



## Statement of Vision

*Lafayette's panoramic view of the Rocky Mountains inspires our view into the future. We value our heritage, our unique neighborhoods, a vibrant economy and active lifestyles. We envision a future that mixes small-town livability with balanced growth and superior city services.*

**AUGUST 11, 2021**

## **JOINT WORKSHOP AGENDA**

**COUNCIL CHAMBERS  
1290 S PUBLIC ROAD**

**6:00 PM PLANNING COMMISSION/ CITY COUNCIL WORKSHOP**

- I. OPENING OF MEETING
  - Call to Order
  - Pledge of Allegiance
  - Roll Call
- II. WORKSHOP
  - Review of Oil and Gas Regulations
- III. ADJOURN WORKSHOP

### **OPTIONS FOR ACCESSING THE MEETING**

- Attend the meeting in person. City Hall Council Chambers, 1290 S. Public Road.
- Tune to Comcast Channel 8 or HD Channel 881.
- View the meeting on your computer at <https://www.lafayetteco.gov/627/Streaming-Video>
- Listen to the meeting by calling 1-877-853-5247 (toll free). Once connected, you will be asked for the meeting number. The meeting number is **832 4397 4552**. Then press # after entering the number.



## PLANNING COMMISSION/CITY COUNCIL AGENDA MEMO

**MEETING DATE:** August 11, 2021  
**AGENDA TITLE:** Draft Oil and Gas Regulations Overview  
**PREPARED BY:** Fritz Sprague, City Administrator  
Jeff Brasel, Planning and Building Director  
Mary Lynn Macsalka, City Attorney

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### **Executive Summary**

The City is updating its land use regulations related to Oil and Gas based upon enabling legislation (SB 19-181) and rulemaking at the state level that provides local jurisdictions with greater ability to regulate the location and mitigation of external effects of new and existing oil and gas facilities.

This memo provides an overview of the draft regulations for discussion with the Planning Commission and City Council at the August 11, 2021, joint workshop. These regulations are being advanced in anticipation of the expiration of the City's moratorium on the acceptance of land use applications related to oil and gas activities in November.

Staff is seeking input from the Planning Commission and City Council prior to finalizing the draft regulations, conducting public outreach, and scheduling the regulations for public hearings before the Planning Commission in September and City Council in October.

**City Council Strategic Priority (most applicable): Environmental Leadership**

### **Background Information**

#### Enabling Legislation

In 2019, the Colorado General Assembly passed, and the Governor signed into law, SB 19-181 effecting a mission change for the Colorado Oil and Gas Conservation Commission (COGCC) and redefined the relationship between state and local government regulation of oil and gas activities. In November 2020, the COGCC completed its rulemaking proceedings addressing the mission change, flowlines, cumulative impacts, alternative location analysis, and compensatory mitigation for wildlife rules, as required by SB 19-181. The COGCC's rulemakings implement the change to the COGCC's mission from "fostering" oil and gas development to "regulating" oil and gas development in a manner that protects public health, safety, welfare, the environment, and wildlife resources. Moreover, the rulemakings

addressed the new dual regulatory framework established by SB 19-181, which gives authority to local governments and the COGCC to regulate oil and gas development. These substantial regulatory changes at the state level, along with the enhanced authority given to local governments under SB 19-181, require the City to comprehensively update City's Oil and Gas regulations contained in Section 26-22.1 of the Development and Zoning Code (DZC).

#### Basis of Draft Regulations

After feedback from City Council at their April 29, 2021 workshop, City Council provided direction for staff to draft regulations based upon Boulder County's recently adopted code with some changes to strengthen the locational restrictions based upon underlying zoning. The draft regulations are provided in **Attachment A** and closely mimic Boulder County's regulations with adjustments to integrate the regulations into Lafayette's DZC, but also consolidate portions of the regulations for usability and inclusion of strengthening provisions around prohibited zone districts and requirements for alternative site analysis at the pre-application stage.

#### Applicability of Regulations

The rules apply to operators seeking to construct a new oil and gas facility or conduct a new oil and gas operation in the City. Certain rules, such as operator registration, monthly and annual inspections for emissions, liquid leaks, soil contamination, emergency response planning, and nuisance requirements also apply to existing operators.

#### Summary of Regulations

If approved by City Council, the new regulations would replace the City's existing regulations in Chapter 26-22.1 DZC in their entirety. There will also be minor technical modifications to other sections of the DZC to incorporate the proposed regulations into existing code provisions, including Table 26-A, Permitted Uses; 26-15, Special Use Application Requirements and Procedures, and 26-16, Review Procedures.

The draft regulations fulfill the goal and purpose of SB 19-181 in that they:

- Promote public health, safety, and welfare, and protection the environment and wildlife resources by requiring state-of-the-art controls and practices to avoid or minimize and mitigate adverse impacts to public health, welfare, safety, and the environment.
- Where necessary, the regulations include provisions that are more stringent than those required by COGCC or the Air Quality Control Commission (AQCC) including additional emission controls to reduce leaks, venting, and flaring, and more frequent groundwater monitoring requirements to swiftly identify contamination to groundwater. The regulations also include higher insurance limits, and require environmental pollution insurance and control-of-well insurance.
- Prohibit oil and gas development in zoned districts that allow for residential uses. This includes the RE1, RE2, R0, R1, OTR, R3, R4, RSR, T1, B1, and P zone districts. The only zone districts that could potentially allow new Oil and Gas facilities include M1

(Industrial), DR (Developing Resource), and AG (Agricultural) zone districts under a special review process.

- Includes a 2,000-foot setback from homes, workplaces, trailheads, trails, childcare centers, jails, athletic fields, auditoriums, amphitheaters, hospitals, undeveloped residential lots, event centers, recreational facilities, nursing homes and life care institutions, and schools in those districts that allow for oil and gas development.
- Establishes a special review process for the establishment of new oil and gas facilities within the City.
- Under the special review process, provides for a variance process in which City Council can reduce setbacks if the applicant can demonstrate that the alternative location and conditions of approval will provide substantially equivalent protections for public health, safety, welfare, the environment, and wildlife resources as the 2,000-foot setback would otherwise provide.

### Scope of Regulations

The draft Oil and Gas regulations represent a significant expansion over the City's existing regulations. The following is not meant to be an exhaustive description of the regulations but provides a very high level description of the major sections and provisions within the proposed regulations.

1. **Registration.** Requires registration and annual renewal for existing and new operators. Registration includes submission of the following:
  - Contact information
  - Map of mineral rights, including lease rights, within the City or within 2000' of the City's boundaries.
  - 10 years of Colorado Oil and Gas Conversation Commission (COGCC) notices of alleged violations.
  - 10 years of any incident reports, including but not limited to accidents, spills, releases, and injuries.
  - Information related to the Operator's financial fitness to operate
  - Emergency Response Plan
  - Complaint resolution protocol
  - Other information that may be necessary to identify the operator's oil and gas operations and facilities.
2. **Inspections.** Requires the following inspections for pre-existing facilities, new facilities, and ongoing operations within the City:
  - Annual soil sampling for contamination
  - Monthly inspections for emissions or releases
  - Monthly inspections for liquid leads within the boundaries of oil and gas facilities pads and along pipeline routes
3. **Required reporting and cleanup of spills, leaks and releases.**
4. **Facility and pipeline abandonment, decommissioning, and reclamation requirements,** including strict compliance with all COGCC rules, authority for the City to impose

conditions on approval of abandonment and decommissioning operations, and revegetation and reclamation requirements.

5. **Permitting for geophysical exploration and seismic testing** that includes requirements for vibration monitoring and mapping, travel routes, traffic control plans, insurance, property owner permission, vibration monitoring, and seismic testing. The regulations also contain noticing requirements to nearby property owners and pre-exploration inspections of property at a nearby property owners' request.
6. **Special Use Review Procedures.** The regulations outline all submittal, noticing, community meeting, and referral requirements for new oil and gas development.
7. **Special Use Application Requirements.** The regulations specify the submittal requirements for a special review application. Highlighted submittal requirements include:
  - Verification of Legal Rights
  - Site Plan and supporting information
  - Reclamation Plan
  - Air Quality Modeling
  - Traffic and Road Use Plan
  - Agricultural Impact Plan
  - Natural Resources Impact Report
  - Water Usage Study
  - Water Quality Plan
  - Emergency Preparedness Plan
  - Noise Monitoring Plan
  - Odor Plan
  - Cultural and Historical Resources Survey
  - Waste Management Plan
  - Existing Mines Study
8. **Special Use Review Standards.** The regulations specify the review and approval criteria for new facilities and operations, including required setbacks from defined uses and features.
9. **Standard Operating Requirements.** The regulations include supplemental rules, requirements, and conditions for oil and gas facilities approved under the special review process. The requirements address air quality, operations, water supply, water and stormwater quality, waste, site management, weed control, landscaping, seismic monitoring, noise, odor, lighting, dust, traffic, etc.
10. **Procedures following approval of Special Use Review.** The regulations include miscellaneous provisions regarding right of entry for inspections, amendments and modifications to facilities, and for maintenance and repair activities.
11. **City Inspections and Enforcements.** The regulations enable enforcement of the new rules and inspections to ensure compliance.
12. **Fines and Penalties.** There is a process for identification and assessment of fines for violation of the regulations, including a process for appeals to City Council.
13. **General Provisions** address operator requests to maintain the confidentiality of documents submitted to the City, such as financial reports. The regulations also allow the City to retain consultants for technical or other assistance, as well as variance provisions and requirements to notify the City if an operator's legal or financial status changes.

**14. Insurance Requirements.** The regulations include requirements for general commercial, automobile, workers compensation, umbrella, professional, pollution liability, and control-of-well insurance. Operators are responsible for ensuring their contractors and subcontractors have adequate insurance. In addition, insurance policies must name the City as an additional insured, and operators will be held responsible for any damage or loss caused by operators or their contractors or subcontractors.

**15. Definitions.** The definitions define key terms used within the regulations.

#### Administration Needs

The proposed regulations present a significant increase over previous regulations with regards to ongoing registration, reporting, and inspection of existing and new facilities within the City. They also require professional and technical resource needs the City currently does not have available in order to review analyze any new applications that might be received.

All administration aspects of the regulations will be integrated into department business practices and will be implemented with an eye towards efficiency for staff resources. Additional resources for review of reporting, inspections and review of new applications will be needed. Staff has begun the process of negotiating with Boulder County for contract services related to these needs as they have staff resources available that may be able to accommodate the City's needs. The financial considerations for such an arrangement need to be explored and it is anticipated that registration, application, inspection, and other fees will be assessed to cover anticipated expenses.

Staff's goal is to bring forth an IGA with Boulder County for the provision of such services either concurrently with or shortly after adoption of the new regulations.

#### **Next Steps**

Staff will take feedback from the workshop and revise the draft regulations as needed. Following revisions to the regulations, the regulations will be posted on the City's website for public review. This public review will be geared towards providing information about the proposed regulations in recognition of the previous public engagement that has already taken place and which has been considered in this draft..

City Council has requested an adoption schedule for the regulations that places public hearings for Planning Commission on September 22, 2021, with first reading before City Council on October 19, 2021.

#### **Attachment(s)**

A: Draft Oil and Gas Regulations

## Proposed Amendments

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# Regulation of Oil and Gas Development, Facilities, and Operations

## Section 26-22.1 • Oil and Gas Development, Facilities, and Operations

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### Section 26-22.1-1 - Applicability

This Section applies to the following:

- (a) Operators who seek a special use review permit to construct and operate an Oil and Gas Facility after [INSERT effective date];
- (b) Operators of oil and gas facilities that were legally established prior to the effective date of this Section ("Pre-Existing Facilities"); and
- (c) Operators who seek a permit to conduct seismic testing activities.

### Section 26-22.1-2 - Purpose

- (a) The City's objective is to:
  - (1) Protect public health, safety, and welfare, and the environment and wildlife resources; and
  - (2) Regulate the surface impacts of oil and gas operations in a reasonable manner to address matters including the following:
    - (A) local land use impacts;
    - (B) the location and siting of oil and gas facilities;
    - (C) impacts to public facilities and services;
    - (D) water quality and source; noise;
    - (E) vibration;
    - (F) odor;
    - (G) light;
    - (H) dust;
    - (I) air emissions and air quality;
    - (J) land disturbance; reclamation procedures;
    - (K) cultural resources;
    - (L) emergency preparedness and coordination with first responders;
    - (M) security;
    - (N) traffic and transportation impacts;
    - (O) financial securities;
    - (P) indemnification;
    - (Q) insurance;
    - (R) other effects of oil and gas development; and
    - (S) providing for the planned and orderly use of land and protection of the environment in a manner consistent with constitutional rights.
- (b) The City will deny applications where the proposed oil and gas operations cannot be conducted in a manner that protects and minimizes adverse impacts to public health, safety, and welfare, and the environment and wildlife.

The City will approve of oil and gas development permits only in locations and in a manner that does not adversely impact the health, safety and welfare of the city's residents in their workplaces, their homes, their schools and public parks in order to protect the public's health, safety, and welfare and to safeguard the environment and wildlife resources.

- (c) This Section is an exercise of the city's land use authority and regulatory authority over oil and gas development. Both the state and city regulate oil and gas operations independently and both may have applicable rules. Nothing set forth in this Section 26-22.1 shall be construed to limit other applicable ordinances of the city as set forth in the Code of Ordinances or otherwise, or applicable resolutions or regulations of the City of Lafayette, or statutes of the State of Colorado, or to limit the city's authority to abate nuisances by any lawful means.
- (d) The city's review process for new oil and gas facilities and operations includes:
  - (1) The submission of all necessary information related to proposed oil and gas development and its potential impacts;
  - (2) thorough analysis and review of such information;
  - (3) multiple opportunities for public input prior to any decision being made, especially from those who are near the proposed development; and
  - (4) action on the proposal, including a thorough evaluation of and determination about all necessary or warranted mitigation measures, or denial if necessary.
- (e) These regulations are intended to provide close scrutiny of all proposed oil and gas development, including seismic testing, in order to protect public health, safety, and welfare, and the environment and wildlife. These regulations also allow staff, the Planning Commission, and the City Council to consider site-specific circumstances related to oil and gas development and to customize avoidance, minimization, and mitigation measures to best address each of the site-specific circumstances, which may include modification, re-location, or denial of proposed oil and gas facilities or oil and gas operations if review of the criteria warrants it. These regulations will help to ensure close inspection, monitoring, and enforcement of all requirements and mitigation measures imposed by this Section. Finally, the regulations allow the City to address potential impacts of pre-existing oil and gas facilities and operations.

### Section 26-22.1-3 - Authority

This Section is authorized by C.R.S. §§ 25-8-101 et seq., 29-20-101 et seq., 30-28-101 et seq., 34-60-101 et seq., 25-7-101 et seq., 30-15-401, Colorado law regarding home-rule authority, Colorado common law related to public nuisances, and other authority as applicable.

### Section 26-22.1-4 - Effective Date

This Section will become effective on the date specified in the adopting ordinance of the City Council (Ordinance No. XX, Series 2021).

### Section 26-22.1-5 - Operator Registration and Renewal

- (a) **Registration Required.** All Operators within the city must have a current and valid city registration in place.
- (b) **Submission and Renewal.** All Operators must submit the following Operator registration information and pay the registration or renewal fee. All submissions under this section are subject to Section 26-22.1-16(e) (falsification) and Section 26-22.1-18(a)(confidentiality).
  - (1) Company name, address, email, and mobile phone contact information for two individuals associated with the company and who will serve as 24-hour emergency contacts and who can ensure a timely and comprehensive response to any emergency.
  - (2) A map that shows all of the Operator's mineral rights, including lease rights, whether owned by the Operator named in (b)(1) above or a subsidiary or affiliate under the same management as the Operator, inside or within 2000' feet of the boundaries of the City of Lafayette.
  - (3) A certified list of all instances within the 10 years prior to the registration in which the Colorado Oil and Gas Conservation Commission ("COGCC"), Colorado Department of Public Health and Environment

("CDPHE"), other state agency, any federal agency, any city, or any county issued a notice of alleged violation or found that the Operator violated applicable state, federal, or local requirements during the course of drilling, operation, or decommissioning of a well. The list must identify the date of the violation or alleged violation, the entity or agency issuing the notice or making the determination, the nature of the non-compliance, and, if applicable, the final resolution of the issue. If no such instances of non-compliance exist, the Operator must certify to that effect.

