000,000 per year.

5. **Methane Emissions Technology Evaluation Center (METEC):** With additional funding, METEC will help to develop and characterize leak detection technologies for flowlines (gas migration experiments in different soil types). Cost $1,100,000.

6. **Gas Detection and Metering Equipment:** COGCC currently needs to update gas detection and metering equipment. This equipment will allow for more accurate detection and measurement of stray gas both in the soil and atmosphere. Cost $300,000.
7. **Remote Methane Leak Detectors**: These machines are highly portable and capable of detecting small leaks in open areas, such as flowlines and pipelines. These can be used in conjunction with Optical Gas Imaging cameras to find and quantify emissions. These cameras would be deployed by COGCC flowline integrity inspectors on a regular basis. Cost $42,000

8. **Legal Expense Reimbursement**: Frederick-Firestone Fire Protection District incurred legal expenses related to the Firestone investigation and the National Transportation Safety Board process. This money would help defer those costs. Cost $50,000

<table>
<thead>
<tr>
<th>Proposed Public Projects</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerial Survey Project</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Mobile Air Monitoring Van</td>
<td>$1,595,000 + $250,000 Annually</td>
</tr>
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<td>Intrinsically Safe Optical Gas Imaging Cameras</td>
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<tr>
<td>Satellite and Remote Sensing Technology</td>
<td>$2,000,000 (for two years)</td>
</tr>
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<td>Methane Emissions Technology Evaluation Center (METEC)</td>
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</tr>
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<tr>
<td>Legal Fees</td>
<td>$50,000</td>
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<td>Proposed Special Public Project Total</td>
<td>$7,337,000</td>
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NOTICE OF ALLEGED VIOLATION - ISSUED

Per Rule 522, the Director has reasonable cause to believe that a violation of the Act, or of any Commission rule, order, or permit has occurred, the Director will require the operator to remedy the violation and may commence an enforcement action seeking penalties by issuing a Notice of Alleged Violation (NOAV). Per Rule 523, an operator who violates the Act, or a Commission rule, order, or permit may be subject to a penalty imposed by Commission order.

OPERATOR INFORMATION

OGCC Operator Number: 47120
Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779
Contact Name and Telephone:
Name: Danielle Piernot
Phone: (720) 929-6156 Fax: ( )
Email: Danielle_Piernot@oxy.com

ALLEGED VIOLATION

Rule: 1102
Rule Description: Operations, Maintenance, and Repair

Initial Discovery Date: 
Date of Violation: 
Description of Alleged Violation:

Pursuant to Rule 1102.a., Kerr McGee Oil & Gas Onshore LP ("Operator") shall take reasonable precautions to prevent failures, leakage and corrosion of pipelines.

On April 17, 2017, Frederick-Firestone F.P.D. crews responded to a home explosion and subsequent fire at 6312 Twilight Avenue in Firestone, CO. The origin and cause of the explosion was unrefined, non-odorized gas that entered the home from a cut, abandoned gas flowline that was connected to the Coors V #6-14Ji wellhead (API No. 05-123-17324).

Operator failed to take reasonable precautions to prevent failures and leakage of pipelines, violating Rule 1102.a.

Abatement or Corrective Action Required to be Performed by Operator: Corrective Action Due Date: 03/26/2020

Proper and timely abatement does not preclude the assessment of penalties and an Order Finding Violation.

In Operator’s Rule 522.d.(2) NOAV Answer, Operator shall determine and report on root cause(s) of the failure and develop a written plan that addresses how re-occurrence of this type of failure at Operator’s other facilities in Colorado will be avoided in the future, to include engineering, inspection protocols, operations, maintenance, management, and training actions, as necessary.

Rule: 1103
Rule Description: Abandonment

Initial Discovery Date: ____________  Was this violation self-reported by the operator? No
Date of Violation: ____________  Approximate Time of Violation: ____________

Was this a discrete violation of obvious duration? No

Description of Alleged Violation:

Pursuant to Rule 1103., Kerr McGee Oil & Gas Onshore LP ("Operator") shall ensure that each pipeline abandoned in place shall be disconnected from all sources and supplies of natural gas and petroleum.

On April 17, 2017, Frederick-Firestone F.P.D. crews responded to a home explosion and subsequent fire at 6312 Twilight Avenue in Firestone, CO. The origin and cause of the explosion was unrefined, non-odorized gas that entered the home from a cut, abandoned gas flowline that was connected to the Coors V #6-14Ji wellhead (API No. 05-123-17324).

Operator failed to ensure that each pipeline abandoned in place shall be disconnected from all sources and supplies of natural gas, violating Rule 1103.

