

## PROPOSED OIL AND GAS REGULATIONS

The draft regulations set forth in Ordinance No. 1986 were adopted by City Council on August 27, 2013 on First Reading and include two paths for approval of drilling operations. The first is the City's standard Use by Special Review process, which includes some enhanced Best Management Practices (BMPs). The draft regulations, set forth in the proposed ordinance, leave the City's current Use by Special Review Permit process for oil and gas wells in place. In other words, the process of hearings before the Planning and Zoning Commission and the City Council would still be required if the operator chooses to go through the Use by Special Review Permit process.

The second is an alternative to the Use by Special Review Permit process that is available for the operator under these draft regulations. It is called an Administrative Approval by Memorandum of Understanding (MOU). The Administrative Approval by Memorandum of Understanding process allows for an MOU that includes all the Best Management Practices determined necessary by the City to be administratively approved and signed by the operator and the City and County Manager, if the operator voluntarily agrees to these best management practices that are more stringent than those in the Use by Special Review process. It is important to note that notice and a neighborhood meeting are required for new wells drilled under the Administrative Approval by Memorandum of Understanding process.

There are more than 30 provisions that exceed current state regulations in the MOU process. Some of these requirements are in the Use by Special Review provisions, to the extent allowable under the law. The Best Management Practices in the draft Oil and Gas Regulations include:

- Operator to submit 10 year Comprehensive Development Plan
- Operator shall provide notice to all owners within 2,640 feet of applications for drilling operations
- Operator shall inspect berms and containment devices at each site on a daily basis
- Operator shall employ closed looped drilling in every circumstance- (Wells drilled, completed and operated using closed loop pitless systems for containment and recycling of drilling, flowback and produced fluids)
- Operator shall anchor all well site equipment
- Operator shall disclose chemicals to City before brought on site
- Operator shall ensure no visible dust emissions from access roads to extent practical and avoid dust suppression within 300 feet of water
- Operator shall submit safety data sheets for dust suppressants used by operator on roads
- Operator has a duty to minimize emissions from operations including consolidation of facilities, monitoring systems, and gathering and water delivery systems

- Operator shall capture and route all vapors to a control device with at least a 98% vapor capture efficiency and operate such equipment in accordance with manufacturer specifications
- Operator shall employ plunger lifts or other similar technology to control emissions from well blowdowns on new wells. (Over time, liquids build up in the well and reduce and eventually eliminate the production of gas so operators need to clear the liquids out of the well to maintain production. A blowdown occurs when the operator opens the top of the well casing and lets the gas vent to the atmosphere and the liquids blow out of the well. If an operator is onsite, the duration of the blowdown can be shortened since the operator can monitor the progress and close the well as soon as the liquids are out of the well. A plunger lift is a device that allows the operator to clear the liquids from the well without opening it to the atmosphere so the venting of gas and the associated emissions do not occur. A plunger installed in the well is used to lift the fluids out of the well so that the liquids can be cleaned out with little or no venting.)
- Operator shall be present onsite during all manual blowdowns.
- Operator shall employ no bleed pneumatic controllers. (Controllers are equipment used to regulate gas flow and pressure; no bleed pneumatic controllers are a type that do not bleed natural gas into the atmosphere by design.)
- If flaring of gas is allowed under state regulation, flare shall be designed so there are no visible emissions; Operator shall employ an automatic pilot to ensure flare is operating.
- Operator to develop Leak Detection and Repair Plan that requires quarterly inspections of all components on well sites and prompt repair of leaking components, with reporting to City. (Reduce leaks by requiring a Leak Detection and Repair Plan (LDAR) to detect and repair leaking pumps, flanges, seals, connectors, etc., at well sites)
- Operator to fund ambient air sampling.
- Operator to respond to air quality action days and emission reduction where feasible.
- Operator to certify annually that it is in compliance with all air quality provisions of the Agreement.
- Operator shall utilize green completions for all wells, consistent with future federal rules. (Green completions require gas to be captured at the well head during and immediately after well completion instead of releasing it into the atmosphere or flaring it.)
- Operator to perform water quality monitoring under COGCC Rule 609, which otherwise does not apply in the City. (Rule 609 requires initial baseline samples and subsequent monitoring samples from all available water sources, up to a maximum of four, within ½ mile of the proposed well, with testing to be conducted between six and 12 months and between 60 and 72 months of completion of well. The MOU also requires an additional test at three years.)
- Operator to comply with more stringent requirements for flammable material.
- Operator to comply with floodplain requirements under municipal code.

- Operator to implement landscaping requirements consistent with a City approved plan.
- Operator to implement lighting plan that goes beyond State rules.
- Operator shall not engage in routine maintenance of machinery within 300 feet of a water body.
- Operator will ensure flowlines are at least 50 feet away from buildings if feasible
- Operator shall record all flowlines and submit to City.
- Operator shall remove equipment within 30 days from completion.
- Operator shall fund soil gas monitoring.
- Operator shall not discharge fluids at well site.
- Operator shall not use produced and flowback water for dust suppression.
- Operator shall disclose to the City water sources used by the Operator and water disposal methods.
- Operator shall provide information to the City regarding plugged and abandoned wells.
- Operator to identify City as additional insured on policy; insurance policy limits increased above State minimum.
- Operator shall participate in Natural Gas STAR program to encourage innovation in pollution controls at drill sites.
- Operator is obligated to defend and indemnify the City from claims relating to or arising out of the well sites.