- (4) A list of all incidents (including but not limited to accidents, spills, releases, and injuries) within the past 10 years that occurred at facilities owned or operated by Operator or a subsidiary or affiliate under the same management as the Operator, including incidents involving contractors. Operator shall also list any root cause analyses conducted and corrective actions taken in response to the incidents, including internal changes to corporate practices or procedures.
  - (5) Information related to the Operator's financial fitness to undertake the proposed oil and gas operations, including materials (audited, where appropriate) such as the following:
    - (A) Balance sheets for the previous 5 fiscal years;
    - (B) Operating cash flow statements for the previous 5 fiscal years;
    - (C) List of long- and short-term debt obligations;
    - (D) List of undercapitalized liabilities;
    - (E) Statements necessary to calculate net profit margin, debt ratio, and instant or current solvency ratio;
    - (F) Certified copies of all current financial assurances filed with the COGCC; and
    - (G) Tax returns for the prior 5 years;
    - (H) For operators with a special use review permit approved after the effective date of these regulations, demonstration of compliance with the insurance requirements contained in Section 26-22.1-19.
  - (6) Emergency Response Plan per Section 26-22.1-11(d)(9). (Emergency Preparedness Plan)
  - (7) Complaint Protocol. Description of a process for the Operator's acceptance, processing, and resolution of any and all complaints submitted to state agencies or the Operator directly by members of the public stemming from any adverse impact from oil and gas facilities and operations.
  - (8) Other information. Other information the Director deems reasonably necessary to identify the operator's oil and gas operations and facilities and to complete the registration or renewal submission.
- (c) New Operators to the City must register at least 60 days prior to scheduling a pre-application conference for special use review. Operators with oil and gas facilities or operations existing in the city prior to the effective date specified in section 26-22.1-4 must register within 90 days after the effective date; or, if not already operating facilities in the city, at least 60 days prior to assuming responsibility for operating existing Oil and Gas Facilities within the city.
- (d) All operators must update and renew registrations annually based upon the initial registration date.

## Section 26-22.1-6 – Pre-Existing Facilities and Operations

- (a) **Application to Pre-Existing Facilities.** Oil and gas facilities and oil and gas operations that were legally established prior to the effective date specified in section 26-22.1-4 but do not conform to this Section 26-22.1-6 will be allowed to continue, subject to registration under section 26-22.1-5 (Operator Registration and Renewal). Any proposed amendment, modification, maintenance, or repair to a pre-existing oil and gas facility or oil and gas operation is subject to review by the Director under 26-22.1-15(d) (review of amendments and modifications) and (e) (notice of maintenance and repairs). Any modification of a pre-existing oil and gas facility or operation that the Director determines to be substantial requires a separate Special Use Review under sections 26-22.1-10 through 26-22.1-12.
- (b) **Assumption of Existing Oil and Gas Facilities or Operations.** Any operator assuming the ownership or operational responsibility for pre-existing oil and gas facilities or oil and gas operation is subject to the requirements of this section 26-22.1-6.
- (c) **Inspections.** Operators must comply with the inspection requirements in 26-22.1-7 (Operator Inspections).

- (d) **Noise.** Pre-existing oil and gas facilities and oil and gas operations must comply with the noise standards in 26-22.1-12(0).
- (e) **Odor.** Pre-existing oil and gas facilities and oil and gas operations must not emit odor detectable after dilution with 2 or more volumes of odor free air.
- (f) **Stormwater Quality Control.** Adequate stormwater quality control measures must be used to comply with applicable permits and City regulations.
- (g) **Weed Control.** Operators must comply with the City's noxious weed rule in section 70-14(a) (Grass, Weeds, Trees, Shrubs and Bushes, Removal Required; exceptions).
- (h) **Fines.** Violations of this section are subject to the enforcement mechanisms in 26-22.1-16 (City Inspections; Enforcement) and 26-22.1-17 (Fines and Penalties).

## Section 26-22.1-7 – Operator-Conducted Inspections

- (a) **Applicability.** This section applies to operators of pre-existing oil and gas facilities and oil and gas operations and to operators who have obtained a special use permit after the effective date specified in section 26-22.1-4.
- (b) **Operator Inspections.** All oil and gas operators must inspect all oil and gas facilities, including shut-in and temporarily abandoned facilities, as follows:
  - (1) Soil sampling for contamination within the boundaries of oil and gas facility pads and along pipeline routes annually;
  - (2) Equipment-assisted inspection for emissions or releases, including use of best available technology (such as infrared cameras), at least every 30 days; and
  - (3) Visual inspections for liquid leaks within the boundaries of oil and gas facility pads and along pipeline routes at least every 30 days.
- (c) **Inspection Reporting.** Operators will report the date, methodology, subject, and results of all inspections to the City no later than the last day of each month.
- (d) **Spills, Leaks and Releases.** Spills, leaks, and releases of any substance other than fresh water, including spills of produced water, oil, condensate, natural gas liquids, all spills outside of secondary containment, gas leaks, and exploration and production waste, must be reported to the City's Local Government Designee immediately upon discovery and no later than 6 hours thereafter. When leaks, spills, or releases are discovered, by City or Operator inspection or otherwise, the enforcement mechanisms and penalty provisions in sections 26-22.1-16 (City Inspections; Enforcement) and 26-22.1-17 (Fines and Penalties) will apply.
- (e) **Reporting.** For spills or other releases meeting the Colorado reporting requirements pursuant to Section 25-8-601 (2), C.R.S., operators will adhere to all Colorado reporting requirements. If the City determines the spill or leak is reportable to any agency, the City may make such report.
- (f) **Clean-up.** Any leak, release, or spill will be cleaned up according to applicable City, County, state and federal laws, including Colorado Water Quality Control Commission regulations, the Oil and Pollution Act and the Clean Water Act. Operators will notify the City immediately upon completion of clean-up activities, at which time the City will inspect the site and either approve the clean-up or impose additional requirements, which may include penalties under 26-22.1-16 (City Inspections; Enforcement) and 26-22.1-17 (Fines and Penalties).
- (g) **Root Cause Analysis.** A root cause analysis of any spill, leak, or release of any substance other than fresh water that resulted in serious bodily injury or fatality, serious environmental harm, was a Grade 1 gas leak as defined by the COGCC, or is otherwise requested by the Director must be submitted to the City within 30 days of the leak, spill, or release.

## Section 26-22.1-8 - Well, Well Site and Pipeline Abandonment, Decommissioning, and Reclamation

- (a) **Applicability.** This section applies to operators of pre-existing oil and gas facilities and to operators who have obtained a special use permit after the effective date specified in section 26-22.1-4.

- (b) **Application Required.** Operators must submit an application, including an abandonment, decommissioning, and reclamation plan at least 90 days before commencing any abandonment, decommissioning or reclamation activities. The plan must provide information on revegetation and include temporary irrigation.
- (c) **Commencement of Operations.** An Operator may not commence activities to plug, re-plug, abandon, or otherwise decommission an oil and gas well, pipeline or fresh water line until the Director has reviewed and provided written approval for the abandonment, decommissioning and reclamation operations.
- (d) **Plugging, Abandoning, or Decommissioning Wells and Well Sites.**
  - (1) **COGCC rules.** Operators will comply with all COGCC rules regarding plugging (including re-plugging), abandoning, and decommissioning oil and gas wells and well sites.
  - (2) **Coordinates.** The Operator must provide the City with the surveyed coordinates of the plugged, abandoned, or decommissioned well within 30 days of plugging, abandoning or decommissioning.
  - (3) **Marking.** Unless otherwise requested by the surface owner, the Operator must leave onsite a permanent physical visible marker of the well location.
- (e) **Pipeline and fresh water line Abandonment.** Pipelines and fresh water lines proposed to be abandoned or decommissioned must be removed unless otherwise authorized in writing by the Director after consultation with the landowner. In reviewing a request to abandon in place, the Director will consider the following: surface owner preference, location line in environmentally sensitive area, potential for air emissions associated with removal transportation vehicles, and any other relevant factors provided by the Operator. If the Director approves of abandonment in place of the line, all applicable COGCC rules will be strictly complied with.
- (f) **Conditions of Approval of Well and Flowline Abandonment.**
  - (1) With any approval of abandonment operations, the Director may provide the Operator with City requirements for surface activities for plugging and abandoning wells, pipelines. These requirements may include but are not limited to:
    - (A) Timing constraints;
    - (B) With respect to pipelines abandoned in place, a tracer in any nonmetal line; and
    - (C) Specific reclamation and revegetation requirements.
- (g) **Revegetation and Reclamation.** When any oil and gas facility, including pipelines, are decommissioned, all areas disturbed will be reclaimed and revegetated to the satisfaction of the City, in consultation with the landowner. Revegetation and reclamation will include, but is not limited to, the use of native plant species when appropriate, integrated management of weed control and prevention, and full establishment of appropriate vegetation for a minimum of three consecutive growing seasons. No species on List A, B, or C in the State of Colorado's Noxious Weed Management Plan may be used to meet revegetation requirements.
  - (1) Revegetation and reclamation, both preliminary and final, will begin as soon as possible after completion of construction or decommissioning of any oil and gas facility and in no case later than 60 days thereafter.
  - (2) Initial reclamation and revegetation procedures will be completed as soon as possible after completion of construction or decommissioning of any oil and gas facility and in no case later than 120 days thereafter. Full establishment of revegetation and completion occurs only after a minimum of 3 growing seasons demonstrating establishment of desirable plant species.

## Section 26-22.1-9 - Geophysical Exploration for Oil and Gas ("Seismic Testing")

To protect the public health, safety, and welfare, and the environment and wildlife, the City will permit only those geophysical exploration activities ("seismic testing") that comply with the following requirements:

- (a) **Permit Required.** Prior to conducting any seismic testing, a permit issued by the Director is required under this section. If the Operator submits information that is inadequate, the Director may deny a permit.
- (b) **Application Requirements.** To apply for a permit, the Applicant must provide:
  - (1) **Vibration Monitoring and Control Plan Map.** A map of the exploration area that identifies all of the following within 800 feet of all source points in the testing area:

- (A) Water supplies for domestic, public, or agricultural use;
  - (B) Domestic, commercial, and industrial structures;
  - (C) Areas affected by previous mining activities or public works;
  - (D) Geologic hazards;
  - (E) Mapped floodplain and floodway;
  - (F) Identification of wildlife resources; and
  - (G) Water, sewer, oil, gas, and chemical facilities, pipelines and gathering lines in the testing area.
- (2) **Travel Routes Map.** A map showing the proposed travel routes of all vibration-generating seismic testing equipment;
- (3) **Traffic Control Plan.** A traffic control plan for any seismic testing operations that will occur on or impede traffic on a public right-of-way;
- (4) **Insurance Coverage.** Operators must comply with the provisions in Section 26-22.1-19, as applicable.
- (5) **Surety.** Financial Assurances in a form and amount satisfactory to the Director sufficient to guarantee Applicant's obligation to restore all property damaged by seismic testing to its pre-testing condition;
- (6) **Property Owner Permission.** Copies of written permission from every landowner of property where the Operator is going to use or place equipment for seismic testing;
- (7) **Vibration Monitoring and Control Plan.** A Vibration Monitoring and Control Plan prepared by a Vibration Monitoring Specialist (VMS). The VMS must be an independent, registered Professional Engineer or Geologist. This Vibration Monitoring and Control Plan must include:
- (A) The name of the firm providing the vibration monitoring services;
  - (B) Specifications of the monitoring equipment to be used;
  - (C) Specifications of the energy source to be utilized for the source points;
  - (D) If vibroseis trucks will be utilized, the plan should discuss:
    - (i) The number of vibroseis trucks;
    - (ii) The distance between the vibroseis trucks;
    - (iii) The drive level to be used;
    - (iv) The sweep duration; and
    - (v) The sweep frequency range.
  - (E) Measurement locations and field procedures for setting up vibration monitors;
  - (F) Procedures for data collection and analysis which include examples of vibration monitoring field sheets and vibration event analysis;
  - (G) Results of on-site vibration attenuation study (walk-away test) with prediction of maximum expected particle velocity at each monitoring location;
  - (H) Means and methods of providing warning when the Response Values are reached;
  - (I) Generalized plans of action to be implemented in the event any Response Value is reached. This plan must include positive measures by the Operator to control vibrations (e.g., reducing drive level, increasing stand-off distances, dropping source points); and
  - (J) Procedures for addressing complaints and claims of damage.
- (c) **Seismic Testing Requirements.** The following requirements will apply to all permits to conduct seismic testing:
- (1) Implementation of a Vibration Monitoring and Control Plan approved by the Director; the Director may require modifications to the plan submitted by the Applicant.
  - (2) Methods involving explosive material ("shotholes") are prohibited.
  - (3) All seismic testing will be strictly limited to the areas, methodologies, and routes indicated in the maps and plans approved by the permit.
  - (4) All seismic testing will be strictly limited to the hours of operation noted in the approved permit. In no case will the Director permit geophysical activities between 6 p.m. and 8 a.m.;
  - (5) The Applicant's VMS will be on site throughout all geophysical activities to ensure City permit conditions are met and will report whether the testing complies with the approved permit.
  - (6) If any utility line(s) or other above or below ground features must be removed or altered during seismic testing, the Applicant will provide a letter from the utility owner authorizing the removal or alteration and

notify the City at least 3 days prior to any such removal or modification and comply with any additional permitting requirements imposed by the City.

- (7) Applicant must obtain any permits for use of City roads required by the City Public Works Department or required by the Code, including, but not limited to overweight or oversize permits for all extra-legal vehicles or loads.
- (8) No seismic testing activities will be permitted in a mapped floodway. Activities in a mapped floodplain may require a City Floodplain Development Permit.
- (9) Any violation of the terms of a seismic testing permit are subject to the penalties and enforcement mechanisms of Sections 26-22.1-16 (City Inspections; Enforcement) and 26-22.1-17 (Fines and Penalties), in addition to all remedies available at law.
- (10) Ground vibration monitoring will be required for any source points located within 400 feet of any structures identified in the map of the seismic testing area. The VMS must conduct the analysis and interpretation of the collected vibration monitoring data for comparison to appropriate vibration limits and must prepare weekly reports for submittal to the City.
- (11) Ground vibration amplitudes will be limited to the following Response Values:
  - (A) The Response Values for ground vibration include a Threshold Value of 0.2 inches per second and a Limiting Value of 0.3 inches per second. Higher values may be acceptable based on the feature of concern, but the Applicant must submit an engineering report for review and approval by the City.
    - (i) If a Threshold Value is reached, the Applicant must:
      - a. Immediately notify the City;
      - b. Meet with the City to discuss the need for response action(s);
      - c. If directed by the City during the above meeting that a response action is needed, submit within 24 hours a detailed specific plan of action based as appropriate on the generalized plan of action submitted previously as part of the vibration-monitoring plan. Seismic testing cannot resume until the detailed specific plan of action is approved by the City; and
      - d. If directed by the City, implement response action(s) within 24 hours of submitting a detailed plan of action.
    - (ii) If a Limiting Value is reached, the Applicant must:
      - a. Immediately notify the City and suspend vibration producing activities in the affected area, except for those actions necessary to avoid exceeding the Limiting Value;
      - b. Meet with the City to discuss the need for response action(s); and
      - c. If directed by the City during the above meeting that a response action is needed, submit within 24 hours a detailed specific plan of action based as appropriate on the generalized plan of action submitted previously as part of the vibration-monitoring plan. Seismic testing cannot resume until the detailed specific plan of action is approved by the City.
      - d. If directed by the City, implement response action(s) within 24 hours of submitting a detailed specific plan of action, so that the Limiting Value is not exceeded.
- (12) Ten days prior to vibration monitoring pursuant to the Vibration Monitoring and Control Plan, the Applicant will submit a certificate of calibration for any vibration monitoring equipment that will be used on site. The certificate must certify that the instruments are calibrated and maintained in accordance with the equipment manufacturer's calibration requirements and that calibrations are traceable to the U.S. National Institute of Standards and Technology. All instrumentation must have been calibrated by the manufacturer or a certified calibration laboratory within 1 year of their use on site.