Abatement or Corrective Action Required to be Performed by Operator: In Operator’s Rule 522.d.(2) NOAV Answer, Operator shall determine and report on root cause(s) of the failure and develop a written plan that addresses how re-occurrence of this type of failure at Operator’s other facilities in Colorado will be avoided in the future, to include engineering, inspection protocols, operations, maintenance, management, and training actions, as necessary.

Corrective Action Due Date: 03/26/2020

Proper and timely abatement does not preclude the assessment of penalties and an Order Finding Violation.

Rule: 324A.a
Rule Description: General Environmental Protection

Initial Discovery Date: ____________  Was this violation self-reported by the operator? No
Date of Violation: ____________  Approximate Time of Violation: ____________

Was this a discrete violation of obvious duration? No

Description of Alleged Violation:

Pursuant to Rule 324A.a., Kerr McGee Oil & Gas Onshore LP ("Operator") shall take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility to prevent the unauthorized discharge or disposal of oil, gas, E&P waste, chemical substances, trash, discarded equipment or other oil field waste.

On April 17, 2017, Frederick-Firestone F.P.D. crews responded to a home explosion and subsequent fire at 6312 Twilight Avenue in Firestone, CO. The origin and cause of the explosion was unrefined, non-odorized gas that entered the home from a cut, abandoned gas flowline that was connected to the Coors V #6-14Ji wellhead (API No. 05-123-17324).

Operator failed to take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, taking into consideration cost-effectiveness and technical feasibility to prevent the unauthorized discharge of gas, violating Rule 324A.a.

Abatement or Corrective Action Required to be Performed by Operator: In Operator’s Rule 522.d.(2) NOAV Answer, Operator shall determine and report on root cause(s) of the failure and develop a written plan that addresses how re-occurrence of this type of failure at Operator’s other facilities in Colorado will be avoided in the future, to include engineering, inspection protocols, operations, maintenance, management, and training actions, as necessary.

Corrective Action Due Date: 03/26/2020

Proper and timely abatement does not preclude the assessment of penalties and an Order Finding Violation.

Rule: 605.d
Rule Description: O&G Facilities - Mechanical Conditions

Initial Discovery Date: ____________  Was this violation self-reported by the operator? No
Date of Violation: ____________  Approximate Time of Violation: ____________

Was this a discrete violation of obvious duration? No

Description of Alleged Violation:

Pursuant to Rule 605.d., Kerr McGee Oil & Gas Onshore LP ("Operator") shall keep all valves, pipes, and fittings securely fastened; inspected at regular intervals; and maintained in good mechanical condition.
On April 17, 2017, Frederick-Firestone F.F.D. crews responded to a home explosion and subsequent fire at 6312 Twilight Avenue in Firestone, CO. The origin and cause of the explosion was unrefined, non-odorized gas that entered the home from a cut, abandoned gas flowline that was connected to the Coors V #6-14Ji wellhead (API No. 05-123-17324).

Operator failed to keep all pipes inspected at regular intervals, and maintained in good mechanical condition, violating Rule 605.d.

Abatement or Corrective Action Required to be Performed by Operator:  
Corrective Action Due Date: 03/26/2020

Proper and timely abatement does not preclude the assessment of penalties and an Order Finding Violation.

In Operator’s Rule 522.d.(2) NOAV Answer, Operator shall determine and report on root cause(s) of the failure and develop a written plan that addresses how re-occurrence of this type of failure at Operator’s other facilities in Colorado will be avoided in the future, to include engineering, inspection protocols, operations, maintenance, management, and training actions, as necessary.

PENALTY

Penalties for violations alleged in this NOAV will be calculated pursuant to Rule 523, with daily penalties accruing pursuant to Section 34-60-121(1), C.R.S.

ANSWER

Pursuant to Rule 522.d.(2), the operator must file an Answer to this NOAV within 28 days of its receipt, or a default judgement may be entered. Hard copy answers are filed with the Commission Secretary at the Commission’s Denver office and should also be emailed to dnrcogccenforcement@state.co.us.

NOAV ISSUED

NOAV Issue Date: 03/12/2020

COGCC Representative Signature:

COGCC Representative: Jeremy Ferrin  
Title: Enforcement Supervisor

Email: jeremy.ferrin@state.co.us  
Phone Num: (303) 694-2100x5186

ATTACHMENT LIST

View Attachments in Imaged Documents on COGCC website (http://ogccweblink.state.co.us/) - Search by Document Number.

<table>
<thead>
<tr>
<th>Document Number</th>
<th>Description</th>
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<td>NOAV CERTIFIED MAIL RECEIPT</td>
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Total Attach: 1 Files