

**LUDC  
2013**

GARFIELD COUNTY, COLORADO

**Article 9: Pipelines  
and  
Oil & Gas Code**





# ARTICLE 9 PIPELINES

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## **DIVISION 1. PIPELINES**

### **9-101. APPLICABILITY.**

#### **A. Length and Diameter.**

An application for a pipeline must be submitted for any pipeline proposed to be located within unincorporated Garfield County, excluding those on public or municipal lands, which are:

1. Greater than 12 inches in diameter and over 2 miles in length or 2 cumulative miles if separated by municipal or public lands; or
2. Any pipeline that is more than 5 miles in length or 5 cumulative miles if separated by municipal or public lands.

#### **B. Permit Required.**

A Land Use Change Permit for a pipeline is required prior to the issuance of any other County permit necessary for pipeline operations. However, pipeline operations that do not require a building or other associated County permit must still obtain a Land Use Change Permit per this Code, as necessary.

### **9-102. SUBMITTAL REQUIREMENTS.**

The following information must be submitted with an application for a pipeline:

#### **A. General Application Materials.**

General Application Materials as provided in section 4-203.B.

#### **B. Vicinity Map.**

A Vicinity Map as provided in section 4-203.C.

#### **C. Site Plan.**

A Site Plan as provided in section 4-203.D.

#### **D. Project Overview.**

A description of the project including the length and diameter of the pipeline, pipeline commodity, general description of the pipeline, and pipeline route.

#### **E. Property Ownership and Authority to File Application.**

1. Identity of owner of the parcel. This can be provided as a map or Plat showing the parcel with the pipeline easement crossing the parcel.
2. Evidence of authority of Applicant to file the application as follows:
  - a. If the property owner of the parcel is not an individual (i.e. an entity or a trust), applicant must submit a recorded Statement of Authority or a recorded power of attorney for the individual authorized to encumber the property on behalf of the entity; and
  - b. Letter of Authorization signed by the property owner authorizing Applicant to file the application; or
  - c. Deed, easement, surface use agreement, or BLM right-of-way subject to the following:
    - (1) Memorandum of the applicable instrument that has been recorded in the County (rather than the actual instrument) if it recites that the instrument relates to the location of a pipeline and provides information showing the location of the pipeline; or

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- (2) The actual deed, easement, surface use agreement, or BLM right-of-way. The Applicant may redact confidential and proprietary information.
  - (3) For cases in which the evidence of authority (i.e., deed, easement, surface use agreement, or BLM right-of-way) contains conditions, the Applicant shall provide a statement that it will comply with the terms and conditions of the applicable instrument.
3. The Applicant may sign the County's Payment Agreement Form as the authorized representative.
  4. The Applicant should submit all applicable BLM rights-of-way with the application, but the BLM access agreement may be provided at a later date.

**F. Adjacent Properties.**

For individual rights-of-way, a diagram showing adjacent properties and the approximate location of buildings and their uses within a distance of 350 feet of any proposed structure, facility, or area to be disturbed.

**G. Regulatory Permit Requirements.**

The permit agency name, permit/action driving task, and the task to be performed to obtain the permit, prior to issuance of the permit by the County.

**H. Primary Project Participants.**

The names, address, and phone numbers of the company representative; company and individual acting as an agent for the company; construction company contacts; and Federal and State agency contacts.

**I. Project Facilities.**

Any permanent project facilities such as permanent rights-of-way, widths, meter stations, valve sets, etc., and any temporary rights-of-way, width during construction, construction facilities, etc.

**J. Construction Schedule.**

The estimated start and end dates for construction, days of the week in which construction will occur, and hours of day during which construction will occur.

**K. Sensitive Area Survey.**

A Sensitive Area Survey shall be submitted by a qualified professional and shall provide the type and area of concern within and adjacent to the pipeline right-of-way, including but not limited to sensitive plant and animal populations and wildlife critical habitat, as such populations are defined by state and federal referral agencies, and Waterbodies. The Survey shall provide a method or plan for compliance with protection measures and state and federal laws as identified by these agencies pertaining to the identified sensitive areas. This submittal requirement does not apply in previously-disturbed corridors or rights-of-way and/or areas permitted by the ECMC.

**L. Reclamation, Revegetation, and Soil Plan.**

A Reclamation, Revegetation and Soil Plan that includes the following information:

1. A plant material list that includes scientific and common names and the application rate in terms of Pure Live Seed per acre, a planting schedule that includes timing, methods, and mulching, and a map with a calculation of the surface area disturbance in acres of the area impacted (where the soil will be disturbed).

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2. Provisions for salvaging on-site topsoil, a timetable for eliminating topsoil and/or aggregate piles and a plan that provides for soil cover if any disturbances or stockpiles will sit exposed for a period of 90 days or more.
  3. A Weed Management Plan for all Garfield County listed noxious weeds and State of Colorado listed noxious weeds that are targeted for statewide eradication. The Plan shall include a site specific map and weed inventory. A Weed Management Plan is required if an area 1 acre or greater is disturbed for the purposes of site construction, development or grading but not including areas serving the long-term function of the site (i.e. building footprint, road surface or permanent parking areas).
  4. A revegetation security may be required if, in the determination of the County Vegetation Manager, the proposed project has:
    - a. A potential to facilitate the spread of noxious weeds;
    - b. A potential to impact watershed areas;
    - c. A potential for visual impacts from public viewing corridors;
    - d. Steep Slopes 15% or greater or unstable areas; and/or
    - e. Disturbs an area 1 acre or greater where topsoil is exposed for the purposes of site construction, development or grading but does not comprise the long-term functioning of the site (i.e. building footprint, road surface or permanent parking areas).
  5. The revegetation security will be in an amount to be determined by the County Vegetation Manager that will be site specific and based on the amount of disturbance. The security shall be held by the County until vegetation has been successfully reestablished, or for a period of time approved by the County Vegetation Manager in any specific land use action, according to the Reclamation and Revegetation Standards section in the Garfield County Weed Management Plan. The County Vegetation Manager will evaluate the reclamation and revegetation prior to the release of the security. The security shall be subject to all provision of Article 13.

**M. Weed Management Plan.**

A Weed Management Plan for all Garfield County-listed noxious weeds and State of Colorado-listed noxious weeds that are targeted for statewide eradication.

**N. Emergency Response Plan.**

A Fire Protection and Hazardous Materials Spills Plan that specifies planned actions for possible emergency events, a listing of persons to be notified of an emergency event, proposed signage, and provisions for access by emergency response teams. The emergency plan must be acceptable to the appropriate fire district or the County Sheriff, as appropriate. The plan shall include a provision for the operator to reimburse the appropriate emergency service provider for costs incurred in connection with emergency response for the Operator's activities at the site.