- (13) During the seismic testing, the Applicant must provide weekly reports summarizing any vibration monitoring data collected. The reports must be prepared and signed by the VMS. The City reserves the right to request a different reporting schedule where appropriate.
  - (14) In addition to the above, the Director may impose additional conditions on the conduct of seismic testing that are necessary and reasonable to protect the public health, safety, and welfare, the environment or wildlife resources.
- (d) **Notice and Property Inspection.**
- (1) After a permit is issued by the Director, the Applicant will provide written notice of the seismic testing by first class mail to the owner of each property located within 800 feet of any source point as depicted in the approved Vibration Monitoring and Control Plan Map at least 10 days before the testing is to occur. Applicant will provide the City an affidavit of notice demonstrating compliance with this requirement.
    - (A) The notice will include:
      - (i) A description of the project including the duration, physical effects, precautions Applicant is taking, and precautions the property owner should take;
      - (ii) Complaint procedures for property owners and residents;
      - (iii) An offer of property and water well baseline condition inspections at Applicant's expense, which, upon property owner's request, will be completed at least 3 days prior to seismic testing. Results of such testing will be provided to the property owner and maintained by Applicant for at least 3 years. All baseline condition testing must be completed by a qualified technician who will report: the date of inspection, name of property owner, address of property owner, property owner contact information, description of the property, age of structure(s), material of structure(s) and foundation(s). High resolution photographs and video must be taken documenting the present state of all structures on the property, including roads, bridges, and sidewalks. The technician should note any chemical and physical weathering or any other structural defects. All water well samples must be collected by a qualified technician and include the date and time of sample, property owner name, address, contact information and water type and conditions, well type, depth, age, casing type and length, drilling contractor, whether it is conditioned or filtered, sample point type, and any other useful information; and
      - (iv) The notice will further include an offer of property and water well condition inspections at Applicant's expense after the testing is complete, the results of which will be provided to the property owner and maintained by Applicant for at least 3 years.
- (e) **Appeals.** Within 30 days of the Director's decision to deny a permit or place particular conditions on the permit, the Applicant may appeal the Director's decision to the City Council.

## Section 26-22.1-10 - Special Use Review – Review Procedure for New Oil and Gas Facilities and Oil and Gas Operations

- (a) **Applicability. Special Use Review Required.** Except as provided in 26-22.1-6 (Pre-Existing Facilities), all oil and gas facilities and oil and gas operations on public and private land within the City of Lafayette must comply with this section 26-22.1-10. Prior to the commencement of any new oil and gas operations in the City, an Applicant must submit an application which must receive approval according to this section 26-22.1-10. The Applicant must obtain local, state and federal permits or approvals required for the operation and provide copies to the Director prior to any construction activities. Applicants may be required to obtain City permits including but not limited to Floodplain Development Permits, Grading Permits, Building or Construction Permits, Oversize/Overweight Permits, Stormwater Control Permits.
- (a) **Community Engagement.** The City requires Applicants to engage with the community, including local residents, neighbors, and other stakeholders. The purpose of this engagement is to provide sufficient opportunity for public and stakeholder comment on plans, operations, and performance, to listen to concerns of the community, and to address all reasonable concerns related to the proposed oil and gas facility and operation.

- (b) **Surface Use Agreements, Rights of Way, Easements.** Operators commonly enter into surface use agreements, right-of-way agreements, easements, and other types of access agreements with landowners. To avoid inconsistency, the City recommends that agreements with landowners related to the proposed oil and gas facility or oil and gas operation not be finalized until the Applicant has completed Special Use Review under this Section, at which time the impacts related to the proposed siting will be analyzed.
- (c) **Pre-Application Process.**
- (1) **Timing.** A pre-application conference must be held prior to the Applicant submitting an application for Special Use Review.
  - (2) **Registration Required.** Prior to scheduling a pre-application meeting, the applicant must register as an operator within the City in accordance with Section 26.22.1-5 (Operator Registration and Renewal).
  - (3) **Alternative Site Analysis.** At the pre-application conference, operator shall identify at least two proposed locations for the oil and gas facility. The City shall review all proposed locations in order to determine which location complies with these rules. If the City determines none of the proposed locations comply with the setback requirements contained in Section 26.22.1-12(w) or the purpose of these rules, the Operator shall submit new proposed locations. Following the pre-application conference the City will prepare a report identifying the location it determines best comports with the requirements and purpose of Section 26-22.1. For each location, operator shall identify:
    - (A) The location;
    - (B) Distance of the proposed oil and gas facility to existing residences or platted residential lots, occupied buildings, parks, open space, schools and child care centers, hospitals, water bodies, wetlands, floodplains, floodways, existing active, inactive and decommissioned wells, and roadways;
    - (C) Zoning;
    - (D) Natural and manmade features;
    - (E) Water sources;
    - (F) Justification for a preferred alternative site;
    - (G) Materials to be submitted to the COGCC to satisfy the COGCC alternative location analysis requirement, if requested by the COGCC.
  - (4) **Six-Month Duration for Filing Application.** Completion of the pre-application conference process qualifies the Applicant to submit an application for a Special Use Review provided the Application is filed within 6 months after the completion of the pre-application process. If more than 6 months has passed since completion of the pre-application process, a new pre-application submittal is required.
  - (5) **Site Visit.** At the discretion of the Director, a site visit of the parcels involved in the Application may be required as part of the pre-application process with the Applicant. To the extent necessary, the Applicant will be responsible for securing permission or coordinating with the landowner(s) to conduct the site visit.
- (d) **Application Submission.** The application must include documentation listed in section 26-22.1-11 (Special Use Review – Application Requirements). The application must contain a certification from the applicant that the information in the application, as well as in any accompanying documentation, is true and accurate. The application must be signed by a person authorized to sign on behalf of the Applicant and identify who will be the primary contact during processing of the application. The point of contact information in the application must be amended to specify the new point of contact if the Applicant’s point of contact changes during the application process.
- (e) **Completeness Determination.** Upon acceptance of the application, the Director will determine if the application satisfactorily meets the requirements of this section. If City staff needs consultants or staff outside the City to assist the Director with the completeness determination, the City may hire such assistance at the applicant’s expense. Upon review of the application materials by the Director and any necessary outside consultants, the Director will determine whether a Special Use Review Application is complete.
- (1) **Application Deemed Incomplete.** If the Director finds that the Application is incomplete, the Director will notify the Applicant of the deficiencies. No further action will be taken on an incomplete Application. Should the Applicant fail to correct deficiencies within 180 days of the notice, the Application will expire,

and the Applicant may submit a new Application and fee as specified in subsection (e) above. The 180-day timeframe may be extended by the Director according to the standards in this Section 26-22.10. Should the Applicant dispute the Director's completeness determination, the Applicant may appeal the Director's determination to the City Council within 30 days of the Director's decision. During any City Council proceeding or subsequent appeal, the Application will not be processed.

- (2) **Application Deemed Complete.** If the Director finds that the Application is complete, the Director will process the Application.

(f) **Notice of Application.**

- (1) Upon receipt of an application and before conducting its completeness review, the Director will post receipt of the application on the City's website. The City's notice template will be used to define the contents of the post.
- (2) The Applicant must deliver written notice by certified mail to the entities listed below no more than 10 days after the Application is deemed complete by the Director. Notice of the Application must be made as follows:
  - (A) To the surface owners of the parcels of land on which the oil and gas operation is proposed to be located;
  - (B) To the owners and identifiable lessees of the parcels of land within 2,640 feet of the parcel on which the oil and gas operation is proposed to be located;
  - (C) To the physical address of all parcels within 2,640 feet of the parcel on which the oil and gas operation is proposed to be located if Boulder County Assessor's records indicate a mailing address for the parcel owner that is different than the physical address; and
  - (D) To owners of wells registered with the Colorado Division of Water Resources, owners of municipal/public water bodies, and owners/managers of irrigation ditches and reservoirs within 2,640 feet of the parcel on which the oil and gas operation is proposed to be located and within 1,320 feet mile of either side of the full length of the planned wellbore and bottom location. The Applicant is responsible for determining the addresses of such water source owners and providing a list of such owners to the Director.
- (3) The notice must contain the following:
  - (A) A message in conspicuous type on the front page of the notice that states as follows: "Attention: An oil and gas operation consisting of up to [number of wells] and [description of other facilities] is being proposed in your area. Please read this notice carefully." Slight variations in this notice language may be approved by the Director at the Applicant's request;
  - (B) A description of the proposed oil and gas facility, including the legal description; parcel number; a street address for the site, if available from the City's addressing system; the company name of the Operator; the name of an Applicant contact; the current business address, telephone number, and email address for the Applicant contact; a vicinity map; and a brief description and overview of the proposed oil and gas operation (e.g., a detailed description of the timeframe for facility construction and estimated duration of drilling and any proposed hydraulic fracturing);
  - (C) Information concerning the facilities and equipment proposed at the site when operational, and proposed access roads and gathering lines;
  - (D) The project number of the Application and the date of the City's completeness determination for the Application;
  - (E) An attachment provided by the Director explaining the applicable review process and explaining that the public may review the full Application file at Department offices and that public comments on the Application may be submitted to the Department;
  - (F) A statement concerning the City's right to enter property that is the subject of the Application as follows: "During the City's Special Use Review process, City staff may from time to time need to enter onto the property that is the subject of a Special Use Review Application."; and

- (G) The current mailing address, website address, email, and telephone number for both the Department and the COGCC, as well as a statement that additional information on the Application will be available from the Department.
- (4) **Notice Review.** Prior to sending the notice, the Applicant must submit a copy of the proposed notice and a list of the addresses for all notices required under this section for review by the Director. If the Director determines that the notice or address list does not comply with the requirements of this section, the Director may require the Applicant to modify the notice or address list.
- (5) **Posting of Application Materials.** Upon a determination that an application is deemed complete, all application materials not deemed confidential will be made available to the public in electronic form on the Department's website.
- (g) **Posting Public Notice Signage Onsite.** Within 5 days after the Director has deemed an Application complete, the Applicant must post a public notice sign or signs on the subject parcels as determined by the Director, including parcels where pipelines or gathering lines will be constructed, that meet the following requirements:
- (1) The sign must be posted in a location visible to the public (i.e., visible from a public road) and approved by the Director.
  - (2) Within 5 days of the posting of the sign, the Applicant must submit a photograph of the sign or signs as posted for review by the Director. If the Director determines that the sign does not comply with the requirements of this Section, the Director may require the Applicant to post a sign or signs complying with this section.
  - (3) The sign or signs must be posted on the sites until the Special Use Review process is complete. The Applicant must repair or replace signs that are damaged or defaced within 5 days of learning of damage or defacement.
- (h) **Neighborhood Meeting.** The Applicant must conduct a neighborhood meeting with adjacent and surrounding landowner(s) and other interested parties at a convenient date, time, and public location. The meeting must occur at least 20 days after the notice is sent and the signs are posted pursuant to this Section 26-22.1-10(g) and (h). The neighborhood meeting must be noticed pursuant to 26-22.1-10(g)(2) at least 14 days prior to the meeting. In addition to those parties entitled to notice under 26-22.1-10(g)(2), the meeting will be made open to all the public. The meeting must be held at an accessible and adequate location. If requested by members of the public or if the Director determines remote attendance is necessary for public health reasons, accommodation must be made for remote attendance. At the neighborhood meeting, the Applicant must provide an overview of its proposed oil and gas operation, distribute a handout provided by the Director with an explanation of the Section 26-22.1 Special Use Review process, and allow those in attendance to provide input as to the proposed operation, including, but not limited to, facility locations, issues that arise from Application of Section 26-22.1 to the proposed operation, and suggested mitigation to adequately ensure compliance with Section 26-22.1. The Applicant must provide a video recording of the meeting and a report of all of attendee comments and any proposals from the Applicant for addressing neighborhood concerns to the Director within 20 days after the meeting.
- (i) **Referral Requirements and Agency Review.** Following the determination that an Application is complete, the Director will refer the Application materials to the city's Public Works Department; Parks, Recreation and Open Space Department; Fire Department; Police Department; City Administrator's Office; any other city agencies, boards, commissions, or committees in the Director's discretion, the COGCC and CDPHE, and any appropriate municipality, special district, and school district for review and comment. As deemed necessary in the Director's sole discretion, the Director may also refer the Application to other government agencies or entities for review and comment. Referral comments on the proposal must be returned to the Director within 75 days of date of referral, unless the Director determines additional time is necessary.
- (1) If the proposed oil and gas facility or oil and gas operation is within or adjacent to a city park, recreation area, or open space property or property over which the city owns a conservation easement, the Director of the city's Parks, Recreation, and Open Space Department may refer the Application to the Lafayette Open Space Advisory Committee ("LOSAC") for consideration at a public meeting and LOSAC may make recommendations related to the City's management of city parks or open space that may be impacted by the proposed oil and gas facility or operations.

- (2) The Applicant is responsible for preparing the referral packets in the manner prescribed by the Director. Any errors made by the Applicant in the preparation of referral packets may result in a delay in processing of the Application.
- (j) **Supplemental Information.** After review, if corrections or additional information is needed, the Director will provide written comments to the applicant. The applicant will need to revise the application and resubmit for further review prior to scheduling for public hearings.
- (k) **Site Visit.** The Department will conduct a site visit to evaluate the Application and the site-specific circumstances on and near the parcel and surrounding parcels on which the facility and operations are located. The Department may coordinate a site visit with other City departments and governmental agencies. To the extent necessary, the Applicant will be responsible for securing permission or coordinating with the landowner(s) to conduct the site visit.
- (l) **Staff Recommendation.** After its review of the Application, Department staff will make a recommendation for approval with conditions or denial of the Application, based on its Alternative Site Analysis report, its analysis of the Special Use Review Standards, the referral comments and the Applicant's responses to the referral comments, and all public comment including comments submitted at the Applicant's neighborhood meeting. When the staff recommendation is complete, the Application will be scheduled for a public hearing in front of the Planning Commission. The staff recommendation will be made available to the public once it is complete.
- (m) **Notice of Planning Commission Hearing.** Not less than 10 days prior to the Planning Commission's public hearing on the Application, the City will publish a legal notice of the public hearing in a newspaper of general circulation in the City and mail written notice to the people and entities entitled to notice under Section 26-22.1-8(g)(2) of the time and place of the Planning Commission's public hearing.
- (n) **Planning Commission Hearing and Recommendation.** The Planning Commission will hold a public hearing on the Application and will make a recommendation of approval with conditions necessary to ensure compliance with this Section, or denial, which will be forwarded to the City Council of Lafayette.
- (o) **Notice of City Council Hearing.** Not less than 10 days prior to the City Council's public hearing on the Application, the City will publish a legal notice of the public hearing in a newspaper of general circulation within the City, and provide written notice to the surface owner and surrounding property owners identified in Section 26-22.1-10(g)(2) of the time and place of the City's public hearing.
- (p) **City Council Hearing and Decision.** The City Council will hold a public hearing on the Application. Any action taken by the City Council will be based on the entire record of proceedings on the matter, as that record is maintained by the Director and/or the City Clerk, including but not limited to: recordings or transcripts of Planning Commission and City Council public hearings; all written comments of referral agencies; the review and recommendations of the Department, LOSAC if applicable, and Planning Commission; and all written comments, testimony, or evidence made or submitted by or on behalf of the Applicant, landowners, or interest holders or their agents, and interested members of the public at the public hearing before the City Council. The Applicant will have the burden of proof to show the applicable standards for approval have been met. Based on the evidence received at the public hearing, the City Council will make its determination to approve the Application with conditions necessary to ensure compliance with this Section or deny the Application. The City Council may designate its determination as final or preliminary and subject to review by a technical review board under Sections 29-20-104(3) and 34-60-104.5(3), C.R.S. The City Council's action will contain appropriate findings or reasons in support of its decision. The City Council will render its decision on the Application in writing following the conclusion of the public hearing, and the decision will be deemed final upon the City Council's formal adoption of the written decision.

## Section 26-22.1-11 – Special Use Review – Application Requirements

Unless an application requirement is waived or modified by the Director after the Applicant's request, the Applicant must submit the information and documents specified in this section with the Special Use Review Application for oil and gas facilities and operations. If the contents or relevant information in any required submittal materially changes, the Applicant must promptly update those materials with the Department. The Director may waive or modify the submission requirements in this section if, because of the nature of the Application, the requested information is unlikely to be useful to the City Council in applying the

Special Use Review standards. Each of the following will form the basis for full and independent review by the City and all reviewing bodies. All materials submitted under this section are subject to Section 26-22.1-16(e) (Falsification).

