

5-3.6. Use By Special Review – Oil and Gas Facilities

A. INTENT AND APPLICABILITY

1. The intent of this Section 5-3.6 is to describe the approval process and approval criteria to locate an Oil and Gas Facility in unincorporated Arapahoe County and to regulate the surface impacts of an Oil and Gas Facility’s operations to such extent as is reasonable and necessary to protect public health, safety, and welfare and the environment in accordance with the authority provided under SB19-181. Any Oil and Gas Facility and related site preparation or development, including any such Facility that requires a Colorado Energy and Carbon Management Commission (“ECMC”) permit, shall not be located, constructed, or operated within the unincorporated jurisdiction of Arapahoe County without first obtaining Administrative Use by Special Review or Use by Special Review approval in accordance with the Arapahoe County Land Development Code, regardless of the zone district or category in which the operation will be located. If permitted in accordance with the requirements of the Arapahoe County Land Development Code, Oil and Gas Facilities are allowed in all zone districts, including Planned Unit Developments, subject to obtaining all required Federal, State, or other Local permits and approvals, and also subject to continued compliance with the requirements for the Oil and Gas Facility and the operations thereof as set forth in this Land Development Code, unless and to the extent waived or otherwise exempted pursuant to this Land Development Code.
2. No person, firm or corporation shall establish, construct, or build a new Oil and Gas Facility, or modify an existing Oil and Gas Facility subject to the provisions of this Code, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new Oil and Gas Facilities, may be submitted simultaneously with the Colorado Energy and Carbon Management (ECMC) permitting process. So long as they meet County requirements, application submissions to the ECMC or Colorado Department of Public Health and Environment (CDPHE) may be used to satisfy County application submittal requirements.
 - a. The Administrative Use by Special Review process available as provided under this Section 5-3.6 shall apply only to an “Oil and Gas Facility” as defined in Chapter 7-2 of this Land Development Code.
 - b. Nothing in this Section of the Land Development Code is intended to waive or modify any applicable provision of the Arapahoe County Regulations Governing Areas and Activities of State Interest (1041 Regulations).
 - c. All Oil and Gas development authorized by this section shall comply with applicable provisions of the Arapahoe County building and engineering standards, including but not limited to, the Floodplain Regulations, the Building Code, the Grading, Erosion, and Sediment Control (GESC) Manual, the Stormwater Management Manual, the Stormwater Ordinance, and the Infrastructure Design and Construction Standards
3. Nothing in this Section of the Land Development Code is intended to waive or modify any applicable provision of the Arapahoe County Regulations Governing Areas and Activities of State Interest (1041 Regulations).
4. All Oil and Gas development authorized by this section shall comply with applicable provisions of the Arapahoe County building and engineering standards, including but not limited to, the Floodplain Regulations, the Building Code, the Grading, Erosion, and

Sediment Control (GESC) Manual, the Stormwater Management Manual, the Stormwater Ordinance, and the Infrastructure Design and Construction Standards

B. RELATIONSHIP TO STATE OF COLORADO RULES

To the extent that there are differing standards or any conflict between an Arapahoe County requirement and any State of Colorado law, regulation or rule, the stricter standard or law, regulation or rule shall apply. The Operation of a Facility in violation of any applicable federal, state, or other local law or regulation that results in adverse or negative surface impact(s) on or to public facilities and services, water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness and coordination with first responders, security, or traffic and transportation shall constitute a violation of the Land Development Code which may be enforced by law as other violations of the Land Development Code.

C. RELATIONSHIP TO SECTION 5-3.4 OF THE LAND DEVELOPMENT CODE

1. This Section provides for an Administrative Use by Special Review process for Oil and Gas Facilities, so that if an applicant meets administrative approval criteria, as set forth in this Section 5-3.6, and obtains approval pursuant to the process set forth herein, then separate approval under Section 5-3.4.B (Use by Special Review) of this Land Development Code is not required.
2. As an alternative to the Administrative Use by Special Review process set forth in this Section for approval to locate a proposed Oil and Gas Facility in unincorporated Arapahoe County, an applicant may submit an application in compliance with Section 5-3.4 (Use by Special Review), except to the extent modified in 5-3.6.J of this Section. Any Oil and Gas Facility approved through the USR process in Section 5-3.4 as modified by Subsection J of this Section 5-3.6 shall be subject to and operate in compliance with the Operational Standards specified in subsection F of this Section 5-3.6.
3. This Section, and Section 5-3.4 for a USR application if applicable, shall govern all applications for a permit to locate, construct or operate an Oil and Gas Facility, including wells, well pads, access roads and other related infrastructure, within the unincorporated jurisdiction of Arapahoe County. These regulations do not apply to pipelines, gathering systems or transmission lines. Pipelines, gathering systems and transmission lines are governed by the Use by Special Review process outlined in 5-3.4 and by the Arapahoe County 1041 Regulations.

D. ADMINISTRATIVE APPROVAL CRITERIA

In order to obtain Administrative Use by Special Review approval for an Oil and Gas Facility, an applicant shall first satisfy the following Administrative Review Criteria:

1. Satisfy Submittal Requirements: The application and exhibits for the Administrative Use by Special Review must satisfy all applicable submittal requirements in this Section 5-3.6 and in the Development Application Manual.
2. Compliance with Land Development Code Requirements: The proposed Oil and Gas Facility must comply with all siting and design requirements and standards specified in this Section 5-3.6.
3. Environmental/Public Health and Safety Impacts: The proposed Oil and Gas Facility must be designed to protect against and minimize adverse impacts to public health, safety, and welfare and to the environment and wildlife. The Oil and Gas Facility must address

and mitigate any site-specific conditions that, by reason of oil and gas operations at that location, present a risk of adverse impacts to the public health, safety, or welfare, or to the environment and wildlife. Approvals may be conditioned in accordance with these regulations to the extent necessary and reasonable to protect the public health, safety, or welfare, the environment, and wildlife.

4. **Emergency Service Providers:** The Oil and Gas Facility applicant must provide a commitment to serve (“will serve”) letter from the authority having jurisdiction for providing emergency services (fire protection and emergency medical services) for that facility, or if no authority has jurisdiction, provide proof of a contract for emergency services from an emergency services provider with the ability to provide such emergency services.
5. **Facilities on Arapahoe County Owned Property:** For Oil and Gas Facilities proposed on Arapahoe County owned property, including open space property, the applicant shall provide an Alternative Location Analysis (ALA) for the proposed location that meets the requirements of Rule 304(b)(2)(C). as adopted by the Energy and Carbon Management Commission (ECMC) in its Rules and Regulations, as amended from time to time. In the event such ALA demonstrates that a location not on County owned property is technically feasible and can meet the requirements of this Land Development Code for approval, the application for location on County owned property may be denied. In the event the ALA demonstrates that no location other than on the County property is technically feasible, the application shall be processed as a USR in accordance with the provisions of Section 5-3.4 and Section 5-3.6.J of the Land Development Code

E. ADMINISTRATIVE PROCESS

1. Application Process

- a. Applications for an Administrative Use by Special Review for proposed Oil and Gas Facilities will follow the application process outlined in Section 5-2.1.B of the Land Development Code, Common Procedures for an Application.
- b. Once a complete application has been submitted, County staff will refer the application for review to the various divisions of the PWD and other Arapahoe County Departments or Offices, as deemed appropriate. An application may require and will be referred for review to outside agencies such as Colorado Parks and Wildlife (CPW), any life-safety providers, adjacent jurisdictions, local public health department, the U. S. Army Corps of Engineers, and others as may be deemed appropriate.
- c. The applicant shall provide a written response to all staff and referral agency comments.
- d. Upon completion of the referral process and acceptance of the final copy of the complete application and exhibits by the PWD, the application materials will be forwarded for final review to the PWD Director.

2. Neighborhood Meeting

Prior to submitting an application to Arapahoe County, the applicant shall conduct a neighborhood meeting to describe and take neighbors’ input on the proposed Oil and Gas Facility. The applicant shall send notification of the meeting to the Planning Division and to all property owners of record, all occupied residences if occupants are different from record owner, and all registered homeowners’ associations for residential subdivisions where any portion of the platted subdivision’s boundary is within one and a half (1.5) miles of the proposed facility pad boundary. Meetings may be conducted in

person or utilizing an electronic virtual or remote meeting platform. Notice of the meeting must be sent no less than 15 days prior to the scheduled meeting date. At said meeting, the applicant must provide information concerning the development plans for the specific facility, including the timing and phasing of construction, drilling and completion, the planned access route, and mitigations planned to address noise, light, odor, traffic, and visual impacts. The applicant shall include with its application for the proposed facility a summary of the neighborhood meeting and the list of attendees from the sign-in sheet(s).

3. Application Notice Requirements

- a.** The applicant shall provide written notification by U.S. Mail to all property owners of record, all occupied residences if occupants are different from record owner, and all registered homeowners' associations for residential subdivisions where any portion of the platted subdivision's boundary is within one and a half (1.5) miles of the pad boundary of the proposed Oil and Gas Facility that an application for an Administrative Use by Special Review for an Oil and Gas Facility, will be filed with the County. The Notice of Application shall meet the format prescribed by the County and shall be mailed at the time of filing the application with the County. The property owners of record shall be those identified in the County Assessor's property records. The Planning Division will provide the applicant with the names and addresses of the homeowners' associations. The applicant shall determine whether a residence is occupied by someone other than the owner and shall be responsible for such occupants.
- b.** Within five (5) days of filing its application with Arapahoe County, the applicant shall also post a sign listing the case number and type of case (Oil and Gas Facility), the phone number of the Planning Division, and the distance from the sign to the facility. The sign shall meet the format specified in Section 5-2.2.A.3 of the Land Development Code and it shall be posted for a period of at least fourteen (14) consecutive days. The sign shall be posted adjacent to and off the shoulder of the County road or other public highway, and at or near the intersection of the proposed facility's access road and the public road, outside of the right-of-way or at such other location acceptable to and approved by Planning Division staff.
Application Submittal Requirements Found in the Development Application Manual (DAM).

4. Application Submittal Requirements Found in the Development Application Manual (DAM)

Applications for an Administrative Use by Special Review or for a Use by Special Review for an Oil and Gas Facility shall also comply with all relevant submittal requirements as set forth in the Development Application Manual. Applications shall include an application narrative, photo-simulations of the view of the well pad from nearby properties and documentation of floodplain, wetlands and riparian area boundaries.

5. Waiver Requests

An applicant may apply for a waiver or modification of the following requirements for a proposed Oil and Gas Facility: 1) neighborhood meetings; 2) the burying of temporary water lines at driveway and gravel road intersections; 3) visual mitigation; or 4) any other matter specifically identified as being eligible for a waiver or modification in this Section 5-3.6. A request to waive or modify a regulation shall be made in writing at the

time of application and will be evaluated on the merit of the individual request. Requests, ~~including requests for reduction of a setback as allowed in these Regulations,~~ must be justified by specific and extraordinary conditions of the location that make compliance with the particular standard or requirement not reasonably achievable or unnecessary and a showing that granting the request will not be detrimental to public health, safety, or welfare or the environment and wildlife, and is not otherwise inconsistent with the intent and purpose of the standard or requirement. ~~Any request for an administrative reduction in a setback must also demonstrate that by reason of the use of alternative Oil and Gas Facility design, best management practices, control technologies, or proposed conditions of approval the reduced setback will provide substantially the same protection as the required setback.~~ A request under this Section 5-3.6.E.5 shall be submitted to the Director of Public Works and Development for decision. The applicant may appeal that decision to the Board of County Commissioners as provided in Section 5-3.6.G.7, below. A request for a waiver for a proposed Oil and Gas Facility will be decided in accordance with the provisions of this Section 5-3.6.E.5 and is not processed through the procedures for variances specified in Section 5-5.4 of this Land Development Code or subject to review by the Arapahoe County Board of Adjustment.

