Version – 3-09-2021

Proposed Oil and Gas Land Use Ordinance

BY AUTHORITY

ORDINANCE NO.

SERIES OF <u>2021</u>

COUNCILLOR'S BILL NO.

INTRODUCED BY COUNCILLORS

A BILL

FOR AN ORDINANCE AMENDING TITLE XI OF THE WESTMINSTER MUNICIPAL CODE REGARDING OIL AND GAS LAND USE REGULATIONS

Whereas, on April 16, 2019, the Governor signed Senate Bill 19-181 - Protect Public Welfare Oil and Gas Operations ("SB 19-181") that grants municipalities more authority to regulate surface and nuisance impacts of oil and gas operations; and

Whereas, SB 19-181 permits municipalities to regulate the surface impacts of oil and gas operations through its land use and zoning powers in a reasonable manner to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources; and

Whereas, SB 19-181 permits municipalities to enact regulations that address the following matters: siting and location of oil and gas operations; impacts 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; traffic and transportation impacts; financial securities; indemnification and insurance to ensure compliance with the regulations; and, all other nuisance-type effects of oil and gas operations; and

Whereas, to implement such powers and authority, SB 19-181 specifically gives municipalities additional authority to: inspect all facilities subject to municipal regulation; impose fines for leaks, spills, and emissions; and, impose fees on operators or owners to cover the reasonably foreseeable direct and indirect costs of permitting and regulation and the costs of any monitoring and inspection program necessary to address the impacts of development and to enforce municipal requirements.

Whereas, oil and gas development creates both short-term and long-term impacts, and it is necessary to consider and address the incremental impacts of past, present, and reasonably foreseeable future actions, regardless of the entity that undertakes such actions; and

Whereas, in adopting regulations, the City of Westminster ("City") considers the precautionary principle when an activity, such as oil and gas development, raises threats of harm to human health or the environment; and

Whereas, prior to the adoption of SB 19-181, State law preempted municipalities from adopting laws that were in operational conflict with rules for oil and gas development set forth in either the Oil and Gas Conservation Act or in the rules and regulations of the Colorado Oil and Gas Conservation Commission ("COGCC"); and

Whereas, the City desires to amend its oil and gas regulations to implement the full extent of its authorities allowed under SB 19-181.

THE CITY OF WESTMINSTER ORDAINS:

<u>Section 1</u>. Section 11-1-6, sub-subsection (A)(1), W.M.C., is hereby AMENDED to add the following fee:

11-1-6: LAND USE AND DEVELOPMENT REVIEW FEE SCHEDULE. (2598 3031 3152 3497 3599 3664)

(A) An applicant for any of the following land use or development reviews shall pay in advance the corresponding fee or fees:

(1) Review Fees: Oil and Gas ODP Review \$5,000

<u>Section 2</u>. Section 11-4-6, subsection (G), W.M.C., is hereby AMENDED to read as follows: 11-4-6: SPECIAL REGULATIONS: (2534 2841 2975 3427 3497 3531 3599 3634 3644 3739 3770)

(G) ADJACENT LAND USE REGULATIONS:

(4) In all zoning districts, including PUD, a new occupied building unit shall be setback two thousand (2,000) feet from any existing or approved oil and gas facility, except for structures that are constructed as a part of that oil and gas facility.

Section 3. Section 11-4-14, W.M.C. is hereby REPEALED AND REENACTED to read as follows: 11-4-14: LAND USE REGULATIONS OF OIL AND GAS OPERATIONS:

(A) PURPOSE: This Section is enacted to protect the public's health, safety, and welfare of all residents of the City and to safeguard the environment and wildlife resources in relation to oil and gas development.

On April 16, 2019, the Governor signed Senate Bill 19-181 - Protect Public Welfare Oil and Gas Operations ("SB 19-181") that grants municipalities more authority to regulate surface and nuisance impacts of oil and gas operations. SB 19-181 permits municipalities to regulate the surface impacts of oil and gas operations through its land use and zoning powers in a reasonable manner to protect and "minimize adverse impacts" to public health, safety, and welfare, the environment, and wildlife resource.

"Minimize adverse impacts" means, to the extent necessary and reasonable, to protect public health, safety, and welfare, the environment, and wildlife resources by avoiding adverse impacts from oil and gas operations and minimizing and mitigating the extent and severity of those impacts that cannot be avoided.

SB 19-181 permits municipalities to enact regulations that address the following matters: siting and location of oil and gas operations; impacts 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; traffic and transportation impacts; financial securities; indemnification and insurance to ensure compliance with the regulations; and, all other nuisance-type effects of oil and gas operations.

To implement such powers and authority, SB 19-181 specifically gives municipalities additional authority to: inspect all facilities subject to regulation; impose fines for leaks, spills, and emissions; and, impose fees on operators or owners to cover the reasonably foreseeable direct and indirect costs of permitting and regulation and the costs of any monitoring and inspection program necessary to address the impacts of development and to enforce municipal requirements.

Prior to the adoption of SB 19-181, State law preempted municipalities from adopting laws that were in operational conflict with rules for oil and gas development set forth in either the Oil and Gas Conservation Act or in the rules and regulations of the Colorado Oil and Gas Conservation Commission ("COGCC").

As the oil and gas industry seeks to obtain the necessary land use approvals relating to its extraction of mineral resources in and around populated areas, it has begun encroaching on residential areas. Accidents related to oil and gas development have highlighted the risks associated with this industrial activity. As such, the City is hereby implementing amended regulations for oil and gas operations and exercising all the authority granted to it under SB 19-181 in a manner to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resource within the City.

Nothing in this Section shall be construed as giving the City authority to enforce State or federal laws, rules, or regulations.

(B) DEFINITIONS: All terms used in this Section that are defined in the Act or in the COGCC rules and regulations and are not otherwise defined in this Section shall have the same meaning as provided in the Act or in such rules and regulations as of the effective date of this Section. All other words used in this Section are given their usual customary and accepted meaning, and all words of a technical nature, or peculiar to the oil and gas industry, shall be given that meaning which is generally accepted in said oil and gas industry. When not otherwise clearly indicated by the context, the following words and phrases used in this Section, whether capitalized or not, have the following meanings:

"Accessory Equipment" shall mean any equipment that is integral to the production and operation of an oil or gas well, including, but not limited to, tanks, treaters, separators, and production pits.

"Act" shall mean the Oil and Gas Conservation Act of the State of Colorado at Sections 34-60-101, *et seq.*, C.R.S.

"Berm" shall mean an earthen barrier of compacted soils preventing the passage of liquid materials, or providing screening from adjacent uses, as may be specified in an applicable design standard.

"Code" shall mean the Westminster Municipal Code.

"COGCC" shall mean the Colorado Oil and Gas Conservation Commission of the State of Colorado.

"Covered Process" shall mean any process at an oil and gas facility.