(a) **General Information**

- (1) **Application Form.**
- (2) **Operator Registration.** Operator registration materials submitted under section 26-22.1-5 (Operator Registration and Renewal) are incorporated into the Application materials. The Director, referral agencies, Planning Commission, and City Council may consider such materials in reviewing any Section 26-22.1-10 (Special Use Review – Review Procedure for New Oil and Gas Applications) Application.
- (3) **Proof of Pre-Application Conference.** Date the Applicant conducted the pre-application conference with the Department.
- (4) **Verification of Legal Rights.**
  - (A) **Mineral Rights and Surface Access Rights.** Proof of ownership of, or lease rights to, the mineral rights and accompanying surface lands where oil and gas facilities are proposed, including copies of all easements, licenses or right-of-way agreements necessary to lay any pipelines or gathering lines associated with the Application. Identification of all persons with a real property interest in the lands where the proposed oil and gas facilities will be located. A title report supporting the asserted mineral interests and surface access. A map of the mineral interests Applicant will produce with the proposed oil and gas operation.
  - (B) **Surface Use Agreements.** The City strongly recommends that surface agreements not be finalized until after the Applicant has Special Use Review approval. Nonetheless, if the Applicant has entered any surface use agreements for any proposed oil and gas facilities subject to the Application, Applicant will provide a copy.
  - (C) **Roads.** Information demonstrating that the Applicant has or will have the right to use or construct temporary and permanent private access roads that are necessary for the proposed oil and gas facilities or operations. A copy of any signed or proposed agreements with landowner(s) regarding road construction, maintenance, and improvements necessitated by the proposed oil and gas operation, and any recorded or historical easements providing access to or across the parcel(s) must be provided.
  - (D) **Pipelines and Gathering Lines.** Information demonstrating that the Applicant has or will have the right to use or construct temporary and permanent pipelines, gathering lines, or fresh water pipelines that are necessary for the proposed oil and gas operations. A copy of any signed or proposed agreements with landowner(s) regarding pipeline, gathering line or fresh water pipeline construction, maintenance, and improvements necessitated by the proposed oil and gas operation must be provided.
- (5) **Insurance Coverage.** Operators must comply with the provisions in Section 26-22.19 as applicable.
- (6) **Financial Fitness and Assurances.** Applicant will be required to provide adequate financial assurances to guarantee performance of all conditions of approval attached to any Special Use Review approval for the lifetime of the oil and gas facility until final reclamation obligations are completed to the City's satisfaction. With the Application, Applicant will submit a description of the type(s) of financial assurances it expects to provide to meet those requirements. The type and amount of financial assurances provided will be determined by the City with any Special Use Review approval.

(b) **Site and Area Information.** Applicant must include maps that meet the following criteria:

- (1) **All maps must be** at a scale which best conveys the conceptual aspects of the plan, include written scale, graphic scale, and north arrow (designated as true north), and allow for effective public presentation. All maps and plans must include the date of preparation and revision box.
- (2) **Topography.** A map of the existing and proposed topography at five-foot intervals to portray the direction and slope of the parcel(s) where the oil and gas facilities are proposed to be located.
- (3) **Existing Dwellings and Structures.** A map of the location of all existing Dwellings and other structures and improvements within one mile from the parcel(s) on which the proposed oil and gas facility will be located.

Dwellings must be specifically identified. This map must depict any minimum setbacks required by this Section.

- (4) **Existing Roads.** A map depicting all existing roads (designating public and private roads) near and surrounding the proposed oil and gas facilities.
- (5) **Existing or Pending Oil and Gas Facilities.**
  - (A) A map showing the location of all producing, shut-in, temporarily abandoned, dry and abandoned or plugged and abandoned wells, and any other oil and gas facilities and operations for which permits are pending with applicable agencies, on or within one mile of the parcel(s) where the proposed oil and gas facilities will be located and within one mile of either side of the full length of each proposed wellbore.
  - (B) A map of existing pipelines, gathering lines or freshwater pipelines on or within one mile of the parcel(s) where the proposed oil and gas facilities will be located, including information on the age, location, depth, diameter, thickness, typical and maximum operating pressures, the nature of the material carried in the pipes and the estimated worst-case liquid spill volumes.
- (6) **Water Wells.** A map of any domestic or commercial water wells or irrigation wells within one mile of the parcel or parcels on which the proposed oil and gas facilities will be located and within one mile of either side of the full length of each proposed wellbore.
- (7) **Surrounding Land Use Patterns.** Identification of all existing activities and uses on surrounding lands (e.g., agricultural activities, residential, recreational, commercial, or businesses) within one mile, or as otherwise determined by the Director of the parcel(s) where the oil and gas facilities are proposed to be located.
- (8) **Schools and Child Care Centers.** A map of schools and licensed Child Care Centers within one mile of the parcel(s) on which the proposed oil and gas facilities will be located. This map must include the distances between the proposed oil and gas facility and the Schools and licensed Child Care Centers. This map must depict any setbacks required by Section 26-22.1-12(w) (Special Use Review Standards, Setbacks, Location, and Surrounding Land Uses).
- (9) **Agricultural Lands.** A map of the agricultural lands on and within one mile of the parcel(s) on which the oil and gas facilities are proposed to be located; identification of the specific agricultural uses on the parcel(s) and their status; and the existence of irrigation and other agricultural infrastructure.
- (10) **Water Bodies; Riparian Areas; Wetlands; Ditches.** A map depicting all surface water bodies including, but not limited to, lakes, streams, wetlands or aquatic habitat, riparian areas, and riparian found on or within one mile of the parcel(s) on which the proposed oil and gas facilities will be located, and within one mile of either side of the full length of each proposed wellbore. The map must also depict irrigation ditches and reservoirs as identified and mapped on the County's Ditch and Reservoir Directory and the St. Vrain and Left Hand Water Conservation District Ditch and Reservoir Directory.
- (11) **Natural Resources.** A map of all significant natural ecosystems or environmental features, significant natural communities, rare plant areas, high biodiversity areas, natural landmarks, and natural areas within one mile of the parcel(s) on which the oil and gas facilities are proposed to be located.
- (12) **Existing vegetation.** An inventory of the vegetation (including its quality) at the site of the proposed oil and gas facilities.
- (13) **Wildlife.** A map of high priority habitat areas and the presence of: species listed in the City of Lafayette Wildlife Species of Concern listing; Tier 1 and Tier 2 species as identified by the Colorado Parks and Wildlife ("CPW"); and of federally-designated threatened or endangered species, as mapped by governmental agencies or discovered upon inspection, on and within one mile of the parcel(s) on which the oil and gas facilities are proposed to be located.
- (14) **Natural and Geologic Hazards.** A map of all natural and geologic hazard and constraint areas as identified in the City of Lafayette Comprehensive Plan or using the best available information on or within one mile of the parcel(s) on which the proposed oil and gas facilities will be located and within one mile of either side of the full length of each proposed wellbore. Natural hazards may include, without limitation, expansive soils

or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls.

- (15) **Floodplain and Floodway.** A map of all floodplains and floodways, including both the FEMA and City of Lafayette Floodplains as delineated by the most recent digital flood insurance rate map (DFIRM), as defined in Section 26-23-3, on or within one mile of the parcel(s) on which the proposed oil and gas facilities will be located.
- (16) **Recreational Activity; Trails; Bikeways.** A map and identification of active and passive recreational activity areas, such as public trails, publicly accessible open space, bike paths, and commonly used bike travel ways within one mile of the parcel(s) where the oil and gas facilities are proposed to be located.
- (17) **Open Space.** A map of public open space or lands with conservation easements on or within one mile of the parcel(s) on which the proposed oil and gas facilities will be located.
- (18) **Site Selection Rationale.** Maps and a narrative explaining the reasons the Applicant chose the proposed site(s) for the oil and gas facilities or operations with respect to other possible locations.
- (19) **Ozone Exceedance.** A report of the number of ozone exceedances as measured at any and all CDPHE monitoring stations in the City of Lafayette and the amount by which the 2015 National Ambient Air Quality Standards of 70 parts per billion or any newer standard under the Clean Air Act were exceeded. The report should include all data for the preceding three-year period.

(c) **Proposed Development Information.**

- (1) **Site and Facility Plan.** A facility layout diagram, including: construction and operations layout drawings; location construction and operations cross-section plots including location and finish grades; operations facility layout drawings; the location of equipment such as wellheads, pumping units, tanks, treaters, staging and storage areas; the location of access roads and ingress and egress to and from public roads; structures such as sound walls; location, height and materials for all fences; temporary workspaces and permanent areas of disturbance for all phases of development; fencing; and an equipment list.
- (2) **Wellbore Risk analysis.** A copy of the anti-collision evaluation for all proposed wells conducted for or under the same terms as required in COGCC Rules.
- (3) **Area of Disturbance.** A map and dimensions of the proposed oil and gas facilities, indicating both temporary and permanent disturbance areas, in square feet and acres.
- (4) **Roads and Road Improvements.** A map of proposed new roads and improvements to existing roads that will be necessary for the proposed oil and gas facilities, as well as identification of the road surface planned for each road or road improvement.
- (5) **Pipelin, Gathering Line Plan and Fresh Water Pipeline.**
  - (A) The specific location and route of each pipeline, gathering line, fresh water pipeline and any other transport pipeline necessary for the oil and gas facilities and operations, through the lifetime of the oil and gas facilities and operations, and their distances from: existing or proposed residential, commercial, or industrial buildings; places of public assembly; surface water bodies; natural resources identified under this Section 26-22.1-11(b)(11) (Special Use Review – Application Requirements, Natural Resources); geologic hazards, agricultural lands; and public or private roads;
  - (B) The size, operating pressure, material, and locations of each pipeline or gathering line and what materials they will carry;
  - (C) Whether pipelines, gathering lines or fresh water pipelines will be co-located with proposed or existing lines; and
  - (D) Identification of all pipeline, gathering line or fresh water pipeline segments that will be constructed by boring and the location of the boring operation.
- (6) **Grading and Drainage Plan.** A plan and information showing location and typical cross-section of all existing and proposed earthwork on the parcel(s) on which the oil and gas facilities are proposed to be located, including earthwork calculations, historic drainage patterns and flow rates, mitigation measures to compensate for anticipated drainage impacts, and geotechnical soil reports. The best available information should be used to identify and evaluate drainage impacts, including without limitation the City of Lafayette Storm Drainage Criteria Manual (or stormwater quality regulations in Chapter 104 of the

Code??? Need Public Works and/or City Engineer to weigh in here). The plan must be certified by a Colorado registered professional engineer.

- (7) **Landscaping and Screening Plan.** A plan denoting the intended landscaping and visual screening on the parcel(s) on which the oil and gas facilities are proposed to be located; an irrigation plan may be required where visual buffering is proposed to be accomplished with vegetation.
  - (8) **Weed Control Plan.** A Weed Control Plan identifying what noxious weeds listed on List A, B, or C in the State of Colorado's Noxious Weed Management Plan are known to be on the parcel(s) on which the oil and gas facilities are proposed to be located, their location, and the proposed method of weed control. This plan must include an integrated management strategy to prevent and manage the growth of noxious weeds during oil and gas operations and reclamation.
  - (9) **Dust Suppression Plan.** A plan detailing how the Applicant will prevent excessive dust escaping from the oil and gas facility site(s) and all associated roads; a plan for preventing fugitive dust, sand, or silica materials escaping from any oil and gas operation.
  - (10) **Lighting Plan and Photometric Study.** A plan indicating the location of all outdoor lighting on the site and structures, including cut sheets (manufacturer's specifications with picture or diagram) of all proposed fixtures. The plan should include the location and type of any emergency lighting and description of situations in which it will be used. A photometric study conducted by an independent consultant to measure the lumens emitted by the oil and gas facilities or operations and evaluate lighting impact on surrounding properties must also be included as part of the plan.
  - (11) **Operational Plan.** A plan describing in detail the proposed oil and gas operations including the method, schedule, and duration of time for drilling, completion, production, and decommissioning.
  - (12) **Electrification Plan.** A plan identifying all sources of electricity that will be brought to or used at the proposed oil and gas facility location during all phases, including drilling, completion, and operations.
  - (13) **Revegetation and Reclamation Plan.** A plan illustrating how all disturbed areas will be revegetated and reclaimed, including areas disturbed during flowline abandonment. The plan will include timing, methods, materials to be used, including any proposed soil amendments, and procedures for ensuring successful revegetation, including an on-going maintenance plan that ensures successful establishment of vegetation and weed control. Revegetation and reclamation will include, but is not limited to, the use of native plant species when appropriate, integrated management of weed control and prevention, and full establishment of appropriate vegetation for a minimum of three consecutive growing seasons. No species on List A, B, or C in the State of Colorado's Noxious Weed Management Plan may be used to meet revegetation requirements.
  - (14) **Worker Training and Records.** Written procedures detailing employee training requirements and training records.
- (d) **Assessments, Studies, and Plans by Outside Experts.** The following submittal items must be prepared by an independent expert, engineer, or consultant at the expense of the applicant and submitted to the City for review.
- (1) **Air Quality Report.**
    - (A) **Existing emissions.** An independent expert's inventory of methane, VOCs, NO<sub>x</sub>, CO<sub>2</sub>, and particulate emissions for all oil and gas facilities and operations in the City of Lafayette owned or operated by the Applicant for the calendar year prior to registration or renewal. Operators must submit all Air Pollution Emission Notices for hazardous air pollutants submitted to the Air Pollution Control Division to the independent expert for review.
    - (B) **Air Quality Modeling.** A qualified, independent air quality modeling study that considers all relevant environmental and atmospheric conditions, and:
      - (i) Assesses the existing air quality at the proposed site;
      - (ii) Predicts the anticipated emissions (including hazardous air pollutants, methane, VOCs, NO<sub>x</sub>, CO<sub>2</sub>, and particulate emissions) from the proposed oil and gas facilities and operations, including mobile sources and assuming use of and identifying all emissions control equipment and processes intended for use at the oil and gas facilities; and

- (iii) Models the impacts on air quality from the proposed oil and gas facilities and operations over their lifetime, until final reclamation obligations are completed to the City's satisfaction, including the compounding effects of climate change on ozone and particulate pollution in the City and taking into account and identifying all relevant factors including natural conditions and other air quality impacts from any existing or foreseeable source.
- (2) **Baseline Soil Conditions.** An independent expert's report detailing the soil conditions on the parcel(s) on which the proposed oil and gas facilities will be located. The report will address the NRCS classification of the soils, the organic and inorganic characteristics of the soil, and any existing contamination or sensitive soil features existing on the site.
- (3) **Traffic and Road Use Plan.**
  - (A) A Transportation Impact Study, as defined in the City of Lafayette Multimodal Transportation Standards, covering all areas affected by the proposed oil and gas facilities or operations and prepared by a Colorado registered professional engineer.
  - (B) A map indicating proposed trip routes for all traffic serving the oil and gas operation during all phases of well development and operations, for the lifetime of the oil and gas facilities and operations until final reclamation obligations are completed to the City's satisfaction.
  - (C) For each segment of proposed traffic routes in the City of Lafayette, the types, sizes, weight, number of axles, volumes, and frequencies (daily, weekly, total) and timing (times of day) of all vehicles to be used during all phases of the proposed oil and gas operation.
  - (D) The intended measures the Applicant will take to ensure safety, maintenance of road condition, and the quality of life experience of other users of the City's transportation system, adjacent residents, and affected property owners, including without limitation:
    - (i) Operational measures to minimize impacts to the public including, but not limited to, time of day, time of week, vehicle fuel and emissions reduction technology, noise minimization, and traffic control safety measures;
    - (ii) Maintenance practices on the proposed route, including without limitation, grading of unpaved roads, dust suppression, vehicle cleaning necessary to minimize re-entrained dust from adjacent roads, snow and ice management, sweeping of paved roads/shoulders, pothole patching, repaving, crack sealing, and chip sealing necessary to maintain an adequate surface of paved roads along the proposed route; and
    - (iii) Any necessary physical infrastructure improvements to ensure public safety for all modes of travel including non-motorized modes along travel routes to and from the site.
- (4) **Agriculture.** An independent expert's report identifying the anticipated impacts of the proposed oil and gas facilities or operations on the current agricultural uses and the existing productivity of the lands where the oil and gas facilities and operations are proposed.
- (5) **Wildlife.** An independent expert's report (i) identifying the presence and population numbers of: species listed in the City of Lafayette Wildlife Species of Concern listing; Tier 1 and Tier 2 species as identified by CPW; and federally-designated threatened or endangered species, (ii) identifying the anticipated impacts of the proposed oil and gas facilities and operations on wildlife and wildlife habitat, and (iii) recommending measures for avoiding or minimizing such impacts.
- (6) **Natural Resources.** An independent expert's report identifying the anticipated impacts of the proposed oil and gas facilities and operations on the resources identified under 26-22.1-11(b)(11) (Special Use Review – Application Requirements, Natural Resources) and recommendations for avoiding or minimizing such impacts.
- (7) **Water Quantity, Source and Use.**
  - (A) An estimate of the amount of water needed for all phases of the oil and gas operation.
  - (B) The source of water intended for use by the proposed oil and gas facility or operation.
    - (i) A list of all available sources of water for the proposed oil and gas operations, and if multiple sources are available, analysis of which source is least detrimental to the environment.

