

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF CHANGES TO THE RULES AND ) CAUSE NO. 1R  
REGULATIONS OF THE OIL AND GAS CONSERVATION )  
COMMISSION OF THE STATE OF COLORADO ) ORDER NO. 1R-99

REPORT OF THE COMMISSION

Pursuant to a hearing before the Oil and Gas Conservation Commission on December 6, 2005, in Suite 801, 1120 Lincoln Street, Denver, Colorado, the Oil and Gas Conservation Commission promulgated amendments to its Rules and Regulations as described below:

**AESTHETIC AND NOISE CONTROL REGULATIONS**

**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. 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. The type of land use of the surrounding area shall be determined by the Commission in consultation with the local governmental designee taking into consideration any applicable zoning or other local land use designation.

c. In the hours between 7:00 a.m. and the next 7:00 p.m. the noise levels permitted below 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.

<b>ZONE</b>	<b>7:00 am to next 7:00 pm</b>	<b>7:00 pm to next 7:00 am</b>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Construction commencing after January 1, 2007:		
	50db(A)	45 db(A)
Commercial	60 db(A)	55 db(A)
Light industrial	70 db(A)	65 db(A)

Industrial

80 db(A)

75 db(A)

In remote locations, where there is no reasonably proximate occupied structure or designated outside activity area, the light industrial standard may be applicable.

Pursuant to Commission inspection or upon receiving a complaint from a nearby property owner or local governmental designee regarding noise related to oil and gas operations, the Commission shall conduct an onsite investigation and take sound measurements as prescribed herein.

The following provide guidance for the measurement of sound levels and assignment of points of compliance for oil and gas operations:

(1) Sound levels shall be measured at a distance of three hundred and fifty (350) feet from the noise source. At the request of the complainant, the sound level shall also be measured at a point beyond three hundred fifty (350) feet that the complainant believes is more representative of the noise impact. If an oil and gas well site, production facility or gas facility is installed closer than three hundred fifty (350) feet from an existing occupied structure, sound levels shall be measured at a point twenty-five (25) feet from the structure towards the noise source. Noise levels from oil and gas facilities located on surface property owned, leased or otherwise controlled by the operator shall be measured at three hundred and fifty (350) feet or at the property line, whichever is greater.

In situations where measurement of noise levels at three hundred and fifty (350) feet is impractical or unrepresentative due to topography, the measurement may be taken at a lesser distance and extrapolated to a 350-foot equivalent using the following formula:

$$\text{db(A)}_{\text{DISTANCE 2}} = \text{db(A)}_{\text{DISTANCE 1}} - 20 \times \log_{10}(\text{distance 2}/\text{distance 1})$$

(2) Sound level meters shall be equipped with wind screens, and readings taken when the wind velocity at the time and place of measurement is not more than five (5) miles per hour.

(3) Sound level measurements shall be taken four (4) feet above ground level.

(4) Sound levels shall be determined by averaging minute-by-minute measurements made over a minimum fifteen (15) minute sample duration if practicable. The sample shall be taken under conditions that are representative of the noise experienced by the complainant (e.g., at night, morning, evening, or during special weather conditions).

(5) In all sound level measurements, the existing ambient noise level from all other sources in the encompassing environment at the time and place of such sound level measurement shall be considered to determine the contribution to the sound level by the oil and gas operation(s).

d. In situations where the complaint or Commission onsite inspection indicates that low frequency noise is a component of the problem, the Commission shall obtain a sound level measurement twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the Commission shall require the operator to obtain a low frequency noise impact analysis by a qualified sound expert, including identification of any reasonable control measures available to mitigate such low frequency noise impact. Such study shall be provided to the Commission for consideration and possible action.

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

f. All facilities within four hundred (400) feet of occupied buildings with engines or motors which are not electrically operated shall be equipped with quiet design mufflers or equivalent. All mufflers shall be properly installed and maintained in proper working order.

Attached, as Exhibit A, is a statement giving the basis and purpose of the revisions and such statements are incorporated herein by reference.

DONE AND PERFORMED by the Oil and Gas Conservation Commission of the State of Colorado this \_\_\_\_\_ day of December, 2005.

IN THE NAME OF THE COLORADO  
OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By \_\_\_\_\_  
Patricia C. Beaver, Secretary

Dated at Suite 801  
1120 Lincoln Street  
Denver, Colorado 80203  
December 6, 2005

Exhibit A  
Statement of Basis and Purpose

This statement sets forth the basis, specific authority, and purpose for the amendments to Rule 802. of the Rules and Regulations promulgated by the Colorado Oil and Gas Conservation Commission. This statement is hereby incorporated by reference in the Rules adopted.

**A. AUTHORITY**

These rules, as amended, are adopted by the Colorado Oil and Gas Conservation Commission under the provision of Title 34, Article 60 of the Colorado Revised Statutes, as amended.

§34-60-102., C.R.S., as amended, declares that it is in the public interest to foster, encourage, and promote the development, production, and utilization of the oil and gas resources in the state of Colorado in a manner consistent with protection of public health, safety, and welfare.

§34-60-103.(6.5), C.R.S. defines “Oil and gas operations” to mean exploration for oil and gas, including the conduct of seismic operations and the drilling of test bores; the siting, drilling, deepening, recompletion, reworking, or abandonment of an oil and gas well, underground injection well, or gas storage well; production operations related to any such well including the installation of flowlines and gathering systems; the generation, transportation, storage, treatment, or disposal of exploration and production wastes; and any construction, site preparation, or reclamation activities associated with such operations.

§34-60-105 (1), C.R.S. provides that “The commission has jurisdiction over all persons and property, public and private, necessary to enforce the provisions of this article, and has the power to make and enforce rules, regulations, and orders pursuant to this article, and to do whatever may reasonably be necessary to carry out the provisions of this article. ...”

§34-60-106 (2)(a), C.R.S. provides that the commission has the authority to regulate “[t]he drilling, producing and plugging of wells and all other operations for the production of oil or gas; . . .”

§34-60-106 (2)(d), C.R.S. gives the commission authority to regulate “[o]il and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil or biological resource to the extent necessary to protect public health, safety, and welfare, in consideration of cost-effectiveness and technical feasibility.”

§34-60-106 (11), C.R.S. mandates the commission to “promulgate rules and regulations to protect the health, safety and welfare of the general public in the conduct of oil and gas operations.”

## B. PURPOSE

### 800 Series

The 800 Series of the Rules and Regulations of the Oil and Gas Conservation Commission pertain to aesthetic and noise control regulations during the drilling, completion and operation of oil and gas wells and production facilities.

**Add new language to describe that the noise abatement rule is designed to be a source-based rule. (802.a.) Add a requirement to clarify that the rule applies to all well sites and production facilities, and that land use shall be determined in consultation with the local governmental designee. (802.b.) Add a requirement effective January 1, 2007 to decrease the decibel levels in residential/agricultural/rural zones by five (5) decibels. Add a requirement to clarify when and how the Commission will take sound measurements. (802.c.) Add a requirement to address low frequency noise. (802.d.) Add a requirement to require quiet design mufflers or the equivalent for all facilities located within four hundred (400) feet of occupied buildings with non-electric engines or motors.**