"Crude Oil Transfer Line" shall mean a piping system that is not regulated or subject to regulation by the PHMSA, pursuant to 49 C.F.R. Section 195 Subpart A, and that transfers crude oil, crude oil emulsion, or condensate from more than one (1) well site or production facility to a production facility with permanent storage capacity greater than twenty-five thousand (25,000) barrels of crude oil or condensate or a PHMSA gathering system. 49 C.F.R. Section 195 Subpart A, in existence as of the date of this regulation and not including later amendments, is available for public inspection during normal business hours from the Public Room Administrator at the office of the COGCC, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. Additionally, 49 C.F.R. Section 195 Subpart A may be found at https://www.phmsa.dot.gov.

"Cumulative Impact" shall mean the impact on the environment which results from the incremental impact of the proposed oil and gas facility when added to other past, present, and reasonably foreseeable future actions regardless of what person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

"Day" shall mean a period of twenty-four consecutive hours.

"Director" shall mean the Director of Community Development or his/her designee.

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

"Flowline" shall mean a segment of pipe transferring oil, gas, or condensate between a wellhead and processing equipment to the load point or point of delivery to a U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration or Colorado Public Utilities Commission regulated gathering line or a segment of pipe transferring produced water between a wellhead and the point of disposal, discharge, or loading. This definition of flowline does not include a gathering line. The different types of flowlines are:

"Wellhead Line" shall mean a flowline that transfers well production fluids from an oil or gas well to process equipment (e.g., separator, production separator, tank, heater treater), not including preconditioning equipment such as sand traps and line heaters, which do not materially reduce line pressure.

"Production Piping" shall mean a segment of pipe that transfers well production fluids from a wellhead line or production equipment to a gathering line or storage vessel and includes the following:

"Production Line" shall mean a flowline connecting a separator to a meter, LACT, or gathering line.

"Dump Line" shall mean a flowline that transfers produced water, crude oil, or condensate to a storage tank, pit, or process vessel and operates at or near atmospheric pressure at the flowline's outlet.

"Manifold Piping" shall mean a flowline that transfers fluids into a piece of production facility equipment from lines that have been joined together to comingle fluids.

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

"Gas Well" shall mean a well, the principal production of which at the mouth of the well is gas, as defined by the Act.

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

"Peripheral Piping" shall mean a flowline that transfers fluids such as fuel gas, lift gas, instrument gas, or power fluids between oil and gas facilities for lease use.

"Produced Water Flowline" shall mean a flowline on the oil and gas location used to transfer produced water for treatment, storage, discharge, injection, or reuse for oil and gas operations. A segment of pipe transferring only freshwater is not a flowline.

"Flowline Exclusion" shall mean a line that would otherwise meet any of the foregoing descriptions will not be considered a flowline if all of the following are satisfied:

-the operator prospectively marks and tags the line as a support line,

-the line is not integral to production.

-the line is used infrequently to service or maintain production equipment.

-the line does not hold a constant pressure.

-the line is isolated from a pressure source when not in use.

"Habitat Protection Area" shall mean areas specifically designated by the City as having a high value and high quantity of wildlife and/or plant habitat. Such areas shall not be used for any surface oil and gas facility. A record of the boundaries of these areas established pursuant to this Section shall be maintained by the Planning Manager, which record is by reference hereby made a part of this Title.

"Incident" shall mean any event classified as a blowout, collision, explosion, fatality, fire, injury, Grade 1 gas leak, or spill greater than five (5) barrels.

"Inherently Safer Systems" shall mean feasible alternative equipment, processes, materials, lay-outs, and procedures meant to eliminate, minimize, or reduce the risk of a safety event, spill, release, or Grade 1 gas leak, by modifying a process rather than adding external layers of protection. Examples include, but are not limited to, substitution of materials with lower vapor pressure, lower flammability, or lower toxicity; isolation of hazardous processes; and use of processes which operate at lower temperatures and/or pressures.

"Injection Well" shall mean any hole drilled into the earth into which fluids are injected for the purposes of secondary recovery, storage, or disposal of wastewater pursuant to authorizations granted by the COGCC.

"Inspector" shall mean any person designated by the Director who shall have the authority to inspect an oil and gas facility to determine compliance with this Section and other applicable ordinances of the City.

"Minimize adverse impacts" means, to the extent necessary and reasonable, to protect public health, safety, and welfare, the environment, and wildlife resources by avoiding adverse impacts from oil and gas operations and minimizing and mitigating the extent and severity of those impacts that cannot be avoided.

"Occupied Building Units" shall mean any building or structure that requires a Certificate of Occupancy or building or structure intended for human occupancy, including homes, schools, and hospitals.

"Oil and Gas Facility or Facilities" shall mean equipment or improvements used or installed at an oil and gas location for the exploration, production, withdrawal, treatment, or processing of crude oil, condensate, exploration and production waste, or gas.

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

"Oil Well" shall mean a well, the principal production of which at the mouth of the well is oil, as defined by the Act.

"Operating Plan" shall mean a general description of a facility identifying purpose, use, typical staffing pattern, seasonal or periodic considerations, routine hours of operating, source of services, infrastructure, and any other information related to regular functioning of such facility.

"Operator" shall mean any person who exercises the right to control the conduct of an oil and gas facility. "Owner" shall mean the person who has the right to drill into and produce from a pool and to appropriate the oil or gas produced therefrom either for such owner or others, including owners of a well capable of producing oil or gas, or both. "PHMSA" means the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.

"Pipeline" shall mean a flowline, crude oil transfer line or gathering line as defined by the COGCC.

"Process Hazard Analysis" shall mean a qualitative, semi-quantitative or quantitative analysis of a process, involving the identification of individual hazards of a process, determination of the mechanisms by which hazards could give rise to undesired events, and evaluation of the consequences of these events on health, property and the environment.

"Production Pits" shall mean pits used after drilling operations and initial completion of a well, including pits related to produced water flowlines or associated with E&P waste from gas gathering, processing, and storage facilities, which constitute:

-Skimming/ Settling Pits used to provide retention time for settling of solids and separation of residual oil for the purposes of recovering the oil or fluid.

-Produced Water Pits used to temporarily store produced water prior to injection for enhanced recovery or disposal, off-site transport, or surface-water discharge.

-Percolation Pits used to dispose of produced water by percolation and evaporation through the bottom or sides of the pits into surrounding soils.

-Evaporation Pits used to contain produced waters which evaporate into the atmosphere by natural thermal forces.

"PUC" shall mean the Colorado Public Utilities Commission.

"Reentering" shall mean accessing an existing well bore for either the original or amended purpose, provided that such well has not been abandoned.

"Risk Analysis" shall mean an analysis performed using the 2016 ISO 17776 standard or similar industry accepted standard acceptable to the City. The risk analysis shall identify enforceable mitigation measures to be included as conditions of approval on the oil and gas permit.

