

TOWN OF ERIE OIL AND GAS TABLE TOP WORKSHOP NOVEMBER 18, 2019

OIL AND GAS REGULATIONS, 10/28/2019 DRAFT

Overview of Nuisance Standards

APPLICANT MUST DEMONSTRATE COMPLIANCE WITH NUISANCE STANDARDS TO PROTECT PUBLIC HEALTH, SAFETY AND WELFARE, AND THE ENVIRONMENT

NOISE [Section 10.12.3.W]

1. No well shall be drilled, re-drilled, or any equipment operated in such a manner so as to create any noise which causes exterior noise level¹ that:
 - a. Exceeds the ambient noise level by more than five (5) decibels during daytime hours and more than three (3) decibels during nighttime hours;
 - b. Exceeds the ambient noise level by more than ten decibels over the daytime average ambient noise level during fracturing operations during daytime hours. No fracturing shall be allowed during nighttime hours except for flowback operations related to fracturing as provided in subsection 1.c. below;
 - c. Exceeds the ambient noise level by more than three (3) decibels during flowback operations during nighttime hours;
 - d. Creates pure tones where one-third octave band sound-pressure level in the band with the tone exceeds the arithmetic average of the sound-pressure levels of two contiguous one-third octave bands by five (5) dB for center frequencies of 500 Hertz and above, and by eight (8) dB for center frequencies between 160 and 400 Hertz, and by fifteen (15) dB for center frequencies less than or equal to 125 Hertz; or
 - e. Creates low-frequency outdoor noise levels that exceed the following dB levels:

16 Hz octave band	65 dB
31.5 Hz octave band	65 dB
64 Hz octave band	65 dB

2. The Operator shall establish and report to the LGD a continuous 72 hour pre-drilling ambient noise level prior to the issuance of a Permit. The 72-hour time span shall include at least one 24-hour reading during either a Saturday or Sunday. The Operator shall use the prior established ambient noise level for the installation of any new noise generation equipment unless the Operator can demonstrate that the increase in the ambient noise level is not associated with drilling and production activities located either on-site or off-site.
3. Adjustments to the noise standards as set forth above in subsection 1.a, 1.b and 1.c. of this section may be permitted intermittently in accordance with the following:

¹ Measured at the protected use's property line or from the closest exterior point of the protected use structure or inside the protected use structure if access to the property is granted.

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Permitted Increase (dBA)	Duration of Increase (minutes)*
10	5
15	1
20	Less than 1
* Cumulative minutes during any one hour	

4. All workover operations shall be restricted to daytime hours.
5. The exterior noise level generated by the drilling, re-drilling or other operations of all wells located within 600 feet of a protected use shall be continuously monitored, to ensure compliance. The cost of such monitoring shall be borne by the Operator. If a complaint is received by either the Operator or the Town the operator shall, within 24 hours of notice of the complaint, continuously monitor for a 72-hour period the exterior noise level generated by the drilling, re-drilling or other operations to ensure compliance. At the request of the Town, the Operator shall monitor the exterior noise level at the source of the complaint.
6. Acoustical blankets, sound walls, mufflers or other alternative methods as approved by the Town may be used to ensure compliance. All soundproofing shall comply with accepted industry standards and be subject to approval by the fire district.
7. The sound level meter used in conducting noise evaluations shall meet the American National Standard Institute's Standard for sound meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.
8. The Operator shall verify compliance with the requirements of this Section 10.12.3.W and the Noise Management Plan after the installation of the noise-generating equipment.
9. If the Operator is in compliance with the approved Noise Management Plan and a violation still occurs, the Operator shall be notified of noncompliance and given 24 hours to correct the violation from an identified source before a notice of violation and enforcement measures under Section 10.12.5 are triggered. Additional extensions of the 24-hour period may be granted in the event that the source of the violation cannot be identified after reasonable diligence by the operator.

VIBRATION [Section 10.12.3.X]

1. No vibration shall be transmitted thru the ground that is discernible without the aid of instruments measured at five hundred (500) feet from the abutting residential or commercial development.
2. No vibration shall exceed 0.002g peak at up to fifty (50) cps frequency measured at five hundred (500) feet from the abutting residential or commercial development. Vibrations recurring at higher than 50 cps frequency or a periodic vibrator shall not induce accelerations exceeding 0.001g.

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3. Single impulse period vibrations occurring at an average interval greater than five (5) minutes shall not induce accelerations exceeding .01g.
4. Operator shall conduct continuous seismic monitoring during fracking operations.
 - a. Seismic events greater than 2.0 on Richter scale shall be reported to LGD and to COGCC.
 - b. If a seismic event occurs, the Town may stop operations immediately and Operator can only resume work once the Town is satisfied with the actions taken to reduce the likelihood of further seismicity.
 - c. Operations shall be immediately suspended for any seismic event measuring 4.0 or above on the Richter scale. Operator may only resume work once the Town is satisfied with the actions taken to reduce the likelihood of further seismicity.

LIGHTING [*Section 10.12.3.Z.7*]

The Operator will install down cast lighting or some other form of lighting that mitigates light pollution and spill-over onto adjacent properties; provided, however