- (C) **Impacts of Water Use.** An independent expert's assessment of the impacts of the proposed use of water described in subsections (a) and (b) above. Impacts to, at a minimum, downstream users, groundwater users, agricultural lands and users, terrestrial and aquatic wildlife, plant communities, and recreation must be considered.
- (D) **Water Management Plan.** An independent expert's recommendation of measures that will avoid or minimize the impacts identified in subsection (c) above and address the water use standards in Section 26-22.1-12(b) (Special Use Review Standards, Water Use).
- (E) **Produced Water.** An estimate of the amount of produced water and other wastewater that will be generated by the proposed oil and gas operations, including a description and evaluation of potential flowback and produced water volume reduction options through recycling, reuse or other beneficial uses and the rationale for the methods to be employed. Plans for recycling or reusing water used or produced by the oil and gas operations.

(8) **Water Quality.**

- (A) **Testing of existing conditions.** A qualified, independent expert's assessment of existing water quality conditions on and adjacent to the parcel(s) where the oil and gas facilities will be located based on testing as follows.
  - (i) Identification of and offers to owners to sample all domestic water wells and water sources located within one mile of the parcel or parcels on which the oil and gas facilities are proposed to be located and within one-half mile of either side of the full length of each proposed wellbore. For all water wells and water sources for which the Applicant is given permission:
    - a. Initial collection and testing of baseline samples from available water sources within 12 months prior to the commencement of drilling a well, or within 12 months prior to the re-stimulation of an existing well for which no samples were collected and tested during the previous 12 months;
    - b. Analysis. All sampling shall be performed by the Applicant according to the specified methods in 40 C.F.R. Part 136, including sample containers, preservation methods, and holding time limits, for the analytes listed in Table 1 below; and
    - c. GPS coordinates, at sub-meter resolution, for all water wells and water sources tested.
  - (ii) An Operator may rely on existing sampling data collected from water sources within the radius described above, provided the data was collected within the previous 12 months, the data includes the constituents listed in Table 1, and there has been no oil and gas activity within a one-mile radius in the time between the original sampling and the present.
  - (iii) If the Operator is unable to locate and obtain permission from the owner of a water source to be tested, the Operator must advise the Director that the Operator could not obtain access to the water source from the surface owner.
  - (iv) The Operator will submit a monitoring report to the Director with the Application, including reporting on damaged or unsanitary water well conditions; existing, adjacent potential pollution sources; water odor; water color; presence of sediment; bubbles and effervescence; and the existence and amount of any Table 1 analytes found. Copies of the report will be provided to the COGCC and the water source owners within 10 days after the Operator's receipt of the report.
  - (v) If sampling shows water contamination, additional measures may be required including the following:
    - a. If free gas or a dissolved methane concentration level greater than one milligram per liter (mg/l) is detected in a water source, determination of the gas



emergency dispatch and the Director immediately, and in no case more than 4 hours after such spill is discovered, in addition to all necessary reporting to state agencies.

- (H) Project-specific emergency preparedness plans are required for any project that involves drilling or penetrating through known zones of hydrogen sulfide gas.
- (I) The plan must include a provision that obligates the Operator to reimburse the appropriate emergency response service providers for costs incurred in connection with any emergency. The appropriate emergency response service provider may specify alternative methods for reimbursement of its services. If requested by the emergency response agency, Operator will include a provision in the plan that addresses regular training exercises.
- (J) Detailed information on safety management showing that the Operator has adequate personnel, ongoing safety training of all on-site personnel, safety supplies, and funding to implement the emergency response plan immediately at all times during construction and operations.
- (K) As applicable, the plan must include provisions that obligate the Operator to keep onsite and make immediately available to any emergency responders the identification and corresponding Safety Data Sheets (SDS) of all products used, stored or transported to the site, including fracking fluids. Operators must timely provide SDS to the public in response to a written request. In cases of spills or other emergency events, the plan must include provisions establishing a notification process to emergency responders of potential products they may encounter, including the products used in the hydraulic fracturing fluids.
- (L) The plan must include a provision establishing a process by which the Operator periodically engages with the surrounding residents and landowners to educate them on the risks of the onsite operations, explain emergency procedures, engage in evacuation exercises, and to establish a process for surrounding neighbors to communicate with the Operator.
- (M) The plan must include a process by which the community can submit concerns and complaints and be assured of responses.

(10) **Noise Plan.**

- (A) **Monitoring Plan.** An independent expert's plan for the creation of the Baseline Report and noise modeling, including the proposed receptor locations, proposed test periods, and proposed times of year for monitoring and the software and methodology for modeling. This plan must be approved by the City prior to the creation of a Baseline Report or Noise Modeling. This plan must demonstrate that the Baseline Reports and Noise Modeling will comply with the current version of American National Standards Institute S 1.4: Specifications for Sound Level Meters.
- (B) **Baseline Report.** Report of dBA and dBC ambient noise levels over 24-hour test periods for at least 3 consecutive weekdays and 3 consecutive weekend periods at the site in different weather conditions, according to the Monitoring Plan. Baseline Reports must include wind speed, direction, rainfall data, season conducted, and any other relevant conditions.
- (C) **Noise Modeling.** Using an industry-recognized noise modeling software, modeling of expected dBA and dBC noise levels from the proposed oil and gas facilities and operations during all phases of development and operation, assuming use of and identifying all noise-mitigating equipment and measures intended for use at the proposed oil and gas facilities or operations. All Noise Modeling must include a list of all noise sources, reference noise data used in the model for each source, noise attenuation specifications for any proposed noise walls, a scaled map showing predicted noise levels.
- (D) **Complaint procedure.** A plan for responding to noise complaints and communicating the results to the complainant and to the City in a timely manner.

- (11) **Odor Plan.** A list of all odor reduction measures that will be used to address the predicted odors from the proposed oil and gas facilities and operations and meet the standards in 26-22.1-12(p) (Special Use Review Standards, Odor). Identification of all natural features (e.g., topography, prevailing wind patterns, vegetation) that will aggravate or mitigate odor impacts on the areas within 2000 feet of the parcel(s) where the oil and gas facilities are proposed to be located. A plan for timely responding to odor complaints and

communicating the results to the complainant and to the City. Operator must notify LGD no later than 24 hours after receiving odor complaint and provide complete description of all activities occurring at the Oil and Gas Facility at the time the odor subject to the complaint was perceived and must provide a description of all measures taken in response to the complaint.

- (12) **Cultural and Historical Resources Survey.** A cultural, historical, and archeological survey of the parcel(s) where the oil and gas facilities or operations are proposed to be located done in consultation with and as required by History Colorado.
- (13) **Flood Protection and Mitigation Plan.** If the proposed oil and gas facilities or operations are within a floodplain, an independent engineer's plan that describes how flood protection measures and flood response actions, such as remote shut-in procedures and anchoring, will be implemented.
- (14) **Waste.**
  - (A) **Projected waste.** An independent expert's assessment projecting the types and amounts of waste (including construction waste, drilling mud, fracking fluids, exploration and production waste) that will be generated by the oil and gas facilities or operations throughout their lifetimes, until final reclamation obligations are completed to the City's satisfaction. The assessment will include description of any sources of technically enhanced naturally occurring radioactive material used in or generated by the oil and gas operations and facilities.
  - (B) **Waste Management Plan.** Plan for disposal of all waste generated by the oil and gas facilities or operations, including use of truck or pipeline transport with details of anticipated truck trips (routes, number of trips, timing of trips). The plan will identify whether waste materials will be stored on site and, if so, how such storage will avoid adverse impacts to the oil and gas facility parcel(s), surrounding lands, water and natural resources, air quality, and public health, safety, and welfare. The plan must specify whether on-site storage of drilling mud is contemplated and, if so, how the Applicant will eliminate odors leaving the site.
- (15) **Existing Mines Risk Study.** An independent engineer's study and assessment of the degree and type of risks posed by interaction of the proposed oil and gas facilities or operations with existing or former mining operations, such as subsurface features resulting from other mineral mining activities within one mile of the proposed oil and gas facilities and within one mile of either side of the full length of each proposed wellbore.

## Section 26-22.1-12 - Special Use Review Standards

The following criteria shall be applied and met in the case of an oil and gas operation special use application:

- (a) The applicant has complied with all requirements of section 26-22.1-10 (Review Procedures for New Oil and Gas Facilities and Oil and Gas Operations) and 26-22.1-11 (Special Use Review – Application Requirements), together with applicable ordinances, resolutions, regulations or statutes and will either avoid adverse impacts to public health, safety, and welfare, the environment, and wildlife resources altogether or, through imposition of conditions of approval, sufficiently minimize, and mitigate adverse impacts.
- (b) Approval of the application will not violate the provisions of the Code of Ordinances.
- (c) The oil and gas well site or production site can be adequately served by necessary utility and public safety services.
- (d) Applicant's other oil and gas operations located within the city are in compliance with all applicable provisions of 26-22.1, or those regulations in existence at the time the oil and gas operation was permitted or approved, and all other applicable ordinances, resolutions, regulations or statutes. Approval of the special use application shall not constitute a waiver by the city of its right to institute proceedings against the applicant as provided by section 26-22.1-16 (City Inspections, Enforcement) of this chapter or to exercise any remedy the city may have.

The City Council will determine whether the proposed oil and gas facility or operation, individually and in light of cumulative impacts, complies with these Special Use Review standards. The City Council will deny the Application if the proposed oil

and gas facilities or operations cannot be conducted in a manner that protects public health, safety, and welfare, the environment and wildlife.

The City Council, considering the advice of the Director, has determined the following standards to be generally applicable based on the nature and extent of oil and gas development. The Applicant bears the burden of proving that the proposed oil and gas facilities and oil and gas operations will meet the standards. When two or more of the standards listed below conflict, the City Council, based upon advice of the Director, will evaluate the applicability and importance of each of the conflicting standards under the facts of the specific Application and make a reasonable attempt to balance the conflicting standards in reaching a decision.

- (a) **Air Quality.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to air quality.
  - (1) **Compliance with National Ambient Air Quality Standards.** Oil and gas facilities and operations will not compromise the attainment of ozone standards for the Denver Metro/North Front Range ozone nonattainment area as established by the US Environmental Protection Agency ("EPA"). Oil and gas facilities and operations will not contribute particulate matter to the air in a manner that fails to protect public health.
  - (2) **Methane.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate emissions or release of methane.
  - (3) **Health-based guidelines for hazardous air pollutants.** Compliance with the most protective health-based guidelines for hazardous air pollutants set by CDPHE.
- (b) **Water Use.** Use of the proposed water from the proposed supply will avoid or sufficiently minimize and mitigate adverse impacts on water users, groundwater users, water delivery systems, agricultural lands and operations, recreation water body health, terrestrial and aquatic wildlife, and viability, plant communities, wetlands, and wildlife.
- (c) **Agricultural Land.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate loss of and adverse impacts to: agricultural land, including farm or ranch lands and soils identified in the Comprehensive Plan or through the Special Use Review process; agricultural operations, including crop and livestock production; irrigation systems and schedules; and improvements including fencing.
- (d) **Cultural and Historic Resources.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to or loss of cultural or historic or archaeological resources identified in the Comprehensive Plan or through the Special Use Review process, resources eligible for City landmarking, and sites included in the National Historic Register.
- (e) **Emergency Prevention and Response.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate risks of and appropriately prepare for emergency situations such as explosions, fires, gas, oil or water pipeline leaks or ruptures, hydrogen sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or spills. In the event of an emergency, adequate practices and procedures must be in place to protect public health and safety and repair damage caused by emergencies.
- (f) **Financial Fitness and Assurance.** Oil and gas operations will avoid or sufficiently minimize and mitigate adverse impacts to public, health, safety, and welfare resulting from financial instability of the operator. Applicants must demonstrate sufficient financial stability to operate the proposed oil and gas operations for the lifetime of the oil and gas operations until final reclamation obligations are completed to the City's satisfaction. Applicants must provide forms of financial assurance sufficient to guarantee performance of all conditions of approval and obligations through the lifetime of the proposed oil and gas operations until final reclamation obligations are completed to the City's satisfaction., which may include environmental surety bonds.
- (g) **Floodplains and Floodways.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate the risk of adverse impacts to public health, safety, and welfare, the environment and wildlife from floods. Flood mapping may be identified in the adopted maps referenced in the Land Use Code or through the Special Use Review process using the best available information. Above-ground oil and gas facilities are prohibited in floodways. Above-ground oil and gas facilities must be located outside a floodplain unless the Applicant proves that no other sites can

be reasonably used, or if reasonably necessary to avoid or sufficiently minimize and mitigate adverse impacts to public health, safety, and welfare, the environment and wildlife.

- (h) **Drainage.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to historic drainage patterns and/or flow rates. The best available information should be used to evaluate these impacts, including the City of Lafayette Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, as applicable.
- (i) **Dust.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate impacts from dust. Operators must prevent dust from leaving their property. No produced water or other process fluids shall be used for dust suppression. Operators shall avoid creating dust or dust suppression activities within 300 feet of the ordinary high-water mark of any water body, unless the dust suppressant is water.
- (j) **Geologic and Natural Hazards.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate risks from geologic or natural hazard areas as identified in the City of Lafayette Comprehensive Plan or through the Special Use Review process using the best available information. Oil and gas facilities will not be located in such areas, unless there is no way to avoid the hazard area, no other sites can be reasonably used, or if reasonably necessary to avoid or sufficiently minimize and mitigate adverse impacts to public health, safety, and welfare, the environment and wildlife.
- (k) **Land Disturbance.** Oil and gas facilities and operations must avoid or sufficiently minimize and mitigate adverse impacts to the surface lands under and immediately surrounding all oil and gas operations and facilities. Considerations in applying this standard include, but are not limited to, alteration of the natural topography and existing vegetation, the scope of the proposed oil and gas facilities or operations, the amount of cut and fill, and run-off and erosion potential, and soil stability.
- (l) **Lighting.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts associated with lighting on public health, safety, and welfare, the environment and wildlife. Lighting associated with oil and gas facilities or operations will be designed to protect surrounding properties, roadways, livestock, and wildlife from light pollution and glare. Lighting will be directed downward and inward and use fully shielding bulbs to prevent light emissions above a horizontal plane drawn from the bottom of the fixture.
- (m) **Water Bodies; Riparian Areas; Wetlands.** Oil and gas facilities or operations will avoid or sufficiently minimize and mitigate adverse impacts to all surface water bodies including, but not limited to, irrigation ditches and reservoirs in County's Ditch and Reservoir Directory and the St. Vrain and Left Hand Water Conservation District Ditch and Reservoir Directory, as well as wetlands or aquatic habitat, riparian areas, and riparian corridors mapped or identified through the Special Use Review process using the best available information.
- (n) **Natural Resources.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to significant natural ecosystems or environmental features, significant natural communities, rare plant areas, high biodiversity areas, natural landmarks, and natural areas, as identified in the City of Lafayette Comprehensive Plan, other sources, or through the Special Use Review process using the best available information.
- (o) **Noise.**
  - (1) Oil and gas operations will avoid or sufficiently minimize and mitigate adverse impacts to public health, safety, and welfare, the environment and wildlife from noise. No oil and gas operations will create noise that unreasonably exceeds the existing ambient noise levels. Specific noise limitations will be assessed and imposed for each proposed oil and gas facility or operation. Maximum noise levels will be lower during nighttime hours than during the day.
  - (2) In no instance may an oil and gas operation produce dBA noise exceeding limits set by the COGCC.
  - (3) In no instance may an oil and gas operation produce noise exceeding 60 dBC.
- (p) **Odor.** Oil and gas operations will avoid or sufficiently minimize and mitigate adverse impacts on public health, safety, and welfare, the environment and wildlife from odor. No odor from the proposed oil and gas facility or oil and gas operations shall be detectable after dilution with 4 or more volumes of odor free air as measured at the property line of the oil and gas location.
- (q) **Electrification.** Oil and gas operations will avoid or sufficiently minimize and mitigate adverse impacts from the use of generators and fossil fuel combustion. Operations will be electrified to the highest degree possible. Renewable

energy sources will be required unless the Applicant proves that they are not feasible in which case off-site renewable offsets may be substituted.