F. STANDARDS REQUIRED FOR OIL AND GAS FACILITIES

1. Regular Meetings

The Operator of any Oil and Gas Facility approved under this Section 5-3.6 or as a Use by Special Review as provided herein shall meet with the Director of Public Works and Development or his or her designee annually to monitor and discuss pertinent issues associated with the Operator's Facility or Facilities operating in the unincorporated territory of the County. At such Regular Meetings, the Operator and the Director or his or her designee will discuss the Operator's updated development plans, required reporting and recordkeeping, updates to the field-wide Emergency Response Plan (ERP), the facility-specific Emergency Action Plans (EAP) and Tactical Response Plans (TRP), updated leak detection and repair plan, outstanding training requirements, any health and safety issues, and potential implementation of new technology. An annual meeting may be conducted as a field visit to the Operator's Facility or Facilities and may be conducted more often than annually if desired by the Operator. Additional meetings in any one year may be required as necessary to address incidents, operational issues, or other issues related to the Facility or Facilities

2. Setbacks

a. All Oil and Gas Facilities shall be located at least:

- i. 3,000 feet from any occupied structure as measured from the pad boundary.
- ii. 3,000 feet from the nearest boundary of a platted lot smaller than 15 acres in area as measured from the pad boundary.
- iii. 200 feet from any adjacent property's boundary line as measured from the pad boundary.
- iv. 100 feet from public rights-of-ways as measured from the pad boundary.
- v. 3,000 feet from a Designated Outside Activity Area as measured from the pad boundary.
- vi. 3,000 feet from the nearest property line of an operating or closed landfill as measured from the pad boundary.

- vii. Outside of a 100-year floodplain ~~under~~ at least 1,000 feet from the edge of any perennial surface water body that is not a public water reservoir, the ordinary highwater mark of any perennial or intermittent stream, or the edge of any riparian area, whichever is the greater distance, as measured from the pad boundary. Nothing in this setback shall be interpreted as modifying any specific requirement for stream, surface water or riparian areas established with CPW in accordance with ECMC Rules 309 and 1202.
- viii. All access roads shall be at least 250 feet from a residential or non-residential property line, excluding light or heavy industrially zoned properties.
- b.** The setbacks from occupied structures or platted lots referenced in subparagraphs 5-3.6.F.2.a.i and ii above may also be reduced to a lesser setback administratively according to Sections F.2.b.i. through 2.b.iii below:
 - i. If the owner(s) of all of the occupied structure(s) or all owners of the affected platted lots agree in writing to a lesser setback in response to a request for informed consent made in accordance with ECMC requirements for informed consent, and the fire district agrees to provide service to the Oil and Gas Facility, this may be approved through an administrative approval; however, even with owner consent, in no case may the setback be reduced below 1,000 feet; or
 - ii. If, as shown on the Oil and Gas Facility Operations Plan submitted with the application, any and all wells, tanks, separation equipment, compressors and any stored hazardous or explosive materials on the Oil and Gas Facility pad will be located or stored more than the distance of the required setback from the nearest occupied structure or all affected platted lots; or
 - iii. The platted lot and occupied structures setback as measured from the pad boundary may be reduced below 3,000 feet if approved by the Board of County Commissioners through the Use by Special Review process provided in Section 5-3.4 of the Land Development Code. For approval of any lesser setback under this subparagraph, in addition to the criteria set forth in Section 5-3.4, the Operator must establish that the lesser setback as proposed will provide substantially equivalent protection to the setback requirement and that granting the lesser setback will not adversely impact public health, safety, or welfare or the environment. In reviewing the proposed lesser setback, the Board of County Commissioners shall consider the extent to which the operator provides an alternative Oil and Gas Facility design, best management practices, control technologies, or proposes conditions of approval that will be effective to avoid, minimize, or mitigate adverse impacts on the affected properties, considering:
 - (a) geology, technology, and natural features, hazards or topography;
 - (b) the location and use of occupied structures and proximity to those structures;
 - (c) the anticipated size, duration, and intensity of all phases of the proposed oil and gas operations at the proposed oil and gas location; and
 - iv. However, in no case may the setback from occupied structures or platted lots be reduced below 1,500 feet the anticipated size, duration, and intensity of all phases of the proposed oil and gas operations at the proposed oil and gas location.

- v. However, in no case may the setback from occupied structures or platted lots be reduced below 1,500 feet.
- c. The setbacks from a Designated Outside Activity Area may be reduced administratively with the consent of the owner or manager of the Designated Outside Activity Area, or through the USR process, but in no case may the setback be reduced below 2,000 feet for a designated outside actively area.
- d. Provided that the Oil and Gas Facility remains entirely outside the boundary of any 100-year mapped floodplain, the setback from a perennial surface water body that is not a public water reservoir, the ordinary highwater mark of any perennial or intermittent stream, or the edge of any riparian area may be administratively reduced in accordance with the provisions of Section 5-3.6.E.5 and provided that the reduction in setback is supported by an independent third-party professional engineering consultant with appropriate wetlands expertise or an independent third-party Wetlands Scientist, approved by the County and retained and paid for by the operator, and provided such reduction is consistent with any requirement of CPW and is not otherwise opposed by CPW. However, in no case may the setback be reduced below 500 feet.
- e. Reverse Setbacks: No new occupied structure shall be constructed less than:
 - i. 2,0050 feet from an existing Oil and Gas well or pad with the following of any status: active Arapahoe County application, ~~(permitted but not drilled yet, drilling, or completing.~~
 - ii. 1,000 feet from an Oil and Gas well or pad with the following status: ; producing, active gas storage, ~~injecting,~~ shut-in, or temporarily abandoned.
 - ~~i.iii.~~ 250 feet from an existing Oil and Gas well with the following status: ; dry and abandoned, or ~~that was~~ plugged and abandoned ~~prior to 2014.~~
 - ~~ii.iv.~~ 150 feet from a plugged and abandoned oil and gas well or remaining equipment that was plugged and abandoned in 2014 or later.
- f. Public Water Reservoir Setbacks: All Oil and Gas Facilities shall be located:
 - i. At least one mile (5,280 feet) from existing or planned public water reservoirs with a capacity of 100 acre/feet or more and used or to be used for a potable water supply, unless the applicant can demonstrate that the Oil and Gas Facility is downgradient from the reservoir, in which case the setback shall be 3,000 feet. The water reservoir setback shall be measured from the Oil and Gas Facility's pad boundary to the nearest high watermark of the reservoir or as mapped on reservoir plans approved with permitting for a planned reservoir.
 - ii. The downgradient reservoir and planned reservoir setback may be reduced below 3,000 feet if approved through the Use by Special Review process provided in Section 5-3.4. For approval of a lesser setback under this subparagraph, in addition to the criteria set forth in Section 5-3.4, the Operator must establish the following criteria: 1. The owner or operator of the reservoir does not object to the lesser setback; 2. Due to topography or other special condition of the site location, the lesser setback is necessary to allow for safe construction, installation, or operations at the Facility; 3. Alternative Oil and Gas Facility design, best management practices, control technologies, and/or proposed conditions of approval proposed for the Facility will be effective to avoid, minimize, or mitigate adverse impacts upon such drinking water sources, and that with such mitigative measures, the lesser setback as proposed will

provide substantially equivalent protection as the setback requirement; 4. That granting the lesser setback for the Facility as proposed and designed will not adversely impact public health, safety, or welfare or the environment; and 5. No setback may be reduced below 2,000 feet.

- iii. The one-mile reservoir and planned reservoir setback for an Oil and Gas Facility (not downgradient) may be reduced if approved through the Use by Special Review process provided in Section 5-3.4. The approval of an application for Use by Special Review for reservoir setbacks shall not be dependent on the owner or operator's approval of a lesser setback as it is a decision to be made by the Board of County Commissioners. For approval of a lesser setback under this subparagraph, in addition to the criteria set forth in Section 5-3.4, the Operator must establish the following: 1. The owner or operator of the reservoir does not object to the lesser setback; 2. There is no evidence of any hydrological connection to the reservoir or planned reservoir; 3. Due to topography or other special condition of the site location, the lesser setback is necessary to allow for safe construction, installation, or operations at the Facility; 4. Alternative Oil and Gas Facility design, best management practices, control technologies, and/or proposed conditions of approval proposed for the Facility will be effective to avoid, minimize, or mitigate adverse impacts upon such drinking water sources, and that with such mitigative measures, the lesser setback as proposed will provide substantially equivalent protection as the one mile setback; 5. That granting the lesser setback for the Facility as proposed and designed will not adversely impact public health, safety, or welfare or the environment; and 6. No setback may be reduced below 3,000 feet.

~~g. Upon reasonable advance notice, no less than 8 hours, to the Operator, the Operator shall provide access to the fire district having jurisdiction over the facility and to County staff for inspection of the Oil and Gas Facility to determine compliance with applicable provisions of this Land Development Code, fire codes, and public safety standards.~~

~~h. The Operator shall mark all wells and all well pads with directional signage in a conspicuous place at or near the intersection of the access road with the public road, from the time of initial drilling until final abandonment. The Operator shall maintain signs in a good and legible condition and shall replace damaged or vandalized signs within fourteen (14) days. Directional signs shall be placed at locations and shall contain directions sufficient to advise emergency crews where drilling or completion is taking place.~~

~~i. A sign with the Operator's 24/7 contact information, COGCC complaint website, shall be placed at the entrance to the Oil and Gas Facility. All signage content shall follow COGCC regulations for such signage, except to the extent that COGCC regulations are inconsistent with the above stated County signage content requirements.~~

~~j. The Operator shall repair any damages to County infrastructure or property caused by Operator's activities or omissions, or that is caused by any emergencies that occur at the facility, in compliance with the Operator's Road Damage Agreement.~~

~~k. Training~~

~~i. The Operator shall conduct a coordinated training exercise with OEM and the fire district having jurisdiction at the facility for at least one well pad every year.~~

~~If the Operator's standard well pad design layout changes, then an additional coordinated training exercise will be conducted that year and every time the standard pad design changes.~~

~~ii.—Key personnel at an Oil and Gas Facility are required to complete the National Incident Management System (NIMS) training courses IS-100.C and IS-700.B prior to commencement of drilling operations at the Oil and Gas Facility. Key personnel shall include those employees of the Operator and any field consultants who are team leads or equivalent having supervisory authority over any of the oil and gas operations conducted at the Facility. OEM may also specify additional specific training requirements pertinent to the proposed Facility that will be required for key personnel prior to the start of drilling. The Operator shall provide to County certificates of completion of the NIMS trainings required in this paragraph at least one week prior to the start of drilling and shall provide certificates of completion for any new or replacement key personnel at a Facility within one month of the person commencing work at the Facility.~~

~~**l.—Fire Prevention and Procedures**~~

~~i.—The Operator shall work directly with the fire district having jurisdiction over the facility to determine if existing response capabilities are adequate to serve the site. If additional response capabilities are deemed necessary by fire district having jurisdiction over the facility, the operator will work with the fire district having jurisdiction to provide additional fire suppression or emergency response assets needed. The operator will provide the identified assets to the fire district having jurisdiction to maintain and control for emergency response unless otherwise agreed upon in writing by both parties. The need for these additional assets shall be judged on a case by case basis per well pad and may be viewed in terms of the cumulative impact of overall oil & gas development within the fire district having jurisdiction.~~

~~ii.—No open burning, except flaring, shall occur on the site of any Oil and Gas Facility.~~

~~**m.—Incident Reporting**~~

~~i.—All emergencies shall be reported to 911 immediately upon discovery, and as soon as reasonably possible to Office of Emergency Management and the County Local Government Designee (LGD). In the case of an emergency situation where a delay caused by reporting would endanger public health, safety, welfare, or the environment or wildlife, the initial notice may be given orally. Formal incident reports are required for, but not limited to, the following incidents: spills, releases, uncontrolled release of pressure, loss of well control, vandalism, terrorist activity, fires, explosions, detonations, lightning strikes, any accidental or natural event that damages equipment, accidents resulting in fatalities, significant injuries or chemical exposures, or any condition or occurrence that threatens or harms safety on any of the Operator's facilities, including pipelines. Formal written incident reports for all reportable incidents shall be submitted to the Office of Emergency Management, the fire district having jurisdiction at the facility, and the County LGD within three (3) calendar days of the incident. When in doubt as to whether the incident is reportable, the Operator will contact the County LGD.~~

