This draft has taken into consideration all comments on the 10/28/2019 Draft.

02/14/2020 REVISIONS TO 10/8/2019 DRAFT OIL AND GAS REGULATIONS

NEW O&G Exploration and Production

Preexisting O&G Exploration and

New and Preexisting O&G Exploration and

Title 10 - Unified Development Code Erie, Colorado

These Regulations are entitled and may be cited as the "Regulations for Dil and Gas Operations.] Formatted: Justified B. Purpose The purpose of these Regulations is to protect public health, safety, welfare and the environment by address in pact is a possible to a solid bear of the environment.] Formatted: Justified B. Purpose If any disc heart is to protect public health, safety, welfare and the environment.] Formatted: Justified B. Purpose If any disc heart is adopted pursuant to C.R.S. §2:9:20-104 (11)(1) and to protect and minimize adverse impacts for Controls. B adopted pursuant to C.R.S. §2:9:20-101 et seq. 31-15-401, and 34-60-101 et seq. Formatted: Highlight C. Authority, This Section is adopted pursuant to C.R.S. §9:29:20-101 et seq. 31-15-401, and 34-60-101 et seq. Formatted: Highlight D. Dil and Gas Permit of section 10.12.1 fF Formatted: Highlight Formatted: Highlight B. No person shall engage in cause, allow, or conduct any Oil and Gas Operation fails within one of these Regulations. Formatted: Highlight Formatted: Highlight Formatted: Highlight Formatted: Highlight S. No person shall engage in section 10.12.1 Fi Formatted: Highlight Formatted: Highlight S. No person shall engage in section 20.12 mice Mean Mean Mean Mean Mean Mean Mean Mea	
The purpose of these Regulations is to protect public health, safety, welfare and the environment by using the Town's police power to! I. Regulate the surface impacts of oil and gas operations in a reasonable manner to address in a public health, safety, welfare and the environment. 2. Implement such requirements that are necessary and reasonable to avoid adverse impacts from Oil and Gas Operations and to minimize and migate the extent and severity of those impacts that are necessary and reasonable to avoid adverse impacts from Oil and Gas Operations and to minimize and migate the extent and severity of those impacts that are necessary and reasonable to avoid adverse impacts from Oil and Gas Operations and to minimize and migate the extent and severity of those impacts that are not be avoided. C. Authority. This Section is adopted pursuant to C.R.S. §§ 29-20-101 et seq. 31-15-401, and 34-60-101 et seq. D. Oil and Gas Permit or communications prior to obtaining an Oil and Gas Operation of the exemptions in Section 10.12.1 ff. 2. No person shall engage in, cause, allow, or conduct any. Oil and Gas Operation are other burst and the section 10.12.2 of these Regulations unless the Operation falls within one of the exemptions in Section 10.12.2 of these Regulations. 3. No person shall engage in sciencing conditions of these Regulations. 4. Optication for the exemption of these Regulations of these Regulations. 4. Optication for the exemption of these Regulations are and reasonable provision of the Operator. Bagenetic conduct, the authorized are subject to the Permit requirements of these Regulations are applicable provision of the Operator. Bagenetics and the informatted: Highlight Formatted: Highlight Form	
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F. Exemption from these Regulations	

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An Operator Agreement with terms and conditions at least as stringent as these Regulations approved by the Town Board of Trustees may, by its terms, exempt the proposed Oil and Gas Operation from these Regulations.

2. Continuation of Existing Operations

Oil and Gas Operations that are being conducted pursuant to approved permits as of the effective date of these Regulations or that are located within territory which thereafter is annexed to the Town may continue operating without the issuance of an Oil and Gas Permit under these Regulations, but shall comply with the requirements of Section 10.12.6 of these Regulations.

G. Severability

If any section, clause, provision, or portion of these Regulations should be found to be

unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of these Regulations shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

H, Definitions

Ambient Noise Level

The all-encompassingall-encompassing noise level associated with a given environment, being a composite of sounds

from all sources at the location, constituting the normal and existing level of environmental noise at a given location.

Building Unit

Building or structure designed for use as a place of residency by a person, a family, or families. The term includes manufactured, mobile, and modular homes, except to the extent that any such manufactured, mobile, – or – modular – home – is – intended – for – temporary – occupancy – or – for business

purposes.

CDPHE

Colorado Department of Public Health and Environment.

Closed Loop Drilling Process or System

A closed loop mud drilling system ______typically consists of steel tanks for mud mixing and storage and the use of solids ______removal equipment which normally includes some combination of shale shakers, mud cleaners and centrifuges sitting on top of the mud tanks. This equipment separates drill cutting solids from the mud stream coming out of the wellbore while retaining the water or fluid portion to be reused to continue drilling the well bore. The solids are placed in containment, either a shallow lined pit or an above ground container, provided on location. The system differs from conventional drilling where a reserve pit is used to allow gravitational settling of the solids from the mud which can______then be reused. A Closed Loop Drilling System does not include use of a Conventional Reserve Drilling Pit.

COGCC

Colorado Oil and Gas Conservation Commission.

Completion

(1) An oil well shall be considered completed when the first new oil is produced through wellhead equipment into lease tanks from the ultimate producing interval after the production string has been run.

(2) A gas-well shall-be considered completed-when the well is capable of producing-

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gas through wellhead equipment from the ultimate producing zone after the production string has been run.

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as set out in these rules.	
(4) Any well not previously defined as an oil or gas well, shall be considered completed ninety(90) days after reaching total depth.	
(5) If approved by COGCC, a well that requires extensive testing shall be	
considered completed when the drilling rig is released or six months after reaching total depth, whichever is later.	
Decibel (dB)	Formatted: Highlight
A unit for measuring the intensity of a sound/noise and is equal to ten times the logarithm to the base ten of the ratio of the measured sound pressure squared to a reference pressure which is 20 micropascals.	
Degradation	
Lowering in grade or desirability; lessening in quality. The act or process of degrading.	
Director	
Community Development Director or the Director's representative.	
Expansive Soils and Rocks	
Any mineral, clay, rock or other type of geologic deposit having the property of absorbing water with an accompanying swelling to several times their original volume.	
Exploration and Production Waste	
Those wastes associated with Oil and Gas Operations to locate or remove oil or gas from the ground or to remove impurities from such substances and which are uniquely associated with and intrinsic to oil and gas exploration, development or production activities that are exempt from regulation under the Resource Conservation and Recovery Act (RCRA).	
Flowlines	
A segment of pipe transferring oil, gas, or condensate between a wellhead and processing equipment to the load point or point of delivery to a U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration or Colorado Public Utilities Commission regulated gathering line or a segment of pipe transferring produced water between a wellhead and the point of disposal, discharge, or loading. This definition of flowline does not include a gathering line. The different types of flowlines are:	
1 Wellhead Line means a flowline that transfers well production fluids from an oil or gas-well	
to process equipment (e.g., separator, production separator, tank, heater treater), not	
including pre-conditioning equipment such as sand traps and line heaters, which do not materially reduce line pressure.	
 2. — — Production Piping means a segment of pipe that transfers well production fluids from a wellhead line or production equipment to a gathering line or storage vessel and includes the following: 	
3. Production Line means a flowline connecting a separator to a meter, LACT, or gathering line;	
4 Dump Line means a flowline that transfers produced water, crude oil, or condensate to a	

storage tank, pit, or process vessel and operates at or near atmospheric pressure at the

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6. **Process Piping** means all other piping that is integral to oil and gas exploration and production related to an individual piece or a set of production facility equipment pieces.

7. Off-Location Flowline means a flowline transferring produced fluids (crude oil, natural gas, condensate, or produced water) from an oil and gas location to a production facility, injection facility, pit, or discharge point that is not on the same oil and gas location. This definition also includes flowlines connecting to gas compressors or gas plants.

Gathering Line

A pipeline_and_equipment that_transports_gas_from_a production facility (ordinarily_

commencing downstream of the final production separator at the inlet flange of the custody transfer meter) to a natural gas processing plant or transmission line or main. The term "gathering line" includes valves, metering equipment, communication equipment, cathodic protection facilities, and pig launchers and receivers, but does not include dehydrators, treaters, tanks, separators, or compressors located downstream of the final production facilities and upstream of the natural gas processing plants, transmission lines, or main lines.

Geologic Hazard Area

An area which contains or is directly affected by a geologic hazard.

Geologic Hazards

A geologic phenomenon which is adverse to past, current, or foreseeable construction or land and which constitutes a hazard to public health and safety or property if not avoided. The term includes but is not limited to:

a.- Landslides, rock falls, mudflows, and unstable or potentially unstable slopes

- b.- Seismic effects
- c.- Radioactivity
- d. Areas of ground subsidence
- e.-- Expansive rocks or soils

Ground Subsidence

A process characterized by the downward displacement of surface material caused by natural phenomena such as removal of underground fluids, natural consolidation, or dissolution

underground minerals or by man-made phenomena such as underground mining.

Groundwater

Subsurface waters in a zone of saturation.

Hydraulic Fracturing or Hydraulic Fracturing Treatment

All stages of the treatment of a well by the application of hydraulic fracturing fluid under pressure that are expressly designed to initiate or propagate fractures in a target — geologic formation to enhance production of oil and natural gas.

Hydraulic Fracturing Fluid

The fluid, including the applicable base fluid and all hydraulic fracturing additives, used to perform a hydraulic fracturing treatment.

LACT ("Lease Automated Custody Transfer")

The transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage vessels or automated transfer facilities to pipelines or any other form of transportation.

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Permit

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Town of Erie Oil and Gas Permit issued pursuant to the provisions of this Ch	hapter 12.
Pipelines	
Flowlines and gathering lines for oil and gas wells.	Formatted: Highlight
Pit	
Any natural or man-made depression in the ground used for oil or gas explo purposes. A pit does not include steel, fiberglass, concrete or other sin release their contents to surrounding soils.	
Pitless	Formatted: Highlight
Pitless with respect to drilling means there is no pit regardless of size or fun- includes conventional reserve drilling pits and drilling cutting pits, but does not includ utilized to contain necessary flaring during the drilling, completion, or up-set	le flare pits which may be
Production Facilities	
All storage, separation, treating, dehydration, artificial lift, power supply, com metering, monitoring, flowline, and other equipment directly associated with injection wells. Protected Use	
A residence; occupied commercial or institutional building or school; or publ activity areas.	lic park, fields or outside
Regulation(s)	
The Town of Erie Oil and Gas Regulations set forth in Chapter 12 of the UD	IC.
Reference Area	
An area either (1) on a portion of the site that will not be disturbed by oil and the desired final reclamation; or (2) another location that is undisturbed by o proximate and similar to a proposed oil and gas location in terms of vegetati management, owned by a person who agrees to allow periodic access to it to providing baseline information for reclamation standards, and intended to re reclamation. Seismic Effects	pil and gas operations and ive potential and for the purpose of
Direct and indirect effects caused by a natural earthquake or a man-made p not limited to exploration and test drilling.	phenomenon including but
Shut-In Well	
A well which is capable of production or injection by opening valves, activati supplying a power source.	ing existing equipment or
Significant	
Noteworthy.	
Significantly Degrade	
To lower in grade or desirability to a significant as opposed to trifling degree	9.
Spill	
The unauthorized, accidental or sudden discharge of chemicals, oil, petroled and production waste, or other hazardous substances.	um product, exploration
Subsurface Facility	
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02/14/2020 REVISIONS TO 10/28/2019 DRAFT OIL AND GAS REGULATIONS Flowlines and all other subsurface facilities of Oil and Gas Operations.