"Root Cause" shall mean prime reasons, such as failures of same management systems that allow faulty design, inadequate training, or improper changes, which lead to an unsafe act or condition and result in an incident. If root causes were removed, the particular incident would not have occurred.

"Sidetracking" shall mean entering the same well from the surface, but not necessarily following the same well bore throughout its subsurface extent, when deviation from such well bore is necessary to reach the objective depth.

"Standley Lake Source Water Protection Zone" shall mean the area surrounding and over Standley Lake that is hydraulically connected to Standley Lake and is protected by the Standley Lake bypass system. This area directly impacts the City's sole drinking water supply and shall not be used for any surface oil and gas facilities or below grade flowlines. A record of the boundaries of this area established pursuant to this Section shall be maintained by the Planning Manager, which record is by reference incorporated herein.

"Surface Water Supply Source" shall mean any water source including, but not limited to, ditch, reservoir, pond, creek, and river that is utilized for the conveyance, storage, or supply of drinking or irrigation water. "Treatment Facilities" shall mean any plant, equipment or other works used for the purpose of treating, separating, or stabilizing any substance produced from a well.

"Twinning" shall mean the drilling of a well adjacent to or near an existing well when the existing well cannot be drilled to the objective depth and/or produced due to an engineering problem, such as collapsed casing or formation damage.

"Water bodies" shall mean reservoirs, ponds, ditches, creeks, rivers, floodplains, and flood ways.

"Well" shall mean an oil or gas well, a hole drilled for the purpose of producing oil or gas, a well into which fluids are injected, a stratigraphic well, a gas storage well, or a well-used for the purpose of monitoring or observing a reservoir.

"Well Head" shall mean the equipment attaching the surface equipment to wellbore equipment at the well. "Well Site" shall mean the areas that are directly disturbed during the drilling and subsequent operation

of, or affected by production facilities directly associated with, any oil well, gas well, or injection well and its associated well pad.

"Woman Creek Reservoir Protection Zone" shall mean the area surrounding and over Woman Creek Reservoir which is critical to the protection of the City's drinking water supply. This area shall not be used for any surface oil and gas facilities or below grade flowlines. A record of the boundaries of this area established pursuant to this Section shall be maintained by the Planning Manager, which record is by reference incorporated herein.

"Working Pad Surface" shall mean the portion of an Oil and Gas Location that has an improved surface upon which oil and gas operations take place.

(C) GENERAL PROVISIONS:

(1) <u>Violations</u>. Within all zoning districts, including Planned Unit Developments ("PUD"):

(a) It shall be unlawful for any person to drill a well, or reactivate a plugged or abandoned well, extract resources from a well, install accessory equipment or pumping systems, or construct a facility that has not been previously approved under this Section, unless an Official Development Plan ("ODP") authorizing such activity or use has first been granted by the City in accordance with the procedures defined in this Section. This prohibition shall not apply to a well that has been approved by the City in an ODP prior to the effective date of this Section, except when any new accessory equipment is installed on an oil and gas facility that was not previously approved on an ODP. When a well has been approved pursuant to this Section, the twinning, sidetracking, or reentering of such well for the purposes of deepening, recompleting, or reworking shall not require a subsequent approval under this Section. The approval of such ODP shall not relieve the owner or operator from otherwise complying with all applicable City, State and federal regulatory requirements.

(b) It shall be unlawful for any person to drill a well on City owned open space, parks, and golf courses.

(2) <u>Inspections</u>. In recognition of the potential impacts associated with oil and gas facilities, all wells and accessory equipment and structures may be examined by the inspectors of the City to determine compliance with applicable provisions of this Section, the International Fire Code, the International Building Code, and all other applicable standards in this Title. For the purpose of implementing and enforcing the provisions of this Section, the inspector and other authorized personnel have the right to enter upon private property after reasonable notification to the operator, which provides the operator an opportunity to be present. The City may use the information collected on the inspections to enforce the requirements of this Section. The City may also report this information to appropriate State and federal officials, including, but not limited to, information regarding alleged violations of State and federal rules. The operator shall make available to the City, upon request, all records required to be maintained by these regulations and the following agencies: the CDPHE, including permits, Air Pollutant Emission Notices, and other documents required to be maintained by CDPHE, COGCC, PUC, PHMSA, and these regulations.

(3) <u>Notifications</u>. The operator shall provide the following notices to the City:

(a) Ten (10) day prior notice of removal of any tank or other equipment.

(b) Thirty (30) day prior notice of all activities associated with plugging and abandonment of well(s).

(c) Ten (10) day prior notice of cutting and capping of abandoned well(s).

(d) Thirty (30) day prior notice of post-plugging and abandonment of well(s) accompanied by photograph of welded cap on well with API number of well, plaque, and GPS coordinates of well(s).

(e) Thirty (30) day prior notice of planned maintenance activities and workover activities. Operator must submit twenty (20) day clearance letter prior to conducting planned maintenance activities and workover activities.

(f) Ten (10) day post notice of maintenance activities taken in response to emergencies.

(g) Thirty (30) day prior notice of planned shutdown of a well.

(h) Thirty (30) day prior notice of commencement of drilling, flowback, hydraulic fracturing or production.

(i) Sixty (60) day prior notice of reactivation of temporarily closed, temporarily abandoned, or shut in wells.

(j) Any other notices required by these regulations.

(4) <u>Reports</u>. The operator shall submit all reports required by these regulations electronically.

(5) <u>Access to information</u>. The operator shall make any and all information regarding operations or activities at the facility available to the City upon request in order to allow the City to ensure continued

compliance with these regulations or the ODP. The operator shall provide any information requested by the City as needed to ensure the facility is meeting its continued obligation to protect and minimize adverse impacts to public health, safety and welfare, the environment, and wildlife resources.

(6) <u>Sales and Use Tax License</u>. An operator of a well subject to the provisions of this Section shall at all times have a valid City sales and use tax license. Such license may be obtained by filing an application with the City Clerk. All operators shall comply with applicable provisions of Title IV of this Code relating to taxation.

(7) <u>Land Disturbance Permit</u>. A land disturbance permit shall be obtained prior to the grading or construction of any improvements for an oil and gas facility.

(8) <u>Building Permit</u>. Building permits shall be obtained prior to the construction of any aboveground structure to the extent required by the City Building Code.

(9) Inspections of Pre-Existing Facilities.

(a) The City may inspect the items listed in this section at pre-existing oil and gas facilities.(b) Operators shall inspect all oil and gas facilities, including shut-in and temporarily abandoned facilities, as follows:

(i) Soil sampling for contamination within the boundaries of existing facility pads annually;

(ii) Equipment-assisted inspection for emissions or releases, including use of best available technology (such as infrared cameras), at least every thirty (30) days; and

(iii) Visual inspections for liquid leaks at least every thirty (30) days.