- (r) **Pipelines.** All pipelines, gathering lines and fresh water pipelines will be routed and constructed to avoid or sufficiently minimize and mitigate adverse impacts to infrastructure and natural resources and to public health, safety, and welfare, the environment, and wildlife, without compromising integrity and safety; any such lines constructed in City-owned right-of-way will also follow the procedures for and requirements of a utility construction permit from the Public Works Department. Pipelines, gathering lines and fresh water pipelines crossing streams, ditches, or other water bodies must be bored underneath the water body, consistent with the City of Lafayette Stormwater Discharge Control Manual.
- (s) **Recreational Activity, Trails, Bikeways.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to the quality and quantity of both active and passive recreational activities, trails, and bikeways maintained by the City or any municipality or that are mapped or identified through the Special Use Review process using the best available information.
- (t) **Revegetation, Reclamation, and Weed Control.** Oil and gas operations will avoid or sufficiently minimize and mitigate adverse impacts to affected lands resulting from land disturbance, vegetation clearing and weed incursion. The Operator must fully reclaim all areas of disturbance and revegetate if necessary. Vegetation must be fully established pursuant to approved revegetation and reclamation plans. No species on List A, B, or C in the State of Colorado's Noxious Weed Management Plan may be used.
- (u) **Safety.** Oil and gas operations must be conducted in a manner that avoids or sufficiently minimizes and mitigates risks of personal injury and property damage.
- (v) **Scenic Attributes and Rural Character.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to the scenic attributes and rural character of the surrounding area. Temporary structures, such as sound walls, or buildings constructed to mitigate impacts of oil and gas development may be approved at heights greater than the maximum building heights for each zoning district.
- (w) **Setbacks, Location, and Surrounding Land Uses.** Oil and gas facilities will be located to avoid or sufficiently minimize and mitigate adverse impacts to surrounding land uses and protect public health, safety, and welfare, the environment and wildlife. Oil and gas facilities are prohibited in the certain zoning districts as set forth in Chapter 26 Development and Zoning, Table 26-A-PERMITTED USES. Where allowed, oil and gas facilities must be located 2,000 feet from: the property line of an existing Dwelling and related residential uses; the property line of a School or licensed Child Care Center; the property line of jails, athletic fields, auditoriums, amphitheaters, hospitals, undeveloped residential lots, event centers, recreational facilities, nursing homes and life care institutions, public parks; public trails and trailheads owned and maintained by the City; and the property line of workplaces located in the T1, B1, C1, and M1 zoning districts.
- (x) **Soil.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to baseline soil conditions.
- (y) **Transportation, Roads, and Access.** Oil and gas facilities and operations must be designed and implemented to avoid or sufficiently minimize and mitigate adverse impacts to public health, safety, and welfare, the environment and wildlife and the City transportation system while supporting a multimodal transportation system, avoiding traffic hazards and minimizing use of City-owned gravel roads.
- (z) **Vibration.** Oil and gas facilities and operations must avoid or sufficiently minimize and mitigate adverse impacts to the public health, safety, and welfare, the environment and wildlife from vibrations. Oil and gas facilities and operations must not create vibrations significant enough or long enough in duration to cause adverse impacts to the health, safety, welfare, environment, and wildlife, or quality of life of surrounding residents and occupants or damage to existing structures.
- (aa) **Waste.** Oil and gas operations and facilities will avoid or sufficiently minimize and mitigate adverse impacts to public health, safety, and welfare, the environment, and wildlife from waste materials. All waste generated by oil and gas facilities and operations will be stored, transported and disposed of safely. Injection wells and disposal wells are prohibited.
- (bb) **Water Quality.** Oil and gas facilities and operations must avoid or sufficiently minimize and mitigate adverse impacts to the availability and quality of surface water bodies and groundwater within the City of Lafayette.

- (cc) **Worker Training.** Oil and gas facilities will be operated in a manner that avoids or sufficiently minimizes and mitigates adverse impacts to public health, safety, and welfare, the environment and wildlife that could be caused by human error or negligence. All workers at oil and gas facilities and involved with oil and gas operations shall have any applicable nationally recognized certifications and training for the work they are performing. This includes, but is not limited to, Hazard Communications Training, Hazardous Waste Operations Certifications, heavy equipment operator training, occupational safety and health training, etc.
- (dd) **Stormwater Quality Control.** All stormwater runoff occurring at an oil and gas facility must be controlled to avoid or sufficiently minimize and mitigate adverse impacts to surrounding natural resources, including wetlands and water bodies.
- (ee) **Wildlife.** Oil and gas facilities and operations will avoid or sufficiently minimize and mitigate adverse impacts to Critical Wildlife Habitat including species listed in the City of Lafayette Wildlife Species of Concern listing; Tier 1 and Tier 2 species as identified by CPW; and federally-designated threatened or endangered species, as mapped by those agencies, or identified on the site.

## Section 26-22.1-13 - Standard Operating Requirements

After Special Use Review, the City Council will deny the Application if the proposed oil and gas facilities or operations cannot be conducted in a manner that protects public health, safety, and welfare, the environment and wildlife. If the Application can be approved, it will be subject to standard operating requirements that ensure compliance with the standards listed in Section 26-22.1-12 (Special Use Review Standards) and the protection of public health, safety, and welfare, and the environment and wildlife resources. Standard operating requirements may include but are not limited to the following:

- (a) **Location.**
  - (1) Adjustments to the locations of any or all proposed oil and gas facilities or operations, which may include but not be limited to consolidating, distributing, or re-locating facilities;
  - (2) Sharing of existing infrastructure by multiple oil and gas operations, minimizing the installation of new facilities and avoiding additional disturbance to the environment, landowners and natural resources; or
  - (3) Modification of proposed travel routes for some or all phases of the oil and gas operation.
- (b) **Scope.** Adjustments to the size and density of facilities that may include but not be limited to:
  - (1) Reductions or limitations on the number of total wells;
  - (2) Reductions or limitations on the number of wells per pad; or
  - (3) Changes to the dimensions of the proposed facilities.
- (c) **Timing and Phasing.**
  - (1) Separating the overall project into phases over a period of time;
  - (2) Establishing the timeline for commencement and duration of all or some phases of oil and gas operations;
  - (3) Establishing the times in which all or some phases of oil and gas operations are conducted with respect to weather, agricultural activities, wildlife needs and other seasonal concerns; or
  - (4) Limitations on times of day and night in which operations are conducted.
- (d) **Air Quality.** To protect air quality and public health, emissions control measures may be required, including, but not limited to, one or more of the following:
  - (1) Compliance with the current, most protective air quality regulations and health-based standards, which may include regulations and standards set by the EPA, CDPHE, COGCC, Centers for Disease Control, or other relevant authorities.
  - (2) Baseline and continuous monitoring during all phases from pre-production through the end of production, which may monitor air quality and meteorological conditions at the oil and gas facilities, nearby properties, and other areas of concern. Monitoring system must be capable of alerting Operator of increases in monitored air pollutant concentrations.
  - (3) A leak detection and repair program that may include:

- (A) Use of best available technology leak detection, such as infra-red cameras and hydrocarbon analyzers;
  - (B) Regular on-site inspections at a frequency determined by the Director;
  - (C) Immediate leak repair;
  - (D) Reporting of monitoring and inspection results to the Director, who may make such reports available to the public;
  - (E) Operator maintenance of all images and data obtained from leak detection devices for 10 years, to be made available to the Director upon request; and
  - (F) Immediate reporting of all leaks detected to the Director;
- (4) Completion of wells using reduced emission completion practices.
  - (5) Require closed loop pitless systems for containment and/or recycling of all drilling, completion, flowback and produced fluids.
  - (6) Routine flaring is prohibited. In the event of an emergency, Operators may be required to shut-in the well if the emergency lasts greater than 24 hours; routine maintenance does not constitute an emergency.
    - (A) Routine flaring is the flaring of natural gas during the normal course of oil and gas production for reasons other than safety and emergencies and other conditions outside of the control of the operator.
    - (B) For any permitted flaring, manufacture test or other data demonstrating hydrocarbon destruction or control efficiency that complies with a design destruction efficiency of 98% or better and equipped with an auto igniter. Proof that any flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet the hydrocarbon destruction or control efficiency requirement is installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. Electronic surveillance monitors to detect when pilot lights on control devices are extinguished
  - (7) Venting is prohibited during all phases unless approved by the Director or required in situations where there is an immediate threat to public health, safety, and welfare, the environment, and wildlife.
  - (8) Zero-emission desiccant dehydrators or 98% control of hydrocarbon emissions from glycol dehydrators.
  - (9) Operator participation in Natural Gas STAR or other voluntary programs to encourage innovation in pollution control.
  - (10) Emission reduction measures in immediate response to posting of air quality action day advisories by CDPHE for the City area, including minimizing vehicle and engine idling, reducing truck and employee traffic, delaying vehicle refueling, suspending or delaying use of gas-powered ancillary equipment, postponing well maintenance and storage tank hydrocarbon liquid loadout, postponing construction and maintenance activities.
  - (11) Consolidation and centralization of product treatment and storage equipment and compression equipment.
  - (12) Use of a pressure-suitable separator and vapor recovery unit.
  - (13) Hydrocarbon control of 98% or better for crude oil, condensate, and produced water tanks.
  - (14) Require dry seals on centrifugal compressors.
  - (15) Routing of emissions from rod-packing and other components on reciprocating compressors to vapor collection systems.
  - (16) Control emissions by 98% during storage tank hydrocarbon liquids loadout (i.e. loading out liquids from storage tanks to trucks).
  - (17) Prohibit manual venting during well liquids unloading activities, use best management practices during liquids unloading activities, including the installation of artificial lift, and automated plunger lifts or other forms of artificial lift (98% or better hydrocarbon flare only).

- (18) 98% reduction of emissions from flowline maintenance activities such as pigging, including routing emissions to a vapor collection system.
- (19) Shut down protocols, approved by the City, with notification and inspection provisions to ensure safe shut-down and timely notification to local communities.

(e) **Operations.**

- (1) Requirement for use of pipelines to transport all gas and fluid materials, including oil, natural gas, fresh water, produced water, and waste products, to and from the oil and gas facilities.
- (2) Delay of well completions until pipeline transport is in place for all hydrocarbon products and produced or wastewater.
- (3) Limitations on on-site storage tanks.
- (4) Restrictions on field maintenance of vehicles involving hazardous materials
- (5) Requirement that vehicles are only refueled on impervious surfaces and never during storm events.

(f) **Water Supply.**

- (1) Conditions necessary to avoid, minimize, and mitigate the impacts of the proposed water use, including recycling; and
- (2) Any necessary water agreements must be secured prior to any oil and gas operations commencing.

(g) **Waste.** Compliance with the City-approved waste management plan, including routine testing of all applicable waste for technically enhanced naturally occurring radioactive material.

(h) **Water Quality and Stormwater Quality Control.** On-going water quality monitoring and use of protective measures such as those listed in this section:

- (1) Follow-up and on-going testing of all water sources and water wells within one mile of the parcel or parcels on which the oil and gas facilities are proposed to be located and within one-half mile of either side of the full length of each proposed wellbore. Sampling requirements may include:
  - (A) Testing for the analytes listed in Table 1.
  - (B) Post-completions and periodic on-going monitoring samples collected from one up-gradient and one down-gradient source and tested pursuant to the following time frame:
    - (i) One sample within 6 months after completion;
    - (ii) One sample between 12 and 18 months after completion; and
    - (iii) One sample between 60 and 72 months after completion.
  - (iv) For multi-well pads, monitoring will occur annually during active drilling and completion and on the subsequent dates listed in this section.
  - (v) If the Operator is unable to locate and obtain permission from the surface owner of a water source to be tested, the Operator must advise the Director that the Applicant could not obtain access to the water source from the surface owner.
- (C) In any case, the Director may require the Applicant to drill a water monitoring well on the Well Pad to ensure that groundwater samples are collected from the aquifer(s) through which the well will penetrate.
- (D) All sampling shall be performed by the Applicant according to the specified methods in 40 C.F.R. Part 136, including sample containers, preservation methods, and holding time limits.
- (E) The location of each tested water source will be noted using a GPS with sub-meter resolution.
- (F) Reporting on damaged or unsanitary water well conditions, adjacent potential pollution sources, odor, water color, sediment, bubbles, and effervescence.
- (G) The Operator will submit a monitoring report to the Director within 10 days after the Operator's receipt of the report, but no later than three months of collecting the samples, including reporting on damaged or unsanitary water well conditions; existing, adjacent potential pollution sources; water odor; water color; presence of sediment; bubbles and effervescence; and the existence and amount of any Table 1 analytes found. Copies of the report will be provided to the COGCC and the water source owners within 10 days after the Operator's receipt of the report.

- (H) If sampling shows water contamination, additional measures may be required including the following:
- (i) If free gas or a dissolved methane concentration level greater than one milligram per liter (mg/l) is detected in a water source, determination of the gas type using gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen);
  - (ii) If the test results indicate thermogenic or a mixture of thermogenic and biogenic gas, an action plan to determine the source of the gas;
  - (iii) Immediate notification to the Director, the COGCC, Boulder County Public Health, and the owner of the water source if the methane concentration increases by more than 5 mg/l between sampling periods, or is detected at or above 10 mg/l;
  - (iv) Immediate notification to the Director, the COGCC, Boulder County Public Health, and the owner of the water source if BTEX and/or TPH are detected as a result of testing. Such detections may result in required subsequent sampling for additional analytes; or
  - (v) Further water source sampling in response to complaints from water source owners.
- (I) Timely production and distribution of test results, well location, and analytical data in electronic deliverable format to the Director, the COGCC, Boulder County Public Health, and the water source owners.
- (2) The City may limit or prohibit toxic (when inhaled or ingested) chemicals in hydraulic fracturing fluids.
  - (3) No produced water or other wastewater may be sprayed or otherwise dispersed on any lands or waters within the City.
  - (4) Compliance with the City of Lafayette Stormwater Detention Provision, and all water quality or stormwater quality permits from the City and other agencies.
  - (5) Confirmation from CDPHE that the oil and gas facilities and operations are covered under the Colorado Discharge Permit System (CDPS) general permit for Stormwater Discharges Associated with Construction Activities (state stormwater discharge permit), when applicable.
  - (6) Flowback and produced water reporting including:
    - (A) A complete characterization of the Operator's flowback and produced water streams, including chemical analyses, radioactivity analyses, total dissolved solid concentrations and rate of flowback and production fluid at each well;
    - (B) Amount of flowback and production fluid generated by each well that is recycled or reused for oil and gas operations; and
    - (C) An accounting of all flowback and produced water from the well to final disposal, including all temporary holding facilities.

**Table 1. Water Quality Analytes**

Gen era   Wa	Alkalinity Conductivity & TDS pH Dissolved Organic Carbon (or Total Organic Carbon) Bacteria Hydrogen Sulphide
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Major Ions	Bromide Chloride Fluoride Magnesium Potassium Sodium Sulfate Nitrate + Nitrite as N (total)
Metals	Arsenic Barium Boron Chromium Copper Iron Lead Manganese Selenium Strontium
Dissolved	Methane BTEX as Benzene, Toluene, Ethylbenzene, Xylenes Total
Other	Water Level Stable isotopes of water (Oxygen, Hydrogen, Carbon) Phosphorus Radionuclides Tracing materials associated with Operator's fracking fluid as identified in the Water Quality Plan pursuant to Section 26- 22.1-11(d)(8) (Special Use Review – Application Requirements, Water Quality)

(i) **Spills, Leaks, and Releases.**

- (1) Containment. Secondary or Tertiary containment for oil and gas facilities and operations may be required.

(j) **Site Management.**

- (1) Trash. Prohibition on burning of trash in association with an oil and gas operation per Section 25-7-128(5), C.R.S.
- (2) Removal of Non-permanent Equipment. Time limits for non-permanent equipment remaining on site.
- (3) Access Roads. Conditions to prevent run-off, erosion and other negative impacts to access roads and abutting lands.
- (4) On-site Inspector. Inspection, at Operator's expense, to monitor adherence to all provisions of this Section and conditions of permits and approvals.

(k) **Weed Control.** Oil and gas facilities must be kept free of weeds and must comply with the approved Weed Control Plan, the City's noxious weed ordinance and the State's weed nuisance requirements. The approved

Weed Control plan should identify what State listed noxious weeds are known to be on the property, their location, and the proposed method of weed control.