**O. Traffic Impact.**

For construction traffic that will use a County road, the anticipated types of vehicles, number of each type, anticipated number of trips per day per each type, County roads to be used, and the percentage of the construction traffic that will travel on each road.

**P. Staging Areas.**

The general location of the staging areas required for pipeline construction.

**Q. Pressure Testing.**

Indicate the quantity of water or other fluid required, legal source of water if utilized, and the disposition of the water or other fluid after testing.



## **9-103. REVIEW PROCESS.**

A pipeline application shall be reviewed according to the following process:

### **A. Pre-Application Conference.**

A pre-application conference shall be conducted pursuant to section 4-101.A, unless waived by the Director.

### **B. Determination of Application Completeness Review.**

1. Determination of Application Completeness Review shall be conducted pursuant to section 4-101.B.
2. Once the application is deemed technically complete, the Director will provide to the Applicant in writing:
  - a. The number of copies to be delivered to the County;
  - b. The date upon which the Director will render a decision; and
  - c. The notice that the Applicant is required to mail to the Adjacent Property Owners.

### **C. Review by Referral Agency.**

Review by referral agency shall be conducted pursuant to section 4-101.C. with the following modifications:

1. Upon the filing of a complete application, the Director shall promptly forward 1 copy to the County Road and Bridge, Vegetation Management, and Engineering Departments, the Oil and Gas Liaison, the County Sheriff, the appropriate fire district, and any adjacent municipality for comment.

### **D. Evaluation by Director/Staff Review.**

Evaluation by Director/Staff Review shall be conducted pursuant to section 4-101.D.

### **E. Notice of Pending Application.**

Within 7 days after the application has been determined complete the Applicant shall provide notification by certified mail to all property owners within 200 feet of the route and a sign shall be posted on the portions of the route crossing or adjacent to a public road. Both the notice and the sign shall indicate that an application has been made and provide the phone number of the Community Development Department where information regarding the application may be obtained.

### **F. Decision.**

Within 30 days of the date of determination of completeness, the Director may approve, conditionally approve or deny the application. Within 10 business days, the Director shall inform the Applicant and the BOCC in writing of the decision.

1. Approve the Application. If the application satisfies all of the applicable requirements of this Code, the application shall be approved.
2. Conditionally Approve. The application may be approved with conditions determined necessary for compliance with this Code and may include, but are not limited to, the relocation or modification of proposed access roads, facilities, or structures; landscaping, buffering, or screening; posting of adequate financial guarantees; compliance with specified surface reclamation measures; or any other measures necessary to mitigate any significant impact on surrounding properties and public infrastructure.
3. Deny the Application. If the application fails to satisfy the standards of this Code, and compliance cannot be achieved through reasonable conditions of approval, the application shall be denied.

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4. Failure to make a decision. For an application submitted by a Public Utility or power authority, failure by the Director to make a determination on the application within the timelines set forth in C.R.S. § 29-20-108, shall result in the application being considered approved and the County may process Applicant's building, access, or other permits, provided the Applicant builds the pipeline in compliance with the application.
  5. Waiting Period. The Director shall issue a decision on the application to the Applicant and provide a copy to the BOCC. The decision is not final and no permit shall be issued for 14 days after the date of the Director's decision.
  6. Unless otherwise approved by the decision-making body, an Applicant has 1 year from the date of approval to satisfy any remaining conditions precedent to issuance of a Land Use Change Permit.

**G. Call-Up.**

Pursuant to section 4-112, the BOCC may call up the Director's decision no later than 10 days after the date of the decision.

**H. Applicant's Right of Appeal of Conditional Approval.**

1. Filing an Appeal. In the event that the Director denies or conditionally approves a pipeline application, the Applicant shall be entitled to appeal the decision to the BOCC. The Applicant must file an appeal for this purpose with the Director in writing no later than 10 days after the date of the Director's decision.
2. Notice. Applicant shall provide written notice at least 15 days prior to the Public Hearing to all property owners within 200 feet of the route and a sign shall be posted on the portions of the route crossing or adjacent to a public road. Published notice shall be accomplished by putting the hearing on the BOCC agenda
3. BOCC Review. The BOCC shall review the Director's decision at a Public Hearing held as soon as practical after the date the appeal was filed and after proper notice.
4. Public Hearing. At the Public Hearing the BOCC shall consider evidence related to the Director's decision, which may be presented by County staff, the Applicant, or interested members of the public. The BOCC shall not be limited in their review to the subject of the appeal and may review any aspect of the pipeline application. Based upon this evidence, the BOCC may affirm the Director's decision, or may approve the application with modified, altered, deleted, or added conditions. No County building, grading, access, or other permit shall be issued, or the Applicant otherwise allowed to proceed with the operation, until the BOCC acts on the Director's decision at the Public Hearing.

**I. Permit Issuance.**

After approval of a Land Use Change Permit for a pipeline and completion of the 14-day waiting period, the Applicant shall be entitled to have processed any necessary building, grading, or access permits, or to otherwise proceed with the proposed operation.

**J. Completion of Approval.**

Upon completion of any pipeline, the Applicant shall submit a statement from a qualified professional engineer certifying the completion of the project in compliance with the Land Use Change Permit. A digital copy of the surveyed pipeline as-built will be provided to the Community Development Department.

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**K. Amendments.**

Amendments to an approved pipeline Land Use Change Permit shall follow the provisions of section 4-106.

**9-104. REVIEW CRITERIA.**

An application for a pipeline shall be approved, conditionally approved, or denied in accordance with the following standards and criteria:

**A. Located Along Perimeters.**

As a general guide, rights-of-way and any associated facilities shall be located along the perimeters of surface property ownerships and not within areas of agricultural crop production. Non perimeter locations will be acceptable if the surface owner agrees and there is no adverse impact on adjacent properties.

**B. Noise Abatement.**

1. Any equipment used in construction or operation of a pipeline must comply with either the ECMC Rules and Regulations in regards to noise abatement or C.R.S. Article 12 of Title 25, as appropriate for the type of pipeline.
2. All power sources used in pipeline operations shall have electric motors or muffled internal combustion engines.

**C. Visual Impact.**

Pipeline operations shall be located in a manner to minimize their visual impact and disturbance of the land surface.

**D. Access Points to Public Roads.**

Access points to public roads shall be reviewed by the County Road and Bridge Department. All access and oversize or overweight vehicle permits must be obtained from the County Road and Bridge Department prior to beginning operation. All proposed transportation rights-of-way to the site shall also be reviewed and approved by the County Road and Bridge Department to minimize traffic hazards and adverse impacts on public roadways. Existing roads shall be used to minimize land disturbance unless traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise. Any new roads created as a result of the pipeline construction, intended to be permanent for maintenance and repair operations, shall be placed behind a locked gate or other barriers, preventing use by Recreational Vehicles. Any gates or barriers need to be consistent with the surface owner's preferences.