- ~~ii.—In addition to the formal incident report, a post-incident meeting shall be required with County staff. The date, time and location of the post-incident meeting shall be determined by the Public Works and Development Director.~~
- ~~iii.—The Operator shall submit copies of any initial and supplemental spill report filed with the COGCC to the County LGD, OEM, and the fire district having jurisdiction at the facility, as well as any associated remediation reports, all within three calendar (3) days of filing with the COGCC. Those copies may be submitted electronically, if electronic submission is available.~~

~~n.—Spill and Release Reporting~~

- ~~i.—The Operator shall provide a copy of the Spill Prevention, Control and Countermeasures (SPCC) Plan for each facility, prepared in compliance with 40 CFR Part 112 (as amended), to the fire district having jurisdiction at the facility and to OEM prior to the start of production. The Operator shall also provide to the fire district and OEM a listing of hazardous chemicals used on-site if required by the Emergency Planning and Community Right-to-Know Act (42 USC 11001, et seq. as amended) and related regulations. If the holding capacity of any planned on-site equipment or storage tank is changed from what is identified in the SPCC or if the listing of hazardous chemicals is changed from what was identified in the SPCC, the Operator shall update the SPCC and provide the update to the fire district with jurisdiction over the Facility, to OEM and to the LGD.~~
- ~~ii.—The Operator shall make available at each well pad and shall require its field staff or contractors to carry, spill response kits capable of mitigating small to mid-size spills (5 to 50 gallons).~~
- ~~iii.—Operator shall submit all reports required under COGCC Rule 912.b to OEM, the fire district serving the facility, and to the LGD. Spill containment and treatment does not relieve the Operator of any spill incident reporting obligations required under these or other applicable federal, State, or local law or regulations.~~
- ~~iv.—The Operator will install automated safety systems on all new facilities. Each system will include a Surface Safety Valve (“SSV”) or wellhead master control valve, installed before the commencement of the production phase and connected to the production tubing at the surface. The SSV or wellhead master control valve shall be capable of remotely shutting the well in should upset conditions be detected. The SSV will have documented, quarterly testing to ensure functionality per manufacturer’s specifications. The Operator shall maintain and keep the quarterly testing results records for at least three years and said records shall be made available to the County upon request by the PWD Director.~~

- ~~o.—Operator shall provide hand washing facilities meeting Arapahoe County Public Health Department requirements at portable restrooms during drilling and completion operations.~~

3. Health and Safety Requirements

- a.** The Operator must submit an initial facility-specific Emergency Action Plan (EAP), which shall include an initial facility-specific Tactical Response Plan (TRP), with any application for any new Oil and Gas Facility. The initial EAP shall be forwarded to the County Office of Emergency Management (“OEM”) for review. OEM shall review and approve or deny approval of the EAP and TRP within two weeks of

submission by the Operator. Provided that an Administrative Use by Special Review or full USR has been approved for the proposed Oil and Gas Facility and provided that OEM has approved the initial EAP and further provided that required engineering permits have been obtained from Arapahoe County, the applicant or other Operator may commence construction of the pad and access road for the proposed Oil and Gas Facility. After the pad and access road have been constructed, the Operator shall prepare ArcGIS Shape files for the well pad and access road. The initial and detailed EAP and TRP shall follow the templates as specified in the DAM.

- b.** The EAP, including the TRP provisions, shall be updated annually and whenever there is any change in or need to change any of the content of the EAP or TRP, such as but not limited to, the addition or subtraction of chemicals used or stored on site.
- c.** The Operator shall coordinate with the fire district having jurisdiction at the facility in establishing evacuation routes in the event of an emergency at the facility. Evacuation route considerations will include any occupied structures, platted lots, critical infrastructure, public facilities, schools, or other high-occupancy buildings that are within proximity to the oil and gas facility, and routes shall be based on guidance from the fire district and OEM.
- d.** The Operator shall provide and maintain 24-hour contact information for the Operator and maintain 24-hour contact information for all contractors and subcontractors working at the facility. Operator shall provide all such contact information to the County upon request.
- e.** The Operator shall maintain a Hazardous Materials Inventory Statement for all hazardous materials on site at the facility and shall provide the Statement to the fire district having jurisdiction at the facility and OEM on an annual basis.
- f.** The Operator shall provide OEM and the fire district having jurisdiction at the facility with a list of all reportable chemicals used or stored on each site from the time of construction to abandonment of the facility. The list of chemicals will be updated whenever new chemicals are added or removed, and such updated list shall be provided promptly to OEM.
- g.** Upon reasonable advance notice, no less than 8 hours, to the Operator, the Operator shall provide access to the fire district having jurisdiction over the facility and to County staff for inspection of the Oil and Gas Facility, [including flowlines as defined by ECMC](#), to determine compliance with applicable provisions of this Land Development Code, fire codes, and public safety standards.
- h.** The Operator shall mark all wells and all well pads with directional signage in a conspicuous place at or near the intersection of the access road with the public road, from the time of initial drilling until final abandonment. The Operator shall maintain signs in a good and legible condition and shall replace damaged or vandalized signs within fourteen (14) days. Directional signs shall be placed at locations and shall contain directions sufficient to advise emergency crews where drilling or completion is taking place.
- i.** A sign with the Operator's 24/7 contact information, ECMC complaint website, shall be placed at the entrance to the Oil and Gas Facility. All signage content shall follow ECMC regulations for such signage, except to the extent that ECMC regulations are inconsistent with the above stated County signage content requirements.

i.j. [Operator shall provide hand washing facilities meeting Arapahoe County Public Health Department requirements at portable restrooms during drilling and completion operations.](#)

j.k. The Operator shall repair any damages to County infrastructure or property caused by Operator's activities or omissions, or that is caused by any emergencies that occur at the facility, in compliance with the Operator's Road Damage Agreement.

k.l. Training

- i. The Operator shall conduct a coordinated training exercise with OEM and the fire district having jurisdiction at the facility for at least one well pad every year. If the Operator's standard well pad design layout changes, then an additional coordinated training exercise will be conducted that year and every time the standard pad design changes.
- ii. Key personnel at an Oil and Gas Facility are required to complete the National Incident Management System (NIMS) training courses IS-100.C and IS-700.B prior to commencement of drilling operations at the Oil and Gas Facility. Key personnel shall include those employees of the Operator and any field consultants who are team leads or equivalent having supervisory authority over any of the oil and gas operations conducted at the Facility. OEM may also specify additional specific training requirements pertinent to the proposed Facility that will be required for key personnel prior to the start of drilling. The Operator shall provide to County certificates of completion of the NIMS trainings required in this paragraph at least one week prior to the start of drilling and shall provide certificates of completion for any new or replacement key personnel at a Facility within one month of the person commencing work at the Facility.

l.m. Fire Prevention and Procedures

- i. The Operator shall work directly with the fire district having jurisdiction over the facility to determine if existing response capabilities are adequate to serve the site. If additional response capabilities are deemed necessary by fire district having jurisdiction over the facility, including provision for additional protections as determined to be necessary and reasonable by the Fire Protection District having jurisdiction over the Oil and Gas Facility for areas containing wildland urban interfaces, the operator will work with the fire district having jurisdiction to provide such additional response capabilities, including but not limited to fire suppression or emergency response assets, as are determined to be needed. The operator will provide the identified assets to the fire district having jurisdiction to maintain and control for emergency response unless otherwise agreed upon in writing by both parties. The need for these additional assets shall be determined on a case by case basis per well pad and may be viewed in terms of the cumulative impact of overall oil and gas development within the fire district having jurisdiction.
- ii. No open burning, except [authorized](#) flaring, shall occur on the site of any Oil and Gas Facility.

m.n. Incident Reporting

- i. All emergencies shall be reported to 911 immediately upon discovery, and as soon as reasonably possible to Office of Emergency Management and the County Local Government Designee (LGD). In the case of an emergency

situation where a delay caused by reporting would endanger public health, safety, welfare, or the environment or wildlife, the initial notice may be given orally. Formal incident reports are required for, but not limited to, the following incidents: spills, releases, uncontrolled release of pressure, loss of well control, vandalism, terrorist activity, fires, explosions, detonations, lightning strikes, any accidental or natural event that damages equipment, accidents resulting in fatalities, significant injuries or chemical exposures, or any condition or occurrence that threatens or harms safety on any of the Operator's facilities, including pipelines. Formal written incident reports for all reportable incidents shall be submitted to the Office of Emergency Management, the fire district having jurisdiction at the facility, and the County LGD within three (3) calendar days of the incident. When in doubt as to whether the incident is reportable, the Operator will contact the County LGD.

- ii. In addition to the formal incident report, a post-incident meeting shall be required with County staff. The date, time and location of the post-incident meeting shall be determined by the Public Works and Development Director.
- iii. The Operator shall submit copies of any initial and supplemental spill report filed with the ECMC to the County LGD, OEM, and the fire district having jurisdiction at the facility, as well as any associated remediation reports, all within three calendar (3) days of filing with the ECMC. Those copies may be submitted electronically, if electronic submission is available.

9.0. Spill and Release Reporting

- i. The Operator shall provide a copy of the Spill Prevention, Control and Countermeasures (SPCC) Plan for each facility, prepared in compliance with 40 CFR Part 112 (as amended), to the fire district having jurisdiction at the facility, [the Planning Division](#), and to OEM prior to the start of production. The Operator shall also provide to the fire district and OEM a listing of hazardous chemicals used on site if required by the Emergency Planning and Community Right-to-Know Act (42 USC 11001, et seq. as amended) and related regulations. If the holding capacity of any planned on-site equipment or storage tank is changed from what is identified in the SPCC or if the listing of hazardous chemicals is changed from what was identified in the SPCC, the Operator shall update the SPCC and provide the update to the fire district with jurisdiction over the Facility, to OEM and to the LGD.
- ii. The Operator shall make available at each well pad and shall require its field staff or contractors to carry, spill response kits capable of mitigating small to mid-size spills (5 to 50 gallons).
- ~~ii.~~ [iii. Routine field maintenance of vehicles or mobile machinery shall not be performed within 500 feet of any Waters of the United States or state surface waters. All fueling must occur over impermeable material.](#)
- ~~iii.~~ [iv.](#) Operator shall submit all reports required under ECMC Rule 912.b to OEM, the fire district serving the facility, and to the LGD. Spill containment and treatment does not relieve the Operator of any spill incident reporting obligations required under these or other applicable federal, State, or local law or regulations.
- ~~iv.~~ [v.](#) The Operator will install automated safety systems on all new facilities. Each system will include a Surface Safety Valve ("SSV") or wellhead master control

valve, installed before the commencement of the production phase and connected to the production tubing at the surface. The SSV or wellhead master control valve shall be capable of remotely shutting the well in should upset conditions be detected. The SSV will have documented, quarterly testing to ensure functionality per manufacturer's specifications. The Operator shall maintain and keep the quarterly testing results records for at least three years and said records shall be made available to the County upon request by the PWD Director.

~~v.vi.~~ The Operator shall conduct soil contamination sample testing at any location where a spill or release of any fluids have moved off the pad and shall provide the County with the results of such testing upon receipt of the results. Such testing shall include all areas where any fire-fighting fluids, whether in connection with fighting a fire on the pad or otherwise, have moved off the pad. Such testing shall analyze for the materials identified in ECMC Rule 615.e and shall include testing for [polyfluoroalkyl substances \(PFAS\)](#) contamination. Such testing shall be conducted in accordance with the requirements set forth in ECMC Rules 615.e and 913.b.(2) or as such Rules may be amended from time to time.