- (l) **Drought-Tolerant Landscaping.** All landscaping for screening and, reclamation, or other purposes will include drought tolerant species that are native and suitable for the climate and soil conditions of the area.
- (m) **Soils.** Post-completion analysis and on-going monitoring for soil contamination. Pre-reclamation analysis of soil profiles.
- (n) **Compliance with Emergency Response Plan.** Following Special Use Review, adherence to a City-approved Emergency Response Plan is an on-going condition of approval.
- (o) **Site Security.** Oil and gas facilities must be kept secure from trespassers and risk of vandalism.
- (p) **Remote monitoring and control.** Use of Supervisory Control and Data Acquisition or other remote monitoring of wells, including remote telemetry units, onsite control valves, onsite data acquisition devices, radio network/modems, and the ability to trigger an automatic shut-down of a facility.
- (q) **Seismicity.** Operator shall conduct continuous seismic monitoring during fracking operations.
  - (1) Seismic events greater than 2.0 on Richter scale shall be reported to LGD and to COGCC.
  - (2) If a seismic event occurs, the City may require cessation of operations immediately and Operator can only resume work once the City is satisfied with the actions taken to reduce the likelihood of further seismicity.
  - (3) 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 City is satisfied with the actions taken to reduce the likelihood of further seismicity.
- (r) **Noise.**
  - (1) Compliance with Section 26-22.1-12(o) (Special Use Review Standards, Noise) is required at all oil and gas operations and oil and gas facilities. Based on results of ambient noise testing and other site-specific conditions, noise limits and necessary conditions will be assessed on a case-by-case basis.
  - (2) Continuous noise monitoring of any oil and gas facilities and operations meeting the most recent version of the American National Standard Institute's Specification for Sound Level Meters.
  - (3) Use of sound walls and other physical barriers to prevent noise leaving the site.
  - (4) Electrification from on-site renewable energy sources or through the purchase of an adequate share in a community facility within or contiguous to the City of Lafayette, at the discretion of the Director.
  - (5) Use of quiet drilling and completion equipment, such as the Quiet Fleet design provided by Liberty Oilfield Services.
  - (6) For well pads that are not electrically operated, use of quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent.
  - (7) Use of electric drill rigs.
  - (8) Tier 4 or better diesel engines, diesel and natural gas co-fired Tier 2 or Tier 3 engines, natural gas fired spark ignition engines, or electric line power for hydraulic fracturing pumps.
  - (9) The use of liquefied natural gas dual fuel hydraulic fracturing pumps.
  - (10) Use of acoustically insulated housing or covers to enclose motors or engines.
  - (11) No pipe unloading or workover operations will occur between 7 p.m. and the following 7 a.m.
- (s) **Odor.**
  - (1) Compliance with Section 26-22.1-12(p) (Special Use Review Standards, Odor); on-going monitoring for compliance.
  - (2) Director may require Operator to collect and analyze a speciated air sample to measure for VOCs or HAPs in response to an odor- related complaint. Speciated air sample collection shall be done utilizing a 3rd- party vendor approved by the City.
  - (3) Odor reduction requirements may include:

- (A) Using minimum low odor synthetic based Group IV or better drilling fluid. This could include non-diesel-based drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX);
  - (B) Adding odorants that are not a masking agent;
  - (C) Additional or enhanced measures during peak odor-producing phases or times such as increasing additive concentration;
  - (D) Wipe down drill pipe each time drilling operation "trips" out;
  - (E) Adding chillers to the mud systems;
  - (F) Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the Applicant shall not mask odors;
  - (G) Enclosing shale shakers to contain fumes from exposed mud where safe and feasible;
  - (H) Prohibition on exposed drilling mud; or
  - (I) Limitation or prohibition on use of diesel generators;
  - (J) Ensure drill cuttings are covered during transport.
- (t) **Lighting.** Limitations on the location and specifications on type of lighting based on the location, nature and size of the facility including:
- (1) Use of timers or motion sensing lighting;
  - (2) Use of full cut-off lighting;
  - (3) Use of reduced light intensity colors and low-glare or no-glare lighting;
  - (4) Other than drilling rig lights, installation of facility lighting beneath the noise barrier, if the facility has a noise barrier.
- (u) **Visual Impacts.** Conditions to reduce adverse visual impacts such as specifications on facility color, screening measures such as berming, visual barriers, and landscaping.
- (v) **Dust.** Particulate control measures, including proof of compliance with State-required dust control measures and imposition of an opacity requirement as tested using EPA Method 9. Limitations on or requirements for activities to control dust; storage requirements for sand, silica and similar materials to prevent fugitive particulates including on or more of the following:
- (1) Ceasing all earthwork activities when wind speeds equal or exceed 30 MPH at any time measured by onsite anemometer;
  - (2) The use of reduced speed restrictions.
- (w) **Traffic.** Conditions necessary to ensure public safety for all modes of travel, including but not limited to adjustment of travel routes during some or all phases of development.
- (x) **City Transportation Infrastructure.**
- (1) Maintenance practices to protect transportation infrastructure
  - (2) Required improvements to existing transportation system infrastructure to support the proposed oil and gas facilities or operations, as designed and performed by the City at Applicant's cost.
  - (3) If Applicant disputes the City's statement of necessary transportation infrastructure improvements or the costs, thereof, Applicant may engage a licensed civil engineer to perform an independent study and provide the results thereof to the City for its consideration, at Applicant's cost.
  - (4) Standards and specifications for construction and maintenance of access roads required for the proposed oil and gas facilities or operations.
  - (5) Measures to protect existing transportation infrastructure, such as weight restrictions, prevention of mud and sediment tracking and prohibition on the use of tire chains.
- (y) **Pipelines or gathering lines conditions.**
- (1) Requirements for pipelines or gathering lines to be in place or imminently available prior to completion of any new well.
  - (2) Specific setbacks from features of concern.

- (3) Conditions on depth of cover and clearance distances from subsurface features or improvements for pipelines.
  - (4) Conditions for protection of trenches during construction.
  - (5) Construction conditions related to protection of streams, rivers, irrigation ditches and wetlands.
  - (6) As-built reporting, including the location (with GPS coordinates), materials and operating pressures of all flowlines, pipelines, gathering lines and fresh water pipelines and depicting the locations of other subsurface features or improvements crossed by such lines.
  - (7) Leak detection system for pipelines.
  - (8) Inspection protocol, in addition to City inspections, for pipelines.
  - (9) A risk-based engineering study by an independent engineer retained by the Applicant and subject to approval by the City prior to placement and construction of proposed pipelines.
  - (10) Without compromising pipeline integrity and safety, Applicant may be required to share existing pipeline rights-of-way and consolidate new corridors for pipeline rights-of-way to minimize impact.
- (z) **Flood Protection.** Compliance with a City-approved flood mitigation plan; any additional conditions necessary to avoid, minimize, and mitigate risks of adverse impacts from oil and gas facilities or operations.
- (aa) **Financial Assurances.**
- (1) Financial assurances such as performance bonds, irrevocable letters of credit, irrevocable trusts, or other financial guarantees in a form satisfactory to the City. These may include environmental surety bonds.
  - (2) Additional assurances may be required if circumstances during the lifetime of the oil and gas operations through the time final reclamation are completed to the City's satisfaction, require.
  - (3) Copies of all financial assurance and insurance renewals promptly supplied to the Department.
  - (4) Upon transfer, Financial Assurances will only be returned or cancelled once they are replaced by equivalent Financial Assurances secured by the new owner/Operator.
- (bb) **Re-assessment of Conditions.** All conditions of approval may specify that the City may re-assess their effectiveness in meeting the standards of this Section after commencement of oil and gas operations.

## Section 26-22.1-14 - Judicial Review

A final decision by the City Council on any matters in this Section 26-22.1-14 is subject to judicial review in a court of competent jurisdiction under C.R.C.P. 106(a)(4).

## Section 26-22.1-15 - Procedures Following Approval of a Special Use Review Application

- (a) **Right to Enter.** Each approved Special Use Review will contain the following statement: "Applicant consents to allow the City the right of inspection of this approved oil and gas facility and operation provided the City contacts the Operator with 4 hours prior notice of such inspection."
- (b) **Effect of the Approved Special Use Review.** After approval of a Special Use Review Application by the City Council and subject to compliance with any applicable conditions of approval, the Department will issue a permit for the proposed oil and gas operation.
  - (1) Following receipt of the permit, the Applicant must obtain any necessary building, grading, access, stormwater control, floodplain, or other City permits and, following the receipt of these additional permits and all necessary permits and permissions from other agencies or persons, is authorized to otherwise proceed with the proposed oil and gas operation.
  - (2) The approval of the Special Use Review Application under this Section does not result in the vesting of development rights, nor does it authorize the violation of any City or state regulations or preclude the City from refusing to issue any other permit or authorization if the plans and specifications do not comply with applicable City regulations.

**(c) Duration of the Approved Special Use Review.**

(1) An approved Special Use Review Application will remain effective for a period of 2 calendar years following the date of the City Council's approval resolution, unless otherwise extended by the Director.

(2) **Expiration of approval to operate after 10 years.** Unless renewed in a subsequent Special Use Review approval, all Special Use Review approvals under this Section 26-22.1 will expire 10 years after their effective date and operations must cease and final reclamation commence.

(d) **Amendments and Modifications.** Prior to changing or modifying a special use approved under Section 26-22.1 or any other existing oil and gas operation, an Operator must submit a written request for modification. The criteria for what constitutes a minor modification is specified under Section 26-16-10 (Amendments to Approved Applications). Amendments to a special use approved under this Section 26-22.1 that the Director determines are not minor require the Operator to submit a new application for a special use pursuant to this Section 26-22.1-10 (Review Procedure for New Oil and Gas Operations). Unless approved in the original Special Use Review approval, the addition of new wells on an existing pad will be considered a substantial modification. Other changes will be considered substantial if they significantly alter the nature, character, or extent of the land use impacts of the Special Use Review approval or will result in an increase in harmful emissions or adverse impacts on public health, safety, and welfare, the environment or wildlife, including as a result of cumulative impacts from the proposed modification in combination with existing land uses. Refracking of an existing well will be considered a substantial modification. At the Director's discretion, a modification that otherwise could be considered substantial may not be deemed as such if it results in a net decrease in hydrocarbon emissions or other net mitigation of existing or potential environmental impacts. Should the Applicant dispute the Director's determination that a proposed modification to a pre-existing oil and gas operation or facility is a substantial modification, the Applicant may appeal the Director's determination to the City Council. The City will not process the Application during any appeal.

(e) **Maintenance and Repair.** If an Operator anticipates undertaking routine maintenance or making a repair to any existing or new oil and gas facility, the Operator must provide written notice to the Director as soon in advance of the maintenance or repair as practicable. For emergency repairs necessary to curtail or prevent threat of property damage or personal injury, if possible, the Operator must provide notice to the Director within 24 hours before commencement of the repair and otherwise as soon thereafter as possible. The notice must include a detailed description of the maintenance or repair. In response to the notice, the Director may approve the repair or maintenance, conditionally approve the repair or maintenance, or require that the Operator apply for a substantial modification determination. The Director may maintain a list of routine maintenance activities that an Operator may undertake without City review or approval.

(f) **Survival.**

(1) All conditions of approval for oil and gas development under this Section will survive until the Director provides notice of satisfactory completion of final reclamation of the oil and gas facilities, including plugged and abandoned wells and related pipelines.

(2) All conditions of approval will survive a change of ownership and apply to the Applicant's successors, including the requirements of Operator Registration and Financial Assurances.

(g) **Representations of Record.** Any approved Special Use Review Application is subject to all commitments of record, including verbal representations made by the Applicant at any public hearing and written commitments in the Application file, and without limitation must encompass compliance with all approved mitigation plans.

## Section 26-22.1-16 - City Inspections; Enforcement

To monitor compliance with permit conditions or if the City determines at any time that there is a violation of the provisions of this Section 26-22.1, including 26-22.1-6 (Pre-Existing Facilities and Operations), 26-22.1-7 (Operator-Conducted Inspections), 26-22.1-8 (Well, Well Site and Pipeline Abandonment, Decommissioning and Reclamation), 26-22.1-9 (Geophysical Exploration for Oil and Gas), 26-22.1-12 (Special Use Review Standards) and 26-22.1-13 (Standard Operating Requirements), the Director may commence one or more of the following enforcement measures and remedies:

(a) **Right to Enter.** Any oil and gas facility may be inspected by the City, or the City's designee, at any time to ensure compliance with the requirements of City permits or the provisions of this Section 26-22. Unless urgent

circumstances exist, the City will use best efforts to ensure that 4 hours prior notice is given to the Operator's contact person at the telephone number on file. City inspections will be coordinated with the Operator to ensure Operator presence onsite to the extent possible and to ensure the site visit is conducted in accordance with all applicable Operator safety requirements. Inspections in response to odor complaints, will occur as soon as feasible upon receipt of the complaint.

- (b) **Records.** Operators will make available to the City at its request all records or reports required by the CDPHE, the COGCC, the Colorado Public Utilities Commission, the Occupational Safety and Health Administration, and the Pipeline and Hazardous Materials Safety Administration.
- (c) **Violations.** Violations of any condition of approval, any provisions of 26-22.1-6 (Pre-Existing Facilities), 26-22.1-7 (Operator-Conducted Inspections), 26-22.1-8 (Well and Well Site and Pipeline Abandonment, Decommissioning and Reclamation), 26-22.1-9 (Geophysical Exploration for Oil and Gas), 26-22.1-12 (Special Use Review Standards) and 26-22.1-13 (Standard Operating Requirements), will be subject to Section 26-22.1-17 (Fines and Penalties).
- (d) **Suit to Enjoin COGCC Rule Violation.** If the Director discovers a violation or threatened violation of Title 34, Article 60 of the Colorado Revised Statutes or any rule, regulation, or order made under that Article, the Director will notify the COGCC in writing. If the COGCC fails to bring suit to enjoin any actual or threatened violation, then the City Attorney may file an action on behalf of the City Council seeking injunctive relief.
- (e) **Falsification.** If the Director, in the course of administering any portion of this Section, learns that the Applicant, including any employee, officer, agent or representative of the Applicant has made a false representation of or omitted material facts the Application may be rejected or summarily denied or, if the Application has been approved, the approval may be revoked and the Director may report such information to the District Attorney for criminal prosecution.
- (f) **Other Penalties.** In addition to or in lieu of civil fines, the City may exercise remedies for Operator violations including the following:
  - (1) Increased operator or City inspection frequency at Operator's expense;
  - (2) Mandatory equipment upgrades;
  - (3) A requirement to conduct an audit of the systems or equipment involved in the violation(s);
  - (4) A requirement for increased reporting to the City;
  - (5) **Written Order Suspending the Approval.** As a result of either (i) emergency conditions, or (ii) three or more fines imposed for serious violations within 6 months, the Director may issue a written order to the Applicant (or the Applicant's owner, Operator, or agent) suspending the Special Use Review Approval. Upon receipt, the Applicant must cease all activities and operations immediately until the violation is remedied or appeal the order suspending approval to the City Council within 14 days.
- (g) **Other Enforcement Remedies.** In addition to the foregoing enforcement measures, the City of Lafayette has the right to any and all other enforcement measures and remedies provided by law, including but not limited to seeking relief through the courts to enforce an approved Special Use Review, or to stop or abate any oil and gas operations occurring or about to occur without the requisite special use, required permits, or other City approvals. Nothing in this section shall limit the remedies available to the City for a violation of any provision of Section 26-22.

## Section 26-22.1-17 - Fines and Penalties

- (a) **Fines for Violations.** An Operator who violates any condition of approval imposed for the oil and gas facility or operation or any provision of 26-22.1-5 (Operator Registration and Renewal); 26-22.1-6 (Pre-Existing Facilities), 26-22.1-7 (Operator-Conducted Inspections), 26-22.1-8 (Well and Well Site, Pipeline Abandonment, Decommissioning and Reclamation), 26-22.1-9 (Geophysical Exploration for Oil and Gas), 26-22.1-12 (Special Use Review Standards) and 26-22.1-13 (Standard Operating Requirements) will be subject to a civil penalty assessed by the Director.
- (b) **Process.**
  - (1) **Identification of Violation.** If the Director has reasonable cause to believe that a violation has occurred, the Director will issue a Notice of Violation to the Operator. Each violation of an individual condition or Code provision will be considered a separate infraction. Each day that a violation remains will be considered a separate infraction.

