AESTHETIC AND NOISE CONTROL REGULATIONS

801. INTRODUCTION

The rules and regulations in this section are promulgated to control aesthetics and noise impacts during the drilling, completion and operation of oil and gas wells and production facilities. Any Colorado county, home rule or statutory city, town, territorial charter city or city and county may, by application to the Commission, seek a determination that the rules and regulations in this section, or any individual rule or regulation, shall not apply to oil and gas activities occurring within the boundaries, or any part thereof, of any Colorado county, home rule or statutory city, town, territorial charter city or city and county, such determination to be based upon a showing by any Colorado county, home rule or statutory city, town, territorial charter city or city and county that, because of conditions existing therein, the enforcement of these rules and regulations is not necessary within the boundaries of any Colorado county, home rule or statutory city, town, territorial charter city or city and county for the protection of public health, safety and welfare.

802. NOISE ABATEMENT

a. The goal of this rule is to identify noise sources related to oil and gas operations that impact surrounding landowners and to implement cost-effective and technically-feasible mitigation measures to bring oil and gas facilities into compliance with the allowable noise levels identified in subsection c. Operators should be aware that noise control is most effectively addressed at the siting and design phase, especially with respect to centralized compression and other downstream "gas facilities" (see definition in the 100 Series of these rules).

b. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels.

ZONE	**7:00 am to next 7:00 pm**	**7:00 pm to next 7:00 am**
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

The type of land use of the surrounding area shall be determined by the Director in consultation with the Local Governmental Designee taking into consideration any applicable zoning or other local land use designation. In the hours between 7:00 a.m. and the next 7:00 the noise levels permitted above may be increased ten (10) dB(A) for a period not to exceed fifteen (15) minutes in any one (1) hour period. The allowable noise level for periodic, impulsive or shrill noises is reduced by five (5) dB (A) from the levels shown.

(1) Except as required pursuant to Rule 604.c.(2)A., operations involving pipeline or gas facility installation or maintenance, the use of a drilling rig, completion rig, workover rig, or stimulation is subject to the maximum permissible noise levels for industrial zones.

control measures available to mitigate such low frequency noise impact. Such study shall be provided to the Commission for consideration and possible action.

802.e. Exhaust from all engines, motors, coolers and other mechanized equipment shall be vented in a direction away from all Building Units.

802.f. All Oil and Gas Facilities with engines or motors which are not electrically operated that are within four hundred (400) feet of Building Units shall be equipped with quiet design mufflers or equivalent. All mufflers shall be properly installed and maintained in proper working order.

803. LIGHTING

To the extent practicable, site lighting shall be directed downward and inward and shielded so as to avoid glare on public roads and Building Units within one thousand (1000) feet.

804. VISUAL IMPACT MITIGATION

Production facilities, regardless of construction date, which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to but slightly darker than the surrounding landscape.

805. ODORS AND DUST

a. **General.** Oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.

b. **Odors.**

(1) **Compliance.**

A. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

B. No violation of Rule 805.b.(1) shall be cited by the Commission, provided that the practices identified in Rule 805.b.(2) are used.

(2) **Production Equipment and Operations.**

A. **Crude Oil, Condensate, and Produced Water Tanks.** All crude oil, condensate, and produced water tanks with uncontrolled actual emissions of volatile organic compounds (VOC) of five (5) tons per year (tpy) or greater, located within 1,320 feet of a Building Unit, or a Designated Outside Activity Area shall use an emission control device capable of achieving 95% control efficiency of VOC and shall obtain a permit as required by Colorado Department of Public Health and Environment, Air Pollution Control Commission Regulation as set forth in 805. b. (1).

B. **Glycol Dehydrators.** All glycol dehydrators with uncontrolled actual emissions of VOC of five (5) tpy or greater, located within 1,320 feet of a Building Unit , or a Designated Outside Activity Area shall use an emission control device capable of achieving 90% control efficiency of VOC and shall obtain a permit as required by Colorado Department of Public Health and Environment, Air Pollution Control Commission Regulation as set forth in 805.b.(1).

C. **Pits.** Pits with uncontrolled actual emissions of VOC of five (5) tpy or greater shall not be located within 1,320 feet of a Building Unit, or a Designated Outside Activity Area. For the purposes of this section, compliance with Rule 902.c is required. Operators may provide site-specific data and analyses to COGCC staff establishing that pits potentially subject to this subsection do not have a potential to emit VOC of five (5) tpy or greater.

D. **Pneumatic Devices.** Low- or no-bleed pneumatic devices must be used when existing pneumatic devices are replaced or repaired, and when new pneumatic devices are installed.

(3) **Well completions.**

A. Green completion practices are required on oil and gas wells where reservoir pressure, formation productivity, and wellbore conditions are likely to enable the well to be capable of naturally flowing hydrocarbon gas in flammable or greater concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure of five hundred (500) psig or sales line pressure, whichever is greater. Green completion practices are not required for exploratory wells, where the wells are not sufficiently proximate to sales lines, or where green completion practices are otherwise not technically and economically feasible.

B. Green completion practices shall include, but not be limited to, the following emission reduction measures:

i. The operator shall employ sand traps, surge vessels, separators, and tanks as soon as practicable during flowback and cleanout operations to safely maximize resource recovery and minimize releases to the environment.

ii. Well effluent during flowback and cleanout operations prior to encountering hydrocarbon gas of salable quality or significant volumes of condensate may be directed to tanks or pits (where permitted) such that oil or condensate volumes shall not be allowed to accumulate in excess of twenty (20) barrels and must be removed within twenty-four (24) hours. The gaseous phase of non-flammable effluent may be directed to a flare pit or vented from tanks for safety purposes until flammable gas is encountered.

iii. Well effluent containing more than ten (10) barrels per day of condensate or within two (2) hours after first encountering hydrocarbon gas of salable quality shall be directed to a

combination of sand traps, separators, surge vessels, and tanks or other equipment as needed to ensure safe separation of sand, hydrocarbon liquids, water, and gas and to ensure salable products are efficiently recovered for sale or conserved and that non-salable products are disposed of in a safe and environmentally responsible manner.

iv. If it is safe and technically feasible, closed-top tanks shall utilize backpressure systems that exert a minimum of four (4) ounces of backpressure and a maximum that does not exceed the pressure rating of the tank to facilitate gathering and combustion of tank vapors. Vent/backpressure values, the combustor, lines to the combustor, and knock-outs shall be sized and maintained so as to safely accommodate any surges the system may encounter.

v. All salable quality gas shall be directed to the sales line as soon as practicable or shut in and conserved. Temporary flaring or venting shall be permitted as a safety measure during upset conditions and in accordance with all other applicable laws, rules, and regulations.

C. An operator may request a variance from the Director if it believes that using green completion practices is infeasible due to well or field conditions, or would endanger the safety of wellsite personnel or the public.

D. In instances where green completion practices are not technically feasible, operators shall employ Best Management Practices (BMPs) to reduce emissions. Such BMPs shall consider safety and shall include measures or actions to minimize the time period during which gases are emitted directly to the atmosphere, and monitoring and recording the volume and time period of such emissions.

805.c. **Fugitive dust.** Operators shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high- wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be required if technologically feasible and economically reasonable to minimize fugitive dust emissions.