~~vi.vii.~~ _____ In the event that any surface water located proximate to an Oil and Gas Facility may have been contaminated by a spill or release from the pad, the Operator shall test such surface water for any contamination from the pad and shall provide the County with the results of such testing upon receipt of the results. Such testing shall be done in accordance with the standards set forth in ECMC Rules 615. e and 913.b.(2) or as such Rules may be amended from time to time.

~~vii.viii.~~ _____ In the event that any of the testing shows material contamination from the pad, the Operator shall develop and implement a remediation plan to correct issues that caused the spill or release and to avoid or minimize and mitigate against future such spills or releases. Remediation shall be completed in accordance with all applicable State and Federal laws and regulations.

~~e.p.~~ ~~Operator shall provide hand washing facilities meeting Arapahoe County Public Health Department requirements at portable restrooms during drilling and completion operations.~~

4. Lightning Response

If damage is sustained to any portion of a facility due to a lightning strike, the entire facility shall be shut in immediately and inspected by the Operator, [who shall verify the safety and integrity of the facility](#), prior to restarting operations at the facility.

5. Secondary Containment for Onsite Storage Tanks

- a.** Secondary Containment is required around aboveground produced water and crude oil storage tanks and shall be constructed of steel berms with synthetic liners or earthen berms constructed of compacted soil and armored with cobbles. Secondary containment shall be of sufficient capacity and effective to contain at least 1.5 times the volume of the largest tank.
- b.** Secondary containment is required around any other aboveground storage tanks or containers of any liquid substance other than fresh water on well pads, and specifically including but not limited to solvents, methanol, fuels, coolants,

antifreezes, or lubricants or lubricating oil, and shall have sufficient capacity and be effective to contain at least 1.5 times the volume of the largest tank.

- c. All secondary containment shall be inspected for evidence of discharge weekly by the Operator or their contractors and within 48 hours of any precipitation event sufficient to reduce the capacity of the secondary containment to less than 1.5 times the volume of the largest tank. Such accumulated precipitation must be removed within 24 hours of an inspection.
 - d. The Operator shall keep written records of secondary containment inspections and shall maintain such for at least three (3) years; the Operator shall make such records available to the County upon the written request of the PWD Director.
6. Disposal of Drill Cuttings
Drill cuttings must be disposed offsite at least twice weekly, at a State-approved solid waste facility. No onsite disposal is allowed.
7. Pad Surface
The surface of a pad shall be paved with either crushed granite or gravel, in a sufficient amount to eliminate mud-tracking offsite and to comply with the County's Grading Erosion and Sediment Control regulations.
8. Number of Tanks and Tank Separation Requirements
- a. All oil and produced water storage tanks shall be spaced at least 3 feet apart.
 - b. No Oil and Gas Facility shall be permitted to have more than a combined total of ~~six~~ (6) oil, produced water and/or condensate tanks, or a total Facility capacity of no more than ~~3000~~6750 barrels.

9. Water Supply and Disposal

- a. The Operator must provide proof of adequate water supply and shall identify a water resource lawfully available for industrial use, including oil and gas development. The Operator shall comply with applicable laws, rules, and regulations concerning the source(s) of water used in the drilling, completion and production phases. A fully executed Water Delivery Agreement is required prior to operations.
- b. All flowback and produced water must be disposed of at a licensed disposal site or recycled for use on-site.
- c. Commercial wastewater injection wells used for produced water disposal are prohibited in Arapahoe County.

9.10. Groundwater and Surface Water Sampling and Monitoring

- a. The report/plan shall demonstrate how the development and operations of the facility will avoid adverse impacts to surface and ground waters in Arapahoe County, identify all private and community permitted water wells of public record within ½ mile (2,640 feet) and demonstrate compliance with and implementation of standards in this section of this Code.
- b. The Operator shall, at its own cost, perform initial baseline sampling and testing of all water sources located within one-half (1/2) mile radius of Oil and Gas Facility if given permission requested by the owner of such water source or owner of land upon which such water source is located. If no water sources are available in a one-half mile radius of the proposed Facility, the Operator shall sample and analyze up to two (2) down-gradient and two (2) up-gradient water sources in a one-mile radius of the proposed Facility. The written results of such baseline testing shall be provided to the requesting property owner, ECMC and to the County.

- c. Water sampling and testing shall be performed in accordance with the standards and requirements specified in ECMC's Rule 615~~(e)~~, or as may be amended from time to time and the ECMC Model Sampling and Analysis Plan and shall be performed by independent third-party testing laboratories. The Operator consultants conducting the sampling shall document the GPS location of all water sources tested under this regulation.
- ~~c.d.~~ The Operator shall provide a letter notice to all owners of properties within a one-half (1/2) mile radius of the proposed pad with a water well listed in the State of Colorado Division of Water Resources database to receive permission from those water well owners to have their water wells sampled prior to drilling.
- ~~d.e.~~ The requirement to perform baseline testing of a water source upon request does not apply if the water source has been tested within the last twelve (12) months by any Operator in accordance with the requirements of this regulation and for which prior testing the Operator is able to furnish the results to County. Such testing is not required if the owner denies access to the water source for testing.
- f. The Operator shall also sample and test, ~~on a one-time basis,~~ down-gradient and perennial surface water within a one-half (1/2) mile of a proposed well pad and any existing wells for which planned re-stimulation is planned, prior to the construction phase for new pads and prior to re-stimulation for existing wells.
- ~~e.g.~~ The Operator shall install at least one down-gradient monitoring well on the well pad for each applicable aquifer to sufficiently evaluate the baseline water quality of each aquifer (Alluvial, Dawson, Denver, Arapahoe and Laramie-Fox Hills). The Operator-drilled monitoring wells must be drilled and sampled prior to the subsurface oil and gas activity. Operator shall provide Public Works and Development with the geophysical logs to ensure that aquifer layers are sufficiently identified for adequate sampling to occur.
- ~~f.~~ The Operator shall provide a letter notice to all owners of properties within a one-half (1/2) mile radius of the proposed pad with a water well listed in the State of Colorado Division of Water Resources database, to inform those water well owners of the opportunity to have their water wells sampled prior to drilling.
- ~~g.h.~~ For all water sources for which the Operator has performed initial baseline sampling with permission at the request of the property owner in accordance with these regulations, including water wells, the monitoring wells, and surface water testing required herein, the Operator shall also perform subsequent sampling and testing within six (6) months of drilling of the Oil and Gas Facility, again within twelve ~~twenty-four~~ (1224) months of completion of any well on the Facility, and thereafter every twelve ~~twenty-four~~ (1224) months for the life of all oil and gas wells on the Oil and Gas Facility pad. The written results of such subsequent testing shall be provided to the requesting property owner, ECMC and to the County.
- ~~h.i.~~ If any of the above testing shows contamination from any of the materials identified in ECMC Rule 615.e, including but not limited to free gas or dissolved methane in excess of 1 mg/l or any thermogenic or a mixture of thermogenic or biogenic contamination, the Operator shall develop and implement an action plan to identify any sources of leaks, spills or releases from the pad or from the oil and gas operations that may have contributed to the contamination, and the Operator shall implement appropriate and effective corrective measures. The operator shall provide such plan to the County for comment and review.

~~i-j.~~ The Operator shall perform periodic inspections and testing on a frequency of at least every 6 months, or in the event there is evidence of contamination, of any perennial surface water located within one half (1/2) mile of Oil and Gas Facility. Such monitoring shall be performed at the point of the surface water body or stream that is closest to the Oil and Gas Facility and reasonably accessible for installation of the monitoring equipment. The Operator shall conduct flowline monitoring in accordance with the requirements of ECMC Rule 1102.

~~j-k.~~ All surface and ground water testing required under this regulation shall be conducted in accordance with the requirements of ECMC Rules 615.e and 913.b.(2) and shall be conducted by an independent third party consultant approved by the County and paid for by the Operator.

~~l.~~ If any of the periodic surface water testing shows any material contamination from any of the substances identified in ECMC Rule 615.e, including but not limited to free gas or dissolved methane in excess of 1 mg/l or any thermogenic or a mixture of thermogenic or biogenic contamination, the Operator will notify the County and shall develop and implement an action plan to identify any sources of leaks, spills or releases from the pad or from the oil and gas operations that contributed to the contamination, and the Operator shall implement appropriate and effective corrective measures identified in ECMC Rule 913.b or as amended. The operator shall provide such plan to the County for comment and review.

~~k-m.~~ All data generated by these sampling and analyses requirements shall be produced and distributed in a timely manner, no longer than 5 weeks from the time of sampling to reporting to the water well owner, the property owner of the surface water sampling location, the Public Works & Development Director, Public Health, and the ECMC. Field parameters and observations during sampling shall be provided as a report that includes the analytical data. Analytical data shall be provided in electronic format.

~~l-n.~~ The requirements of this Section shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the ECMC, the EPA, and the Army Corps of Engineers.

~~10.11.~~ Air Quality Monitoring

~~a.~~ Protection of Air Quality: In order to minimize degradation to air quality, Operator shall avoid, minimize, or mitigate all potentially harmful emissions and odors, and avoid, minimize, or mitigate dust associated with onsite activities and traffic on access roads.

~~b.~~ Air contaminant emission sources shall comply with the permit and control provisions of the state air quality control program (C.R.S. § 25-7-101 et seq.) and the rules and regulations promulgated by the State.

~~a-c.~~ An Air Quality Mitigation Plan shall be submitted with all Oil and Gas Facility (O&GF) applications to demonstrate how the Facility will be designed and operated to avoid adverse air quality impacts to public health, safety, and welfare and the environment, or how the design development and operation of the Ffacility will minimize and mitigate such to the extent that the extent and severity of of such adverse impacts cannot be avoided, and shall to air quality, and will demonstrate compliance with and implementation of standards in this section of the Code.

~~b-d.~~ Air Quality Monitoring. The air quality mitigation plan will include a section on air quality monitoring that describes how the Operator will conduct baseline

monitoring prior to construction of the O&G. The monitoring plan shall also describe how the Operator will conduct monitoring on a frequency as specified in these regulations, and collect periodic canister samples (or equivalent method capable of speciated air samples) [for week-long sampling and](#) when [health guidelinesstandards](#) are exceeded during the drilling, completion, and production phases of development. Air pollutants monitored shall include methane and total VOCs (including BTEX). At Operator's cost, a third-party consultant approved by the County shall conduct baseline and ongoing air sampling and monitoring. Such sampling and monitoring shall comply with the following requirements:

i. [Baseline Air Quality Testing](#)

Prior to commencing any construction activities at a new Oil and Gas Facility, the Operator shall conduct baseline sampling of air quality at the site of the proposed facility using a continuous monitoring system that detects the following: wind speed, wind direction, temperature, humidity, pressure, particulate matter (PM2.5 and PM10), and all other possible emissions including but not limited to sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon dioxide (CO), methane, ethane, propane, butane, total volatile organic ~~carbon~~ [compound](#) (VOCs). Baseline testing shall also include a sample to be analyzed by EPA Method TO-15 (Determination of Volatile Organic Compounds (VOCs) in Air), ~~which includes benzene, toluene, ethylbenzene and xylene.~~ Operator shall conduct baseline testing [upwind and downwind](#) within 500' of a proposed O&G over a 30 day period immediately prior to drilling and provide a wind rose diagram to the [Public Works & Development Department County](#) for evaluation of 4 proposed monitoring locations. [Baseline sampling data shall be provided to the County as part of the Oil and Gas permit submittal.](#)

ii. [Continuous Air Monitoring](#)

During Drilling, Completion, and Production Phases, the Operator shall conduct continuous air monitoring using a system with the same detection capabilities as required for Baseline Testing. Continuous air monitoring is defined as sampling on a frequency of at least once per minute every twenty-four hours. Each hydrocarbon monitor shall include a sampling device to automatically collect a speciated air sample when the monitor levels reach [1 ppm average, over 1 hour, total VOCs a threshold concentration level defined by the third-party consultant or in response to a request by Arapahoe County Department of Public Works and Development.](#) Meteorological monitoring is also required during the time period that air quality monitoring is conducted. Continuous monitoring of production operations will continue until three years have passed from the date the last well drilled on the site has entered the production phase, unless a school, licensed child care center, hospital, or residence is within 3,000' of the edge of the well site. In such instance, continuous monitoring shall be required until all wells are plugged and abandoned. Continuation of continuous monitoring may also be required at the discretion of the Director if repeated emissions at threshold concentrations are detected or as a result of repeated odor violations.