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Temporarily Abandoned Well A well that has all downhole completed intervals isolated with a plug set above the highest perforation such that the well cannot produce without removing a plug or a well which is incapable of production or injection without the addition of one or more pieces of wellhead or other equipment, including valves, tubing, rods, pumps, heater-treaters, separators, dehydrators, compressors, piping or tanks. UDC Town of Erie Unified Development Code. VOC Emissions Formatted: Highlight Volatile organic compounds in oil and gas operations that have the potential to be released into the atmosphere and/or ground. Water Body Any surface waters which are contained in or flow in or through the Town, including: Coal Creek, Boulder Creek, Erie Lake, Erie Reuse Reservoir, Thomas Reservoir, Prince Lake #2, and any irrigation ditches. Water Source Water wells that are registered with Colorado Division of Water Resources, including household, domestic, livestock, - irrigation, - municipal/public, - and - commercial - wells, - permitted - or adjudicated springs, or monitoring wells installed for the purpose of complying with groundwater baseline sampling and monitoring requirements under COGCC Rules 318A.e.(4), 608, or 609. Well (Oil and Gas) An oil or gas well, a hole drilled for the purpose of producing oil or gas, a well into which fluids are injected, a stratigraphic well, a gas storage well, or a well used for the purpose of monitoring or observing a reservoir. Wildlife Habitat A natural or man-made environment that contains the elements of food, shelter, water, and space ir a combination and quantity necessary to sustain one or more wildlife or plant species at stable population levels in historically-used habitats. Sensitive wildlife habitat areas include, but are not limited to, nesting, brood rearing areas, rookeries, leaks, migration corridors, calving and fawning grounds for big game. Formatted: Highlight PERMIT APPLICATION PROCESS FOR NEW OR MODIFIED OIL AND GAS OPERATIONS 10.<mark>12.2</mark> Formatted: Highlight A. Compliance with Zoning - Rezoning Application Formatted: Highlight No Oil and Gas Permit application will be scheduled for a hearing will be finally approved under these Formatted: Highlight Regulations unless the property where the Operation will be located is zoned as Heavy Industrial (HI) under Section 10.7.5 of the UDC. Where rezoning is required, the Town will work with the Applicant to coordinate public notices and hearings for rezoning with the requirements of these Regulations. B. Pre-Application Conference Formatted: Highlight 1. Pre-Application Conference Prior to submitting an application for an oil and gas permit, an applicant shall meet with the Director and the LGD to discuss the proposed Oil and Gas Operation. The purpose of the pre-application conference includes, without limitation: To discuss the location and nature of the proposed Oil and Gas Operations To explain the application submittal requirements, the nature of materials that will be

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responsive to those requirements, and waivers of any materials that would not be necessary in determining whether the application complies with Town requirements;

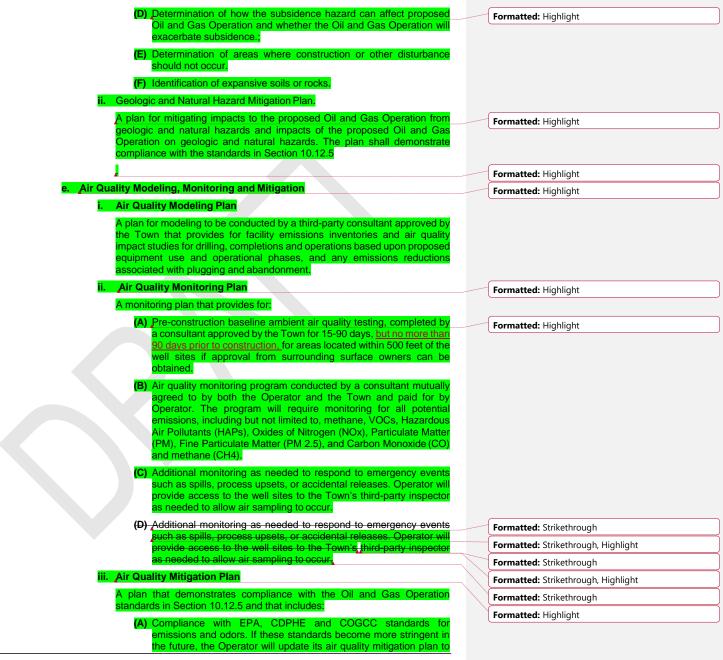
 C. To discuss state terms and conditions imposed on the proposed Oil and Ga Operation; 	
 To identify site-specific concerns and issues that bear on the proposed Oil a Operation; 	and Gas
e. To discuss projected impacts and potential mitigation;	
f. To discuss the Town Oil and Gas Operations Standards that must be satisfi Permit approval.	ied for
2. Pre-Application Materials	Formatted: Highlight
At or before the pre-application conference, the applicant shall provide the Direct information that is sufficient for determining the location and nature of the proposed Gas Operation, the degree of impacts associated with the Operation, and m proposed to offset such impacts.	<mark>d Oil and</mark>
C. Permit Application Submittal The applicant shall submit the Permit application materials to the Director. The Permit applic	Formatted: Highlight
 materials are set forth in Section 10.12.2.E. D. Permit Application Fee The applicant is responsible for all costs of reviewing and processing the Permit application. 1. Fee Requirement The Permit application shall be accompanied by the application fees set forth in Section 10-5 of the Municipal Code. 2. Payment of Additional Costs 	
Additional costs for reviewing and processing the Permit application include but limited to the costs of legal, consultant, and referral agency review of the Permit app the pre-application conference, completeness determination, and all hearings and rr on the Permit application. Such costs are in addition to the application fees paid purs D.1 above and shall be billed to the applicant. All additional costs must be paid in ful final action by the Board of Trustees on the Permit application.	blication, neetings rsuant to
E. Permit Application Materials for Oil and Gas Operations	Formatted: Highlight
The applicant shall submit the application materials to the Community Development Department The Director, in consultation with the LGD, may waive any part of the Permit application mat requirements when the information would not be relevant to determining whether the propose and Gas Operation complies with the Oil and Gas Operations standards in Section 10.12.4.	terial sed Oil
Completed Land Use application form including the Operator's name and address a type of entity, the name and address of the registered agent of the Operator; any other that the Operator designates to receive notice, and a person designated by the Operator serve as an on-site contact.	e <mark>r person</mark>
2. Financial Qualifications and Technical Expertise	
Documentation of the applicant's financial qualifications and technical experti capability to construct and operate the proposed Oil and Gas Operation in compliar all conditions of approval.	
3. Insurance	
Evidence of liability insurance covering both the Operator and the Town of Erie in the of \$2 million.	amount
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4. Summary of Proposed Oil and Gas Operation		
Summary of proposed Oil and Gas Operation, including: a list of all proposed oil and gas facilities to be installed and estimated timeline; hours of operation; number of employees on site on a daily basis; types of vehicles and equipment.		
5. Topographic Map		
a. Location of Proposed Oil and Gas Operation		
The location of the proposed Oil and Gas Operation including well pads, tanks, roads, pipelines and gathering systems, and related features on a United States Geological Survey quadrangle map or on a recorded plat if the proposed Oil and Gas Operation is within an approved subdivision, with the location highlighted so that it is easy to see.	Formatted: Highlight	
b. Topography		
Existing and proposed topography at intervals established by the Director as necessary to portray the direction and slope of the area affected by the proposed Oil and Gas Operation.		
c. Transportation and Roads		
All public and private roads that traverse and/or provide access to the proposed Oil and Gas Operation.		
d. Easements	 Formatted: Highlight	
Easements recorded or historically used that provide access to or across, or other	Pormatted. Filginight	
use of, the property.		
e. Municipal and Subdivision Boundaries		
Municipal or subdivision boundaries within one mile of the well pad, tanks, gathering lines, storage areas or any other ancillary feature of the proposed Oil and Gas Operation.		
f. Other Operations	 Formatted: Highlight	
Location of other Oil and Gas Operations within one mile of the site.		\sim
g. Distances Between Well or Surface Equipment and Nearest Building Unit		
Shortest distance between any proposed well or surface production equipment on the well pad and the nearest exterior wall of an existing Building Unit.	Formatted: Highlight	
6. Current Aerial Photo	 Formatted: Highlight	\Box
Current aerial photo that shows the location of the proposed Oil and Gas Operation and the shortest distance between any proposed well or surface production equipment on the well pad and the nearest exterior wall of an existing Building Unit, displayed at the same scale as	 Formatted: Highlight	
the topographic map to facilitate use as an overlay.		
7. Site Preparation Plan	 Formatted: Highlight	
Site plan for site preparation, mobilization, and demobilization.		
8. Property Rights, Permits and Other Approvals	 Formatted: Highlight	
a. Description and documentation of property rights, easements, and rights-of-way agreements that are necessary for or that will be affected by the proposed development.		
b. List of all federal, state, and county permits and approvals that have been or will be required for the proposed development.		
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c. Description of all mitigation and financial security required by federal, state, and local authorities; and copies of any draft or final environmental assessments or impact	Formatted: Highlight
statements prepared for the proposed development.	
9. Reports/Studies/Plans	
The following reports, studies and plans shall be prepared to adequately portray the physical characteristics of the property.	
a. Community Outreach Plan	
A plan that describes how the Operator will conduct neighborhood meeting(s) and use other techniques to provide the public with information and listen to concerns about the Oil and Gas Operation.	Formatted: Highlight
b. Cumulative Impact Analysis.	Formatted: Highlight
Documentation of the existing and approved Oil and Gas Operations within the Town of Erie; a description of the adverse impacts to public health, safety and the environment from the existing and approved Oil and Gas Operations; and an analysis of whether the proposed Oil and Gas Operation will contribute to these adverse impacts. Where the proposed Oil and Gas Operation will contribute to existing impacts, a cumulative impact mitigation plan is required.	
c. Alternative Site Analysis	Formatted: Highlight
 includes for each site: Location; Zoning; Zoning; Natural and manmade features; Water source; Distance of proposed pad to residences, occupied buildings, parks and open space; water bodies; floodplains; and roadways, Justification of a preferred alternative site and/or reason why a site is not proposed as a viable alternative. Materials submitted to the COGCC to satisfy the alternative location analysis requirement. Geologic and Natural Hazards Assessment and Mitigation Plan Geologic and Natural Hazards Report 	Formatted: Highlight
A report detailing the natural and geological characteristics on-site, and within one (1) mile of the site, prepared by a registered engineer or geologist	Formatted: Highlight
 registered engineer or geotechnical consultant. The report shall include a geotechnical assessment of all geologic hazards that have the potential to affect the Oil and Gas Operation and which may be de-stabilized or exacerbated by the Oil and Gas Operation. The geotechnical assessment shall include, without limitation: (A) Determination if mining exists under the site; (B) Determination if void space is still present underground; (C) Determination if subsidence has taken place (from drill hole data 	
and surface evidence);	

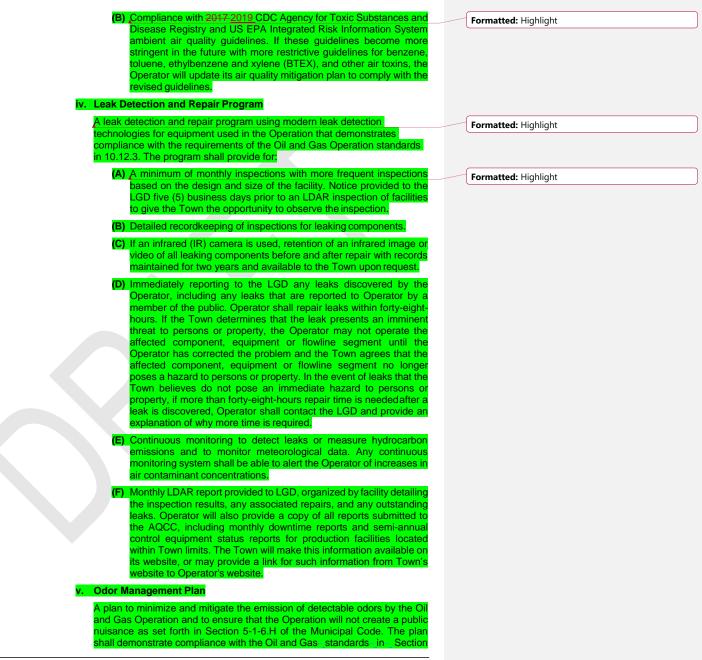
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02/14/2020 REVISIONS TO 10/28/2019 DRAFT OIL AND GAS REGULATIONS comply with the more stringent standards.