(c) Operators shall report the date, methodology, subject, and results of all inspections to the City monthly.

(d) Spills, leaks, and releases of any substance other than fresh water, including spills of produced water, oil, condensate, natural gas liquids, all spills outside of secondary containment, gas leaks, and E & P waste, must be reported to the City Local Governmental Designee immediately upon discovery and no later than six (6) hours thereafter. When leaks, spills, or releases are discovered by City, operator inspection, or otherwise, the enforcement mechanisms and penalty provisions in Section 11-4-14, W.M.C. shall apply.

(i) Reporting. For spills or other releases meeting the Colorado reporting requirements pursuant to Section 25-8-601(2), C.R.S., operators shall adhere to all Colorado reporting requirements. If the City determines the spill or leak is reportable to any agency, the City may make such report.

(ii) Clean-up. Any leak, release, or spill shall be cleaned up according to applicable local, state, and federal laws, including Colorado Water Quality Control Commission regulations, the Oil and Pollution Act, and the Clean Water Act. Operators shall notify the City immediately upon completion of clean-up activities, at which time the City will inspect the site and either approve the clean-up or impose additional requirements, which may include penalties under Section 11-4-14, W.M.C.

(iii) Root Cause Analysis. A root cause analysis of any spill, leak, or release of any substance other than fresh water that resulted in serious bodily injury or fatality, serious environmental harm, was a Grade 1 gas leak as defined by the COGCC, or is otherwise requested by the City must be submitted to the City within thirty (30) days of the leak, spill, or release.

(D) REVIEW REQUIRED: Within all zoning districts, including PUD, when an applicant wishes to drill a well, reactivate a plugged or abandoned well, extract resources from a well, install accessory equipment or pumping systems, or construct a facility that has not been previously approved under this Section, it is unlawful for any person to perform any such activity, unless an ODP has first been reviewed by the Planning Commission and approved by the City Council pursuant to this Section. When an ODP has been approved

for a well, the reentering of such well for the purposes of deepening, recompleting, or reworking shall not require a subsequent approval under this Section, unless such work requires a new or modified ODP from the City. The approval of such use by ODP does not relieve the operator from otherwise complying with all applicable City, State, and federal regulatory requirements.

The operator shall submit an application for an ODP each time an existing oil and gas facility undergoes a substantial modification. Substantial modification includes removal, replacement or modification of equipment, or similar changes to the facility that increase harmful emissions, noise, or odor, or other modifications to the facility that adversely impact public health, safety, welfare, the environment, or wildlife resources. Substantial modifications do not include minor changes that provide equivalent or greater protections than those required under this Section.

(E) OFFICIAL DEVELOPMENT PLAN REVIEW PROCESS FOR OIL AND GAS OPERATIONS:

(1) <u>Pre-application materials submitted by operator to staff</u>. Prior to the submission of an application for an ODP, the operator shall submit the operator name, parent companies or related companies, demonstration of financial capability of operator to comply with these regulations, previous violations of any local, State, or federal rule or law of the operator within the last ten (10) years, three (3) proposed locations of the facility, number of wells and access points, size of well pad, amount and type of equipment, proposed pipeline routes and any previous spacing unit approvals, and proof of ownership and access to the oil and/or gas reserves that will be extracted.

(2) <u>Pre-application meeting</u>. Following the submission of pre-application materials, the operator shall meet with the City to review the proposed new well or facility. The goal of this meeting shall be for the City staff and the operator to review the proposed oil and gas facility in a manner that ensures compliance with these regulations and applicable State and federal regulations. The pre-application meeting shall also allow the operator and City staff to explore site-specific concerns associated with the proposed locations, discuss project impacts and potential mitigation methods, including field design and infrastructure construction to avoid or minimize impacts, to discuss coordination of field design with other existing or potential development and operators, to identify sampling and monitoring plans for air and water quality, and other elements as required by these regulations.

(3) <u>Notice of pre-application</u>. The operator shall mail pre-application notices ninety (90) days prior to submission of any ODP application to the City and prior to submittal of any Form 2 or 2A to the COGCC. The operator shall pay for the cost of mailing notices. Notice shall include number of wells, size of well pad, type and measurements of proposed major equipment. Owners of record shall be ascertained according to the records of the Clerk and Recorder of Adams County or Jefferson County, whichever is applicable. Notice shall be made as follows:

(a) To the City, to surface owners, and all property addresses of the parcels of land on which the oil and gas facility is proposed to be located.

(b) To all property addresses and property owner addresses, if not the same, of parcels of land within two thousand six hundred and forty (2,640) feet of the parcel on which the oil and gas facility is proposed to be located.

(c) It shall be the responsibility of the applicant to:

(i) Prepare the list of addresses to which notices are required to be sent under subsection (a) and (b), above. Such list shall contain the name and mailing address of property owners from the County Assessor's records and City address records.

(ii) Prepare an accurately scaled map using County Assessor's maps identifying the subject site, and the location of the properties to be notified.

(iii) Deliver to the Planning Manager the items listed in paragraphs (i) and (ii) above in a City-approved format at least fifteen (15) days prior to the pre-application meeting.

(iv) Mail, by first-class mail, the individual notices to the listed property owners and addresses, at least ten (10) days prior to the date of the pre-application meeting. Also,

the applicant shall provide the Planning Manager, prior to the pre-application meeting, a certification that the required notices were mailed and receipts of the mailing.

(4) <u>Alternative site analysis</u>:

(a) At the pre-application meeting, the operator shall identify three proposed locations for the oil and gas facility. The proposed locations shall meet the City's siting regulations. For each location, the operator shall provide a scaled map showing the distance of the proposed facility to existing or platted residences, occupied building units, parks, open space, formal trail systems, schools, hospitals, water bodies, Habitat Protection Areas, Standley Lake Source Water Protection Zone, Woman Creek Reservoir Protection Zone, Standley Lake Park and Wildlife Refuge, groundwater wells, any wildlife habitats listed in COGCC rules and regulations, existing active and decommissioned wells, and roadways within two thousand six hundred and forty (2,640) feet of the proposed sites.

(b) The operator shall consult with the City on the alternative site analysis prior to submittal of any spacing application or Form 2 or 2A to the COGCC. Operators are encouraged to schedule this meeting prior to entering into any surface use agreements.

(c) The City shall review all proposed locations in order to determine which location complies with the purpose of these regulations. If the Director determines that none of the three proposed locations satisfies the purpose of these regulations, the operator shall submit three new proposed locations.

(d) The City shall prepare a report summarizing its findings with respect to proposed locations and recommending one (1) or more proposed locations.

(5) <u>Application submittal</u>. All requests for an ODP shall be submitted in writing to the Planning Division and shall include an application fee of five thousand dollars (\$5,000.00) and a report that discusses the results of the alternative site analysis required by Section 11-4-14, W.M.C.