[iii. Minimization of Canister-Triggering Emission Events](#)

(a) To minimize canister-triggering emission events, Operator shall implement the following:

- (i) Improve maintenance of separators, particularly mud/gas separators.
- (ii) Design changes to avoid corrosion near choke manifold of separators.
- (iii) Install an additional choke near wellheads to lessen pressure differentials.

(b) Within 72 hours of a canister-triggering event, Operator shall provide a report via email to the LGD and Arapahoe County Public Health summarizing well pad operations at the well pad at the time a canister was triggered.

(c) Operator shall maintain a trigger canister record to facilitate correlations between triggering events and analytical reports received one month later.

(d) Operator shall provide a list of changes made to minimize emissions prior to the drilling phase.

iii-iv. In the event a speciated sample is triggered, the County LGD and Arapahoe County Public Health shall be notified within 72 hours via email or as required by the Director. Depending on the circumstances, expedited lab analysis may be required.

iv-v. The air quality monitoring plan shall meet the minimum requirements of Air Quality Control Commission (AQCC) Regulation 7 section VI.C. and receive approval from the Air Pollution Control Division (APCD) prior to beginning air quality monitoring at the permitted site of the O&GF.

v-vi. When submitting the air quality monitoring plan to ACP~~C~~D the operator shall submit at least 90 days in advance of the pre-drilling monitoring to account for the County's 30-days of pre-drilling air quality monitoring requirement.

vi-vii. The air quality monitoring plan submitted to ACP~~C~~D for review shall include the pollutants identified in this Section.

vii-viii. APCD will review the monthly reports of the air quality monitoring plan through the 6 months of early production. After the 6-months, the Operator shall retain a third-party consultant approved by the County to implement the approved monitoring plan to monitor air quality for the timelines identified in 11.b.c. Monthly reports would then be submitted to the County rather than APCD by the last day of the month.

viii-ix. The Air Quality Mitigation Plan must consider the cumulative impacts to existing air quality including ambient air quality standards for ground-level ozone, meeting oil and gas sector greenhouse gas reduction targets, and the cumulative impacts of all approved and existing oil and gas operations within the County. The cumulative impacts plan prepared for the ECMC may be used to meet this requirement.

ix-x. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction, and standard operations of an O&GF will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.

x-xi. EPA Reduced Emission (Green) Completions, as defined in ECMC Rule 903.c.1, as may be amended, shall be used for all completions and well workovers.

- ~~xi~~-xii. _____ The Following Air Quality Best Management Practices shall be required unless an equal or better system exists:
- (a) Zero emission desiccant dehydrators.
 - (b) Emission controls of 98% or better for glycol dehydrators.
 - (c) Pressure-suitable separator and vapor recovery units.
 - (d) Zero emission pneumatic devices.
 - (e) Automated tank gauging.
 - (f) Require dry seals on centrifugal compressors.
 - (g) Routing of emissions from rod-packing and other components on reciprocating compressors to vapor collection systems.
 - (h) Control emissions by 98% during storage tank hydrocarbon liquids loadout (i.e. loading out liquids from storage tanks to trucks).
 - (i) Reduction or elimination of emissions from flowline maintenance activities such as pigging, including routing emissions to a vapor collection system.
 - ~~(+)(j)~~ Closed loop, pitless drilling, completions systems without permanent on-site storage tanks for containment and/or recycling of all drilling, completion, and flowback fluids are encouraged.
- xiii. General Air Quality Protection Measures
- (a) Operators should work to limit truck traffic to and from the site.
 - (b) Hydrocarbon emissions control of at least 98% or better for crude oil, condensate, and produced water tanks with uncontrolled actual emissions of Volatile Organic Compounds (VOCs) greater than two tons per year (TPY) VOCs.
 - (c) No venting other than if necessary for safety or during an emergency or as otherwise allowable in ECMC rules.
 - (d) Operators shall consolidate product treatment and storage facilities within a facility.
 - (e) Operators shall centralize compression equipment within a facility.
 - (f) Permanent production equipment shall be operated with electric equipment and electric line power, where available.
 - (g) Any combustion device, auto-ignition system, recorder, vapor recovery device, or other equipment used to meet the hydrocarbon destruction efficiency or control efficiency regulation shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
 - (h) Operators shall meet year-round ECMC and CDPHE odor standards. ~~ear-round compliance with the odor standards pursuant to ECMC and CDPHE regulations.~~
 - (i) For planned maintenance activities involving the intentional flaring of gas, the Operator shall provide forty-eight hour (48-hour) advance written notice to the LGD of such proposed flaring. Such notice shall identify the duration and nature of the flaring event, a description as to why flaring is necessary, what steps will be taken to limit the duration of flaring, and what steps the Operator proposes to undertake to minimize similar events in the future.

- (j) Exhaust from all engines, turbines, motors, coolers, and all other equipment must be vented up and away from the nearest residences.
- (k) Operator shall participate in Natural Gas STAR program or other voluntary programs to encourage innovation in pollution control at the Oil and Gas Location.
- (l) Combustion Devices
To the extent flares, thermal oxidizers, or combustion devices are utilized, all such flares shall be designed and operated as follows:

 - (i) The combustion device must be fired with natural gas and designed to operate with a ninety-eight percent (98%) or higher hydrocarbon destruction efficiency.
 - (ii) The combustion device must be designed and operated in a manner that will ensure no visible emissions during normal operation. Visible emissions mean observations of smoke for any period or periods of duration greater than or equal to one (1) minute in any fifteen (15) minute period during normal operation, pursuant to EPA Method 22. Visible emissions do not include radiant energy or water vapor.
 - (iii) The combustion device must be operated with a flame present at all times when emissions may be vented to it, or another mechanism that does not allow uncontrolled emissions.
 - (iv) The combustion device will have no visible flame, with the exception of the pilot light, from the Oil and Gas Location boundary. The combustion device shall completely conceal the flame.
 - (v) All combustion devices must be equipped with an auto-igniter unless manned while in use.
 - (vi) Any emissions must be routed to and controlled by a flare or combustor operated with at least a 98% destruction removal efficiency for hydrocarbons.
 - (vii) For any flares or combustion devices used, manufacturer test or other data must be maintained and demonstrate that the device has a destruction removal efficiency of 98% for hydrocarbons.
 - (viii) If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare's pilot light burner. A telemetry system shall be in place to monitor pilot flame and shall activate a visible and audible alarm in the case that the pilot goes out.
 - (ix) If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually, and a device shall be installed and used to continuously monitor the electric arc ignition system.
- (m) Air quality mitigation plan shall include measures to be taken on Ozone Air Quality Action Days:

 - (i) Operator shall implement emission reduction measures to respond to air quality action day advisories posted by the Colorado Department of Public Health and Environment for the Front Range Area, including minimizing vehicle and engine idling; reducing truck traffic and worker traffic; delaying vehicle refueling; suspending or delaying use of fossil

fuel powered ancillary equipment; postponing construction activities; postponing maintenance activities.

(ii) Within sixty (60) days following the conclusion of each annual Ozone Air Quality Action Day season, Operator must submit a report to the County that details which measures it implemented during any Ozone Air Quality Action Day advisories.

xiv. Compliance Reports

The Operator must submit quarterly reports to the County certifying:

(a) Compliance with these air quality requirements and documenting any periods of material non-compliance, including the date and duration of each such deviation and, if not rectified prior to submission of the report, a compliance plan and schedule to achieve compliance; and,

(b) That the equipment at the Oil and Gas Location continues to operate within its design parameters, and if not, what steps will be taken to modify the equipment to enable the equipment to operate within its design parameters. The quarterly report must contain a certification as to the truth, accuracy, and completeness of the reports, signed by a Responsible Official, as defined by the CDPHE. The Operator will also provide the County with a copy of any self-reporting submissions that Operator provides to the CDPHE due to any incidence of noncompliance with any CDPHE air quality rules or regulations at the Oil and Gas Location.

(c) If EPA, CDPHE and ECMC standards for emissions and odors become more stringent in the future, the Operator will update its Air Quality Mitigation Plan to comply with the revised, more stringent guidelines.

xii-xv. Leak Detection and Repair

During the Production Phase, the Operator shall develop and maintain a Leak Detection and Repair (LDAR) program as required by CDPHE using modern leak detection technologies such as (but not limited to) infra-red (IR) cameras for equipment used on the Oil and Gas Facility. Inspections must occur at least monthly. More frequent inspections may be required based on the design, size and location of the facility, or as appropriate based on continuous monitoring. If an infrared (IR) camera is used, operator shall retain an infrared image or video of all leaking components before and after repair. Any leaks discovered by operator, including any verified leaks that are reported to the operator by a member of the public, shall be reported to the County immediately upon discovery. Any leaks detected shall be promptly repaired within 72 hours, and a written report thereof documenting what leaked, the duration of the leak, the estimated volume of the leak, and such remediation and repair measures taken in response.

(a) Leak Detection and Repair Plan shall be submitted with all O&GF applications and updated at least once every three years. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair, and report leaks, and shall demonstrate how it will comply with and implement the standards in this section of the Code.

- (b) The provisions of this section of the Code are applicable to both new and existing O&GF.
- (c) Operators shall conduct leak detection and repair inspections at every O&GF a minimum of once every month or at greater frequencies as required by the APCD (Air Pollution Control Division) or Arapahoe County PWD, for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Arapahoe County PWD and ACHD and County Local Government Designee (LGD) upon request. [Reports of leaks shall include a diagram of the leak location.](#)
- (d) Repair of leaks shall occur within 72 hours of detection. If a leak is not repaired within 72-hours, the Operator must use other means to stop the leak including, but not limited to, isolating the component or shutting in the well, unless such other means will cause greater emissions. If it is anticipated that a repair will take longer than 72 hours, the Operator shall provide a written explanation to the LGD and ACHD as to why more time is required and how the leak will be contained.
- [\(e\) Verification of leak repairs shall be provided with the notice of the leak if the leak is repaired at the time of inspection. An IR camera video shall be provided if requested by the County. If the leak is repaired the following days, verification of the repair shall be sent the day of the repair.](#)
- ~~(e)~~(f) _____ Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment require the Operator to take the most appropriate safety response action, which may include shut down of the affected equipment or facility and not be allowed to resume operation until the Operator has provided evidence that the leak has been repaired.
- ~~(f)~~(g) _____ At least annually, Operators shall provide a 2-week notice of a routine leak inspection to the LGD and ACHD inviting them to attend and observe the inspection.

~~xiii-xvi.~~ _____ Data

The Operator shall maintain the data collected from such baseline sampling, continuous monitoring and LDAR program and equipment maintenance logs for a period of three (3) years from the date of its collection and shall supply such data to Arapahoe County PWD and to CDPHE and ECOM on a monthly basis.

~~xiv-xvii.~~ _____ Sampling and Monitoring

~~M~~Continuous monitoring to detect leaks or measure hydrocarbon emissions and monitor meteorological data shall be required as provided in these regulations. All sampling and monitoring shall be performed by an independent third-party consultant, approved by the County and paid for by the Operator. Samples shall be taken at such locations as are established by the consultant as most effective, and continuous monitoring equipment shall be maintained at a minimum of four locations on and around the Oil and Gas Facility. Any continuous monitoring system shall be able to alert the operator of increases in air contaminant concentrations [above health guidelines](#). Operator shall report any onsite events that may have contributed to excess emissions within [two weeks of the event](#)~~24 hours~~ of the ~~emission concentration~~ exceedance [of health guidelines](#).

~~xv-xviii.~~ _____ Air quality requirements for both new and existing facilities.

