

DRAFT OIL & GAS RULES AUGUST 2020

Quality of Life-Related Rules

Draft Rule/Requirement	Why	Other Jurisdictions/Agency
Noise		
Noise limit of 65 db measured 25 ft from nearest occupied structure	Noise is the most frequent complaint from neighbors. 65 db will be achievable with sound walls.	Broomfield: 45 db night (proposed rules) Boulder: 50 db night (proposed rules) Larimer: 50 db night (current rules)
Ambient Noise Survey for well pads and compressor stations	May relieve requirements for noise mitigation in noisy areas. Could waive requirement for remote areas.	Adams (current rules) Aurora (proposed rules) Commerce City (current rules)
Noise Modelling and Noise Mitigation Plan	Lays out the level of noise predicted and how it will be addressed if above limit	Adams (current rules) Broomfield (current rules) Larimer (current rules)
Address low-frequency noise	Very disruptive to those impacted	Aurora (proposed rules) Commerce City (current rules) Larimer (current rules)
Sound walls if A- and C-scale noise predicted to exceed 65 db at the property line of a residence	Standard procedure for one of our operators	Boulder (proposed rules) Broomfield (Operator Agreement), (current rules), (proposed rules)
Use best available technology to reduce noise during drilling and completion	Allows operators flexibility	Aurora (proposed rules) - Use Quiet Technology
Electric drilling or production equipment where equipment and power are available	Far less noisy	Boulder (proposed rules) Commerce City (current rules) Larimer (current rules) Thornton (current rules)
Mufflers, covers or insulation on diesel equipment; Insulate a compressor building	Most effective methods to reduce equipment noise during drilling, fracking and gas compression	Larimer (current rules) Boulder (proposed rules)

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Vents and blowdown silencers within ½ mil of a home	Sound similar to a jet https://www.youtube.com/watch?v=gR-Csmuhauo	Aurora (proposed rules)
No unloading of tubular goods at night	One of the noisiest well pad noises that carries offsite	Adams (current rules) Aurora (proposed rules) Boulder (proposed rules) Broomfield (current + proposed)
Minimize engine idling	Reduces offsite noise (and odor) migration	Aurora (proposed rules)
Heavy trucks and deliveries prohibited at night except where unavoidable (delivery of a drilling rig)	Reduces nighttime noise at neighboring properties along the roads	Several jurisdictions have general rules for reducing truck traffic.
24-hr phone number posted for noise complaints	Nighttime noise can be more disruptive; Operators should receive complaints in real time	Unique to AC
Noise limit more lenient where high ambient noise levels exist	Noise mitigations may be waived where ambient noise levels are high	Unique to AC
Odor Reduction/Prevention		
Odor prevention (through use of low-odor mud)	Odor is a frequent complaint. This is a standard procedure for one of our operators	Aurora (proposed rules) Boulder (current and proposed) Broomfield (proposed rules) Larimer (current rules) Weld (current rules – CDPHE odor standards)
Operator shall use closed-loop systems instead of open pits	Reduces odors	Aurora (proposed rules) Broomfield (proposed rules) Larimer (current rules) Thornton (current rules)
Operator shall not plow hydrocarbon-bearing drill cuttings into the surface soil unless approved by landowner	Reduces odors and soil contamination – although eventually the soil recovers	Aurora (proposed rules)
Operator shall proactively respond to and address odor complaints	Ensures quick resolution of odor issues	Adams (current rules) Larimer (current rules)
Mud on Roads		
Prevention and removal of mud on roads	Less frequent complaint, although upsets citizens	Adams (current rules) Aurora (proposed rules) Boulder (current rules) Broomfield (proposed rules) Larimer (current rules)