(6) <u>Neighborhood meeting</u>. Following the submission of an application to the Planning Division, and before submitting an application to the COGCC, the operator shall schedule and notice a neighborhood meeting. A neighborhood meeting shall be required for any application for an ODP. The operator shall notice, attend, and conduct the neighborhood meeting. The operator shall work with the City to ensure the neighborhood meeting is conducted at an appropriate time and location, to be approved by the City. The operator shall provide the City with a mailed notice. The public may submit comments on the application to the operator at the neighborhood meeting. The operator shall prepare a written summary of the comments received at the neighborhood meeting, and submit the summary to staff.

(7) <u>Notification of application</u>. The operator shall mail notice of the application no more than ten working days after an application has been submitted to the City. The operator shall pay for the cost of mailing notices. Notice shall include number of wells, size of well pad, type, and measurements of proposed major equipment. Owners of record shall be ascertained according to the records of the Clerk and Recorder of Adams County or Jefferson County, whichever is applicable. Any notices provided are considered a courtesy and consideration of the application may proceed despite claims of a lack of notice. Notice of the application shall include reference to the neighborhood meeting and be made as follows:

(a) Mailed notice.

(i) To the surface owners and all property addresses of the parcels of land on which the oil and gas facility is proposed to be located.

(ii) To all property addresses and property owner addresses, if not the same, of parcels of land within two thousand six hundred and forty (2,640) feet of the parcel on which the oil and gas facility is proposed to be located.

(b) It shall be the responsibility of the applicant to:

(i) Prepare the list of addresses to which notices are required to be sent under subsection (a), above. Such list shall contain the name and mailing address of property owners from the County Assessor's records and City address records.

(ii) Prepare an accurately scaled map using County Assessor's maps identifying the subject site, and the location of the properties to be notified.

(iii) Deliver to the Planning Manager the items listed in paragraphs (i) and (ii) above in a City-approved format at least fifteen (15) days prior to the neighborhood meeting.

(iv) Mail, by first-class mail, the individual notices to the listed property owners and addresses, at least ten (10) days prior to the date of the neighborhood meeting. Also, the applicant shall provide the Planning Manager, prior to the pre-application meeting, a certification that the required notices were mailed and receipts of the mailing.

(c) Posted notice. The real property proposed to be developed shall also be posted with a sign, giving notice to the general public of the proposed development. For parcels of land exceeding fifteen (15) acres in size, two (2) signs shall be posted. The size of the sign required to be posted shall be as established in the supplemental notice requirements of Section 11-5-13, W.M.C. Such signs shall be provided by the City and shall be posted on the subject property in a manner and at a location or locations reasonably calculated by the City to afford the best notice to the public. Posting shall occur a minimum of ten (10) calendar days prior to the neighborhood meeting. The City shall post notice on its website, and the operator shall post notice on its website, if one exists.

(8) Staff review. Following receipt of the operator's written summary of the neighborhood meeting, City staff shall review the application to ensure the application protects and minimizes adverse impacts to public health, safety, and welfare, the environment, and wildlife resources. An application may require review by outside agencies such as the U.S. Army Corps of Engineers, if the project impacts a floodplain, and may also be referred to any life-safety providers, adjacent jurisdictions, local public health department, CDPHE, COGCC, State Engineers Office, and Colorado Department of Parks and Wildlife, and others as may be deemed appropriate by staff. The City may require that the application materials, including proposed locations, results of alternative site analysis, and requests for variances be submitted to a technical consultant deemed by the City to be appropriate and necessary to complete the review. Costs associated with such review shall be paid by the operator. The applicant will be notified of any outstanding issues in connection with application materials upon completion of this review and shall address any issues or deficiencies in connection with the application materials. If necessary, a meeting shall be held to discuss any issues that need to be resolved. If necessary, the applicant shall then submit an amended application, plan or other submittals, as appropriate, to staff for verification that deficiencies have been addressed by the applicant. If revisions were necessary, staff shall review such revised application. Upon determination by staff that all issues have been resolved, staff will submit the application to the Planning Commission and City Council.

(a) Prior to any review of a proposed ODP, the applicant shall provide:

(i) Either the written consent of all owners of the property in the proposed ODP or evidence otherwise satisfactory to the Planning Manager of the applicant's authority to represent the owners of the property.

(ii) Evidence of ownership and encumbrances satisfactory to the City and such other information as may be reasonably required to evaluate the proposed application.

(iii) A non-refundable application fee as specified in the Land Use and Development Review Fee Schedule set forth in Section 11-1-6, W.M.C., shall be paid at the time of application for any proposed ODP.

(9) <u>Staff recommendation</u>. After completing its review, staff shall submit its written report and comments to the Planning Commission and City Council, along with the alternative site analysis report required by Section 11-4-14, W.M.C. The recommendation of staff shall either be a recommendation to approve, to approve with conditions, or to deny the request. If the recommendation is to approve with conditions, the recommendation shall set forth the conditions and those requirements as deemed necessary

to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources.

(10) <u>Notice and hearing before the Planning Commission</u>. Upon public notice as required by the Code, the Planning Commission will hold a public hearing. Planning Commission shall consider staff recommendations and shall make a recommendation to approve, to approve with conditions, or to deny the application. Factors to be considered are those specified in this Section. The Planning Commission shall hold a public hearing prior to making its recommendation. Notice shall be given in accordance with subsection 11-5-13 (A), W.M.C.

(11) <u>Notice and hearing before the City Council</u>. Upon public notice as required by the Code and following the review by the Planning Commission, the City Council will hold a public hearing. City Council shall consider staff and Planning Commission recommendations and shall make a final decision to approve, to approve with conditions, or to deny the application. Factors to be considered are those specified in this Section. The City Council shall hold a public hearing prior to making its final decision. Notice shall be given in accordance with subsection 11-5-13 (A), W.M.C.

(12) <u>Decision to be stated in official minutes</u>. Any decision of the City Council on an ODP shall state in the official minutes of the hearing the reasons for such decision.

(13) <u>Duration</u>. All ODPs for oil and gas facilities approved by City Council after July 5, 2021, shall be valid for one (1) year from the approval date. If construction of the approved use has begun by the end of the specified period, the approval shall remain valid so long as development of the facility continues, and the operator is in compliance with this Section. If construction of the approved use has not begun at the end of the specified period, or if it thereafter ceases, the approval shall be deemed void and of no further force and effect, and no permits shall be issued until and unless the ODP is reapproved by the City Council. Development of the facility shall be considered ceased if the land disturbance permit is no longer valid.

(F) OFFICIAL DEVELOPMENT PLAN FOR OIL AND GAS OPERATIONS AND SUBMITTAL REQUIREMENTS: All applications for an ODP are subject to review by the Planning Commission and approval by the City Council pursuant to this Section. All applications for an ODP shall include the following information, which is subject to review by the Planning Commission and approval by the City Council:

(1) The operator's and surface owner's names and addresses, and designation of agent, if applicable.