~~xvi-xix.~~ _____ New and existing O&G shall utilize operational provisions to the extent practical to reduce emissions on Air Quality Action Advisory Days posted by the CDPHE for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:

- (a) Minimizing vehicle traffic and engine idling,
- (b) Reducing truck and worker traffic,
- (c) Delaying vehicle refueling,
- (d) Suspending or delaying use of fossil fuel powered equipment,
- (e) Postponing construction and maintenance activities unless repairing identified leaks or releases,
- (f) Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
- (g) Postponing or reducing operations with high potential to emit VOCs of NOx.
- (h) Venting is prohibited except as allowed in ECMC rules.
- (i) Flaring is prohibited except as allowed in ECMC rules.

11.12. _____ Noise Mitigation Requirements

- a. Beginning with construction and up to the first 6 months of production, a third-party consultant approved by the County must conduct continuous noise monitoring in fifteen-minute increments near well sites and maintain records for two years to verify the noise mitigation is effect and meets standards. All data shall be made available to the County on request.
- b. Noise emitted from the facility pad shall not exceed 60 dBA or 65dBC, measured at the nearest property line of the property with the nearest occupied structure. These noise levels, as measured, constitute the Maximum Permissible Limit of noise that may be allowed to emanate off site from the Oil and Gas Facility.
- c. During the hours between 7:00 AM and 7:00 PM, the maximum permissible noise levels 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. [The increase in noise is not permissible between the hours of 7:00 PM to 7:00 AM.](#)
- d. The Operator may apply for a modification or waiver to exceed the Maximum Permissible Limit in accordance with and subject to the standards in Section 5-6-3.6.E.5 above where the Oil and Gas Facility is proposed to be located in an area with existing ambient background noise levels that are at or above the Maximum Permissible Limit or if proposed for an area that is sufficiently remote from any property with an occupied structure or any High Priority Habitat, provided that the lack of High Priority Habitat is supported by recommendation of CPW. The Operator may also apply for a waiver in accordance with and subject to the standards in Section 5-6.3.6.E.5 of the requirements below to prepare a noise survey and noise mitigation plan for a pad site that will not contain any oil and gas wells and will not be drilled or fracked.
- e. The Operator shall conduct an ambient noise survey for each proposed well pad no more than 90 days prior to application in order to establish baseline noise levels for

the site, and the Operator shall also conduct noise modeling for the well pad to simulate noise during drilling and completion.

- f.** The noise surveys and the noise modeling shall be used to create a Noise Mitigation Plan for the site for keeping sound emissions from the site within the Maximum Permissible Limit. The Noise Mitigation Plan shall describe noise mitigation practices, equipment, strategies, infrastructure, or other strategies to be used and implemented at the Oil and Gas Facility in order to comply with the Maximum Permissible Level of noise emanating from the Facility. The Operator shall update the Noise Mitigation Plan for any changes in equipment that may reasonably be expected to affect the ambient noise levels at the site or if the Facility is not constructed within two (2) years of the date of the County's Administrative Use by Special Review or Use by Special Review approval for the Facility. The Noise Mitigation Plan shall also be updated if any new occupied structure is constructed within 2,000 feet of the pad boundary, between the time of Administrative Use by Special Review or Use by Special Review approval of the Facility and the commencement of drilling. The Operator shall provide the updated Noise Mitigation Plan and implement any strategies identified in the updated plan prior to putting such new equipment into operation or prior to commencing construction of the Facility as applicable.
- g.** If the noise modeling indicates that noise levels for either or both A-Scale (dBA) and C-Scale (dBC) noise for drilling and completion will exceed the Maximum Permissible Level at the property line of any property with an occupied structure, where that structure is within 2,000 feet of the pad, additional noise mitigation measures will be required as necessary to achieve the Maximum Permissible Level.
- h.** If the noise modeling indicates that drilling or completion activity or production equipment on a well pad without noise mitigation will exceed the Maximum Permissible Limit, notwithstanding other mitigations that may be proposed in the Noise Mitigation Plan, sound walls shall be constructed prior to both drilling and completion commencing.
- i.** The Noise Mitigation Plan shall address noise/vibration through sound walls and other practices such as, but not limited to, utilizing electric equipment, Tier 4 diesel engines, installing mufflers or covers on noisy equipment or the use of Quiet Fleet™, or similar noise mitigation. If sound walls will be required for mitigation of noise during completion, they shall be erected prior to drilling.
- j.** Additional mitigations, as necessary to achieve the compliance with the Maximum Permissible level, must be described and used by the Operator if C-scale noise levels are increased to the larger of either (i) 5db over ambient or (ii) 65 dBC at the property line of the property upon which the nearest occupied structure exists. The County may require larger setbacks and/or sound walls or other structures on a case-by-case basis for mitigation of C scale noise, based on data from the noise model.
- k.** The Operator shall follow the most recent and most appropriate BMPs to reduce noise related to drilling and completion.
- l.** Tubular goods may not be unloaded from 8 PM to 7 AM unless there are no occupied structures within 2,640 feet.
- m.** Engine idling shall be minimized. Between the hours of 7:00 p.m. and 7:00 a.m., engine idling is limited to 10 minutes.

- n. The Operator shall provide a 24-hour contact number for noise complaints on the facility sign required in section 5-3.6.F.3.h, as well as the ECMC's complaint hotline number.

12.13. Access Road Standards

- a. Prior to commencing construction of the Oil and Gas Facility, the Operator shall connect the site via an access road designed to support an imposed load of 80,000 pounds that will accommodate emergency response vehicles such as, but not limited to, law enforcement, emergency command vehicles (cars/SUVs), ambulances, hazardous materials response vehicles, water tenders, and fire apparatus during construction and operation of new tank batteries, new drilling activity and reworks or recompletions of existing wells, unless a local fire department or fire district agrees in writing to a different or lesser standard for the access road.
- b. Access roads shall be constructed to be at minimum twenty (20') feet wide with at least six (6") inch road base.
- c. The Operator shall maintain such access roads in good condition and suitable for emergency vehicle use until such time as the Oil and Gas Facility has been plugged and abandoned.
- d. If an Oil and Gas Facility site incident could prevent emergency access on public or private roads, the Operator shall construct an alternative access road meeting these standards, unless Office of Emergency Management staff and the fire district having jurisdiction at the facility, determine that the current condition is adequate.
- e. Best efforts will be made to improve inadequate access to existing tank battery sites identified by the fire district or County as determined through service calls and demonstrated problems of access to the site.
- f. The County and/or appropriate emergency response agency may conduct spot inspections of access roads to ensure that emergency access in accordance with this section is maintained

13.14. Odor Mitigation

- a. The Operator shall prevent odors migrating offsite during drilling through the use of low-odor drilling fluid, unless a waiver or modification is allowed under 5-3.6.E.5 of these regulations
- b. The Operator shall use closed-loop systems in place of open pits.
- c. The Operator shall proactively respond to and address odor complaints.
- d. The Operator may be required to address odor complaints with additional measures such as wiping down drill pipe, increasing mud additives, using filtration systems, enclosing shale shakers and frequently transporting drill cuttings offsite for disposal.

14.15. Site Lighting

- a. All site lighting shall be directed downward and inward to prevent light spill outside the pad.
- b. Wherever possible, lights will be mounted on the inside of the sound wall.
- c. Any lights not concealed by a sound wall must be IES (Illuminating Engineering Society) full cutoff or shielded/screened to minimize the amount of light leaving the pad
- d. During the production phase, site lighting shall be turned off between the hours of 10:00 PM and dawn. Motion-sensing lights may remain active during those hours.

- e. Upon receipt of a lighting complaint and review by the Planning Division, the Operator may be required to address lighting complaints within 24 hours of the Planning Division's review of the complaint, with additional mitigation measures.

15.16. Visual Mitigation

- a. Well pads within 1,320 feet of a property line of a property containing an occupied structure, a platted lot, or a parcel of 40 acres or smaller, shall be designed with some form of visual mitigation, to include but not be limited to, low-profile production equipment [and natural paint colors](#), opaque fencing, berming, or landscaping.
- b. Landscaping or fencing around the perimeter of the pad shall be installed within nine (9) months of the first well's completion. The screening shall be designed to minimize visual impacts from adjacent properties and the nearest streets.
- c. Production pads shall be maintained free of vegetation, except such vegetation as may be required for interim reclamation or Arapahoe County GESC regulation requirements, and shall be maintained free of rubbish and debris. For the purposes of this Visual Mitigation regulation only, a production pad may exclude the reclaimed area, approved through a County-issued GESC permit.
- d. Storage of equipment not associated with the on-going oil and gas operations at a specific pad is prohibited on that pad.
- e. Privacy or solid fencing shall be Class 5 – Solid Fencing as defined in section 4.3 of the Land Development Code, at least 8 feet high and painted or stained with natural wood colors.
- f. Whenever possible, the Operator shall use existing natural contours and existing vegetation to conceal the site from view.
- g. Whenever possible, the Operator shall minimize the size and number of tanks and equipment installed or maintained on a production pad. When available, as provided below, use of pipelines to reduce the size and number of tanks and equipment maintained on a production pad is encouraged.

16.17. Locks/Emergency Access Hardware

The Operator shall provide approved emergency access hardware for any locked facility gates or access points.

17.18. Traffic Mitigation and Reduction Measures

- a. The Operator shall make best efforts to schedule its traffic to limit heavy truck traffic on County roads during peak commuting hours and during school bus hours and shall comply with any restrictions established in accordance with the Road Damage Agreement.
- b. The Operator shall use pipelines for the transport of produced water and hydrocarbon liquids from the well pad, wherever available.
- c. To reduce traffic associated with the Operator's drilling and completion activities, the Operator is allowed to use temporary surface lines for transportation of water needed during drilling and completion or Modular Large Volume Tanks (MLVTs) for storage of water needed during drilling and completion. Provided that the MLVT is located on or contiguous with the Oil and Gas Facility pad, the MLVT may be approved with the Administrative Use by Special Review application or by amendment to an approved Administrative Use by Special Review. The Operator may use County Road Right-of-Way, and County drainage culverts, where practical, for the laying and operation of temporary water lines on the surface, provided that

the County's Engineering Services Division approves the locations of the temporary water lines through a street-cut/right-of-way permit issued in accordance with the Arapahoe County Infrastructure Design and Construction Standards. The Operator will bury temporary water lines at existing driveway and gravel road crossings, unless the PWD Director approves an alternative to burying the lines in accordance with section 5-3.6.E.5 above.

- d. Prior to commencing construction of an Oil and Gas Facility, the Operator shall execute a Road Damage Agreement for the site or shall have executed a field wide Road Damage Agreement for all sites within the County. Such agreement shall be in a form approved by and acceptable to the County.
- e. Consistent with the Road Damage Agreement, the Operator shall provide the County with a truck access route for evaluation and approval by the County. The County may require a route that minimizes impact on nearby residents and/or a particular County roadway.

18.19. Wildlife, Wetlands, Riparian Areas and Stream Channel Measures

- a. The Operator shall implement the recommendations of Colorado Parks & Wildlife (CPW) that address any site-specific site conditions. unless a waiver or modification is approved in accordance with Section 5-3.6.E.5 above.
- b. Wetlands boundaries shall be determined by a Professional Wetland Scientist (PWS) and those boundaries shall be indicated on the Administrative Use by Special Review plan.
- c. Crossings of defined streambed and banks (stream channels) by flowlines and pipelines must be bored underneath and not trenched.
- d. All crossings of riparian areas by flowlines and pipelines shall be bored under, starting 500 feet from the edge of the riparian area. All crossings of riparian corridors by access roads will be constructed with culverts, approved by Engineering Services Division.
- e. The Operator shall avoid constructing in CPW-mapped High Priority Habitats (HPH) to the maximum extent possible. If an operator elects to construct in an HPH polygon, then they will be subject to minimization and/or mitigation measures as specified in ECMC's 1200 Series Rules, as well as any applicable CPW recommendations.
- f. Fencing that bisects streams is prohibited.

20. Waste. All waste materials generated by or at an Oil and Gas Facility or by the operations thereof shall be stored, transported and disposed of in accordance with all applicable Federal, State, and Local laws and regulations.