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10.12.4 and provide for a timely response to odor complaints from the community and for identifying and implementing additional odor control		
measures necessary to control odors emanating from the Operation.		
f. Electrification Plan		Formatted: Highlight
A plan identifying all sources of electricity that will be supplied and used during all phases of development including drilling, completions, and operations.		
g. Dust Suppression Plan		Formatted: Highlight
A plan that demonstrates compliance with the requirements for dust suppression in 10.12.5.J.		Formatted: Highlight
h. Water Quality Impact Assessment, Monitoring and Mitigation Plan		Formatted: Highlight
An assessment and <u>AA</u> plan that includes:		Formatted: Highlight
Water Quality Impact Assessment	\sum	Formatted: Highlight
An assessment of the impacts to water quality including the following	\backslash	Formatted: Highlight
considerations: (A) Changes to existing water guality, including patterns of water		Formatted: Highlight
 (B) Applicable narrative and numeric water quality standards; (C) Changes in point and nonpoint source pollution loads; (D) Increase in erosion; (E) Changes in sediment loading to waterbodies; (F) Changes in stream channel or shoreline stability; (G) Changes in stream channel or shoreline stability; (G) Changes in trophic status or in eutrophication rates in lakes and reservoirs; (I) Changes in the capacity or functioning of streams, lakes, or reservoirs; (J) Changes in flushing flows; and (K) Changes in dilution rates of mine waste, agricultural runoff, and other unregulated sources of pollutants. (L) Identification of All Surface and Subsurface Water Bodies. An inventory and location of all water bodies, as well as domestic and commercial water wells within one mile of the proposed Oil and Gas Operation. (M) Identification of Intakes. Identification of intake(s) for public drinking water supply. 		Formatted: Highlight
For surface and groundwater, a plan that establishes a baseline and a process for monitoring changes to water quality and the aquatic environment to demonstrate the effectiveness of mitigation. The plan shall demonstrate compliance with the Oil and Gas Operation standards in Section 10.12.5 and include: (A) Key stream segments, other water bodies, and groundwater to be		
monitored. (B) Locations for and frequency of sampling and monitoring to establish baseline of existing conditions prior to the proposed Oil and Gas		

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Operation including existing water quality, aquatic life and macro- invertebrates, and groundwater data.	
(C) Key indicators of water quality and stream health, and threshold levels that will be monitored to detect changes in water quality and health of the aquatic environment.	Formatted: Highlight
(D) Locations for and frequency of sampling and monitoring for key indicators of water quality and stream health, including but not limited to constituents regulated by the Colorado Water Quality Control Commission, and constituents associated with the proposed Oil and Gas Operation.	Formatted: Highlight
(E) Locations for and frequency of sampling and monitoring to measure effectiveness of water quality mitigation during the life of the proposed Oil and Gas Operation.	
 (F) Mitigation steps that will be implemented to avoid degradation of water bodies if monitoring of key indicators reveals degradation. i. Stormwater Management Plan 	
A site-specific stormwater plan to minimize impacts to surface waters from erosion, sediment, and other sources of nonpoint pollution and that demonstrates compliance with the Oil and Gas Operation standards in Section 10.12.4. The stormwater management plan required by CDPHE may be provided to establish compliance with this provision.	
j. Water Supply Plan	
A plan prepared by a certified professional engineer that demonstrates compliance with the applicable Oil and Gas Operation standards in Section 10.12.4 and includes:	
 Description of the physical source of the water that the Operator proposes to use to serve each phase of the Operation 	
 List of all available physical sources of water other than Erie municipal water for the Operation, and if multiple sources are available, analysis to determine which source is least detrimental to the environment; 	
iii. Amount of water needed for each phase of the Operation;	
iv. Proof that the source of water supply is physically and legally available and dependable for each phase of the Operation;	
 Description of how water will be delivered to the site for each phase of the Operation; 	
vi. Description of water efficiency methods; and	
vii. Amount of waste water produced, and disposal plans for waste water.	
k. Spill Release Response and Reporting Plan	
A plan that demonstrates compliance with the Oil and Gas Operation standards in Section 10.12.4 and includes:	
i. Location of storage areas for equipment, fuel, lubricants, chemicals and waste during both construction and operation of the proposed use.	
ii. Measures, procedures, and protocols for spill prevention, storage and containment.	
iii. An electronic monitoring program to aide in discovery of spills and releases.	

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 Measures, procedures, and protocols for clean-up and description of the financial security for these provisions.
 Measures, procedures, and protocols for reporting spills and storage to Town, county, state and federal officials in compliance with the Oil and Gas Operation standards in Section 10.12.4.
vi. Provisions establishing that the Town, or its designee, may undertake prevention, control, countermeasure, containment, and clean-up measures if the permittee fails to comply with its obligations under the <i>Spill Release</i> and Reporting Plan and that the permittee will pay all costs incurred by the Town for any such measures.
vii. Maintenance of material safety data sheets (MSDS).
viii. Baseline assessment of conditions of the soils within the area covered by the Spill Release Response and Reporting Plan.
 Plan for monitoring conditions of the soil for the duration of Oil and Gas Operations and for post-Operation sampling of the soil.
I. Waste Water and Waste Management Plan
A plan that identifies the amount of waste water produced by the Oil and Gas Operation, and disposal plans for waste water that demonstrates compliance with the Oil and Gas Operation standards in Section 10.12.4.
m. Chemicals and Hydraulic Fracturing Fluids Disposal and Reporting Plan
A plan for disposal and reporting of chemicals and hydraulic fracturing fluids, that includes:
 Material safety data sheets (MSDS) for the chemicals used in the proposed Oil and Gas Operation.
ii. Chemical Abstract Service Registry Numbers for every chemical used in the proposed Oil and Gas Operation, if available, other than those protected as Trade Secrets.
iii. Provision for reporting to the Town the chemicals, other than those protected as a Trade Secret, that will be stored and used during any hydraulic fracturing event along with the maximum quantity that will be present on-site at any one time.
n. Emergency Response Plan
A plan that addresses events such as explosions, fires, gas or water pipeline leaks or ruptures, leaks from well casings and pits, tank leaks or ruptures, hydrogen sulfide or other toxic gas emissions, transportation of hazardous material and vehicle accidents or spills. The plan must include proof of adequate personnel, supplies, and funding to immediately implement the emergency response plan at all times during construction and operations.
o. Noise
i. Ambient Noise Baseline Survey
An ambient noise survey for each well site at baseline and during drilling, hydraulic fracturing, flowback and operations prepared by a qualified consultant approved by the Town.
ii. Noise Management Plan
A plan detailing how each phase of the Operation will comply with the

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maximum permissible noise levels in Section 10.12.4. The plan shall: (A) Identify Oil and Gas Operation sources of noise by phase; (B) Document the ambient noise level prior to construction of any wellhead, compressor or compression facility; and (C) Detail how noise impacts will be mitigated. In determining noise nitigation, specific site characteristics shall be considered, including but not limited to: Nature and proximity of adjacent development; (2) Seasonal and prevailing weather patterns, including wind directions; (3) Vegetative cover on and adjacent to the site; and (4) Topography. p. Lighting Study A plan that demor strates compliance with the Oil and Gas Operation standards in Section 10.12.4. q. Operations Plan A plan including the method and anticipated schedule for drilling, completion transporting, production and post-operation, and a description of future Oil and Gas Operations. **Vegetation and Weed Management Plan** A written description of the species, character and density of existing vegetation on the site, a summary of the potential impacts to vegetation as a result of the proposed Oil and Gas Operation, and proposed mitigation to address these impacts. The plan shall include any COGCC required interim and final reclamation procedures. **Reclamation Plan** A plan for interim reclamation and revegetation of the site and final reclamation of the site in compliance with the Oil and Gas Operation standards in Section 10.12.4 The plan shall include the locations of any proposed Reference Areas to be used as guides for interim and final reclamation. t. Grading, Drainage, and Erosion Control Plan A plan that identifies existing (dashed lines) and proposed (solid lines) contours, at two-foot intervals, and the methods for controlling and minimizing erosion during construction and operational phases of the proposed Oil and Gas Operation. **Traffic Management and Access** Traffic Impact Study A study prepared by a certified traffic engineer that includes at a minimum: (A) Existing Conditions escription of the baseline condition of road segments to be affected by the Oil and Gas Operation, including the existing physical condition, trips generated by vehicle type on the average and at peak times, and the existing level of service. (B) Proposed Conditions

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For each phase of the Operation, a description of average and peak time site trip generation and load impact for each affected road segment by vehicle type.

(C) Future Conditions

Description of by vehicle type of the total future traffic projected for the roads that will be affected by the Oil and Gas Operation.

(D) Evaluation

Assessment of impacts to the level of service and physical condition of each affected road segment for each phase of the Operation, need; and

(E) Mitigation

For each phase of the Operation, proposed mitigation, including road improvements and repairs, funding, traffic signals, and other measures to ensure that the physical condition and the level of service for each affected road segment is not degraded during any phase of the Operation.

Traffic Management Plan

A plan describing traffic delays, road closures, frequent turns and stopping, and similar impacts to traffic movement and safety; and measures to mitigate adverse impacts for each phase of the Operation.

iii. Access Road Plan

A plan sufficient to demonstrate compliance with the Oil and Gas Operation standards for access roads in Section 10.12.4.

v. Flowline Management Plan

A plan that includes:
Description of how the operator intends to adhere to the integrity management procedures listed in COGCC Rule 1104.c-f.
A copy of the leak protection and monitoring plan required by COGCC Rule 1104.o. as applicable.
A map at a scale of 1 inch equals 250 feet (1" = 250') or such scale as required by COGCC showing the location of all existing and proposed flowlines associated with the Oil and Gas Operation. For each existing and proposed flowlines associated with the Oil and Gas Operation. For each existing and proposed flowline the map shall denote its size and the maximum pressure at which it is or will be operated; its depth from the surface and, if existing, whether it was constructed or installed before October 31, 2017 and whether it is in use, abandoned, or shut-in.
Description of the measures planned to minimize land disturbance and impacts to vegetation.
A copy of COCCC approved continuous monitoring-program providing for pressure data monitoring 24 hours a day 7 days a weak and a provision for reporting requires to the LOP or decorption of COCCC. Rule 1104 a pressure testing practices and provision for reporting results to the LOP.
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Completeness Is Not a Determination of Compliance
 A determination that an application is complete shall not constitute a determination that it complies with the Oil and Gas Operation standards in Section 10.2.4.

G. Permit Review and Decision

1. Referral of Application

a. Technical and Legal Consultants and State, Local and Federal Agencies

The Director may send a copy of the complete application to technical and legal consultants retained by the Town, and any local, state or federal agency that may have expertise or an interest in impacts that may be associated with the proposed Oil and Gas Operation.

b. Colorado Geological Survey

The Director shall send a copy of the complete application to the Colorado Geologica Survey for recommendations if the Oil and Gas Operation is proposed to be located in a designated geologic hazard area.

 Comment Period. The comment period for referral agency review shall be thirty (30) calendar days from the date of determination of completeness.

ed. Cost of Consultant and Referral Agency Reviews

The applicant shall be responsible for the costs of all consultant and referral agency reviews.

2. Neighborhood Meeting

Neighborhood meeting(s) shall be held in accordance with the approved Community Outreach Plan.

3. Public Hearing and Recommendation by Planning Commission

a. Public notice

i. Published Notice

Not less than fifteen (15) calendar days prior to the date of the public hearing, the Director shall publish a notice of public hearing on the Permit application. The notice shall be published once in a newspaper having general circulation in the area. The notice shall include the information in subsection 3.a.iv, below. The applicant shall be responsible for the cost of publication.

i. Written Notice of Planning Commission Hearing to Property Owners and Occupants

Not less than fifteen (15) calendar days prior to the date of the public hearing, the Director shall mail written notice of the public hearing to the owners and occupants of property described in subsection 3.a.v, below. The applicant shall provide a stamped and addressed envelope for each party to be notified.

iii. Posted Notice

Fifteen (15) days prior to the public hearing, the applicant shall post a sign at the site of the proposed Oil and Gas Operation giving notice to the general public of the Planning Commission hearing. The Town will provide the signs for posting. The applicant is responsible for filling out the signs, posting the signs, checking on the signs to make sure they remain in place, and to remove the signs—within—two days—after the final decision on—— the