(2) A list of all permits or approvals obtained or to be obtained from local, State, or federal agencies, including the COGCC.

(3) A detailed site plan for all facilities that includes submittal to the City of all documents required to be submitted with COGCC Form 2A, a depiction of all visible improvements within five hundred (500) feet of the proposed location to include buildings/residences, public roads and trails, major above-ground utilities, railroads, pipelines, mines, water bodies, including, but not limited to, reservoirs, ponds, ditches, creeks, and rivers, floodplains, habitat protection areas, Standley Lake Source Water Protection Zone, Woman Creek Reservoir Protection Zone, groundwater wells, oil/gas/injection/water/plugged wells, etc. as required by COGCC Rule 303.d(3)C, and the site plan requirements of the Code. Information on gathering lines and pipelines shall include the age, size, pressure in the line, depth of bury, and substance transported.

(4) A detailed site plan showing all below grade utility infrastructure required to be disclosed to COGCC for below grade mapping and locating.

(5) A detailed site plan showing the setback of the oil and gas facilities from adjacent property lines. For proposed oil and gas locations near occupied building units, no working pad surface shall be located less than two thousand (2,000) feet from the property line of one (1) or more occupied building units, unless one (1) or more of the following conditions are satisfied:

(a) All of the occupied building unit owners and residents within two thousand (2,000) feet of the working pad surface explicitly agree with informed consent to the proposed oil and gas location;

(b) Any wells, tanks, separation equipment, or compressors proposed on the oil and gas location shall be located more than two thousand (2,000) feet from the property lines of all occupied building units; or

(c) The operator obtains a variance pursuant to Section 11-4-14(K)(3), W.M.C.

(6) A summary of planned operations, including identified access points and operational timeline for posting to a local community information webpage.

(7) A detailed site plan for site preparation, mobilization, and demobilization that covers all phases of operation.

(8) An interim plan for reclamation and revegetation of the well pad and final reclamation of the well pad.

(9) The vicinity maps for a facility submitted with an application for an ODP shall be submitted as a sheet within the ODP showing the following information:

(a) Topographic detail and the location of all existing water bodies or any physically defined channel including the direction of water flow within a one-half mile radius of the proposed well.

(b) Location of existing oil and gas wells or injection wells as reflected in COGCC records. This information shall be submitted on a map and shall include any and all wells within a two thousand (2,000)-foot radius of the proposed location for the well.

(c) Location of drill site. The information to be submitted shall be on COGCC Form 2 or include the information required to be submitted with a Form 2 and shall include the parcel tax identification number.

(d) Proximity to critical protection areas such as habitat protection areas, Standley Lake Source Water Protection Zone, and Woman Creek Reservoir Protection Zone.

(10) Project schedules for all phases, including site construction, flowline and pipeline construction, drilling, completions (broken down into activity-based components), commissioning, operations, reclamation, and abandonment.

(11) Administrative fees.

(12) Information demonstrating that the operator is capable of fulfilling and is likely to fulfill the obligations imposed by this Section and the Oil and Gas Conservation Act, including:

(a) A certified list of all instances within the past ten (10) years where the COGCC, other State or federal agency, city, or county found that the operator has not complied with applicable federal, State, or local requirements with respect to drilling, operation, or decommissioning of a well, or operation of an oil and gas facility or pipeline The list shall identify the date of the determination, the entity or agency making the determination, the nature of the non-compliance, and, if applicable, the final resolution of the issue and procedural or policy changes that were implemented to prevent future infractions and which adequately demonstrate effectiveness. If no such instances of non-compliance exist, the operator shall certify to that effect.

(b) A list of all near-misses and incidents within the past ten (10) years that occurred at Facilities owned or operated by operator, an operator's legacy companies, or a subsidiary of operator, including events involving contractors. The operator shall also list any root causes analysis conducted and corrective actions taken in response to the near-misses and incidents, including internal changes to corporate practices or procedures, such as modifications to safety management plans.

(c) A map that shows all of the operator's mineral rights, including lease rights, whether owned by the operator or a parent or subsidiary entity, inside or within two thousand (2,000) feet of the boundaries of the City.

(d) A description of a process for the operator's acceptance, processing, and resolution of any and all complaints submitted to state agencies or the operator directly by members of the public stemming from any adverse impact from oil and gas facilities and operations.

(13) A noise and vibration impact mitigation plan that protects and minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall include noise modeling for pre-construction and active drilling, hydraulic fracturing, and flowback, which shall be conducted by a third-party consultant approved by the City.

(14) A recreation plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources demonstrating that the facility shall avoid causing degradation to the quality and quantity of recreational activities in the City. Consideration shall be given to designated environmental resources, trails, and recreational uses, as identified in the Open Space Stewardship Plan or Parks Master Plan or identifiable on or near the site.

(15) A light and dust mitigation plan that plan for light and dust mitigation that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources.

(16) An air quality plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The air modeling plan shall be conducted by a third-party consultant approved by the City. The plan shall include facility emissions inventories for all greenhouse gas emissions, criteria pollutants and hazardous air pollutants, and air quality impact studies for drilling, completions and production operations based upon proposed equipment use, operation phases, and any emissions reductions associated with plugging and abandonment. In addition, the plan shall include emissions associated with truck traffic for drilling, completions, production, and plugging and abandonment operations. Air modeling shall demonstrate that:

(a) Emissions from the proposed facilities and associated truck traffic shall not cause or contribute to exceedances of the National Ambient Air Quality Standards.

(b) Emissions from the proposed facilities comply with federal air quality and odor rules, including EPA's New Source Performance Standards and National Emission Standards for Hazardous Pollutants.

(c) Emissions from the proposed facilities comply with COGCC and CDPHE air quality and odor rules and regulations.

(d) Emissions from the proposed facilities comply with City emission control regulations.

(e) Emissions shall be below the most protective health-based guidelines, including those set by CDPHE, EPA, California, or others.

(17) An air monitoring plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The air monitoring plan shall be conducted by a qualified third-party consultant approved by the City. The plan shall describe how the operator will conduct baseline monitoring within five hundred (500) feet and at select nearby receptors of a proposed facility prior to construction and during all phases of development including drilling, completion, production, and operation. The plan shall include monitoring for all potential emissions, including but not limited to, Methane (Ch4), VOCs, Hazardous Air Pollutants (HAPs), BTEX, Hydrogen Sulfide, Oxides of Nitrogen (NOx), Particulate Matter (PM), Fine Particulate Matter (PM 2.5), Carbon Monoxide (CO) and Carbon Dioxide (CO2). The operator shall pay for the baseline and ongoing monitoring.