**E. Air Contaminant Emissions.**

Air contaminant emissions shall be in compliance with the applicable permit and control provisions of the Colorado Air Pollution Prevention and Control Act, C.R.S., Title 25, Article 7.

**F. Water Quality Control Standards.**

All operations shall comply with all applicable CDPHE Water Quality Control Standards.

**G. Reclamation Plan.**

The proposed Reclamation Plan shall provide for a reasonable reclamation schedule in light of the specific surface use and surrounding land uses, and may require recontouring and revegetation of the surface to pre-disturbance conditions. The Director may also approve a plan for an alternative post-disturbance reclamation, provided the surface owner and the Applicant agree.

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**H. Removal of Abandoned Pipeline.**

Should an abandoned pipeline be removed, it will be subject to the original revegetation and weed management requirements in the original application.

**9-105. ENFORCEMENT**

Enforcement, violations, and appeals are subject to all provisions of Article 12.

## **DIVISION 2. OIL AND GAS CODE**

### **9-201. GENERAL PROVISIONS**

#### **A. Title and Short Title.**

This Code, and all future amendments, shall be known as the Garfield County Oil and Gas Code and is also referred to herein as the “Code.”

#### **B. Purpose and Intent.**

Garfield County’s socio-economic well-being, safety, welfare, and culture relies significantly on the effective management and continuation of local oil and gas production. Mineral extraction is a significant source of revenue, funding essential services for local governments and special districts. Given the importance of oil and gas development and a safe, healthy, and clean environment to our communities, Garfield County has developed Oil and Gas Permit regulations to review and make siting decisions for oil and gas locations that allow responsible development of oil and gas resources in a manner that protects public health, safety and welfare and the environment and wildlife resources.

Garfield County Oil and Gas Permit regulations:

- (1) are reasonable and necessary to protect public health, safety and welfare and the environment and wildlife resources;
- (2) allow Garfield County to exercise the authority expressly granted by Senate Bill 19-181 to regulate siting and surface impacts of oil and gas locations and facilities;
- (3) are not unduly burdensome to the regulated community;
- (4) clearly state what an operator must do to comply with local government regulations; and
- (5) can be implemented efficiently and effectively in coordination with state and federal permitting processes.

#### **C. Authority.**

It is the intention of the Board of County Commissioners in adopting the Garfield County Oil and Gas Code to fully exercise all relevant powers confirmed by the Constitution and laws of the State of Colorado including but not limited to:

##### **1. Colorado Constitution.**

All of the powers reserved to the County by the Colorado Constitution.

##### **2. State Enabling Legislation.**

All of the powers granted to the County by:

- a. Title 16, Article 13, Part 3, C.R.S., Restraint and Abatement of Nuisance;
- b. Title 29, Article 20, C.R.S., Local Government Land Use Control Enabling Act;
- c. Title 30, Article 11, C.R.S., County Powers and Functions;
- d. Title 30, Article 15, C.R.S., County Regulations Under Police Powers;
- e. Title 30, Article 28, C.R.S., County Planning Act;
- f. Title 43, Article 2, C.R.S., State, County and Municipal Roads.

##### **3. Recognition of Local Government Authority.**

- a. Title 34, Article 60, at 105(1)(b)(V), C.R.S., Powers of Commission;
- b. Title 34, Article 60, Part 131, C.R.S., Powers of Commission.

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**D. Jurisdiction.**

This Code shall apply to all land within the unincorporated areas of Garfield County.

**E. Adoption of Colorado Energy and Carbon Management Commission (ECMC) Rule 423, NOISE, and Rule 424, LIGHT, by Reference.**

**1. ECMC Rule 423, NOISE.**

Garfield County hereby adopts ECMC Rule 423, NOISE, as it may be amended. The Community Development Director will determine the appropriate land use designation based on existing land uses within 2,000 feet of the proposed Oil and Gas Location. A copy of ECMC Rule 423, NOISE, as of the date of the adoption of this Code, is incorporated herein as Appendix A. An applicant may seek a variance from or modification to the noise requirements pursuant to Section 9-204 of the Code.

**2. ECMC Rule 424, LIGHTING.**

Garfield County hereby adopts ECMC Rule 424, LIGHTING, as it may be amended. The Community Development Director will determine the appropriate land use designation based on existing land uses within 2,000 feet of the proposed Oil and Gas Location. A copy of ECMC Rule 424, LIGHTING, as of the date of the adoption of this Code, is incorporated herein as Appendix B. An applicant may seek a variance from or modification to the lighting requirements pursuant to Section 9-204 of the Code.

**F. Applicability.**

This Code shall apply only to an Oil and Gas Location or an Oil and Gas Facility, whether existing or proposed:

- 1.** For which the ECMC will require the Applicant to conduct an Alternative Location Analysis pursuant to ECMC Rule 304.b(2) B.i. through viii. and x.;
- 2.** For which the Applicant is requesting a variance pursuant to ECMC Rule 502, VARIANCES, from the requirements of ECMC Rule 423, NOISE or ECMC Rule 424, LIGHTING, or is requesting a noise level higher than otherwise allowed under ECMC Table 423-1 pursuant to ECMC Rule 423.b (3) B; or
- 3.** For any change to an Oil and Gas Location that required an Alternative Location Analysis and will require the Applicant to submit a new or amended Form 2A to the ECMC.

**G. Oil and Gas Permits.**

No person shall engage in, cause, allow, or conduct any Oil and Gas Operation at any Oil and Gas Location or Oil and Gas Facility, or substantially modify an existing Oil and Gas Location or Oil and Gas Facility, subject to this Code prior to obtaining a Garfield County Oil and Gas Permit as required by this Code.

**H. Term of Oil and Gas Permit.**

An Oil and Gas Permit issued pursuant to this Code shall expire when the applicable Oil and Gas Development Plan or the applicable Form 2A, approved by the ECMC expires pursuant to ECMC Rule 311, EXPIRATION.

## 9-202. DEFINITIONS.

### A. Colorado Energy and Carbon Management Commission.

Words, phrases, or acronyms in this Code shall have the definitions as those words and phrases or acronyms are defined in the ECMC Rules and Regulations, 100 Series, as that 100 Series may be amended. If a word, phrase, or acronym is not defined in the ECMC Rules and Regulations, it shall be defined pursuant to this Code.

### B. Acronyms.

For the purposes of this Code, the following acronyms are defined as follows.

AQCC	Colorado Department of Public Health and Environment, Air Quality Control Commission
CDPHE	The Colorado Department of Public Health and Environment
ECMC	The Colorado Energy and Carbon Management Commission
DRMS	The Colorado Division of Reclamation, Mining, and Safety
LUDC	The Garfield Land Use and Development Code, adopted 2013, as amended

### C. Additional Definitions.

**Ambient Noise Level.** The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources at the location, constituting the normal and existing level of environmental noise at a given location.