19.21. Floodplains/Floodways Restrictions

- a. Storage of hazardous or floatable materials in the floodplain is prohibited.
- b. Oil and Gas facilities shall not be located in a floodplain. Access roads, and underground pipelines and flowlines are permitted to cross floodplains provided that they are designed to meet Arapahoe County Floodplain Regulations and the Infrastructure Design and Construction Standards or other applicable Engineering Standards and those crossings are in accordance with a Floodplain Development permit issued by the Arapahoe County Floodplain Administrator in accordance with Section 5-4.3 of the Land Development Code.

20.22. Notification of Commencement of Geophysical Exploration/Seismic Testing, Construction, Drilling, Completion, and Flaring

- a. The Operator shall provide advance written notice to the Planning Division of the projected commencement of geophysical exploration/seismic testing; the construction phase, drilling phase, and completion phase of each new well; and each workover one week prior to the start of each phase.
- b. Flaring shall be reported to the County LGD via email or text message prior to flaring whenever possible, or during the flaring event. An updated notice will only be required if the commencement of any phase is delayed more than one week from the original date indicated in the notice.

21,23. New Technologies

The County may require modifications to equipment for drilling, completion, or production operations to incorporate new technologies for reduction of noise, odor, dust or for mitigating other surface impacts caused by the Oil and Gas Facility or its operations if such new technologies are technologically sound, economically practical, and commercially available to the Operator.

22,24. Compliance with Laws and Regulations

The Oil and Gas Facility shall be operated in compliance with all applicable federal, state, and local laws and regulations.

G. INSPECTIONS AND ENFORCEMENT

1. Inspections: In recognition of the potential impacts associated with oil and gas facilities, all well pads may be examined by the inspectors of the County at reasonable times to determine compliance with applicable provisions of this chapter, the International Building Code, and all other applicable standards in these Regulations. The County reserves the right in its reasonable discretion to make spot inspections or to inspect without notice in the event of an issue potentially involving an immediate risk to public health, safety, welfare, the environment, or wildlife, or damage to the property of another or a complaint. The Operator shall make available to the inspector upon request all records required to be maintained by these regulations or to show compliance with these regulations, and the rules and regulations promulgated by the ECMC and the CDPHE, including permits, Air Pollutant Emission Notices (APENs) and other documents required to be maintained by the ECMC, CDPHE and these regulations.

2. State Notification of Violations

The County may contact the appropriate ECMC or CDPHE area inspector if non-compliance issues related to state laws, rules or regulations are identified as a result of field inspections or if noncompliance issues are not resolved expediently.

3. Purpose of Inspections

For the purpose of implementing and enforcing the provisions of this chapter, the inspector and other authorized personnel have the right to enter upon private property. The County may use the information collected on inspections to enforce the requirements of this chapter. The County may also report this information to federal officials, including but not limited to information regarding alleged violations of state and federal rules. Operator shall make available to County, upon request, all records

required to be maintained by these regulations or to show compliance with these regulations, and the rules and regulations promulgated by the ECMC and the CDPHE, including permits, Air Pollutant Emission Notices (APENs) and other documents required to be maintained by the ECMC, CDPHE and these regulations.

4. Notice of Inspection to Operators / Right to Enter

The County reserves the right to inspect any O&GF for compliance. County inspections may occur without Operator present. However, except in the event of an issue potentially involving an immediate risk to public health, safety, welfare, the environment, or wildlife, or damage to the property of another or a complaint, unless urgent circumstances exist, the County will use best efforts to give four (4) hours advance prior notice to the Operator's contact person at the telephone number on file. Inspections in response to odor, noise, or possible violation of rules may occur as soon as feasible upon receipt of the complaint. Routine inspections will be coordinated with the Operator to allow Operator presence onsite to the extent possible and to ensure the site visit is conducted in accordance with all applicable Operator safety requirements. The County reserves the right to increase required inspections if Operator is found to be non-compliant. The County will provide the operator with at least forty-eight (48-hour) hour notice for most inspections to allow the Operator an opportunity to assign staff to accompany the County inspector. Spot inspections may be conducted in the event of suspected non-compliance with County regulations that could result in an environmental or health and safety incident or a complaint.

5. Non-limitation of Actions

The County retains the right to seek whatever remedy or redress is legally allowable. The County reserves the right to seek an injunction action, mandamus action, or any other legally available mechanism to prevent, mitigate, cease, or deter any activity that is detrimental to the public health, safety, and welfare of Arapahoe County residents, the environment, and wildlife.

6. State Notification of Violations

The County may contact the appropriate ECMC or CDPHE area inspector if non-compliance issues related to state laws, rules or regulations are identified as a result of field inspections or if noncompliance issues are not resolved expediently.

7. Cease and Desist

The Director has the authority to issue a Cease and Desist order, requiring the Operator to stop all affected Oil and Gas operations where either there is (1) an emergency condition necessitating the cessation of activities to prevent harm to public health, safety, welfare, wildlife, or the environment, or (2) three or more documented violations which threaten public health, safety, welfare, wildlife or the environment within a six month time frame .

The Cease and Desist order shall be served on the Operator, who may request an appeal to the Board of County Commissioners within seven days, which hearing shall take place within fourteen days of the request.

H. FINES AND PENALTIES

- 1. Any Operator who violates any provision of the operational requirements under these regulations relating to leaks, spills or emissions from the Oil and Gas Facility is subject to a fine as set forth below Land Use Code may be subject to a penalty issued by the Director.**
- 2. If the Director has reasonable cause to believe that a violation is taking place, and has not been corrected, the Director shall issue a Notice of Violation enumerating the alleged violations. Each separate violation of an individual regulation shall be considered a separate violation/infraction, and each day that a violation exists will be considered a separate violation.**
- 3. The Notice of Violation shall identify the facts giving grounds for the violation, the particular provision that is being violated, the potential penalty for such violation, and a demand indicating what action must be taken to remedy the violation.**
- 4. Unless otherwise indicated by the Director, the Operator shall respond in writing to the Notice of Violation within 48 hours providing any proposed remedy and/or defense to the Notice of Violation.**
- 5. Following a review of the response, the Director may either issue a fine, rescind the Notice of Violation, or provide the Operator with additional time to correct the violation.**
- 6. If the Operator disagrees with the fine, the Operator may, within fourteen days issuance of the fine, appeal to the Board of County Commissioners pursuant to §5.1.2.**
- 7. Inspection Report - Amount of Fine**

The Director has the authority to issue a fine up to \$15,000 for each violation and for each separate day. In considering the appropriate amount of the fine to issue, the Director shall consider the following mitigating and aggravating factors:

 - a. Whether the violation resulted in threatened or actual impact to public health, safety, welfare, the environment or wildlife and the degree to which it did so;**
 - b. Whether the violation threatened or actually impacted livestock, wildlife, fish, soil, crops, water, and all other environmental resources and the degree to which it did so;**
 - 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 any leak, release, or spill;**
 - e. Whether the violation resulted in a significant waste of oil and gas resources;**
 - f. The toxicity of leak or spill;**

- g. Whether the violation led to death or serious injury;
- h. The duration of the violation;
- i. Whether the same or similar violations have occurred at the location previously;
- j. Whether the Operator has a history of violations of any applicable rules, of similar or different types, at the location or others;
- k. The timeliness and adequacy of the Operator's corrective actions;
- l. The degree the violation was outside of the violator's reasonable control and responsibility;
- m. Whether the violator acted with gross negligence, or knowing and willful misconduct;
- n. Whether the violator self-reported and the nature and promptness of the response by the violator
- o. Self-audits or compliance monitoring done by the violator; and
- p. Whether violator was cooperative with all agencies involved in working to mitigate the impacts of the violation.

I. GOVERNMENTAL IMMUNITY AND NON-LIABILITY OF COUNTY

These regulations shall not be construed to hold the County or any of its employees or officials, acting within the scope of their employment in any manner, responsible or liable for any damages to persons or property resulting from any inspection, enforcement or review as required by these standards and regulations or resulting from any failure to enforce or inspect, or resulting from the issuance or denial of any building permit, or the institution or failure to institute any court action as authorized or required by these standards and regulations. In enacting these standards and regulations, the Board of County Commissioners intends to preserve all rights of the County, its agencies and departments, its elected and appointed officials and employees to immunity from liability as set forth in the Colorado Governmental Immunity Act, C.R.S. §§24-10-101, et seq.

I. JUDICIAL REVIEW

Decisions of the Board of County Commissioners shall be subject to review as applicable pursuant to C.R.C.P. 106(a)(4).

K. YEARLY FEE FOR INSPECTIONS AND COST OF INSPECTIONS

The County may require operators to pay a reasonable inspection fee for all Oil and Gas Facilities in the County. Fees for Oil and Gas Facility inspections shall be assessed according to the County's adopted fee schedule.

L. FINANCIAL ASSURANCE

The Operator shall provide the County with financial assurance as provided in this section.

1. Administrative Regulations. The Director shall establish administrative regulations for financial assurances consistent with this section. Such requirements shall include, at a

minimum, standard language for each type of financial assurance; qualifications for issuing institutions; and procedures for the review, processing, acceptance, replacement, cancellation and termination, use, release, reduction, or aggregation of financial assurances and standby trusts to implement financial assurances. Such requirements shall be reviewed and updated by the Director as needed to meet the intent of this section.

2. Minimum Requirements

a. Amount

The financial assurance shall be in the amount of ninety-five thousand dollars (\$95,000.00), multiplied by the number of approved wells on the associated planned well site. The Financial Assurance (including any existing Financial Assurance) shall be adjusted for inflation on January 1 of each year thereafter. "Inflation" shall mean the annual percentage change in the United States department of labor, bureau of labor statistics, consumer price index for Denver-Aurora-Lakewood, all items, all urban consumers, or its successor index.

b. Term

The term of the financial assurance shall be provided to the County before the commencement of any work, including well pad construction, and shall remain until all wells at the pad site have been plugged and abandoned and the pad site has been adequately reclaimed to ECMC standards unless alternate financial assurance is provided; or the Director determines that the amount of financial assurance released or reduced is not necessary to ensure the purpose for which it was provided.

c. Type

The financial assurance must be in the form of a surety bond or irrevocable standby letter of credit, or approved combination thereof.

d. Purpose

The Financial Assurance must guarantee, at a minimum, that the Operator will:

- i. Secure the wells, well sites, associated facility lands and infrastructure; plug and abandon all wells at the facility in compliance with State law, and reclaim the facility in compliance with State law;
- ii. Perform all requirements of the application approval for the facility;
- iii. Provide an alternate financial assurance and obtain the County's written approval of such alternate financial assurance upon the issuing institution's cancellation or failure to extend a financial assurance, as provided in this section; and
- iv. Guarantee that, if the Director notifies the issuing institution that the Operator has failed to do any of the foregoing or the occurrence of any event providing for an authorized use as defined in this section, the issuing institution will pay the amount of the bond or letter of credit into a standby trust fund.

3. State and Federal Bonding Requirements

The financial assurance required by this section may be reduced or waived to the extent the federal or state bonding requirements satisfies the requirements of this section.

4. Insurance

Operator shall comply with these insurance standards to: protect human health and safety; prevent damage to property; prevent unacceptable losses to public finances; and prevent unreasonable interference with the public welfare. These standards are established to improve and to prevent degradation to the quality of life and the general welfare in the County. The Director may waive or alter requirements below if Operator can demonstrate that required coverage is not commercially available or not relevant to the operations proposed in its oil and gas application.