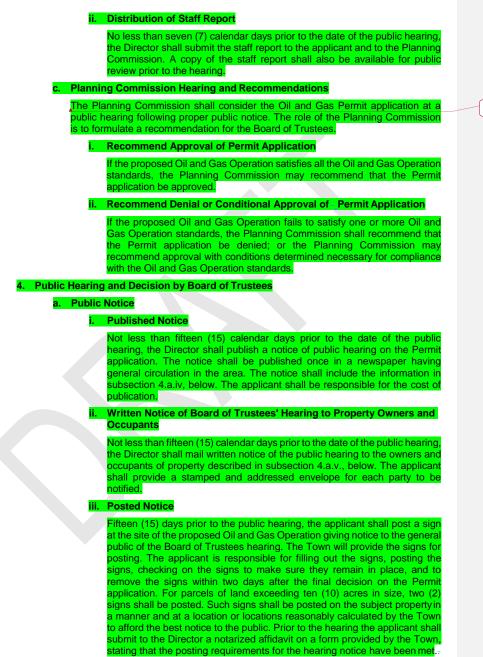
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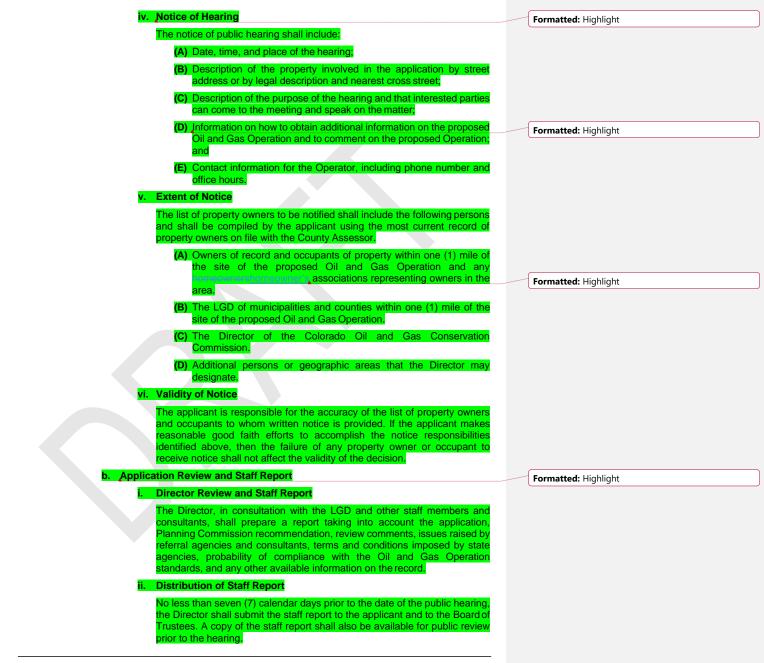
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application. For parcels of land exceeding ten (10) acres in size, two (2) signs shall be posted. Such signs shall be posted on the subject property in a manner and at a location or locations reasonably calculated by the Town to afford the best notice to the public. Prior to the hearing the applicant shall submit to the Director a notarized affidavit on a form provided by the Town, stating that the posting requirements for the hearing notice have been met.	
iv. Notice	
The notice of public hearing shall include:	
(A) Date, time, and place of the hearing;	Formatted: Highlight
(B) Description of the property involved in the application by street address or by legal description and nearest cross street;	
(C) Description of the purpose of the hearing and that interested parties can come to the meeting and speak on the matter;	
(D) Information on how to obtain additional information on the proposed Oil and Gas Operation and to comment on the proposed Operation; and	
(E) Contact information for the Operator, including phone number and office hours.	
v. Extent of Notice	
The list of property owners to be notified shall include the following persons and shall be compiled by the applicant using the most current record of property owners on file with the County Assessor.	
(A) Owners of record and occupants of property within one (1) mile of the site of the proposed Oil and Gas Operation and any homeowners associations representing owners in the area.	
(B) The LGD of municipalities and counties within one (1) mile of the site of the proposed Oil and Gas Operation.	
(C) The Director of the Colorado Oil and Gas Conservation Commission.	
(D) Additional persons or geographic areas that the Director may designate.	
vi. Validity of Notice	
The applicant is responsible for the accuracy of the list of property owners and occupants to whom written notice is provided. If the applicant makes reasonable good faith efforts to accomplish the notice responsibilities identified above, then the failure of any property owner or occupant to receive notice shall not affect the validity of the decision.	
b. Application Review and Staff Report	
i. Director Review and Staff Report	
The Director shall prepare a report in consultation with the LGD and other appropriate staff members and consultants, taking into account the application, written comments from the public, issues raised by referral agencies and consultants, terms and conditions imposed by state agencies, probability of compliance with the Oil and Gas Operation standards, and any other available information on the record.	

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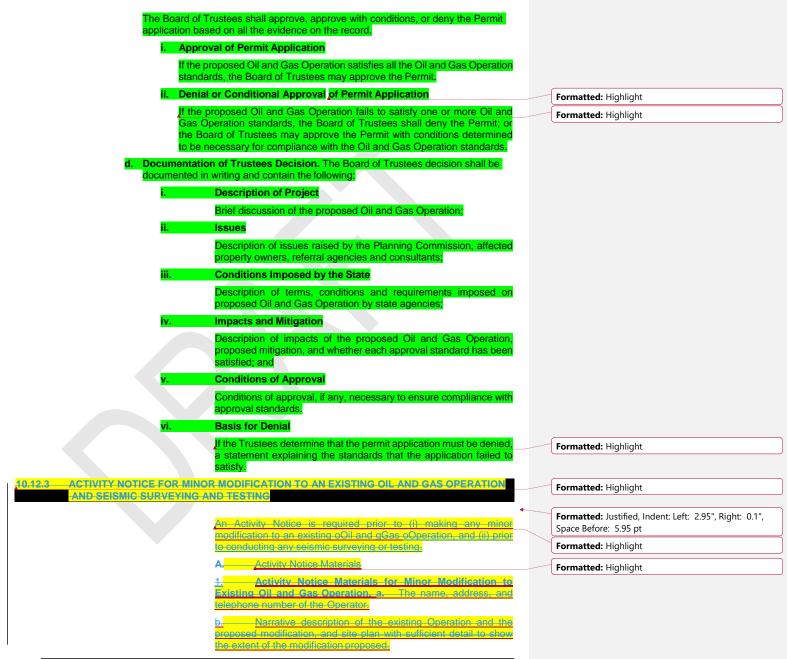
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02/14/2020 REVISIONS TO 10/28/2019 DRAFT OIL AND GAS REGULATIONS c. Permit Decision by Board of Trustees

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02/14/2020 REVISIONS TO 10/28/2019 DRAFT OIL AND GAS REGULATIONS <u>e.</u> Name and address of

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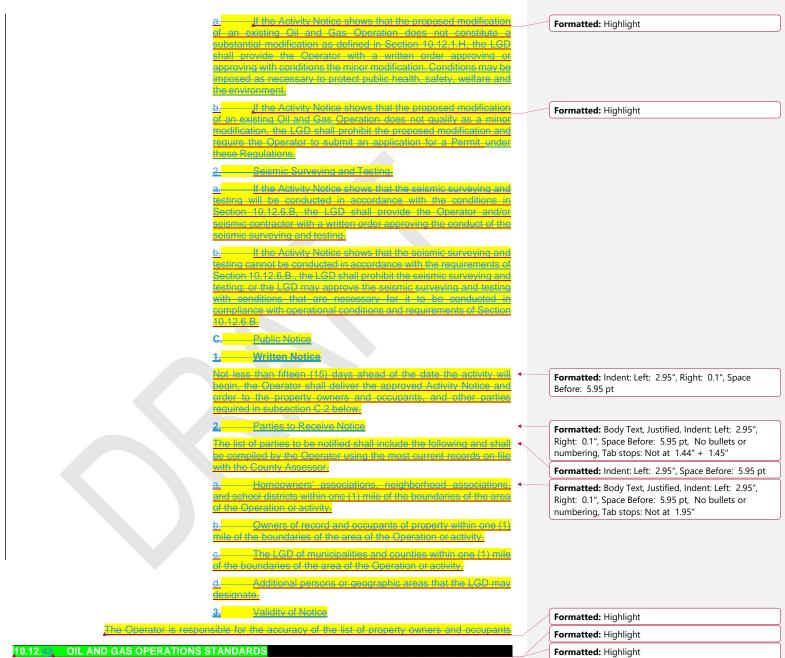
. Homeowner associations, neighborhood associations and Formatted: Highlight school districts within one (1) mile of the boundaries of the area of the Operation. ii. Owners of record and occupants of property within one (1) Formatted: Highlight mile of the boundaries of the area of the Operation iii. The LGD of municipalities and counties within one (1) mile Formatted: Highlight of the boundaries of the area of the Operation. 2. Activity Notice Materials for Seismic Surveying and Testing. a. The name, address, and telephone number of the Operator Formatted: Highlight if the Operator is conducting the seismic surveying and testing. b. The name, address, and telephone number of the seismic contractor who will be present at and responsible for conducting the seismic surveying and testing activities. c. The name and address of: Homeowners' associations, neighborhood associations, and school districts within one (1) mile of the boundaries of the area of the activity. ii. Owners of record and occupants of property within one (1) mile of the boundaries of the area of the activity. iii. The LGD of municipalities and counties within one (1) mile of the boundaries of the area of the activity. d. If the surface land comprising the area of proposed activity i<u>s owned by a person other than the applicant, the name and address</u> of the owner of record of the surface land and a description of the basis upon which the person proposing activities claims the right to conduct the proposed activities on the area. e. Seismic Surveying and Testing Plan. A plan that includes: i. A map of the proposed seismic survey and testing area including surface topography, geology, drainage, surface water, and other physical features; vegetative cover; wildlife habitats and habitats of endangered or threatened species; and recreational. historical and archaeological resources located within the seismic survey and testing area or affected by the activity. ii. Description of Proposed Seismic Survey and Testing **Activity** (1) Narrative description of the proposed seismic survey and testing activity; (2) Commencement date and duration of surveying and testing. (3) List of all property owners and occupants within one (1) mile of the seismic testing and surveying area. (4) List of streets that will be affected; (5) Description of how the seismic surveying and testing activities will meet the conditions and requirements in Section 10.12.6.B.

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Narrative description of methods to be used for reclamation	
f the area upon completion of the seismic surveying and testing	
ctivities.	
Activity Notice Review and Decision by LGD. Within five	
5) working days after the Activity Notice is deemed complete by the	
GD, the LGD shall determine whether the Activity Notice shows that	
ne proposed activity can be conducted in accordance with the	
equirements of these Regulations.	
Minor Modification of Existing Oil and Gas Operation.	
	 Activity Notice Review and Decision by LCD. Within five activities. Activity Notice Review and Decision by LCD. Within five 5) working days after the Activity Notice is deemed complete by the LCD the LCD shall determine whether the Activity Notice shows that he proposed activity can be conducted in accordance with the equirements of these Regulations.

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and other parties to whom written notice is provided. If the Operator makes reasonable good faith efforts to accomplish the notice responsibilities identified above, then the failure of any property owner or occupant to receive notice shall not affect the validity of the public notice.

The following standards are the minimum standards that will apply to all proposed Oil and Gas Operations, and shall be in addition to any additional state or federal standards that may apply. In the event of a conflict between these standards and another applicable standard, the more stringent standard shall apply. Formatted: Justified, Indent: Left: 1.44", Right: 0.09", Space Before: 6.15 pt

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A. Expertise and Financial Capability

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The applicant has the necessary expertise and financial capability to complete and operate the proposed Oil and Gas Development in compliance with the requirements and conditions of these	Formatted: Highlight
Regulations.	Formatted: Highlight
B. Property Rights and Easements	Formatted: Highlight
The applicant will obtain all property rights and easements necessary for the Oil and Gas Operation prior to site disturbance.	
C. Location Standards	Formatted: Highlight
1. The Operation is located within a zone district that allows heavy industrial uses.	Formatted: Highlight
 The Operation is located at the site from which the minerals can be accessed with the least adverse impact to public health, safety, welfare and the environment in compliance with all applicable standards in this Section 10.12.4. 	
3. Any type of well pad and above-ground production facility shall be located at least 1000feet from occupied buildings, or a proposed building that has applied for a building permit that requires a certificate of occupancy pursuant to the UDC. Measurement shall be taken from disturbed area of the production facility to the nearest wall or corner of any such buildings. The Town may decide that a different setback is more appropriate based on the Alternative Site Analysis.	
4. Any type of well pad and above-ground production facility shall be located at least 2000 feet from the boundary line of platted residential lots or parks, sports fields and playgrounds, or other outside activity areas and any occupied structure. Measurement shall be taken from the edge of the disturbed area to the boundary line. The Town may decide that a different setback is more appropriate based on the Alternative Site Analysis.	
5. The Operation shall be at least 500 feet from any surface waterbody.	
 The Operation shall be at least 500 feet from any domestic or commercial water wells or irrigation wells. 	
 The Operation is not located within a floodway district as defined in Section 10.2.7.C.4 of the UDC. 	
D. Minimal Site Disturbance	
The Oil and Gas Operation shall be located and constructed in a manner so that there is no unnecessary or excessive site disturbance and that minimizes the amount of cut and fill:	
1. Multi-well drill pads and consolidated facilities shall be used to minimize surface disturbance.	
 Pad dimensions shall be the minimum size necessary to accommodate operational needs while minimizing surface disturbance. 	
 Structures and surface equipment shall be the minimum size necessary to satisfy present and future operational needs. 	
4. The Operation shall be located in a manner to minimize impacts on surrounding uses, and achieve compatibility with the natural topography and existing vegetation.	
E. Geologic and Natural Hazards	
1. The Oil and Gas Operation shall not be subject to risk from natural or geologic hazards.	
2. The Oil and Gas Operation shall not initiate or intensify natural or geologic hazards.	
 For Oil and Gas Operations located in an area where geologic and natural hazards occur, the Oil and Gas Operation shall be conducted in compliance with the recommendations of the Colorado Geological Survey. 	
F. Air Quality	

