

COLORADO OIL AND GAS CONSERVATION COMMISSION

Proposed rules for “Green Completions”

June 27, 2008

What are “Green Completions”

- Green completion techniques are methods that minimize the amount of natural gas and oil vapors that are released to the environment when a well is being flowed during the completion phase of a well.

Benefits of Green Completions

- Green Completions minimizes the release of green house gases such as methane
- Green Completions minimize the release of Volital Organic Compounds (VOC's) that result in odor complaints
- Green Completions maximize the recovery of the natural resource by diverting gas to the sales line instead of the atmosphere

Green Completion Techniques are Not New

- The COGCC awarded British Petroleum an “Outstanding Operations Award” in 2004 for using closed loop completion technology in the San Juan Basin
- The Environmental Protection Agency invited Williams Production Company to discuss their green completion program in the Piceance Basin as part of EPA’s Gas Star program in 2006







Special Green Completion Rules

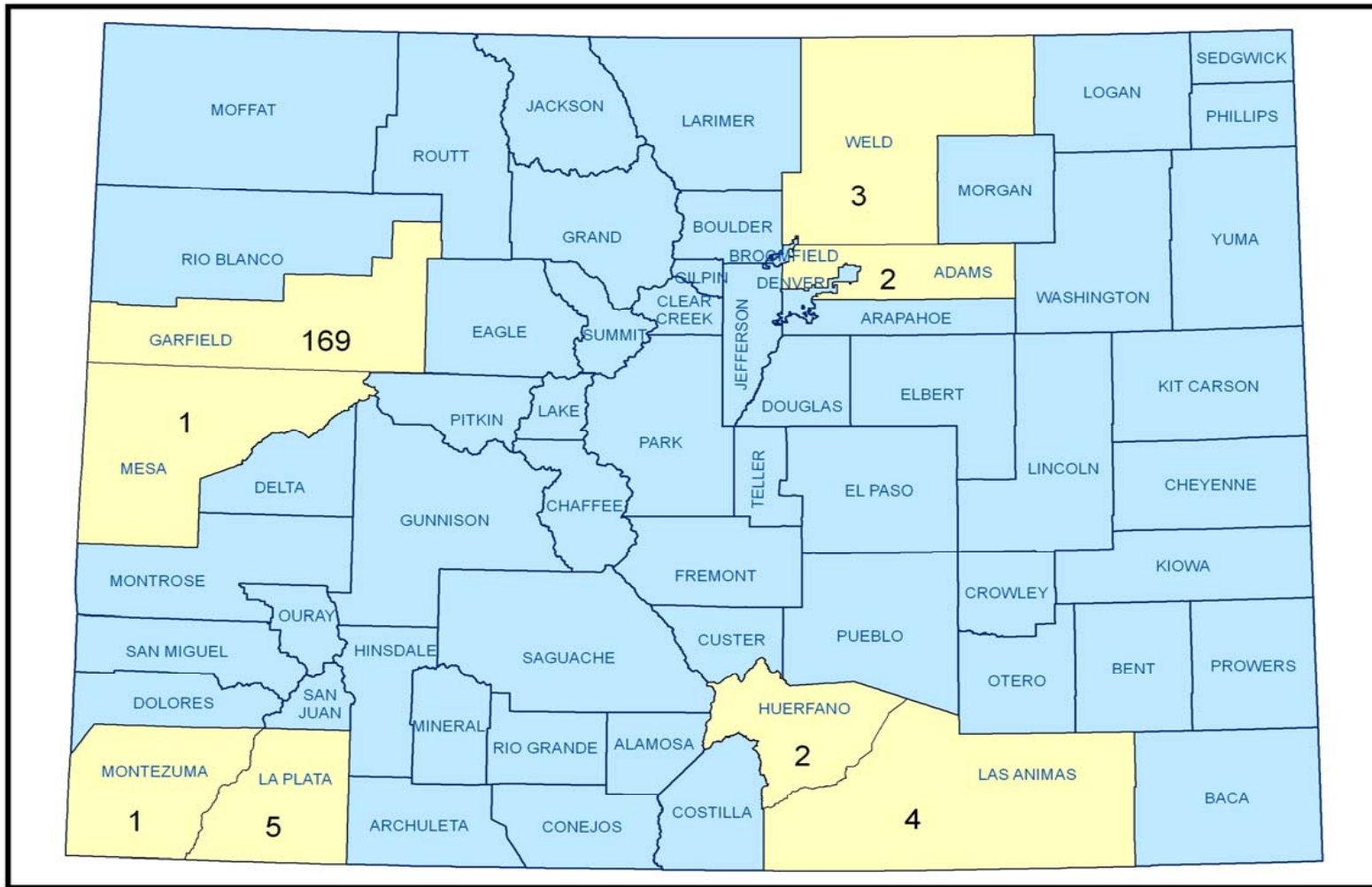
- The proposed rules would require green completions enable the well to flow more than 500 MCFD against more than 500 psi
- Operators shall employ sand traps, surge vessels, separators, and tanks as soon as practicable to maximize resource recovery and minimize releases to the environment

Special Green Completion Rules

- All salable gas shall be directed to the sales line as soon as practicable or shut in and conserved.
- Operators may request a variance from the Director if they believe that ... green completions are not feasible ... or would endanger the safety of personnel or the public

INDUSTRY COMMENTS

- Green completions are not practical in their area due to low reservoir pressure
- Green completion practices shall not apply to wells that only produce methane gas or produce water that does not contain condensate



**ODOR COMPLAINTS BY COUNTY
1997 TO 2008**

INDUSTRY COMMENTS

- Green completion practices should not be required for exploratory wells where there is no sales line.
- Flowing back to open top tanks or closed top tanks should be at the discretion of the operator.

INDUSTRY COMMENTS

- Portions of the green completion rule 805.b.(3) conflict with odor rules in the preceding subsection 805.b.(2).