**Decibel (dB).** A unit for measuring the intensity of a sound by comparing it with a given value on a logarithmic scale.

**Degradation or Degrade.** Lowering in grade or desirability; lessening in quality. The act or process of degrading.

**Director.** The Garfield County Community Development Director.

**Expansive Soils and Rocks.** Any mineral, clay, rock or other type of geologic deposit having the property of absorbing water with an accompanying swelling to 10% or more of their original volume.

**Garfield County Oil and Gas Permit.** A permit issued in compliance with this code.

**Geologic Hazard Area.** An area which contains or is directly affected by a geologic hazard.

**Leak.** A hole in a container or covering through which contents, especially liquid or gas, may accidentally pass.

**Mitigation.** The following actions, in order of preference:

1. Avoiding adverse impacts. Avoiding an adverse impact by not taking a certain action or parts of an action; or
2. Minimizing adverse impacts. Minimizing adverse impacts to protect public health, safety, and welfare and the environment, and mitigating the extent and severity of those impacts that cannot be avoided; or

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3. Rectifying impacts. Repairing, rehabilitating, or restoring the impacted area, facility, or service; or
  4. Reducing or eliminating impacts. Reducing or eliminating the impact over time by preservation and maintenance operations; and
  5. Other provisions for addressing impacts. Replacing or providing equivalent biological, social, environmental, and physical conditions, or a combination thereof.

**Oil and Gas Facility.** Equipment or improvements used or installed at an oil and gas location for the exploration, production, withdrawal, treatment, or processing of crude oil, condensate, exploration and production waste, or gas.

**Oil and Gas Location.** A definable area where an operator has disturbed or intends to disturb the land surface in order to locate an oil and gas facility.

**Oil and Gas Operations.** Exploring for oil and gas, including conduction of 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; and any constructing, site preparing, or reclaiming activities associated with such operations.

**Seismic Effects.** Direct and indirect effects caused by a natural earthquake or a man-made phenomenon including but not limited to exploration and test drilling.

## **9-203. PRE-APPLICATION PROCESS FOR NEW OR MODIFIED OIL & GAS OPERATION.**

### **A. Request for Pre-Application Conference.**

The Applicant shall request, in writing, a pre-application conference through the Community Development Department. It is the intent of the County that the Applicant is responsible for initiating the County pre-application process before the Applicant initiates with the ECMC an application for the same matter, and sufficiently early that the County has time to complete its entire review process prior to the ECMC making its own determination.

### **B. Pre-Application Materials.**

The Applicant shall submit contemporaneously with its written request for a pre-application conference the following:

1. **Alternative Location Analysis if required by the ECMC.** If the ECMC will require an alternative location analysis, the Applicant shall identify the following items, in a written narrative and on a topographic map or maps of sufficient detail to accurately convey the concept, character, location, proposed mineral development, including:
  - a. The proposed area of mineral development;
  - b. The information required by ECMC Rule 304.b.(2) C;
  - c. Each Federal, State or local government designated park or open space partially or wholly located within the proposed area of mineral development;
  - d. Each known area containing environmental contamination partially or wholly located within the proposed area of mineral development (as identified on ECMC, DRMS and/or CDPHE databases);
  - e. Each public road right of way;



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- f. All materials submitted to Garfield County are considered part of the public record. However, if an applicant requests that any required documentation is confidential, a written request from the applicant's attorney describing the confidentiality shall be submitted with the pre-application materials. This attorney confidentiality request will be directed to the County Attorney's Office for review.
- 2. When A Variance is Sought from ECMC Noise or Light Requirements.**  
If an Alternative Location Analysis is not required by the ECMC for the location for which a variance from ECMC's noise or light standards, or a modification of the maximum permissible noise level allowed by ECMC Rule 423.b.(3) B is sought, the Applicant shall provide a narrative explaining the rationale for the variance or modification and what other options were considered by the Applicant.
- C. Scheduling and Conduction a Pre-Application Conference.**  
Within 10 business days of receiving the Applicant's written request and required application materials for a pre-application conference, the Director shall schedule the conference and inform the applicant in writing of the date, time and place of the conference. Garfield County reserves the opportunity to invite to the pre-application conference a representative of the ECMC or other agency identified by the Director. The Director, or Director's designee, shall conduct the pre-application conference.
- D. Applicant Shall Schedule, Notice, and Conduct a Neighborhood Meeting.**  
After the pre-application conference, and prior to submitting an application for a Garfield County Oil and Gas Permit, the Applicant shall schedule and notice a neighborhood meeting in Garfield County. The Applicant shall provide mailed notice of the neighborhood meeting to the owners and tenants of all property within 2,000 feet of the proposed Working Pad Surface of the location identified pursuant to Section 9-204.B. below, any of whom may participate in the meeting. The identity of owners shall be compiled by using the most recent record of property owners on file with the County Assessor. Notice to tenants can be accomplished by sending notice to "current resident" at the address of the property. At the neighborhood meeting, the Applicant shall provide an overview of its proposed request for an alternative location analysis or variance or modification from the noise or lighting requirements of this Code and allow those in attendance to provide input as to the pertinent proposed request, including, but not limited to, issues that arise from application of this Code to the pertinent proposed request, and suggested mitigation to adequately ensure compliance with this Code. The Applicant shall make a written summary of the neighborhood meeting and provide a copy of that summary to the Director to become part of the record to be considered by the Board of County Commissioners.
- E. Staff Comments/Written Summary.**  
Within 20 business days of the pre-application conference, the Director shall provide to the Applicant a written summary of the pre-application conference. Any comments (written or oral) made by County staff are preliminary in nature and not binding. The summary will provide a preliminary list of submittal requirements to be included with the application, if any, in addition to those required by below. All applications for an Alternative Location Analysis or variance or modification for noise or light requirements of this Code will be treated as a Limited Impact Review, and in addition to the notices and processes required by this Code, shall be subject to the review procedures identified in the Garfield County Land Use Development Code (LUDC), Table 4-102: Common Review Procedures and Required Notice.

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For applications that seek a modification of an existing Oil and Gas Facility with a Garfield County Oil and Gas Permit, or an existing or new Oil and Gas Facility without a Garfield County permit, for which ECMC will require a new Form 2A or an Alternative Location Analysis or for which the Operator will seek a variance from ECMC's noise or light standards, the Director will inform the applicant if the request constitutes:

1. A substantial modification that will require further Garfield County review.
2. A minor modification that does not require further Garfield County review.