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	written notice to the LGD of such proposed venting. Such notice shall identify the duration and nature of the venting event, a description as to why venting is necessary, a description of what vapors will likely be vented, what steps will be taken to limit the duration of venting, and what steps the operator proposes to undertake to minimize similar events in the future.	
	ii. If emergency venting is required, or if accidental venting occurs, Operator shall provide notice to LGD of such event as soon as possible, but in no event longer than twenty-four (24) hours from the time of the event, with the information listed above and with an explanation as to the cause and how the event will be avoided in the future.	Form
	 Participate in Natural Gas STAR program or other voluntary programs to encourage innovation in pollution control at the well pad site. 	
	n. Centralize compression facilities within a well site.	
	o. Vent exhaust from all stationary engines, motors, chillers and other mechanized equipment up or in a direction away from the closest occupied structures to such equipment.	
	p. Use a pressure-suitable separator and/or vapor recovery unit (VRU) when appropriate.	
	q. Construct flowline infrastructure prior to beginning production.	
	 r. Use dry seals on centrifugal compressors. s. Route emissions from rod-packing and other components on reciprocating 	
	compressors to vapor collection systems.	
	t. Control hydrocarbon emissions of 98% or better for centrifugal compressors and reciprocating compressors.	
	 Use emission reduction measures to respond to air quality action day advisories posted by the Colorado Department of Public Health and Environment for the Front Range Area. Emission reduction measures will be implemented for the duration of an Air Quality Action Day advisory and will include: 	
	i. Minimize vehicle and engine idling;	
	ii. Reduce truck traffic and worker traffic;	
	iii. Delay vehicle refueling;	
	iv. Suspend or delay use of fossil fuel powered ancillary equipment; and	
	v. Postpone construction activities	
	vi. Within thirty days following the conclusion of each annual air quality action day season, Operator shall submit a report to the LGD that details which measures it implemented during any action day advisories.	
	v. Establish shutdown protocols, approved by the Town, with notification and inspection provisions to ensure safe shut-down and timely notification to affected neighborhoods.	
	w. Conduct ongoing maintenance checks of all equipment to minimize the potential for gaseous or liquid leaks. <u>Minimize truck traffic to and from the site</u> .	Form
×. <mark>a.</mark>	Minimize truck traffic to and from the site.	Form
¥	Use desiccant gas processing dehydrators or other zero emitting dehydrators.	Form
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Hydrocarbon control of 98% or better for crude oil, condensate, and produced water tanks with uncontrolled actual emissions of VOCs greater than two TPY VOCs.	 Formatted: Highlight
ea.z Consolidate product treatment and storage facilities within a well pad site.	 Formatted: Highlight
bb. Centralize compression facilities within a well pad site.	
cc. Use pressure suitable separator and vapor recovery unit (VRU) where applicable.	
ag. Use EPA Reduced Emission Completions for wells. Daily logs documenting reduced emission completions provided to the LGD <u>upon request</u> .	
bb. Use no-bleed continuous and intermittent pneumatic devices. This requirement can be met by replacing natural gas with electricity or instrument air, or routing the discharge emissions to a closed loop-system or process.	Formatted: Highlight
cc. Conduct root cause analysis for any Grade 1 gas leaks.	 Formatted: Highlight
dd. Use automated tank gauging.	
For Operators with existing Oil and Gas Operations in the Town of Erie, demonstrate that the Operation will not result in any increase of volatile organic compounds (VOCs) from Operator's existing and planned Operations in the Town. Operator may include anticipated reductions from plugging and abandoning existing wells located in Town when modeling total VOCs from existing and future Operations and related activities.	
ff. Comply with all OSHA work practice requirements with respect to benzene.	 Formatted: Highlight
gg. Construct flowline infrastructure prior to beginning production.	
hh. Use other best management practices to control emissions as they become available.	
2. Flares and Combustion Devices.	
Flaring shall be eliminated other than during emergencies or upset conditions and all flaring shall be reported to the LGD. If flaring is required, all flares, thermal oxidizers, or combustion devices shall be designed and operated as follows:	
 Flaring shall be done with a flare that has a manufacturer specification of 98% destruction removal efficiency or better 	
b. Flare and/or combustor shall be fired with natural gas.	
c. Flare and/or combustor shall be designed and operated in a manner that will ensure no visible emissions during normal operation.	
i. No visible emissions of smoke for any period or periods of duration greater than or equal to one minute in any fifteen-minute period during normal operation, pursuant to EPA Method 22.	
ii. Visible emissions do not include radiant energy or water vapor.	
d. Flare and/or combustor shall be operated with a flame present at all times when emissions may be vented to it.	
e. All combustion devices shall be equipped with an operating auto-igniter.	
f. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. A telemetry system shall be in place to monitor pilot flame and shall activate a visible and audible alarm in the case that the pilot goes out.	

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g. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.	
h. Flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet the hydrocarbon destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.	
3. Leak Detection and Repair (LDAR)	
 Operations shall be conducted in conformance with the Leak Detection and Repair Plan. 	Formatted: Highlight
b. If the Town determines that the leak presents an immediate hazard to persons or property, the Operator may not operate the affected component, equipment or flowline segment until the Operator has corrected the problem and the Town agrees that the affected component, equipment or flowline segment no longer poses a hazard to persons or property. In the event of leaks that the Town believes do not pose an immediate hazard to persons or property, if more than forty-eight-hours repair time is needed after a leak is discovered, Operator shall contact the LGD and provide an explanation of why more time is required. Continuous monitoring to detect leaks or measure hydrocarbon emissions and monitor meteorological data shall be required. Any continuous monitoring system shall be able to alert the Operator of increases in air contaminant concentrations. Operator shall provide detailed recordkeeping of the inspections for leaking components.	
4. Well Completion	
For each well completion operation with hydraulic fracturing, the Operator shall control emissions by the following procedures.	
a. For the duration of flowback, route the recovered liquids into one or more storage vessels or re-inject the recovered liquids into the well or another well, and route the recovered gas into a gas flowline or collection system, re-inject the recovered gas into the well or another well, use the recovered gas as an onsite fuel source, or use the recovered gas for another useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.	
 b. If compliance with paragraph 4.a above is infeasible, the Operator must capture and direct flowback emissions to a completion combustion device equipped with a reliable continuous ignition source over the duration of flowback, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways or nearby structures. Non-flammable gas may be vented temporarily until flammable gas is encountered where capture or combustion is not feasible. 5. Compliance 	
a. Operator will submit annual reports to the LGD certifying	
(A) Compliance with these air quality requirements and documenting any periods of material non-compliance, including the date and duration of each such deviation and a compliance plan and schedule to achieve compliance, and	
(B) Equipment at the well sites continues to operate within its design parameters, and if not, what steps will be taken to modify the equipment to enable the equipment to operate within its design parameters.	
b. The annual report shall contain a certification as to the truth, accuracy and completeness of the reports, signed by a responsible corporate official. The Operator	

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will also provide the LGD with a copy of any self-reporting submissions that operator provides to the CDPHE due to any incidence of non-compliance with any CDPHE air quality rules or regulations.
G. Odor Management
 Use of D-822 is prohibited unless its use is required by COGCC. In comments on the Form 2A the LGD shall request that the COGCC only approve mud types that are water base and low odor type fluids.
2. The operator shall notify the LGD no later than 24-hours after receiving an odor complaint.
 Operator shall conduct drive-by inspections through neighborhoods at various times to hear, smell and see what is going on during each phase of Operations.
4. No emission of odorous gases or other odorous matter shall be permitted in such quantities as to be readily detectable when diluted in the ratio of one volume of odorous air to four volumes of clean air.
 Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system so that control will be maintained if the primary safeguard system should fail.
6. Filtration systems or additives to minimize odors from drilling and fracturing fluids may be used except that operators shall not mask odors by using masking fragrances.
7. Drill cuttings shall be covered to prevent odor while being transported by truck.
H. Dust Suppression
 Dust associated with on-site activities and traffic on access roads shall be minimized throughout construction, drilling and operational activities such that there are no visible dust emissions from access roads or the site to the extent practical given wind conditions.
2. Untreated produced water and process fluids will not be used for dust suppression.
 Operator shall not conduct dust suppression activities within 300 feet of surface water unless the dust suppressant is water.
4. Safety data sheets shall be submitted for any chemical based suppressant.
I. Water Quality
The Oil and Gas Operation shall not cause significant degradation of water quality of affected water bodies and water wells. The Operator shall implement the required Water Quality Monitoring and Mitigation Plan to achieve the standard.
1. Determination of Significant Degradation of Water Quality
Determination of whether the Operation will cause significant degradation to water quality may include, but is not limited to the following considerations:
a. Applicable narrative and numeric water quality standards.
b. Changes in point and nonpoint source pollution loads.
c. Increase in erosion and sediment loads.
d. Changes in stream channel or shoreline stability.
e. Changes in stormwater runoff flows.
f. Changes in quality of ground water.
g. Certification. The Operator shall submit annual reports to the LGD certifying compliance with water quality standards, documenting any non-compliance, including its date and

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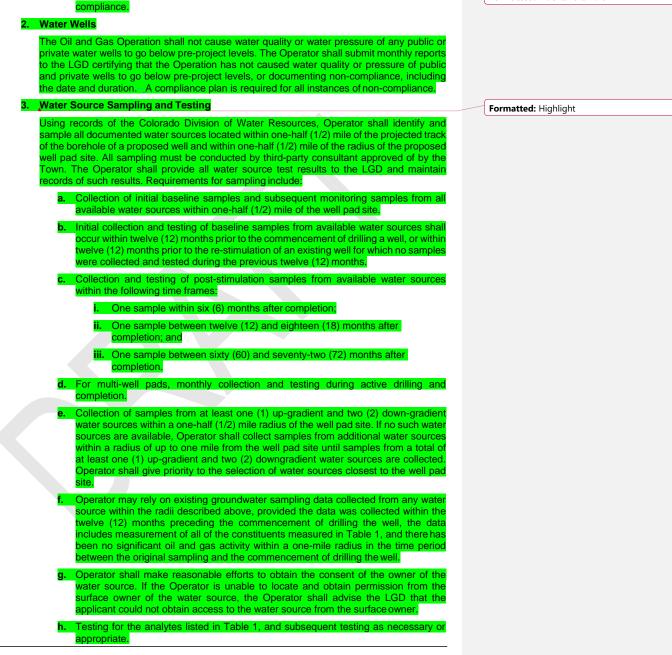
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02/14/2020 REVISIONS TO 02/14/2020 REVISIONS TO 10/28/2019 DRAFT OIL AND GAS REGULATIONS duration. A compliance plan is required for all instances of

non-

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	standard industry pro model Sampling and		nples, consistent with the	
j. Reporti	ng the location of the w	ater source using a GPS v	with sub-meter resolution.	
sources			djacent potential pollution effervescence discovered	
		ults described above to the ree (3) months after collect	LGD, the COGCC, and the ing the samples.	Formatted: Highlight
<mark>m.</mark> Additior includin		required If sampling she	ows water contamination	1
i.	milligram per liter (mg	/I) is detected in a water s mpositional analysis and st	ion level greater than one ource, determination of the able isotope analysis of the	
ii.		icate thermogenic or a m n plan to determine the so	ixture of thermogenic and urce of the gas.	1
iii.	source if the methan		and the owner of the wate s by more than five mg/ than ten mg/l.	
iv.	source if BTEX and/	or TPH are detected as	and the owner of the wate a result of testing. Such nt sampling for additiona	1
vi.	owners. Timely production and data in electronic deliv source owners.	distribution of test results, rerable format to the LGD,	mplaints from water source well location, and analytica the COGCC and the wate g shall be conducted by the	
Operato	or or if requested by a s		d independent professiona	
GENERA	Table	1. Water Quality Analytes Alkalinity Conductivity & TDS Ph Dissolved Organic Carbo (or Total Organic Carbo Hydrogen Sulphide		
MAJOR I	ONS	Bromide Chloride Fluoride Magnesium Potassium Sodium Sulfate Nitrate + Nitrite as N (to	tal)	
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		1. Water Quality Analytes		
	METALS	Arsenic		Formatted: Highlight
		Barium Boron		
		Chromium		
		Copper		
		Iron Lead		
		Manganese		
		Selenium Strontium		
		Subnull		
	DISSOLVED GASES AND	Methane		Formatted: Highlight
	VOLATILE ORGANIC COMPOUNDS	Ethane Propane		
		BTEX as		
		Benzene, Toluene, Ethylbenzene, X		
		Total Petroleum Hydrocarbons (TPH	<u>v</u>	
	OTHER	Water Level		Formatted: Highlight
		Stable isotopes of water (Oxygen, H Carbon)	lydrogen,	
		Phosphorus		
J. Groundwate	r Baseline Sampling and Monito	oring, Greater Wattenberg Area Well	S	Formatted: Highlight
		he results of tests performed by Opera	ator on Greater	
Wattenberg A	Area wells within the Town limits u	nder COGCC Rule 318A.f,		
K. Stormwater				
1. Oper	ation shall be conducted in conform	mance with the Stormwater Managem	ent Plan.	
2. Best	Management Practices (BMPs) sh	nall be maintained in effective operation	g condition and	
	· · · · · · · · · · · · · · · · · · ·	a stormwater inspector must be imple	emented by the	
	ator as soon as possible.			
		ired by CDPHE-WQCD shall be provid		
		nplemented as soon as construction a		
		has reached final stabilization as defir nust develop and implement a pos		
	nwater program as defined by COC			
L. Water Suppl	X			
	water supply is the least detriments adequate to meet the needs of the	al to the environment among the avail Oil and Gas Operation.	able sources	
	water supply is legally and physic ecycling will be implemented.	cally available, dependable, and susta	ainable. Reuse	
	Operation shall not use water from e Board of Trustees.	n the Town's municipal water supply u	nless approved	
		onformance with the Water Supply Pla	0	
	e Response and Reporting	Smonnance with the water Supply Fla		
		ontrol and contain all spills and release	a of exploration	
	shall demonstrate the adulty to co	ontroi and contain air spills and felease	es or exploration	
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	d production waste, including produced fluids, immediately upon discovery in conformance with Spill Release Response and Reporting Plan.	
	 Spills and releases shall be contained, investigated, and cleaned up as soon as possible or immediately in emergency situations. 	
	 All employees performing spill clean-up shall be qualified in accordance with applicable state and federal requirements. 	
	3. Copies of Form 19 Spill Release Report (both initial and Supplemental Report) and Form 23 Loss of Well Control Report shall be submitted to the LGD at the same time they are submitted to the COGCC, including the topographic map showing location of the spill and any information relating to initial mitigation, site investigation, and remediation that accompany the report.	Formatted: Highligh
	4. Spills and releases outside of containment which exceed one barrel of Exploration and Production Waste or produced fluids shall be reported to the LGD within 24 hours.	
	5. Spills and releases of any size which impact or threaten to impact any waters of the state, residences or occupied structures, livestock, or public byways shall be verbally reported to the LGD within twenty-four (24) hours, with a follow-up written notice within 48 hours.	
	6. Spills and releases of any size which impact or threaten to impact any water supply area shall be verbally reported to the Colorado Environmental Spill Reporting Hotline at 1-877-518-5608, and to the LGD immediately after discovery.	
	7. Spills and releases that impact or threaten to impact a water supply intake shall be reported immediately to the LGD, and to the owner of the intake if the Town is not the owner of the intake.	
	8. Spills, chemical spills and releases shall be reported in compliance with applicable state and federal laws. Applicant will provide the LGD with a copy of any self-reporting submissions that applicant provides to any agency.	
N. Us	e of Steel-Rim Berms	
	e Oil and Gas Operation shall use steel rim berms or some other state of the art technology that s the capacity to contain 150% of the largest storage tank.	
O. Vel	hicle and Equipment Fueling and Maintenance	
	utine field maintenance of vehicles or mobile machinery shall not be performed within five hundred 0) feet of any water body. All fueling must occur over impervious material,	
P. Fue	el Storage Areas	
	e Oil and Gas Operation includes measures to contain fuel in fuel storage areas to prevent release any water body. Inventory management or leak detection plans may be required.	
Q. Wa	ste Water Management	
Op	eration will be conducted in conformance with the Waste Water Management Plan.	
	 All fluids will be contained and there will be no discharge of fluids. 	
	 Waste will be stored in tanks, transported by tanker trucks and/or pipelines, and disposed of at licensed disposal or recycling sites. 	
	3. Land treatment of oil impacted or contaminated drill cuttings within the Town limits is prohibited.	
	4. Disposal of waste water within the Town limits is prohibited.	
R. Us	e of Underground Waste Water Injection Wells Prohibited	
Cla	iss II underground waste water injection wells within the Town limits are prohibited.	