(18) An air quality mitigation plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources and demonstrates compliance with the following:

(a) EPA, CDPHE, and COGCC rules and regulations for emissions. If these regulations become more stringent in the future, the operator shall update its air quality mitigation plan to

comply with the revised guidelines as such regulations exist now or future, more stringent, regulations.

(b) Compliance with 2017 CDC Agency for Toxic Substances and Disease Registry and USEPA Integrated Risk Information System ambient air quality guidelines. If these guidelines become more stringent in the future with more restrictive guidelines for benzene, toluene, ethylbenzene and xylene (BTEX), and other air toxins, the operator shall update its air quality mitigation plan to comply with the revised guidelines.

(19) An electrification plan identifying all sources of electricity that shall be brought to or used at the facility during all phases of operations.

(20) An emergency preparedness and response plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The emergency preparedness and response plan shall be approved by the City Fire Department in order to be deemed complete. Oil and gas operations shall avoid risks of emergency situations such as explosions, fires, gas, oil or water pipeline leaks, ruptures, hydrogen sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or spills. Oil and gas operations shall ensure that, in the event of an emergency, adequate practices, procedures, and infrastructure are in place to protect public health and safety and repair damage caused by emergencies. The applicant shall complete the Front Range Emergency Resource Co-op template. The plan shall be updated on an annual basis, after an incident occurs, or when changes are made to facility operations, personnel, or other content covered in the plan. The plan shall demonstrate compliance with the following:

(a) Adequate provisions to ensure the operator shall cover all costs associated with ongoing training of employees and first responders, response and remediation, including any additional onsite and regional specialized equipment and supplies necessary to respond to any emergency incident at its facilities.

(b) The operator shall cooperate and train with City Fire Department emergency responders as requested by the City.

(c) The operator shall participate in training, drills, exercises, and development of the afteraction report.

(d) The operator shall immediately notify the City, surrounding communities, and any nearby schools, hospitals, and long-term care facilities of an emergency event and develop emergency protocols with the City Fire Department, Jefferson County Department of Public Health or Tri-County Health, and the City Police Department.

(e) The operator shall provide to the City safety and security protocols for the facility site.

(f) The operator shall provide a copy of any spill prevention, control, and countermeasures plan to the City if required by USEPA rules and a copy of a listing of hazardous chemicals used on site if required by USEPA CERCLA Community Right to Know rules.

(h) The operator shall maintain onsite storage of aqueous film forming foam (which shall not contain PFAS), absorption boom and granulated materials for ready deployment in case of leaks or other emergencies. The operator shall notify first responders of the location of said materials.

(i) The operator shall identify and provide twenty-four (24)-hour contact information for contractors and subcontractors. The operator shall provide the company name, address, email, and mobile phone contact information for two individuals associated with the company and who will serve as twenty-four (24) hour emergency contacts and who can ensure a timely and comprehensive response to any emergency.

(j) The operator shall coordinate with the City Fire Department regarding evacuation routes. Evacuation routes shall include any schools, hospitals, and long-term care facilities that are within proximity to the oil and gas facility, based on guidance from the City Fire Department.

(k) Fire hydrant exists within one thousand (1,000) feet from oil and gas facility. If no fire hydrant connected to the City's water system or alternative approved of by the City exists within one thousand (1,000) feet from facility, the operator shall install fire hydrant at its own cost, or reimburse the City for the cost of installing a fire hydrant.

(21) A weed control plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall demonstrate avoidance of degradation to vegetation and pollinators and shall require that weeds not be higher than twelve (12) inches.

(22) A traffic control plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The operator shall provide financial security to cover any damage to public infrastructure during all operations, including construction, drilling, completions and production. The operator and subcontractors shall comply with the City and other jurisdictions' requirements related to traffic restrictions. The operator shall conduct a baseline report of conditions of the roads to be used by the operator and the remaining road life for the proposed truck routes. Haul and access roads shall be designed per City standards. Where available, existing private roads shall be used. Prior to the start of construction, operator shall complete a traffic study and provide detailed traffic plan to determine any operational changes and geometric modifications necessary for extraction activities. This shall include, but is not limited to:

(a) Detail of access locations for each facility, including sight distance, turning radius of vehicles and a template indicating feasibility, turning volumes in and out of each site for an average day and what to expect during the peak hour.

(b) Estimated weights of vehicles when loaded, a description of the vehicles, including the number of wheels and axles of such vehicles and trips per day.

(c) Anticipated truck traffic volumes shall be converted to equivalent single axle loads and compared with existing volumes.

(d) Core drill or boring samples of City roads shall be used to determine the adequacy of the existing roadway structure and determine if the roadway section is adequate for oil and gas activities.

(e) Truck routing map and truck turning radius templates shall be used to determine if improvements are necessary at intersections along the route.

(f) Identification of the need for any additional traffic lanes.

(g) Restriction of Class 7 vehicles or above from facilities to periods outside of peak AM and PM traffic periods (generally seven (7)- nine (9) A.M. and three (3)-six (6) P.M. during weekdays or in other specific instances as determined by the Transportation Engineer).

(h) Require a traffic study to determine impacts to City streets.

(i) Restriction of idling or parking on shoulders of roads.

(j) Periodic training of employees and subcontractors on traffic safety and traffic requirements.

(k) The study shall identify any habitat protection areas, Standley Lake Source Water Protection Zone, Woman Creek Reservoir Protection Zone, and any areas of critical habitat for COGCC listed species in a graphic and narrative form sufficient to assess any potential hazardous condition to these critical sites.

(23) A visual mitigation plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources and complies with applicable COGCC rules and regulations, including, but not limited to, a list of the proposed colors for the facilities, regardless of construction date, which are observable from any public roadway, providing for paint that is uniform, noncontrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to, but slightly darker than the surrounding landscape and a listing of the operations' equipment. The plan shall indicate the location of all outdoor lighting on the site and any structures and include cut sheets of all proposed fixtures. The operator shall provide a photometric study approved by City prior to start of construction to indicate impact on surrounding properties and measure the lumens emitted from the facility outside of the walls. The plan shall avoid causing degradation to the scenic attributes and character of the area, including view corridors and vistas, as identified in the Comprehensive Plan. It shall also provide for screening or fencing the proposed facility in order to mitigate visual impacts and protect wildlife. The facility shall be sited and located in a manner that is compatible with surrounding buildings. Separation from buildings shall be considered the most effective measure to ensure compatibility. Natural topography and existing vegetation; prevailing weather patterns, including wind directions; and hilltops, ridges, slopes and, silhouetting shall be considered in the plan.

(24) A water supply plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The operator shall submit estimated water supply requirements for all phases of operation of the oil and gas facility and usage for the proposed development including:

(a) Demonstration that the available water supply is the least detrimental to the environment among the available sources and adequate to meet the needs of the development. Approval may be conditioned upon sufficient proof of adequate water supply.

(b) An estimate of the amount of water needed for all phases of the oil and gas facility.