Draft Rule/Requirement	Why	Other Jurisdictions/Agency
		Thornton (current rules)
Site Lighting		
Lighting directed downward and inward	Existing COGCC rule and in MOU	Weld (current rules) Broomfield (proposed rules)
Lights mounted on the inside of sound walls	Lighting is one of the most common complaints	Unique to AC - but one operator already does this
IESNA – full cutoff or shielded	Lighting is one of the most common complaints	Broomfield (Operator Agreement) Broomfield (proposed rules) Boulder (proposed rules)
Visual Mitigation		
If within ¼ mi of an occupied structure, platted lot or parcel of 40 acres or smaller, pad must be designed with some form of visual mitigation.	Operator can choose the form(s) of visual mitigation. No visual mitigation required for pads >1/4 mi; Offers relief for future development; Mitigates view from roads	Adams (current rules) Aurora (proposed rules) Boulder (proposed rules) Broomfield (Op agreement)
Visual mitigation installed within 3 months of well completion	Limits the time of visual disruption to neighbors; Allows for homes to be listed w/in 3 months of completion with mitigation of pads	Unique to AC
No weeds, rubbish or debris	Sets a reasonable standard; Decreases chance of brush fires.	Adams (current rules) Aurora (current rules) Broomfield (Operator Agreement) Boulder (current & proposed rules) Weld (current rules)
No storage of equipment not related to that pad	Sets a reasonable standard; Outdoor storage of equipment is an industrial use.	Aurora (proposed rules) Broomfield (Operator Agreement)
Privacy fencing colors and height	Hides pad to a large extent	Aurora (proposed rules) Adams (current rules) Boulder (current & proposed rules) Broomfield (Operator Agreement) Weld (current rules)
Use of existing contours and existing vegetation to conceal the site, whenever possible	Conceals site to some extent	Thornton similar (current rules)

Draft Rule/Requirement	Why	Other Jurisdictions/Agency
Minimize the size and number of tanks, wherever possible	Helps to minimize the visual impact	Boulder (current rules) Broomfield (current rules) Thornton similar (current rules)
Site Security		
Site secured when Operator is not on site; fencing at least 8' high.	Reduces the chance of trespassing, vandalism and unauthorized person injury	Aurora similar (proposed rule) Boulder (proposed rules) Broomfield similar (current rule) Thornton (current rules)
Emergency access hardware required	Aids emergency responders	Fire district recommendation
Traffic Mitigation		
Restrict traffic during commuting and school bus hours	Minimizes traffic congestion during peak hours and helps to avoid potential accidents with school buses and children	Adams (current rules) Aurora (proposed rules) Broomfield (proposed rules) Commerce City (current rules)
Use pipelines wherever available	Takes a portion of heavy truck traffic off roads	Aurora (proposed rules) Boulder (current rules) Broomfield (current rules) Commerce City (current rules) Larimer (current rules)
Use temporary water lines for drilling + completion	Takes a portion of heavy truck traffic off roads	Adams (current rules) Aurora (proposed rules) Larimer (current rules)
Wildlife, Wetlands, Riparian Areas and Streams		
Must implement the recommendations of CPW unless waived in part by the PWD Director	Protects wildlife and wildlife habitat	Unique to AC
Determine wetlands boundaries using Professional Wetlands Scientist and indicate on plan set	Helps to preserve wetlands which are part of critical habitat	Boulder (current rules)
No construction within 300' of wetlands boundaries	Helps to preserve wetlands which are part of critical habitat	Aurora (proposed rules) Requested by CPW
Bore under defined bed and bank	Preserves vegetation and habitat of tributaries and streams	Requested by CPW
No pads in riparian areas	Helps to protect riparian areas which are critical habitat	Boulder (current rules)
Bore under riparian areas for flowlines and pipelines	Helps to protect vegetation growing on the borders of riparian areas, such as cottonwood trees	Requested by CPW
Use culverts for crossing of riparian areas by access roads.	Helps to preserve riparian areas which are critical habitat and to maintain wildlife movement corridors	Requested by CPW

Draft Rule/Requirement	Why	Other Jurisdictions/Agency
Fencing that bisects streams is prohibited	Wildlife use streams for migration	Requested by CPW
Floodplains		
Storage of hazardous or floatable materials is prohibited in floodplains	Helps to avoid spills in floodplains	Boulder (proposed rules)
Aboveground oil & gas facilities must be located outside of floodplains unless no other sites can be reasonably used	Preserves floodplains	Boulder (proposed rules) Weld (current rules)