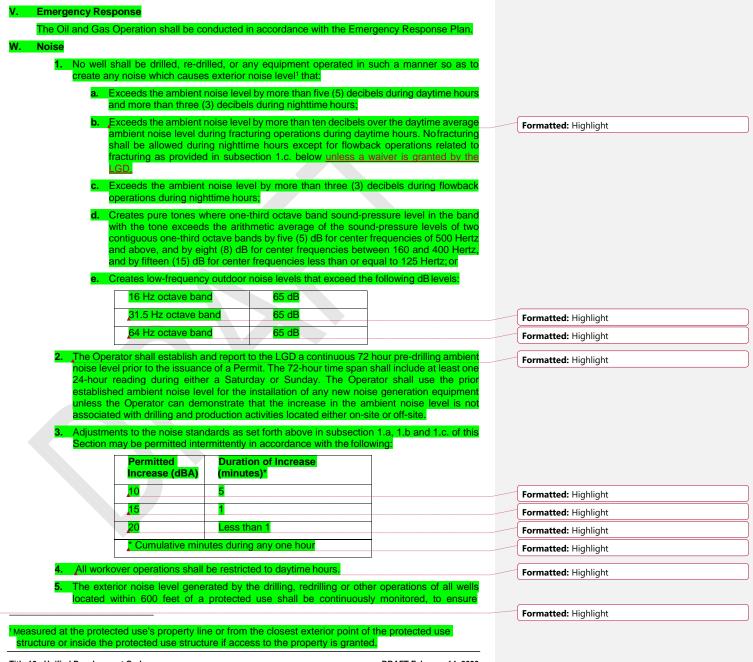
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The Operator shall demonstrate the ability to and shall dispose of all hydrau		
accordance with the Chemicals and Hydraulic Fracturing Fluids Disposal and R	Reporting Plan	
Hazardous Materials		
1. The Oil and Gas Operation includes measures to contain all hazardous		
areas to prevent release to any water body. Inventory managemen systems are required.	t and leak detection	
 Full disclosure, consistent with COGCC requirements, including materia 	ial cofaty data choota	_
2. If all hazardous materials that will be transported on any public or priva for all hazardous materials that will be transported on any public or priva Town for the Oil and Gas Operation, shall be provided to the LGD. Th treated as confidential and will be shared with other emergency respor an as needed basis.	te roadway within the his information will be	Foi
 Flammable Material. The area twenty-five (25) feet around anything flat free of dry grass or weeds, conform to COGCC safety standards and a 		
Chemical Disclosure and Storage		
FracFocus website within sixty (60) days of the completion of fracturing oper shall not permanently store fracturing chemicals, flowback from hydraulic fra		
water in the Town limits. Operator shall remove all hydraulic fracturing chemica hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used	ls at a well site within	
thirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used	Is at a well site within	
hirty (30) days following the completing of hydraulic fracturing at that well site.	ls at a well site within	
hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead	d at the well site within d at the well sites: CAS# 71-43-2 7439-92-1	
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hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead Mercury Arsenic Cadmium Chromium	Is at a well site within d at the well sites: CAS# 71-43-2 7439-92-1 7439-97-6 740-38-2 7440-43-9 7440-43-9 7440-47-3	
hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead Mercury Arsenic Cadmium Chromium Ethyl benzene	d at the well sites: CAS# 71-43-2 7439-92-1 7439-92-1 7439-38-2 7440-43-9 7440-43-9 7440-47-3 100-41-4	
hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead Mercury Arsenic Cadmium Chromium	Is at a well site within d at the well sites: CAS# 71-43-2 7439-92-1 7439-97-6 740-38-2 7440-43-9 7440-43-9 7440-47-3	
hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead Mercury Arsenic Cadmium Chromium Ethyl benzene Xylenesf	d at the well site within d at the well sites: CAS# 71-43-2 7439-92-1 7439-92-1 7439-97-6 7440-43-9 7440-43-9 7440-43-9 7440-47-3 100-41-4 1330-20-7	
hirty (30) days following the completing of hydraulic fracturing at that well site. The following chemicals will not be added to the hydraulic fracturing fluids used Ingredient Name Benzene Lead Mercury Arsenic Cadmium Chromium Ethyl benzene Xylenesf 1,3 ,5-trimethylbenzene	Les at a well site within d at the well sites: CAS# 71-43-2 7439-92-1 7439-97-6 740-38-2 7440-43-9 7440-43-9 7440-47-3 100-41-4 1330-20-7 108-67-8	
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	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, redrilling 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 10.12.4.W and the Noise Management Plan after the installation of the noise-generating equipment.
9 X. Vibra	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 10.12.7 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.
	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.
3	 Single impulse period vibrations occurring at an average interval greater than five (5) minutes shall not induce accelerations exceeding .01g.
<mark>4</mark>	. 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.
Y. Visua	al Quality
	il and Gas Operation shall not cause significant degradation to the scenic attributes and cter of the Town.
1	 Facilities shall be painted in a uniform, non-contrasting, non-reflective color, to blend with the surrounding landscape and with colors that match the land rather than the sky. The color should be slightly darker than the surrounding landscape.
2	. The Oil and Gas Operation shall be buffered from sensitive visual areas by providing landscaping along the perimeter of the site between the surface equipment and the sensitive visual area.

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damage to existing to existing to existing to exist the edges	ration shall be constructed in a manner to minimize the removal of and trees and vegetation. If the Operation requires clearing trees or s of the cleared vegetation should be feathered and thinned and the mowed or brushhogged while leaving root structure intact, instead of
scenic and environme	ration shall be sited away from prominent natural features and visual, ental resources such as distinctive rock and land forms, rivers and ve vegetative patterns.
5. The Oil and Gas Oper	ration shall use low profile tanks or less visually intrusive equipment.
General Operations and Mai	Intenance Requirements
	all times keep the well sites, roads, rights-of-way, facility locations, and eration areas safe and in good order, free of noxious weeds, litter and
by the Operat	shall be responsible for ongoing weed control at all locations disturbed tion and along access roads during construction and operation, until t and final reclamation is completed.
sediment disc pad design an street sweepii	r shall utilize vehicle tracking control practices to control potential charges from unpaved surfaces. Such practices may include road and ind maintenance to minimize rutting and tracking, controlling site access, ing or scraping, tracking pads, and wash racks. Traction chains from nent shall be removed before entering a public roadway.
	spose of all water, unused equipment, litter, sewage, waste, chemicals te at an approved disposal site.
the well pad si	t used for drilling, re-drilling and maintenance shall be removed from ite within thirty (30) days after completion of the work, unless otherwise the surface owner. Permanent storage of equipment on well pad sites llowed.
b. Materials and	trash shall not be buried on-site.
c. Trash burning	
3. The Operator shall pro reclamation plan.	omptly reclaim and reseed all disturbed sites in conformance with the
	oment associated with the Operation shall be anchored to minimize ions through the ground.
secured where the Op	e valves on all storage tanks, pipelines and other containers shall be peration site is unattended or is accessible to the general public. Open- es shall be placed within the interior of the tank secondary containment.
Impasse or Stronghold fencing color shall be	gas well facilities shall be fenced with wrought iron fencing or Ameristar d fencing or approved equivalent, as determined by the Director. The bronze unless the Director approves black fencing. Black fencing will the Director if fencing or site furnishings in the adjacent developments elements.
pollution and spill-ove	all down cast lighting or some other form of lighting that mitigates light or onto adjacent properties; provided, however, that Operator may still cessary for public and occupational safety.
equipped with all appr	access to the well pads to conduct inspections. Town personnel will be ropriate personal protection equipment (PPE) and will comply with the ary safety rules and shall be accompanied by an
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representative.

AA. Grading, Drainage, and Erosion Control

The Oil and Gas Operation shall be conducted in accordance with the Grading, Drainage, and Erosion Control Plan.

BB. Use of Existing Roads

Unless traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise, existing roads on or near the site of the Oil and Gas Operation shall be used in order to minimize land disturbance.

CC. Transportation, Roads, and Access Standards

1. Compliance with Town Standards

All public roads shall be constructed and maintained in compliance with Town standards as necessary to accommodate the traffic and equipment related to Oil and Gas Operations and emergency vehicles.

2. Access to Public Roads

- a. Access points to public roads shall be located, improved and maintained to assure adequate capacity for efficient movement of existing and projected traffic volumes and to minimize traffic hazards.
- b. Access roads shall be improved a minimum distance of 200 feet on the access road from the point of connection to a public road. The access road shall be improved as a hard surface (concrete or asphalt) for the first 100 feet from the public road and then improved as a crushed surface (concrete or asphalt) for 100 feet past the hard surface in the appropriate depth to support the weight load requirements of the vehicles accessing the well and production facilities.
- If an access road intersects with a pedestrian trail or walk, the Operator shall pave the access road as a hard surface (concrete or asphalt) a distance of 100 feet either side of the trail or walk and if necessary, replace the trail or walk to address the weight load requirements of the vehicles accessing the well and production facilities.
- **d.** Temporary access roads associated with the Oil and Gas Operation shall be reclaimed and revegetated to the original state within sixty (60) days after discontinued use of the temporary access roads.

3. Implementation of Traffic Management Plan

The Operator shall implement the approved Traffic Management Plan.

4. Road Repairs

- a. The Operator shall arrange for a qualified outside consultant to perform a road impact study for all public roads that are used to access the Oil and Gas Operation. The consultant shall conduct the first part of the study prior to operations and the second part of the study after the Operator completes all drilling and hydraulic fracturing. The Operator and the Town shall use these studies to determine the extent of any damage accruing to the road during the study period. The Operator shall either promptly pay the Town to repair such damage or arrange for and pay the cost of such repairs itself, whichever the Town prefers.
 b. The Operator shall maintain financial assurance to secure its road repair obligations.
 - The amount of such financial assurance shall equal the Town's annual road maintenance budget as of the date of permit approval multiplied by the percentage yielded by dividing the total number of Town road miles as of the date of permit approval into the number of such road miles that the Operator will use to access the

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Oil and Gas Operation. The Operator shall select the form of such financial assurance and shall maintain such assurance.