Minor modifications are those that:

1. Do not require submittal of a ECMC Form 2A and or Alternative Location Analysis; and
2. Comply with all of the requirements of this Code;
3. Do not conflict with the Comprehensive Plan;
4. Do not change the character of the development;
5. Do not alter the basic relationship of the development to adjacent property; and
6. Do not change the uses permitted; and
7. Do not require the amendment or abandonment of any easements of rights of way.

A substantial modification is any requested change that is not a minor modification.

The characterization of the modification is subject to the call up provisions of the LUDC at Section 4-112.

If after receiving all necessary information, the Director determines that the proposed modification is not a substantial modification, the Director will provide the Applicant with a Director's Determination and no further action is required.

#### **9-204. APPLICATION MATERIALS FOR AN OIL & GAS PERMIT.**

**A. Written Application Required.**

Any application for an Oil and Gas Permit shall be made in writing to the Director. The Director may waive one or more of these application materials when they are not relevant to either the application or review of it.

**B. Additional Information Required.**

In addition to the information required by Section 9-203.B., the application shall contain:

**1. Submittals for All Applications.**

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- a. The Applicant's name and email address. The applicant shall be either the owner of the subject real property, or a person or entity with a written, executed Statement of Authority and Authorization to represent the owner;
  - b. Identification of the type of application submitted;
  - c. Vicinity Map showing the location of the proposed Oil and Gas Operation (including Township/Range/Section, and nearby public roads).
  - d. The name and contact information (including email), for an operator or applicant representative designated to receive and respond to questions;
  - e. A topographic map showing the location of the proposed operation including:
    - Well pads, tanks, roads, pipelines, gathering systems, topography, all public roads that provide access to or traverse the proposed Oil and Gas Operation;
    - Recorded easements that provide access to or traverse the proposed operation;
    - Municipal and subdivision boundaries within two thousand (2000) feet of the proposed Working Pad Surface;
    - Residences and occupied buildings within two thousand (2000) feet of the proposed Working Pad Surface;
    - Designated Outside Activity Areas, as defined by ECMC, within two thousand (2000) feet of the proposed Working Pad Surface;
    - Location of all other Oil and Gas Operations within two thousand (2000) feet of the proposed Working Pad Surface;
    - Water bodies within two thousand six hundred fifty (2650) feet of the proposed Working Pad Surface.
  - f. A summary of the legal and factual grounds for the variance or alternative location analysis being sought.
  - g. Evidence of liability insurance as required by this Code;
  - h. A report, study, or plan that assesses the impacts to public health, safety, welfare, wildlife and the environment of the alternative location or the variance requested, and proposed best management practices or mitigation. In addition to the materials required for the pre-application conference, the report shall address these subjects:
    - Sources of electricity that will be supplied and used during all phases of the Oil and Gas Operation;
    - Noise mitigation techniques;
    - Light mitigation techniques;
    - Wildlife and wildlife habitat assessment and mitigation;
    - Potential impacts on County services and facilities.
  - i. Any additional information requested by Garfield County.
  - j. All applications shall be executed by a person with authority to do so on behalf of the applicant, and the contents thereof will be verified in writing by a qualified professional with sufficient knowledge to confirm the data contained herein.
  - k. Fees. Each application will be accompanied by an application Fee. A schedule of fees is available through the Community Development Department.

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**2. Additional Application Materials for an Oil and Gas Permit That Requires Alternative Location Analysis, or Requests a Substantial Modification to an Approved Oil and Gas Location.**

In addition to the information required in subsection 9-204.B.1. above, the Applicant shall provide a narrative detailing all potential alternate locations from which the targeted minerals can be accessed and the Applicant's analysis of why the Applicant chose its preferred site. The Applicant shall also provide, only regarding its preferred site, the following:

- a. All of the information required by ECMC Rule 304.b.(2) (C.) and Rule 304.b. (3) through (15) inclusive, except NOT Rule 304.b. (7)(D) (Preliminary Flow Diagrams) and (7)(H) (Directional Well Plat).
- b. All of the information required by ECMC Rule 304.c. except NOT (c)(10)(Hydrogen Sulfide Drilling Operations Plan), (c)(12)(Gap Capture Plan), and (c)(13) (Fluid Leak Detection Plan).
- c. A traffic study as identified in the Garfield County Land Use Development Code, Table 4-201.

**3. Additional Application Materials for an Oil and Gas Permit When a Variance from Noise or Lighting Requirements is Requested.**

**4.**

The Applicant shall provide as applicable:

- a. The "noise mitigation plan" required by ECMC Rule 423.a.;
- b. The "preliminary plan" required by ECMC Rule 423.b. identifying how the Operator will conduct background ambient noise surveys to establish baseline conditions, on the site for both A-scale and C-scale noise; and/or
- c. The "light mitigation plan" required by ECMC Rule 424.a.

In addition, the applicant shall provide a written analysis of the impact of the proposed variance or modification and documentation of how the variance will satisfy the standards of approval for a variance set forth in Section 9-205.B. below. The plans and analysis shall identify, as applicable, the intensity of the lumens or decibels, and the location of all light(s) or decibels over the adopted requirements.

## **9-205. STANDARDS OF APPROVAL.**

**A. Standard of Approval of an Application That is the Subject of an Alternative Location Analysis.**

In determining whether an application which is the subject of an alternative location analysis is to be denied, approved, or approved with conditions, the Board of County Commissioners shall consider without limitation:

1. The distances required, respectively, in ECMC Rule 304.b.(2).B.i., ii., iii., iv., vi. bb., and x., and
2. The site specific conditions identified, respectively, in ECMC Rule 304.b.(2).B.v., vi.aa., vii., and viii.

The Board of County Commissioners may approve the Applicant's proposed location if, based on the totality of circumstances including any necessary and reasonable conditions of approval required by the County, the Board of County

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Commissioners determines the proposed location to be protective of public health, safety, welfare, the environment, and wildlife resources.

**B. Standard of Approval for Variance from or Modification to Noise and Lighting Requirements.**

The Board of County Commissioners may approve a variance from or modification to Garfield County noise or lighting requirements if, based on data and analysis, the Board of County Commissioners finds that:

1. The Applicant has made a good faith effort to comply, or is unable to comply, with the specific requirements contained in the applicable rule or order from which it seeks a variance or modification;
2. Granting the variance or modification will result in no unacceptable impact to public health, safety, welfare, the environment, or wildlife resources; and
3. The requested variance or modification contains reasonable conditions of approval or other mitigation measures, in priority order to avoid, minimize, rectify, or mitigate adverse impacts to public health, safety, welfare, the environment, and wildlife resources.

**9-206. REVIEW BY REFERRAL AGENCY.**

Each application subject to this Code shall be referred to an agency consistent with the requirements of the Garfield County Land Use Development Code, Article 4, Section 4-101.c. review by referral agency.

**9-207. EVALUATION BY DIRECTOR/ STAFF.**

The Director shall review the application consistent with the requirements of the Garfield County Land Use and Development Code, Article 4, Section 4-101.D. Evaluation by Director/Staff Review.