- a. The Operator shall maintain or cause to be maintained, with insurers authorized by the state of Colorado and carrying a financial strength rating from A.M. Best of no less than A- VII (or a similar rating from an equivalent recognized ratings agency), at a minimum, the following types of insurance with limits no less than the amounts indicated:
 - i. Commercial General Liability insurance on an occurrence-based form including coverage for bodily injury or property damage for operations and products and completed operations with limits of not less than \$1,000,000 each and every occurrence.
 - ii. Automobile Liability insurance with limits of not less than \$1,000,000 each accident covering owned, hired, and non-owned vehicles.
 - iii. Workers' Compensation insurance- Statutory Workers' Compensation Coverage for the employee's normal State of employment/hire. Including Employer's Liability insurance - with limits of not less than \$1,000,000 Each Accident, Disease - Each Employee, Disease - Policy Limit.
 - iv. Control of Well/Operators Extra Expense insurance - with limits of not less than \$10,000,000 covering the cost of controlling a well that is out of control or experiences a blowout, re-drilling or restoration expenses, seepage and pollution damage resulting from an out of control well or blowout as first party recovery for the operator and related expenses, including, but not limited to, loss of equipment and evacuation of residents.
 - v. Umbrella/Excess Liability - in excess of General Liability, Employer's Liability, and Automobile Liability with limits no less than \$25,000,000 per occurrence;
 - vi. Environmental Liability/Pollution Legal Liability insurance for gradual pollution events, providing coverage for bodily injury, property damage or environmental damage with limits of not less than \$5,000,000 per pollution incident. Coverage to include claims arising during transportation and at non-owned waste disposal sites.
- b. Operator shall add the County and its elected and appointed officials and employees as Additional Insureds under general liability (including operations and completed operations), auto liability, and umbrella liability.
- c. All policies shall be endorsed such that they cannot be canceled or non-renewed without at least 30 days' advanced written notice to Operator and the County, evidenced by return receipt via United States mail, except when such policy is being canceled for nonpayment of premium, in which case ten (10) days advance written notice is required. Language relating to cancellation requirements stating that the insurer's notice obligation is limited to "endeavor to" is not acceptable.
- d. Operator shall, prior to permit issuance, deliver Certificates of Insurance reasonably acceptable to the County confirming all required minimum insurance is in full force and effect.

- e. Deductibles or retentions shall be the responsibility of Operator. Deductibles or retentions must be listed on the Certificate of Insurance required herein and are subject to the reasonable approval of the County.
 - f. Operator shall require any of its subcontractors to carry the types of coverage and in the minimum amounts in accordance with the requirements set out in Section B.1 a, b, and c. Operator shall be responsible for any damage or loss suffered by the County as a result of non-compliance by Operator or any subcontractor with this section.
 - g. If Operator's coverage lapses, is cancelled or otherwise not in force, the County reserves the right to obtain insurance required herein and charge all costs and associated expenses to Operator, which shall become due and payable immediately.
5. Low Producing Wells
The operator of any low-producing well for which no financial assurance has been provided under these regulations shall acquire financial assurance in accordance with these regulations and provide proof of such financial assurance to the County no later than 60 days after a well becomes low-producing for twelve (12) consecutive months.
6. If Corrective Actions are required by the County
Should any corrective actions be required by the County to protect Health, Safety, Welfare and the Environment resulting from failure of Operator to follow regulations, standards or conditions of approval, the performance bond shall be forfeited in an amount sufficient to defray the expense.

M. TRANSFER/SALE OF A FACILITY TO A NEW OPERATOR

At least 30 days prior to the close of the sale the purchasing operator shall submit a report to the Director stating whether the then-current condition of the facility is in compliance with all state laws and the applicable regulations which were in effect in Section 5-3.6 at the time the relevant Oil & Gas application was approved. If non-compliant conditions are discovered, then by the purchase date, the purchasing Operator must submit to the Director a written report detailing a plan and timeline to bring the facility and all of their facilities into compliance as soon as practicable after the purchase date.

G-N. APPROVAL/DENIAL/CONDITIONS OF APPROVAL OF ADMINISTRATIVE USE BY SPECIAL REVIEW/APPEAL

- 1. Action to Approve, Conditionally Approve or Deny**
The PWD Director may approve, approve with conditions, or deny an Administrative Use by Special Review application for an Oil and Gas Facility. Written notice of the decision shall promptly be provided to the applicant, and, if denied, the notice shall include a statement of the reason(s) for denial.
- 2. Revocation of Approval**
Approval may be revoked, after notice of the grounds for such proposed revocation and a hearing before the Arapahoe County Board of County Commissioners, if the Operator fails to meet or fails to continue to meet any requirements of this Land Development Code or any Conditions of Approval governing the installation and operation of an Oil and Gas Facility. The hearing will be conducted as a general business item at a regular

meeting of the Board of County Commissioners. At said hearing, the Planning Division shall present evidence of the grounds for revocation of the approval and the Operator shall be afforded the opportunity at such hearing to present evidence in response to the proposed revocation. The Operator may appeal the Board of County Commissioners' decision in accordance with Rule 106(a)(IV) of the Colorado Rules of Civil Procedure.

3. Recordation

Arapahoe County Public Works & Development shall record the approved permit for an Administrative Use by Special Review or for a Use by Special Review under Section 5-3.4 of the Land Development Code and the approved site plan in the Office of the Arapahoe County Clerk and Recorder within 30 days of the approval. The applicant shall pay any recordation fees.

4. PWD Director's Discretion to Refer to the Board

In lieu of the PWD Director making a decision on an application, the Director has the discretion to refer any application for Administrative Use by Special Review or amendment thereto to the Board for its consideration and decision at a public hearing. In such event, the Board shall make its determination based upon the requirements of this Section; however, unless waived by the Board, compliance with the notice requirements set forth in Section 5-3.4.C.2. is required prior to the Board hearing. At such public hearing, the Board may approve, approve with conditions, or deny the application.

5. Expiration of Approval

- a.** An approval of the Administrative Use by Special Review, as delineated in the application, shall automatically expire three (3) years after the date of recordation, unless the facility is already substantially commenced by the drilling of at least one well on a pad.
- b.** For good cause shown, the Planning Division Manager or designee may grant a time extension to the expiration date stated in this Section for up to one year, upon a written request by the applicant. Such request shall be submitted in writing to the Planning Division Manager no less than sixty (60) days before the date of expiration of the approval.
- c.** The Board may, for good cause shown, grant an additional extension for an additional one-year period.
- d.** If drilling of a well is not completed within the time allowed under the original permit or any extension granted pursuant to this Section 5-3.6.G.5, the approval shall lapse and a new application is required. After a lapsed approval, the Oil and Gas Facility may be constructed, completed, or produced only in compliance with the Land Development Code in effect at the time of the new application.

6. Permits Required Prior to Commencement of Operations

If applicable under the Land Development Code or other Arapahoe County code or regulation, an Access Permit issued under the Infrastructure Design and Construction Standards, a GESC Permit, a Roadway Damage Agreement and Oversize/Overweight Vehicle Permit shall be required prior to the development of an Oil and Gas Facility. A Floodplain Development Permit shall be required prior to any work within a floodplain. A Building Permit may be required prior to construction of structures or the erection of equipment within the Oil and Gas Facility in accordance with the Arapahoe County Building Code.

7. **Appeal of Decision on Application for Administrative Use by Special Review**
An applicant may appeal the Public Works and Development Director's denial of an application for an Administrative Use by Special Review for an Oil and Gas Facility, denial of a waiver request, or any conditions of approval, to the Board of County Commissioners for a de novo hearing. The Applicant must file the appeal within fourteen (14) calendar days of the date of the PWD Director's decision by submitting a letter of appeal to the Planning Division Manager. Thereafter, the matter will be scheduled on the next available agenda of the Board, following public notice required by Section 5-3.4.C.2. At such hearing, the Board may affirm, reverse, or modify the decision of the PWD Director, based upon the criteria set forth in this Section 5-3.6.

H.O. ADMINISTRATIVE AMENDMENT

If the Applicant or the Operator proposes changes from the plans approved through the Administrative Use by Special Review, including but not limited to any changes in the source or location of water to be used by the Oil and Gas Facility, the type and size of equipment on the facility or visual mitigation measures, the Applicant is required to submit an amendment to the approved Administrative Use by Special Review plans showing the proposed changes. The PWD Director may approve, conditionally approve, or deny the proposed amendment in accordance with the provisions of this Section 5-3.6. The proposed amendment will be reviewed by PWD staff and, as needed for the review of the application, PWD Staff may require additional information. The amended application will need to meet all requirements of this Section and be approved in writing. If the BOCC approved the original application on appeal, as a USR, or by reason of its otherwise having been elevated to the BOCC for decision under this Section 5-3.6, the proposed amendment shall be referred to the BOCC for consideration and decision following public hearing as provided in Section 5-3.6.G.4 above. The PWD Director may exercise his or her discretion to elevate any proposed amendment to the BOCC for consideration and decision as provided in Section 5-3.6.G.4 above. Upon recommendation of PWD Staff, the PWD Director may waive the need for amendment of the Administrative Use by Special Review or other BOCC approved Oil and Gas Facility permit provided that the proposed change is found to be minor, with no material effect to or departure from the original approval, and without the potential for significant surface impacts to public health, safety, welfare, or the environment at the Facility site.

I.P. TRANSFER/SALE OF FACILITIES TO A NEW OPERATOR

The Operator must notify the Planning Division in writing within seven days of the closing of any transfer of an Oil and Gas Facility or Facilities to a different Operator or other successor owner. Prior to commencing any operations at the site of the transferred Oil and Gas Facility, the new Operator or successor owner must first provide the following to the County:

1. Letter(s) authorizing the transfer of the Oil and Gas Facility operation as approved through the original Administrative Use by Special Review or Use by Special Review approval for the Facility to the new Operator and the new Operator's written acceptance of responsibility for the operations at the Oil and Gas Facility and agreement to abide by all terms and conditions of the Administrative Use by Special Review or Use by Special Review approval.

2. The Operator must meet with the LGD to discuss any pertinent issue relative to the new Operator's assumption of operations of the Oil and Gas Facility, including plans for development of pipeline installation to serve the Oil and Gas Facility.
3. An updated Emergency Action Plan (EAP) and Tactical Response Plan (TRP), two weeks prior to the transfer, with contact information for at least two employees of the new Operator.

J.Q. NON-ADMINISTRATIVE APPROVAL PROCESS

Use by Special Review approval for an Oil and Gas Facility may also be requested through the process described in Section 5-3.4 of this Code, subject to the following modifications:

1. Plan Format

The site plan shall comply with the requirements of the Development Application Manual, Non-Administrative Use by Special Review for Energy Facilities. In addition, the final document shall be submitted electronically in PDF format through the Accela Customer Access (ACA) Portal. The original signature sheets of the plans shall be printed on 24" x 36" paper notwithstanding the requirements for a Use by Special Review contained in the Development Application Manual.

2. Criteria and Standards

In addition to the criteria set forth in Section 5-3.4 of the Land Development Code, an application for Use by Special Review for an Oil and Gas Facility will also be evaluated under the criteria specified in Section 5-3.6.D above and shall comply with the Standards specified in Section 5-3.6.F above, and shall be operated in compliance with the requirements of this Section 5-3.6. In addition, the provisions of Section 5-3.6.G.1 through 7 shall apply to an Oil and Gas Facility approved as a Use by Special Review. Also, Section 5-3.6.I shall apply to the transfer of any Oil and Gas Facility approved by a Use by Special Review.

3. Expiration of Approval

An approval of a Use by Special Review shall automatically expire three (3) years after the date of recordation, unless the facility well pad is already substantially commenced by drilling of at least one well. The Operator may request and extensions as described in Section 5-3.6.G.5 above.

K.R. ~~ECMCCOGCC~~ AND COUNTY APPROVALS REQUIRED

Development of an Oil and Gas Facility shall not commence until and unless any required permits from the State or County, and a Use by Special Review (administrative or non-administrative) from the County, have both been approved. Prior to construction, the Operator must submit proof of any insurance and bonding that are required or may be required by these rules.

Chapter 7: Definitions

Add the following definitions:

Inspector

Any person designated by the County with authority to inspect an Oil and Gas Facility to determine compliance with section 5-3.6 of the Land Development Code.

O&GF

Oil and Gas Facility

APCD

Air Pollution Control Division (CDPHE)