- (A) **Contents of Notice of Violation:**
  - (i) Provisions of this Section or conditions imposed on a permit that are violated;
  - (ii) Short and plain statement of the facts alleged to constitute each violation;
  - (iii) A statement that the Operator will be subject to fines as specified in this section; and
  - (iv) A demand that the violation be remedied.
- (2) **Response.** The Operator will have the time specified by the Director in the notice to respond to the Notice of Violation, unless an extension is requested in writing and granted by the Director. The Response must address each violation, including the cause of the violation and any corrective actions taken, and identify any other relevant facts.
- (3) **Assessment of Fine.**
  - (A) Based on the Operator's response, if any is provided, and any other competent evidence, the Director will determine if a violation has occurred and, if so, the appropriate penalty to assess. Any fine imposed after consideration of the response will be measured with respect to the first date of discovery of the violation or the date the violation first occurred and continues until the violation has been remedied to the satisfaction of the Director.
  - (B) If the Operator disputes the Director's determination that a violation occurred or the amount of any fine assessed, an appeal as specified in this Section 26-22.1-17(d) must be made within 14 days of the determination. Any requirement to remedy the violation will not be stayed during the appeal period.
- (c) **Penalty Calculation.** The Director has discretion to assess a civil penalty between \$300 and \$2,650 per violation per day, depending on the nature and severity of the violation, statutory authority, and application of the additional factors listed in subsection (b) below.
  - (1) To evaluate the severity of the violation, the Director will consider the following:
    - (A) Degree of threatened or actual impact to public health, safety, welfare, the environment or wildlife;
    - (B) Existence, size, and proximity of potentially impacted livestock, wildlife, fish, soil, crops, water, and all other environmental resources;
    - (C) Degree of threatened or actual damage to agricultural lands, public lands, private property, freshwater sources, public drinking water, natural resources, environmental features, or wildlife;
    - (D) The size of the leak, release, or spill;
    - (E) The violation resulted in a significant waste of oil and gas resources;
    - (F) Toxicity of leak or spill;
    - (G) Violation led to death or serious injury; and
    - (H) Duration of the violation.
  - (2) In addition to considering the severity of the violation, the Director will consider the following:
    - (A) Whether the same or similar violations have occurred at the location;
    - (B) Whether other violations have occurred at the location in the previous 12 months;
    - (C) The Operator's history of violations of any applicable rules, of similar or different types, at the location or others;
    - (D) The timeliness and adequacy of the Operator's corrective actions;
    - (E) The degree the violation was outside of the violator's reasonable control and responsibility;
    - (F) Whether the violator acted with gross negligence, or knowing and willful misconduct;
    - (G) Whether the violator self-reported; and
    - (H) Whether violator was cooperative with all agencies involved in working to mitigate the impacts of the violation.
- (d) **Appeal Hearing Before the City Council.** If the Applicant files a written appeal with the City Council of the Director's determination within 10 days of receipt of the determination that a violation occurred or the imposition of any fine or penalty or a written order suspending special use approval, the City Council will schedule a hearing on the appeal, of which the Applicant will receive reasonable prior notice. The City Council, based on the evidence in the record, may reverse or confirm the Director's determination whether a violation occurred. In addition, based

on the evidence in the record, the City Council may reverse, confirm, or adjust any remedy or penalty imposed by the Director. The City Council, in its discretion, may also give the Applicant additional time to correct the violation(s), or may specify other means of correcting the violation(s) at the Applicant's expense. The City Council's determination is subject to judicial review as specified in Section 26-22.1-14 (Judicial Review).

## Section 26-22.1-18 - General Provisions.

- (a) **Confidentiality.** If an Operator or person designates any portion of a document or submission to the City as "confidential" and if the City determines that the document meets the confidentiality provisions of the Colorado Open Records Act, it may be exempt from disclosure to the public, provided that any page containing such information is clearly labeled with the words "Confidential Information."
- (b) **Consultant Review.** The Director may submit all or parts of the Application for review and recommendation by consultants retained by the City with the necessary expertise to review technical or other aspects of the Application. Among other consultant reviews, third-party consultant review may be required to evaluate the risks and impacts of the proposed seismic testing activity, oil and gas facility or oil and gas operations. The Applicant will be notified if the Director decides to retain consultants, and the Applicant will escrow funds sufficient to cover the anticipated cost of the consultants' review. The Applicant will be responsible for the actual costs associated with this consultant review and will be refunded any excess escrowed funds.
- (c) **COGCC approval.** COGCC approval of any application does not constitute local approval, and compliance with all terms and conditions of this Section is required prior to the commencement of any new oil and gas facility and operations in the City. Wherever the Oil and Gas Conservation Act, §§ 34-60-101 et seq., C.R.S., requires local government approval prior to COGCC approval, Special Use Review approval under this section 26-22.1-12 is required before applications are submitted to the COGCC.
- (d) **Variance.** An operator may seek a variance from the setbacks that apply to dwelling and related residential uses and public trails and trailheads owned and maintained by the City specified in Section 26-22.1.12(w) (Special Use Review Standards, Setbacks). In considering whether to grant a variance, City Council will consider whether the Proposed Oil and Gas Location and conditions of approval will provide substantially equivalent protections for public health, safety, welfare, the environment and wildlife resources as the setback specified in Section 26-22.1.12(w) (Special Use Review Standards, Setbacks).
- (e) **Certification and Reporting.** The Operator will submit to the Director copies of all reports related to oil and gas operations and oil and gas facilities made to any agency at the local, state or federal level within 30 days of their submission to the original recipient.
- (cc) **Notice of Financial or Legal Status Change.** Operators will provide notice to the City within 10 days of any significant change in status related to the operator's financial condition or legal status, including but not limited to insolvency, filing for bankruptcy protections, change of entity type, merger with or acquisition by another entity, and receipt of cease and desist or stop work orders issued by any applicable agency or entity.

## Section 26-22.1-19 Insurance Requirements.

The following certificates of insurance for insurance coverage are required for seismic testing operations and oil and gas facilities and oil and gas operations:

- (a) **Commercial General Liability.** This coverage must be provided on an Occurrence Form, ISO CG001 or equivalent, with Minimum limits of \$1,000,000 Each Occurrence, \$2,000,000 General Aggregate and \$2,000,000 Products Completed Operations Aggregate. Operators of oil and gas facilities and oil and gas operations must also endorse the policy to include Additional Insured Owners, Lessees or Contractors endorsements CG 2038 (or equivalent), Designated Construction Project(s) General Aggregate Endorsement CG2503 (or equivalent) and Additional Insured Completed Operations for Owners, Lessees or Contractors CG 2037 (or equivalent). The City requires the Products/Completed Operations coverage to be provided 3 years after completion of construction. An endorsement must be included with the certificate.

(b) **Automobile Liability.** Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of the seismic testing Contract or in the proposed oil and gas operations. Minimum limits \$1,000,000 Each Accident.

(c) **Workers' Compensation and Employer's Liability.** Workers' Compensation must be maintained with the statutory limits. Employer's Liability is required for minimum limits of \$100,000 Each Accident/\$500,000 Disease-Policy Limit/\$100,000 Disease-Each Employee.

(d) **Umbrella/Excess Insurance.** Umbrella/Excess Liability insurance in excess of general liability, employer's liability, and automobile liability with limits not less than \$25,000,000.00, per occurrence. Operators of oil and gas facilities and oil and gas operations must also maintain umbrella/excess insurance with limits no less than \$100,000,000 per occurrence for so long as the Construction Phase, Drilling Phase or Completions Phase is ongoing at any of the Well Sites.

(e) **Professional Liability (Errors and Omissions).** Professional liability coverage with minimum limits of \$10,000,000 Per Loss and \$10,000,000 Aggregate. Professional Liability provisions indemnifying for loss and expense resulting from errors, omission, mistakes or malpractice is acceptable and may be written on a claims-made basis. Operators of oil and gas facilities and oil and gas operations must warrant that any retroactive date under the policy shall precede the effective date of the Use by Special Review approval; and that continuous coverage will be maintained until final reclamation obligations are completed to the City's satisfaction.

(f) **Pollution Liability.** Coverage pay for those sums the operator becomes legally obligated to pay as damages because of Bodily Injury, Property Damage or environmental Damage arising out of a pollution incident caused by the Operator. Coverage shall include emergency response expenses, pollution liability during transportation (if applicable) and at Non-Owned Waste Disposal Sites (if applicable). The Minimum limits required for seismic testing operations are \$15,000,000 Per Occurrence/Loss and \$15,000,000 Policy Aggregate. The Minimum limits required for oil and gas facilities and oil and gas operations are \$25,000,000 Per Occurrence/Loss and \$25,000,000 Policy Aggregate. Should this insurance be on a claims-made basis the retroactive date must precede the date field activities were initiated.

(g) **Control of Well Coverage for oil and gas facilities and oil and gas operations.** Coverage for costs and expenses related to bringing a well back under control, pollution cleanup costs incurred due to pollution that results from a well out of control event, legal liability for pollution-related bodily injury or property damage arising from a well out of control event, re-drill and other extra expense incurred to restore the well to its pre-loss condition that the Operator becomes legally obligated to pay. The Minimum limits required are \$25,000,000 Per Occurrence/Loss and \$25,000,000 Policy Aggregate. If the coverage is written on a claims-made basis, the Operator will warrant that any retroactive date applicable to coverage under the policy precedes the effective date of any Special Use Review approval; and that continuous coverage will be maintained until final reclamation obligations are completed to the City's satisfaction. The City shall be named as an additional insured for ongoing operations and completed operations.

(h) **Waiver of Subrogation.** Operator will waive and cause its insurers to waive for the benefit of the City any right of recovery or subrogation which the insurer may have or acquire against the City or any of its affiliates, or its or their employees, officers, or directors for payments made or to be made under such policies.

(i) **Additional Insured.** The City of Lafayette must be named as an additional insured for the General Liability, Umbrella/Excess Coverage, and Pollution Liability policies listed above. Additional insured shall be endorsed to the policy and evidenced on the certificates of insurance. Additional Insured wording shall be as follows: *City of Lafayette, State of Colorado, a municipal corporation, and its officers and employees, are named as an Additional Insured.*

(f) **Contractors.** The Operator shall require adequate insurance of its contractors and subcontractors. Operators will be responsible for any and all damage or loss suffered by the City as a result of the work being performed by the Operator or any contractor or subcontractor.

Terms used in this Section 26-22.1 are defined below. All terms used in this Section 26-22.1 that are defined in the Oil and Gas Conservation Act or in the Oil and Gas Conservation Commission regulations and are not otherwise defined in this section, have the meaning as provided in the Oil and Gas Conservation Act or in the Oil and Gas Conservation Commission regulations as of the effective date of this Section.

**Abandonment.** The permanent decommissioning of an oil and gas facility, including any single well or portion of pipeline.

**Act.** The Oil and Gas Conservation Act at Sections 34-60-101 et seq., C.R.S., as amended.

**Adequate Water Supply.** A water supply that will be sufficient for the proposed oil and gas operations, including consideration of reasonable conservation measures and water demand management measures.

**Agent.** One authorized to make binding representations on behalf of the Applicant.

**Applicant.** Person, corporation or other legal entity possessing the legal right to develop a mineral resource who has applied for a Special Use Review permit for an oil and gas operation.

**Application.** The Application filed by the Applicant for Special Use Review under current consideration.

**Best Management Practices.** Practices that are designed to prevent or reduce impacts caused by oil and gas facilities or operations to air, water, soil, or biological resources, and to minimize adverse impacts to public health, safety and welfare, including the environment and wildlife resources.

**BTEX and/or TPH.** Benzene, Toluene, Ethylbenzene, Xylene and Total Petroleum Hydrocarbons.

**Child Care Centers.** -1.

**Closed Loop Drilling Process or System.** A system consisting of steel tanks for mud mixing and storage and the use of solids removal equipment by some combination of shale shakers, mud cleaners and centrifuges to separate drill cutting solids from the mud stream. The solids are placed in containment provided on the site. A Closed Loop Drilling System does not include use of a Conventional Reserve Drilling Pit.

**Combustion device.** Any ignition device installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions.

**Comprehensive Plan.** The City of Lafayette Comprehensive Plan, available at [X WEBSITE]

**Department.** City of Lafayette Planning and Building Department.

**Director.** The Director of the City of Lafayette Planning and Building Department or other authorized representative of the City.

**Dwelling.** See Section 26-8-1.

**School.** See Section 26-8-1.

**Equipment.** Machinery or structures located on an oil and gas location, including, but not limited to, wellheads, separators, dehydration units, compressors, heaters, meters, storage tanks, compressors, pumping units, internal combustion engines, and electric motors.

**Financial Assurance.** A surety bond, cash collateral, certificate of deposit, letter of credit, sinking fund, escrow account, lien on property, security interest, guarantee, or other instrument or method in favor of and acceptable to the City. With regard to third party liability concerns related to public health, safety and welfare, the term encompasses general liability insurance, sudden and accidental pollution liability insurance and gradual pollution liability insurance.

**Flowline.** Those segments 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. In this Section, flowline includes lines within a well pad and those that are outside a well pad, and includes flowlines connecting to gas compressors or gas plants.

**Gathering Line.** A gathering pipeline or system as defined by the Colorado Utilities Commission, Regulation No. 4, 4 C.C.R. 723-4901, Part 4, (4 C.C.R. 723-4901) or a pipeline regulated by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration pursuant to 49 C.F.R. §§ 195.2 or 192.8. 49 C.F.R. §§ 195.2 or 192.8 and 4 C.C.R. 723-4901 in existence as of the date of this regulation and does not include later amendments.

**Seismic Testing.** Operations that involve the transmittal of seismic waves into and through the ground to model the geophysical properties of the Earth's crust.

**Groundwater.** Subsurface waters in a zone of saturation.

**Incident.** Any event classified as a blowout, collision, explosion, fatality, fire, injury requiring medical treatment, Grade 1 gas leak, or spill greater than 5 barrels.

**NO<sub>x</sub>.** Nitrogen oxides. Ozone precursor pollutants.

**Oil and Gas Facility or Facilities.** The equipment and improvements used for the exploration, production, transportation, treatment, and/or storage of oil and gas and waste products, including: an individual well pad built with one or more wells and operated to produce liquid petroleum and/or natural gas, including associated equipment required for such production; flowlines and ancillary equipment including but not limited to drip stations, vent stations, pigging facilities, chemical injection stations and valve boxes; and temporary storage and construction staging yards in place for less than 6 months.

**Oil and Gas Operations.** Exploring for oil and gas, including conducting seismic operations and the drilling of test bores; siting, drilling, deepening, recompleting, reworking, or abandoning a well; producing operations related to any well, including installing flowlines; the generating, transporting, storing, treating, or disposing exploration and production wastes; the construction, operation, maintenance and repair of any oil and gas facility; and any constructing, site preparing, or reclaiming activities associated with such operations. With respect to any submittal or review requirements under this section, "oil and gas operations" will refer to the particular oil and gas operations for which the Applicant is seeking City approval.

**Operator.** Any person who exercises the right to control the conduct of oil and gas operations.

**Pipelines.** Any flowline or crude oil transfer line as defined by the COGCC.

**Pit.** Any natural or man-made depression in the ground used for oil or gas exploration or production purposes excluding steel, fiberglass, concrete or other similar vessels which do not release their contents to surrounding soils.

**Produced Water.** Water produced from a well or wellbore, including treatment fluids.

**Recreation (active or passive).** Active recreation means outdoor activities that require equipment or physical exertion or both. Passive recreation means outdoor activities such as nature observation or photography that require a minimum of facilities or development.

**Reduced Emissions Completion.** A well completion following fracturing or refracturing where gas flowback that is otherwise vented is captured, cleaned, and routed to the gas flow line or collection system, re-injected into the well or another well, used as an onsite fuel source, or used for other useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

**TPY.** Tons per year.

**VOC.** Volatile organic compounds.

**Wastewater.** Water used in oil and gas operations that is contaminated with chemicals, particulate, or other matter that makes it non-potable.

**Water or Water Body.** Any surface waters which are contained in or flow in or through the City of Lafayette, excluding ephemeral streams, roadway ditches, water in sewage systems, water in treatment works of disposal systems, water in potable water distribution systems, stock ponds or irrigation ditches not discharging to live streams, and all water withdrawn for use until use and treatment have been completed.

**Water Source.** Water source will mean water bodies that supply domestic, agricultural or municipal uses, 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, and monitoring wells other than monitoring wells that are drilled for the purpose of monitoring water quality changes that are not associated with oil and gas activities.

**Well or Wellhead.** 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.

**Well Pad.** Areas that are directly disturbed during the drilling and subsequent operation of, or affected by production facilities directly associated with, any oil well, or gas well.

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