**9-208. NOTICE OF PUBLIC HEARING.**

With the exception of minor modifications, a public hearing by the Board of County Commissioners is required for all applications subject to this Code, and the Applicant shall notice that public hearing consistent with the requirements of the LUDC, Article 4, E., EXCEPT, that in addition, the following persons and entities also shall be so notified.

1. The Owners and tenants of property within 2,000 feet of the Working Pad Surface. The identity of Owners shall be compiled by using the most recent record of property owners on file with the County Assessor. Notice to tenants can be accomplished by sending the notice to "current resident" at the address of the property.
2. The Local Government Designee of any municipality or County within one (1) mile of the site pertinent to the application.
3. The Director of the ECMC.

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4. Additional persons or entities that the Garfield County Community Development Director or the Garfield Board of County Commissioners may designate.

#### **9-209. CONDUCT OF HEARING AND DECISION BY THE BOARD OF COUNTY COMMISSIONERS.**

The public hearing shall be conducted, and decision made, by the Board of County Commissioners consistent with the requirements of the LUDC, Article 4: Application and Review Procedures.

#### **9-210. FINANCIAL GUARANTEE.**

If required by the Board of County Commissioners, the Applicant shall fulfill the requirements of the LUDC, Article 13: Financial Guarantee.

#### **9-211. INSURANCE.**

All operators shall maintain general liability insurance coverage covering the operator, employees and contracted third parties, for property damage, environmental damage, and injury to third parties in the minimum amount of two million dollars (\$2,000,000) per occurrence. Such policies shall include the Board of County Commissioners as an "additional insured." The existence of this insurance is not, and shall not be, construed to be a waiver by Garfield County of governmental immunity.

#### **9-212. ENFORCEMENT.**

The Board of County Commissioners reserves the right to enforce this Code using the statutory and regulatory remedies available for enforcing any County regulation or land use decision.

#### **9-213. SETBACKS FROM EXISTING OIL & GAS WELLS, OIL AND GAS FACILITIES, OR ABANDONED WELLS.**

- A. No building unit intended for human occupancy shall be constructed within five hundred feet (500) or less from an existing oil and gas well and/or above ground oil and gas facilities.
- B. No school or childcare center building, structure or playfield or park shall be constructed within two thousand (2000) feet or less from an existing well and/or associated above ground oil and gas facilities.
- C. No subdivision plat shall be approved with any lot lines that are within three-hundred and fifty feet (350) or less from existing wells and/or associated above ground oil and gas facilities.
- D. All subdivisions lots platted after the effective date of this code with any lot line that is closer than two thousand feet (2000) feet of an existing well or above ground oil and gas facility, and/or oil and gas pipelines shall contain a plat note and require a notice to be recorded against the title of the location of such oil and gas facilities.
- E. No building intended for human occupancy shall be located closer than twenty-five (25') feet to a well abandoned and reclaimed in accordance with ECOMC regulations.

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**APPENDIX A: ECMC RULE 423, NOISE.**

**423. NOISE**

- a.** Operators will submit a noise mitigation plan that demonstrates one or more proposed methods of meeting the maximum permissible noise levels described by this Rule 423 as an attachment to their Form 2As, as required by Rule 304.c.{2}. An Operator may submit substantially equivalent information or plans developed through a Local Government land use process or federal process in lieu of the information required by this Rule 423.a unless the Director or Commission determines that the information or plan developed through the Local Government land use process or federal process is not equivalent. The noise mitigation plan will include at least the following information:
- (1) An explanation of how the Operator will comply with the maximum permissible noise levels specified in Rule 423.b.(1). This is to include a description of methods to design acoustical mitigation measures or choose/site equipment appropriately such that the Operator has a reasonable expectation of compliance.
  - (2) Estimated duration of each stage of operation, including drilling, completion, Flowback, production, and an estimate of the noise levels of each stage of operation;
  - (3) Reference to topographical considerations of noise and noise propagation at the proposed Oil and Gas Location;
  - (4) Description of Best Management Practices and best engineering practices for measuring and mitigating noise levels and an implementation schedule for such technology.
  - (5) For proposed Oil and Gas Locations with a Working Pad Surface within 2,000 feet of one or more Residential Building Units, at least one, and no more than six noise points of compliance where monitors will be located. Operators will identify noise points of compliance using the following criteria:
    - A. Provide one noise point of compliance in each direction in which a Residential Building Unit is located within 2,000 feet of the proposed Working Pad Surface.
    - B. Noise points of compliance will be located at least 350 feet from the Working Pad Surface, and no less than 25 feet from the exterior wall of the Residential Building Unit that is closest to the Working Pad Surface. If a Surface Owner or tenant refuses to provide the Operator with access to install a noise monitor, then the noise point of compliance will be located at either the next-closest Residential Building Unit or an alternative location approximately the same distance and direction from the Working Pad Surface.

- b. A preliminary plan for how the Operator will conduct background ambient noise surveys to establish baseline conditions for noise levels on the site, for both A-scale and C-scale noise. The Director may require as a condition of approval on the Form 2A that the Operator conduct the background ambient noise survey between 30 and 90 days prior to start of construction and update the plan accordingly based on the results. Operators will conduct baseline noise surveys at the noise points of compliance identified pursuant to Rule 423.a.(5). When an Operator conducts a background ambient survey the Operator will follow the same approach as outlined in Rule 423.c.(7) and over a 72-hour period, including at least 24 hours between 10:00 p.m. on a Friday and 4:00 a.m. on a Monday. Operators will record any significant weather events and take those events into account when establishing the baseline. A single cumulative daytime ambient noise level and a single cumulative nighttime ambient noise level will be established by taking the logarithmic average of all daytime or nighttime 1-hour Leq values measured and in accordance with the sound level data collection requirements pursuant to the maximum permissible noise levels.
- (1) All Oil and Gas Operations will comply with the following maximum permissible noise levels in Table 423-1 unless otherwise required by Rule 423. The Director may require Operators to comply with a lower maximum permissible noise level based on the consultation process with Relevant and Proximate Local Governments, CDPHE, or CPW pursuant to Rules 302.g, 309.e, & 309.f

**Table 423-1 - Maximum Permissible Noise Levels**

<b>LAND USE DESIGNATION</b>	<b>7:00 am to next 7:00 pm</b>	<b>7:00 pm to next 7:00 am</b>
Residential/Rural/State Parks & State Wildlife Areas	55 db(A)	50 db(A)
Commercial/Agricultural	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)
All Zones	60 dc(C)	60 dc(C)

- (2) Unless otherwise required by Rule 423, drilling, or completion operations, including Flow back:
- A. In Residential/Rural or Commercial/Agricultural, maximum permissible noise levels will be 60 db(A) in the hours between 7:00 p.m. to 7:00 a.m. and 65 db(A) in the hours between 7:00 a.m. to 7:00 p.m.; and