If the projected use of public roads as a result of the Oil and Gas Operation will result in a need for an increase in roadway maintenance, the Operator shall enter into an agreement with the Town whereby the Operator provides for private maintenance or reimburses the Town for such increased costs and/or provides a bond or other financial assurance in an amount acceptable to the Town to cover the costs of mitigating impacts to public roads.

DD. Flowlines and Pipelines.

Operator shall comply with the requirements for flowlines set forth in COGCC Rules 1101 through 1105, which address: registration, construction standards, design, installation, reclamation, inspection, maintenance, repair, operation, and integrity management of flowlines; pressure testing; leak protection, detection, and monitoring; and data sharing with local government.

EE. Floodplain, Wetlands and Riparian Areas

The Oil and Gas Operation shall not have a significant adverse effect on the floodplain and shall not significantly degrade wetlands and riparian areas. Oil and Gas Operations conducted within the Floodplain Overlay District shall comply with Section 10.2.7.C of the UDC.

FF. Natural Resource Areas

The Oil and Gas Operation shall not cause significant degradation of natural landmarks, rare plant species, riparian corridors, or other sensitive areas.

GG. Wildlife

The Oil and Gas Operation shall not cause significant degradation of wildlife or wildlife habitat.

HH. Historical and Cultural Resources

The Oil and Gas Operation shall not cause significant degradation to resources of historic, cultural, paleontological, or archeological importance.

I. Public Services and Facilities

The Oil and Gas Operation shall not have a significant adverse effect on the capability of the Town to provide municipal services or the capacity of the service delivery systems.

JJ. Compliance with Plans

Operation will comply with all plans submitted under Section 10.12.2.E.9.

KK. Financial Guarantee

The Operator will provide evidence of financial guarantee in a form acceptable to the Town to ensure that the Oil and Gas Operation will comply with these Regulations and all conditions of approval imposed by the Board of Trustees. The final amount of such financial guarantee shall be calculated by the Town following final approval of the permit application. The financial guarantee may be increased at any time if the LGD determines that the amount of the guarantee is no longer sufficient.

LL. Benefits Outweigh Adverse Impacts.

<u>Where an impact of an Oil and Gas Operation cannot be completely mitigated,</u> ∓the overall benefits to the Town of the Oil and Gas Operation outweigh any adverse impacts that may be caused by the proposed Operation. <u>This does not obviate the need to satisfy every standard in these</u>

10.12.45 EXISTING OIL AND GAS OPERATIONS Regulations.

A. Registration of Existing Oil and Gas Operations

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Oil and Gas Operations existing at the effective date of these Regulations, including wells that are out of production and wells that are temporarily abandoned or abandoned, must be registered with the Town within thirty (30) days of the effective date of these Regulations.

1. Submit Registration Materials

Operator shall submit the registration materials described in subsection A.2, below, and all applicable fees to the LGD.

2. Registration Materials

The following materials are required for registration of Oil and Gas Operations:

- a. Completed Oil and Gas Operation Registration form.
- b. Copy of maps and flowline records submitted to COGCC.
- c. Copy of the Emergency Response Plan.
- d. Copy of current SPCC Plan.
- e. Emissions record from previous calendar year.
- f. Copy of most recent Operator's Monthly Report of Operations submitted to COGCC.
- g. For shut-in wells:
 - i. A map at a scale designated by the Town showing the location, including GPS location, of each shut-in well and denoting the age; size, and the maximum pressure at which it is operated; and its depth from the surface.
 - ii. Copy of the most recent mechanical integrity test report submitted to COGCC for each shut in well.

h. For abandoned and temporarily abandoned wells:

- A map at a scale designated by the Town showing the location, including GPS location, of abandoned and temporarily abandoned wells.
- ii. Copy of the most recent mechanical integrity test report submitted to COGCC for each temporarily abandoned well.
- iii. Copy of Form 6 Notice of Intent to Abandon submitted to COGCC.
- iv. Quarterly inspections of temporarily abandoned and shut-in wells for surface impacts.

3. Decommissioned and Abandoned Oil and Gas Well Assessment and Monitoring Prior to and Following Fracturing

Prior to any hydraulic fracturing, and at periods following hydraulic fracturing, Operator shall conduct assessment and monitoring of oil and gas wells that are plugged and decommissioned or removed from use or dry and removed from use (abandoned wells) within one-quarter (1/4) mile of the projected track of the borehole of a proposed well. Operator shall obtain permission from each surface owner who has an abandoned well on the surface owner's property to access the property in order to test the abandoned well. If a surface owner has not provided permission to access after thirty (30) days from receiving notice, the applicant shall not be required to test the abandoned well.

- 1. Assessment shall include:
 - a. Based upon examination of COGCC and other publicly available records, identification of all abandoned wells located within one-quarter (1/4) mile of the projected track of the borehole of a proposed well.

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- b. Risk assessment of leaking gas or water to the ground surface or into subsurface water resources, taking into account plugging and cementing procedures described in any recompletion or plugged and abandoned report filed with the COGCC.
- c. Soil gas surveys from various depths and at various distances, depending on results of risk assessment, of the abandoned well prior to hydraulic fracturing
- d. Soil gas surveys from various depths and at various distances, depending on results of risk assessment, of the abandoned well within one (1) year and then every three (3) years after production has commenced.
- 2. Operator shall notify the LGD and COGCC of the results of the assessment of the plugging and cementing procedures.
- Results of the soil gas survey shall be provided to the LGD and the COGCC within three (3) weeks of conducting the survey or advising the LGD that access to the abandoned wells could not be obtained from the surface owner.
- 4. If contamination is detected during any soils testing, no further operations may continue until the cause of the contamination is detected and resolved and the Town has given its approval for additional operations to continue.
- 5. Operator shall conduct Bradenhead monitoring. Operator shall equip the bradenhead access to the annulus between the production and surface casing, as well as any intermediate casing, with a fitting to allow safe and convenient determinations of pressure and fluid flow. Valves used for annular pressure monitoring shall remain exposed and not buried to allow for visual inspection. The Operator shall take bradenhead pressure readings on a monthly basis and report those readings to the LGD. Such readings shall include the date, time, and pressure of each reading, and the type of fluid reported.

10.12.5 SEISMIC SURVEYING AND TESTING

A. Seismic Surveying and Testing Activity Notice Required

An Activity Notice for Seeismic Sourceving and Ttesting Activity Notice shall be filed pursuant to Division 10.12.3. Activity Notice for Minor Modification to Existing Oil and Gas Operation and for Seismic Surveying and Testing, with the LGD no less than forty-five (45) calendar days prior to beginning seismic surveying and testing activities. The Town may retain, at the Operator's costoutside consultants to review the application.

- FB. Operational Requirements and Conditions
 - 1.—Seismic contractor shall submit a Peak Particle Velocity (PPV) summary to the LGD after the first week of testing and a PPV summary at the end of testing. Contractor may be required to submit additional summaries through the duration of the testing as requested by the LGD.
 - 2. PPVs are not to exceed 0.35 in/sec.
 - 3. Seismic testing shall be conducted only during the hours of 7 a.m. to 6 p.m. Monday Friday, and 9 a.m. to 6 p.m. on Saturday. Testing is not allowed on Sundays or Town holidays. These hours may be further restricted by the Town to accommodate special events.
 - Gress weight of each vibe truck shall not exceed gross weight of 18:000 lb. on street rightof-way.
 - Lane closures on residential streets are limited to 7 a.m.-4 p.m. Monday-Friday and 9 a.m.-6 p.m. on Saturdays.
 - Contractor will work around, other construction activity, and may need to adjust location of receivers and/or equipment to accommodate businesses.

7. The Seismic Surveying and Testing will satisfy the noise requirements in Section 10.12.4.W.

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- Contractor will maintain Americans with Disabilities Act (ADA) compliant pathways and is will
 resolve potential trip hazards from seismic hardware, lines/cables, etc.
- With the exception of seismic-recording-hardware and cables, no surveying or testing equipment may be stored in Town right-of-way without the permission from the Director of Public Works.
- 10. Mud and/or debris associated with surveying and testing will be removed daily.
- 11. Contractor is responsible for any damages caused by seismic surveying and testing.
- 12. All traffic control must be in compliance with the latest version of the Uniform Traffic Centrol Devices and the Town of Erie Municipal Code.
- 13. Contractor shall comply with all other Town permit requirements and is responsible for keeping permits current and in testing vehicles at all times.

B. Seismic Surveying and Testing Activity Notice Materials

- The Notice shall include the following:
 - 1. The name, address, and telephone number of the Operator.
 - 2... The name, address, and telephone number of the seismic contractor who will be present at and responsible for conducting the seismic surveying and testing activities.
 - 3. If the surface land comprising the seismic surveying and testing area is owned by a person other than the Operator, the name and address of the owner of record of the surface land and a description of the basis upon which the person proposing exploration activities claims the right to enter the proposed exploration area.
 - 4. Seismic Surveying and Testing Plan
 - A plan that includes:

a. Description of Proposed Seismic Survey and Testing Area.

- i. Map of the proposed seismic survey and testing area.
- II. A narrative description of the proposed seismic survey and testing area including surface topography, geology, drainage, surface water, and other physical features; vegetative cover; wildlife habitats and habitats of endangered or threatened species; and recreational, historical and archaeological resources located within the seismic survey and testing area or affected by the activities.

b. Description of Proposed Seismic Survey and Testing Activity

- i. Narrative description of the proposed seismic survey and testing activity;
- ii. Commencement date and duration of surveying and testing.
- iii. List of all property owners and occupants affected.
- iv. List of streets that will be affected;
- Description of how the proposed seismic surveying and testing activities will meet the conditions and requirements in Section 10.12.5.F.
- vi. Narrative description of methods to be used for reclamation of the area upon completion of the seismic surveying and testing activities.

D. Activity Notice Review and Decision by LGD

Within five (5) working days after the Activity Notice is deemed complete by the LGD, the LGD shall determine whether the Activity Notice shows that the conduct of the seismic surveying and testing can be conducted in accordance with the conditions and requirements in Section 10.12.5.F.

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1. Approval of Activity Notice

If the Activity Notice shows that the seismic surveying and testing will be conducted in accordance with the conditions and requirements in Section 10.12.5.F, the LGD shall provide the seismic contractor with a written order approving the conduct of the seismic surveying and testing.

2. Denial or Conditional Approval of Activity Notice

If the Activity Notice shows that the seismic surveying and testing cannot be conducted in accordance with the conditions and requirements in Section 10.12.5.f., the LGD shall prohibit the seismic surveying and testing; or the LGD may approve the Activity Notice with conditions determined to be necessary for the testing and surveying to be conducted in compliance with Section 10.12.5.F.

E. Public Notice

1. Written Notice

Not less than fifteen (15) days ahead of the date the Seismic Surveying and Testing activities will begin, the Operator shall deliver the approved Activity Notice to the property owners and occupants, and other parties required in this section E.2.

2. Parties to Receive Notice

The list of parties to be notified shall include the following and shall be compiled by the Operator using the most current records on file with the County Assessor.

- a. Affected homeowners' associations, neighborhood associations, and school districts within one (1) mile of the seismic surveying and testing area.
- b. Affected owners of record and occupants of property within one (1) mile of the seismic surveying and testing area.
- c. The LGD of municipalities and counties within one (1) mile of the seismic surveying and testing area.
- d. Additional persons or geographic areas that the LGD may designate.

3. Validity of Notice

The Operator is responsible for the accuracy of the list of property owners and occupants and other parties to whom written notice is provided. If the Operator makes reasonable good faith efforts to accomplish the notice responsibilities identified above, then the failure of any property owner or occupant to receive notice shall not affect the validity of the public notice.

10.12.6 EXISTING OIL AND GAS OPERATIONS [RESERVED

10.12.47 ENFORCEMENT AND PENALTIES

Oil and Gas Operations in Violation of These Regulations

 Any person engaging in a development of Oil and Gas Operations who does not comply with these Regulations, or who acts outside the jurisdiction of the Oil and Gas Permit may be enjoined by the Town from engaging in such development and may be subject to such other criminal or civil liability as may be prescribed by law.

2. If the Town determines at any time that there are material changes in the construction or operation of the Oil and Gas Operation from that approved by the Town, the Permit shall be immediately suspended and a hearing shall be held to determine whether new conditions are necessary to ensure compliance with the Permit or these Regulations, or if the Permit should be revoked.

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Permit Suspension or Revocation

1. Suspension

The Board of Trustees may temporarily suspend the Permit for a period of thirty (30) days for any violation of the Permit or these Regulations. Prior to any permit suspension, the Board of Trustees shallprovide the Permittee with written notice of the violation. The Permittee will have a minimum of fifteen (15) days to correct the violation. If the violation is not corrected, the Permit shall be temporarily suspended for thirty (30) days.