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- B. In all zones maximum permissible noise levels will be 65 db(C) in the hours between 7:00 p.m. to 7:00 a.m. and 65 db(C) in the hours between 7:00 a.m. to 7:00 p.m.
- (3) The basis for determining land use designation pursuant to Table 423-1 will be the Relevant Local Government's land use or zoning designation. The Director may consult with a Relevant or Proximate Local Government to identify the type of land use of the Oil and Gas Location and its surrounding area, taking into consideration any applicable zoning or other local land use designation.
- A. To protect public health, safety, and welfare, the Director may require Operators to comply with a lower maximum permissible noise level in areas zoned industrial, light industrial, or commercial, if the Oil and Gas Facility will be within 2,000 feet of a Residential Building Unit or High Occupancy Building Unit.
- B. In a noise mitigation plan submitted pursuant to Rule 423.a, an Operator may request a higher maximum permissible noise level than would otherwise be allowed by Table 423-1, if the Operator demonstrates that both the Relevant and any Proximate Local Governments agree to the higher maximum permissible noise level. The Director may apply that higher maximum permissible noise level as long as the requested level is protective of public health, safety, and welfare, and wildlife.
- (4) When operating in High Priority Habitat, Operators will consult CPW and, on federal lands, the Bureau of Land Management, or United States Fish and Wildlife Service, to determine the acceptable noise limits and monitoring protocols.
- (5) Operators may exceed the noise levels in Table 423-1 as measured at the nearest noise point of compliance if all affected Surface Owners and tenants agree in writing to the higher noise limit requested by the Operator.
- (6) Unless otherwise required by Rule 423.b.(7), during the hours between 7:00 a.m. and the next 7:00 p.m. the maximum permissible noise levels listed in Table 423-1 may be increased 10 dB(A) for a period not to exceed 15 minutes in any 1-hour period. The increase is permissible only for a 1-hour period during any 12 hours.
- (7) Operators will reduce periodic, impulsive, or shrill noise by 5 dB(A) below the levels in Table 423-1. For periodic, shrill, and impulsive noise within' 1000 feet of a Residential Building Unit, Operators will minimize noise that can be readily eliminated through maintenance, equipment modification, or other readily, available procedures.
- (8) Pursuant to Commission inspection or upon receiving a complaint from a Local Government, or a Surface Owner or tenant of a property within 2,000 feet of an Oil and Gas Facility regarding noise related to Oil and Gas Operations, the Commission will conduct an onsite investigation and take sound measurements using the methods prescribed for Operators in Rule 423.c.

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c. To demonstrate compliance with Tables 423-1 and 423-2 Operators will measure sound levels according to the following standards:

- (1) During pre-production activities and ongoing operations lasting longer than 24 consecutive hours such as drilling, completion, recompletion. Stimulation, and Well maintenance, in areas zoned residential or within 2,000 feet of a Building Unit, Operators will take continuous sound measurements from each noise point of compliance designated pursuant to Rule 423.a .(5).
- (2) **Monitoring Procedures.**
  - A. In response to a complaint or at the Director's request, Operators will measure sound levels at 25 feet from the complainant's occupied structure towards the noise source for low frequency (dbC) indicated issues. For high frequency (dbA) measurement will be at the nearest point of compliance. For equipment installed at Oil and Gas Locations subject to a Form 2A approved prior to January 15, 2021, after the Commencement of Production Operations, no single piece of equipment will exceed the maximum permissible noise levels listed in Table 423- 1 as measured at a point 350 feet from the equipment generating the noise in the direction from which the complaint was received.
  - B. In situations where measurement of noise is unrepresentative due to topography or any other issue, Operators or the Commission may take the measurement at the nearest noise point of compliance, or at a different distance and extrapolate it to 25 feet from the complainant's residence (dbC) or the complainant's property line (dbA) using the following formula:  
  
$$\text{db(A) distance 2} = \text{db(A) distance 1} - 20 \times \log_{10} \left( \frac{\text{distance 2}}{\text{distance 1}} \right)$$
  
  
$$\text{db(C) distance 2} = \text{db(C) distance 1} - 20 \times \log_{10} \left( \frac{\text{distance 2}}{\text{distance 1}} \right)$$
- (3) Operators will equip sound level meters with wind screens that are in good working order and will take readings when the wind velocity at the time and place of measurement is not more than 5 miles per hour. In determining an Oil and Gas Operation's contribution to sound levels. The Director will consider wind readings that exceed 5 mph.
- (4) Operators will take sound level measurements 5 feet above ground level.
- (5) Operators will determine sound levels by averaging logarithmic minute-by-minute measurements made over a minimum 1-hour sample duration.

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- (6) All measurements will be reported using LeqA (fast) and LeqC (slow). Meters will be field calibrated pre-survey and post survey. Continuous surveys will be field calibrated pre-survey and post survey and pursuant to the manufacturer's recommended interval. All survey equipment will be inspected at time of calibration for compliance with the Commission's Rules.
  - (7) Operators will take samples under conditions that are representative of the noise experienced by the complainant (e.g., at night, morning, evening, or during special weather conditions).
  - (8) If a Building Unit, High Occupancy Building Unit, High Priority Habitat, or Designated Outside Activity Area is built or designated after an Oil and Gas Development Plan or Form 2A is approved, the Operator of the Oil and Gas Location need not comply with Rule 423.c with respect to the newly built or designated Building Unit, High Occupancy Building Unit, High Priority Habitat, or Designated Outside Activity Area.
  - (9) Operators will maintain records to demonstrate compliance with this Rule 423.c, and will submit the records to the Director upon request.

**d. Cumulative Noise.** All noise measurements will be cumulative.

- (1) Noise measurements taken at noise points of compliance designated pursuant to Rule 423.a.(5) will take into account ambient noise, rather than solely the incremental increase of noise from the facility targeted for measurement.
- (2) At new or substantially modified Oil and Gas Locations where ambient noise levels at noise points of compliance designated pursuant to Rule 423.a.(5) already exceed the noise thresholds identified in Table 423-1, then Operators will be considered in compliance with Rule 423, unless at any time their individual noise contribution, measured pursuant to Rule 423.c, increases noise above ambient levels by greater than 5 dBC and 5 dBA between 7:00 p.m. and 7:00 a.m. or 7 dBC and 7 dBA between 7:00 a.m. and 7:00 p.m. This Rule 423.d.(2) does not allow Operators to increase noise above the maximum cumulative noise thresholds specified in Table 423-2 after the Commencement of Production Operations.
- (3) After the Commencement of Production Operations, if ambient noise levels already exceed the maximum permissible noise thresholds identified in Table 423-1, under no circumstances will new Oil and Gas Operations or a significant modification to an existing Oil and Gas Operations raise cumulative ambient noise above:

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**Table 423-2 - Maximum Cumulative Noise Levels**

<b>LAND USE</b>	<b>7:00 am to next 7:00 pm</b>	<b>7:00 pm to next 7:00 am</b>
Residential/Rural/ State Parks/State Wildlife Areas	65 db(A)	60 db(A)
Commercial/ Agricultural	70 db(A)	65 db(A)
Light Industrial	80 db(A)	75 db(A)
Industrial	90 db(A)	85 db(A)
All Zones	75 db(C)	70 db(C)

- e. If Oil and Gas Operations result in persistent noise that adversely impacts public welfare, the Director may require the Operator to take action pursuant to Rule 901.a.

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**APPENDIX B: ECMC RULE 424, LIGHTING.****424. LIGHTING**

- a.** Operators will submit a light mitigation plan as an attachment to their Form 2As, pursuant to Rule 304.c.(3). An Operator may submit substantially equivalent information or plans developed through a Local Government land use process or federal process in lieu of the information required by this Rule 424.a unless the Director or Commission determines that the information or plan developed through the Local Government land use process or federal process is not equivalent.
- (1) All light mitigation plans will be signed by a person with relevant expertise in light mitigation techniques and design.
- (2) All light mitigation plans will address:
- A. A pre-production facility lighting plan demonstrating one or more proposed methods of ensuring compliance with Rule 424.c, and:
- i. That provides adequate lighting to ensure safety during active operations involving personnel; and
  - ii. The proposed anticipated location, mounting, height, and orientation of all outdoor lighting fixtures on the site during pre-production activities.
  - iii. Nothing in this Rule 424.a.(2).A prevents an Operator from using ad hoc temporary portable lighting when necessary for safety reasons during pre-production activities, provided that the Operator otherwise complies with the standards in Rules 424.b-f.
- B. A Production Facility lighting plan demonstrating one or more proposed methods of ensuring compliance with Rules 424.d & e, and:
- i. The location, mounting, height, and orientation of all outdoor lighting fixtures on the site;
  - ii. A table that calculates the total lumen output of all fixtures combined; and
  - iii. Cut sheets of light fixtures that demonstrate Backlight, Uptight, and Glare ("BUG") rating, lumen output, and fully shielded design; and
  - iv. For any location with a Building Unit within 2,000 feet, a photometric plan estimating or calculating the illuminance, measured in lux, 100 feet outside the facility boundary;
- C. The Operator's capability of meeting all requirements of this Rule 424 through one or more proposed methods;

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- D. The location of the resources and receptors listed in Rules 424.c & d; and
  - E. Square footage of the Working Pad Surface for purposes of demonstrating compliance with Rule 424.d.(2).

**b. Lighting Standards.**

- (1) Operators will direct site lighting downward and inward, such that no light shines above a horizontal plane passing through the center point light source.
- (2) Operators will use appropriate technology within fixtures that obscures, blocks, or diffuses the light to reduce light intensity outside the boundaries of the Oil and Gas Facility.
- (3) Operators will use Best Management Practices to minimize light pollution and obtrusive lighting, which may include, but are not limited to:
  - A. Minimizing lighting when not needed using timers or motion sensors;
  - B. Using full cut-off lighting;
  - C. Using lighting colors that reduce light intensity; and
  - D. Using low-glare or no-glare lighting.

**c. Pre-Production Facility Lighting.**

- (1) At all Oil and Gas Facilities with active operations involving personnel, Operators will provide sufficient on-site lighting to ensure the safety of all persons on or near the site.
- (2) If the facility has a noise barrier, Operators will locate the facility lighting beneath the noise barrier, except for drilling rig lights, which will be shielded and pursuant to Federal Aviation Administration permit requirements if applicable. Operators will take precautions to ensure that lights do not shine out of openings in the noise barrier.
- (3) Prior to the Commencement of Production Operations, Operators will take all necessary and reasonable precautions to ensure that lighting from Oil and Gas Facilities does not unnecessarily impact the health, safety, and welfare of any of the following:
  - A. Persons occupying Building Units within 2,000 feet of the Oil and Gas Facility;
  - B. Motorists on roads within 2,000 feet of the Oil and Gas Facility; and

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- C. Wildlife occupying any High Priority Habitat within 2,000 feet of the Oil and Gas Facility.

**d. Production Phase Facility Lighting When Personnel Are On-Site.**

- (1) After the Commencement of Production Operations, at all Oil and Gas Facilities with active operations involving personnel, Operators will provide sufficient on-site lighting to ensure the safety of all persons on or near the site.
- (2) After the Commencement of Production Operations, when active operations involving personnel are occurring, Oil and Gas Facilities will not exceed the following maximum permissible light levels.

<b>LAND USE</b>	<b>Lumens per square foot of Working Pad Surface</b>
Residential/Rural/State Parks/State Wildlife Areas/High Priority Habitat/Wilderness Areas/National Park/National Monument	1.25
Commercial/Agricultural	2.5
Light Industrial	5.0
Industrial	7.5

- (3) The basis for determining land use designation pursuant to be Rule 424.d.(2) will be the Relevant Local Government's land use or zoning designation. The Director may consult with a Relevant or Proximate Local Government to identify the type of land use of the Oil and Gas Location and its surrounding area, taking into consideration any applicable zoning or other local land use designation.
  - A. To protect public safety and welfare, the Director may require Operators to comply with a lower maximum permissible light level in areas zoned industrial, light industrial, or commercial, if the Oil and Gas Facility will be within 2,000 feet of a Residential Building Unit or High Occupancy Building Unit.
  - B. The Director may require Operators to comply with a lower maximum permissible light level based on the consultation process with Relevant and Proximate Local Governments, CDPHE, or CPW required by Rules 302.g, 309.e, & 309.f.

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- C. In a light mitigation plan submitted pursuant to Rule 424.a, an Operator may request a higher maximum permissible light level than would otherwise be allowed by Rule 424.d.(2), if the Operator demonstrates that both the Relevant and any Proximate Local Governments agree to the higher maximum permissible light level. The Director may apply that higher maximum permissible light level as long as the requested level is protective of public safety, public welfare, and wildlife.
  
  - e. **Production Phase Facility Lighting When Personnel Are Not On-Site.** After the Commencement of Production Operations, Operators will minimize continuous on-site lighting when personnel are not present.
  
  - f. **Cumulative Light Impacts.** Operators will develop site lighting to reduce cumulative nighttime light intensity from all Oil and Gas Facilities to 4 lux at any Residential Building Unit or High Occupancy Building Unit within 1 mile of any Oil and Gas Facility, measured at 5.5 feet above grade in a direct line of sight to the brightest light fixture onsite.