2. Revocation

The Board of Trustees may, following notice and hearing, revoke a Permit granted pursuant to these Regulations if any of the activities conducted by the Permittee violates the conditions of the Permit or these Regulations. No less than thirty (30) days prior to the revocation hearing, the Board of Trustees shall provide written notice to the Permittee setting forth the violation and the time and date for the revocation hearing. Public notice of the revocation hearing shall be published in a newspaper of general circulation not less than thirty (30) days prior to the hearing. Following the hearing, the Board of Trustees may revoke the Permit or may specify a time by which action shall be taken to correct any violations for the Permit to be retained.

C. Transfer of Permits.

A Permit may be transferred only with the written consent of the Board of Trustees. The Board of Trustees must ensure, in approving any transfer, that the proposed transferee can and will comply with all the requirements, terms, and conditions contained in the Permit and these Regulations; that such requirements, terms, and conditions remain sufficient to protect the health, welfare, and safety of the public; and that an adequate guarantee of financial security can be made.

D. Inspection

The Town may enter and inspect any property subject to these Regulations at reasonable hours for the purpose of determining whether the development is in violation of the provisions of these Regulations. The Town shall personnel shall be equipped with appropriate personal protection equipment. The Town will attempt to provide reasonable notice of inspections but reserves the right to conduct spot inspections.

E. Judicial Review

Any action seeking judicial review of a final decision of the Board of Trustees shall be initiated within thirty (30) days after the decision is made, pursuant to Rule 106 of the Colorado Rules of Civil Procedure.

Seismic Surveying and Testing Activity Notice Required

An Activity Notice for Selsmic Surveying and Tisting Activity Notice shall be filed pursuant to Division 10.12.3, Activity Notice for Minor Modification to Existing Oil and Gas Operation and for Seismic Surveying and Testing, with the LCD no less than forty-five (45) calendar days prior to beginning seismic surveying and testing activities. The Town may retain, at the Operator's cost, outside consultants to review the application.

FB. Operational Requirements and Conditions

4. Seismic contractor shall submit a Peak Particle Velocity (PPV) summary to the LGD after the first week of testing and a PPV summary at the end of testing. Contractor may be required to submit additional summaries through the duration of the testing as requested by the LGD.

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2. PPVs are not to exceed 0.35 in/sec.
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- Seismic testing shall be conducted only during the hours of 7 a.m. to 6 p.m. Monday-Friday, and 9 a.m. to 6 p.m. on Saturday. Testing is not allowed on Sundays or Town holidays. These hours may be further restricted by the Town to accommodate special events.
- Gross weight of each vibe truck shall not exceed gross weight of 18,000 lb. on street rightof-way.

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b. Lane closures on residential streets are limited to 7 a.m4 p.m. Monday-Friday and 9 a. 6 p.m. on Saturdays.	<u>n</u>
6. Contractor will work around, other construction activity, and may need to adjust locatio	<mark>n of</mark>
receivers and/or equipment to accommodate businesses.	
The Seismic Surveying and Testing will satisfy the noise requirements in Section 10.12.4	.W.
 Contractor will maintain Americans with Disabilities Act (ADA) compliant pathways and is resolve potential trip hazards from seismic hardware. lines/cables. etc. 	will
9- With the exception of seismic recording hardware and cables, no surveying or tes equipment may be stored in Town right-of-way without the permission from the Directo Public Works.	
 Mud and/or debris associated with surveying and testing will be removed daily. 	
44. Contractor is responsible for any damages caused by seismic surveying and testing.	
42. All traffic control must be in compliance with the latest version of the Uniform Traffic Con Devices and the Town of Erie Municipal Code.	<mark>itrol</mark>
43. Contractor shall comply with all other Town permit requirements and is responsible keeping permits current and in testing vehicles at all times.	for
Activity Notice is required prior to (i) making any minor modification to an existing eOil and eGas. Operation, and (ii) prior to conducting any seismic surveying or testing.	
Activity Notice Materials	
1. Activity Notice Materials for Minor Modification to Existing Oil and Gas Operation.	
a. The name, address, and telephone number of the Operator.	
 Narrative description of the existing Operation and the proposed modification, a site plan with sufficient detail to show the extent of the modification proposed. 	<mark>nd</mark>
c. Name and address of	

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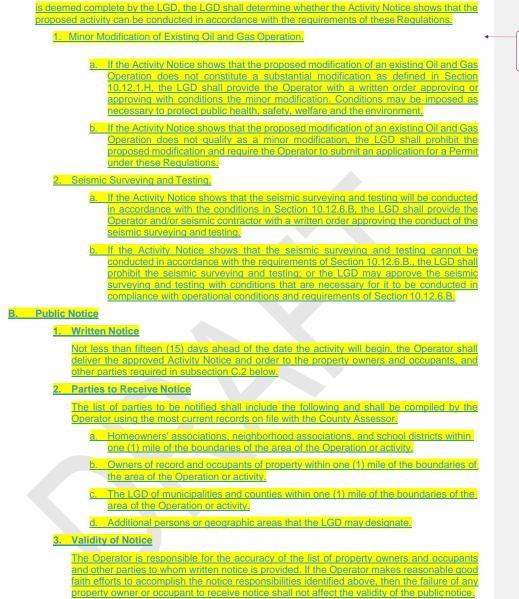
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 Homeowner associations, neighborhood associations and school districts within one (1) mile of the boundaries of the area of the Operation. 	
ii. Owners of record and occupants of property within one (1) mile of the boundaries of the area of the Operation.	
iii. The LGD of municipalities and counties within one (1) mile of the boundaries of the area of the Operation.	
0.12.3 ACTIVITY NOTICE FOR MINOR MODIFICATION TO AN EXISTING OIL AND GAS OPERATION AND SEISMIC SURVEYING AND TESTING	Formatted: Indent: Left: 1.94", No bullets or numbering
An Activity Notice is required prior to (i) making any minor modification to an existing eOil and eGas	Formatted: Indent: Left: 0.5", No bullets or numbering
eOperation, and (ii) prior to conducting any seismic surveying or testing. A. Activity Notice Materials for Seismic Surveying and Testing. 1. The name, address, and telephone number of the Operator if the Operator is conducting the seismic surveying and testing.	Commented [LA1]: Fromm 10.12.3 DOWN IS SECTIONS THAT WERE MIXED IN WITH GREEN AND HAVE BEEN MOVED DOWN AS THEY ONLY PERTAIN TO PREEXISTING FACILITIES WITH MINOR MODIFICATIONS
 The name, address, and telephone number of the seismic contractor who will be present at and responsible for conducting the seismic surveying and testing activities. The name and address of: 	Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, + Start at: 1 + Alignment: Left + Aligned at: 0.57" + Indent at: 0.94"
 a. Homeowner's associations, neighborhood associations, and school districts within one (1) mile of the boundaries of the area of the activity. b. Owners of record and occupants of property within one (1) mile of the boundaries of 	Formatted: Numbered + Level: 2 + Numbering Style: 1, 2, 3, + Start at: 1 + Alignment: Left + Aligned at: 1.19" + Indent at: 1.44"
the area of the activity. C. The LGD of municipalities and counties within one (1) mile of the boundaries of the area of the activity.	Formatted: Numbered + Level: 3 + Numbering Style: a, b, c, + Start at: 1 + Alignment: Left + Aligned at: 1.69" + Indent at: 1.94"
4. If the surface land comprising the area of proposed activity is owned by a person other than the applicant, the name and address of the owner of record of the surface land and a description of the basis upon which the person proposing activities claims the right to conduct the proposed activities on the area.	Formatted: Numbered + Level: 2 + Numbering Style: 1, 2, 3, + Start at: 1 + Alignment: Left + Aligned at: 1.19" + Indent at: 1.44"
5. Seismic Surveying and Testing Plan. A plan that includes:	
a. A map of the proposed seismic survey and testing area including surface (opporaphy, geology, drainage, surface water, and other physical features: vegetative cover; wildlife habitats and habitats of endangered or threatened species; and recreational, historical and archaeological resources located within the seismic	Formatted: Numbered + Level: 3 + Numbering Style: a, b, c, + Start at: 1 + Alignment: Left + Aligned at: 1.69" + Indent at: 1.94"
survey and testing area or affected by the activity.	
b. Description of Proposed Seismic Survey and Testing Activity	
 Narrative description of the proposed seismic survey and testing activity; Commencement date and duration of surveying and testing. 	Formatted: Numbered + Level: 4 + Numbering Style: i, ii, iii, + Start at: 1 + Alignment: Left + Aligned at: 2.2" + Indent at: 2.45"
iii. List of all property owners and occupants within one (1) mile of the seismic testing and surveying area.	
iv. List of streets that will be affected;	
 Description of how the seismic surveying and testing activities will meet the conditions and requirements in Section 10.12.6.B. 	
vi. Narrative description of methods to be used for reclamation of the area upon completion of the seismic surveying and testing activities.	Formatted: Numbered + Level: 1 + Numbering Style: A,
B. Activity Notice Review and Decision by LGD. Within five (5) working days after the Activity Notice	B, C, + Start at: 1 + Alignment: Left + Aligned at: 0.57" + Indent at: 0.94"

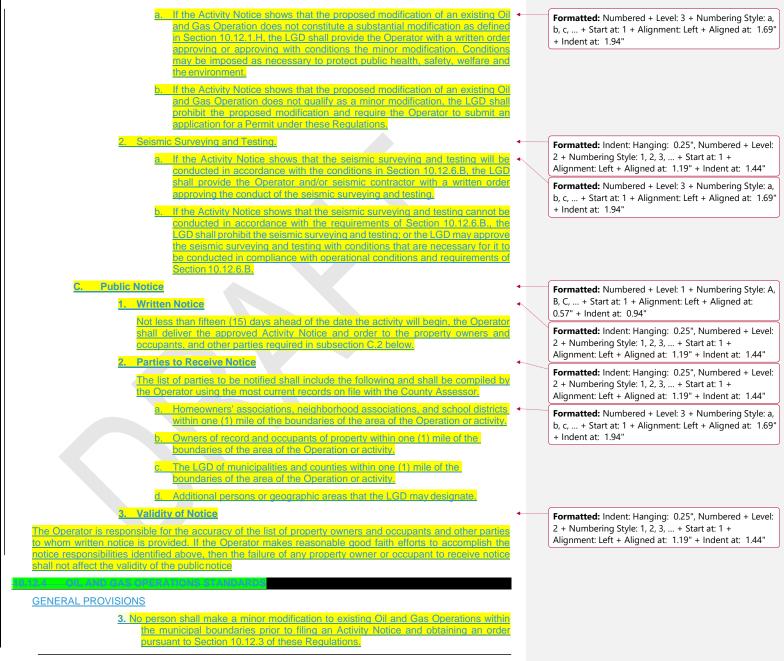
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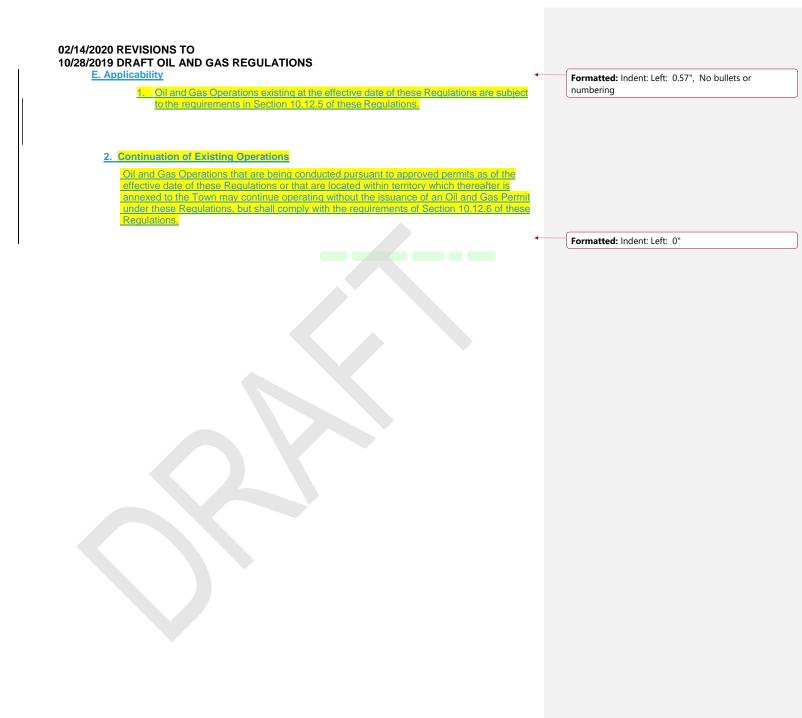
10/28/2019 DRAFT OIL AND GAS REGULATIONS



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