(c) A list of all available physical sources of water for the project including infrastructure descriptions, and if multiple sources are available, analysis of which source is least detrimental to the environment.

(d) Contracts or other documentation necessary to prove that the water has been legally obtained and will meet all requirements of the State Engineers Office and associated water decrees shall be provided.

(e) A description of the physical source of water that the applicant proposes to use to serve the oil and gas facility.

(f) Water conservation measures, if any, that may be implemented within the oil and gas facility, including any plans for recycling water or treating it to a standard suitable for non-potable uses.

(g) An estimate of the amount of water that will be used at the site, where and how the water will be consumed, the amount of wastewater produced, and disposal plans for wastewater.

(h) Use of City water is prohibited.

(25) A water quality control plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall demonstrate that all facilities use the most effective performance techniques and best management practices to minimize impacts to water quality, including plans for water quality testing, prevention of illicit or inadvertent discharges, and containment of pollutants as required by the Code and State and federal laws and regulations. The owner or operator shall provide the City with the information it provides to the COGCC ensuring compliance with the water quality protection standards contained in any applicable COGCC rules and regulations governing water quality protection. The owner or operator shall provide its plans concerning downhole construction details and installation practices, including casing and cementing design, and shall inform the City how the plans establish that the facility does not create significant degradation to surface waters or drinking water aquifers. All costs associated with testing and monitoring shall be borne by the operator. The owner or operator shall notify the Director of any changes to the design, construction, or operation of the facility that could impact water quality. The City retains the right to deny design, construction, or operational changes that could negatively impact surface or groundwaters.

(26) A land disturbance plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall demonstrate that the facility will not cause significant erosion or sedimentation and minimizes the amount of cut and fill.

(27) A stormwater management plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall identify possible pollutant sources that may contribute pollutants to stormwater, best management practices, sampling procedures (if required), and inspections that, when implemented, will reduce or eliminate any possible water quality impacts.

(28) A risk analysis and risk management plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources and demonstrates that an appropriate safety management plan and emergency response and preparedness plan is in place.

(29) A phasing, abandonment, and reclamation plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall clearly demonstrate the improvements and mitigation measures needed during each phase of work. The plan shall

demonstrate how the wells will be abandoned and what measures will be taken for reclamation of disturbed lands.

(30) A wetlands protection plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall demonstrate that the facility will not alter historic drainage patters and/or flow rates or will include acceptable mitigation measures to compensate for anticipated drainage flows.

(31) A hazardous materials management plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall identify hazardous materials that will be used or stored at the facility or site, (including those disclosed through the "Frac Focus" process), the physical hazards they present, the quantity on hand (daily and maximum), the storage method and location, and any other pertinent information that is of value to employees exposed to the materials and/or first responders in the event of an accident or incident. The operator shall provide copies of all safety data sheets to the City prior to each phase of operation.

(32) A waste management plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall identify waste types and associated hazards, the approximate quantities, storage method(s), transportation and management method(s), communication and training of employees, identification of individuals responsible for waste management by facility or site, spill and release prevention methods, emergency management strategies (including spill containment), and inspection types and frequencies. The operator shall recycle drilling, completion, flowback, and produced fluids, unless technically infeasible. Waste may be stored temporarily in tanks and shall be transported by pipelines and disposed of at licensed disposal or recycling sites. Disposal of wastewater is not permitted within the City.

(33) A historical and cultural resources plan that protects or minimizes adverse impacts to public health, safety and welfare. The plan shall assess historical and cultural resources in and around the proposed facility and include such information and proposed mitigation measures. If a significant surface or subsurface archeological site is discovered during construction, the operator shall be responsible for immediately contacting the City to report the discovery. If any disturbance of a site deemed by the State Historic Preservation Office to be a historical or cultural resource occurs, the operator shall obtain approval from such Office in consultation with the Historic Landmark Board detailing required protection and mitigation measures to be implemented to preserve any historical or cultural resources potentially affected by the facility, and to provide a copy of such approve to the City.

(34) Evidence of adequate financial security required by the City and applicable COGCC rules and regulations.

(a) Information related to the operator's financial fitness to undertake the proposed oil and gas operations, including materials (audited, where appropriate) such as the following:

(i) Balance sheets for the previous five (5) fiscal years;

(ii) Operating cash flow statements for the previous five (5) fiscal years;

(iii) List of long- and short-term debt obligations;

(iv) List of undercapitalized liabilities;

(v) Statements necessary to calculate net profit margin, debt ratio, and instant or current solvency ratio;

(vi) Certified copies of all current financial security filed with the COGCC; and (vii) Tax returns for the prior five (5) years.

(35) An environmental impact assessment of the facility completed by a qualified third-party that includes, but is not limited to, the following:

(a) At least one (1) on-site evaluation within three (3) months of the submittal to the City.

(b) A map and photographs of the site.

(c) Identification and assessment of potential impacts to the environment and wildlife, including wetlands; floodplain; ponds; creeks, streams and drainageways; migratory birds and

raptors; ground nesting birds; prairie dogs; burrowing owls; State and federal threatened and endangered species for both flora and fauna; any other applicable wildlife issues, including den sites for mammals, such as coyotes and foxes; fish and other aquatic life; wildlife corridors; significant habitat; natural landmarks and prominent natural features, such as distinctive rocks and land forms; vegetation including grasses, shrubs and trees; and, visual or scenic resources.

(d) Identification and assessment of potential impacts to habitat protection areas.

(e) Identification and assessment of potential impacts to the Standley Lake Source Water Protection Zone or the Woman Creek Reservoir Protection Zone.

(f) Confirmation that the proposed project shall comply with the City's policies for prairie dog conservation and management.

(g) Identification of proposed project design measures or other relevant mitigation measures to avoid unacceptable impacts or to reduce impacts to levels of insignificance.

(h) Prior to construction, the operator shall submit a twenty (20)-day environmental clearance letter confirming that any environmental and wildlife conditions identified in the environmental assessment have been adequately mitigated and addressed and that the Standley Lake Source Water Protection Zone and the Woman Creek Reservoir Protection Zone are avoided. Facilities are prohibited to be operated in the Standley Lake Source Water Protection Zone and the Woman Creek Reservoir Protection Zone and the Woman Creek Reservoir Protection Zone. Road construction, both permanent and temporary, are prohibited within the Standley Lake Source Water Protection Zone and the Woman Creek Reservoir Protection Zone.

(36) A geological study that demonstrates that the proposed well locations are outside geologically sensitive areas. The study shall include maps of any jurisdictional dams, potential risk of earthquake caused by fracking operations, and include an analysis of earthquake risk to those jurisdictional dams.

(37) An odor mitigation plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. The plan shall demonstrate how the operator will minimize odors from its operations and comply with Colorado Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emissions, 5 CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, COGCC odor requirements and any other applicable regulations. The plan shall also provide a plan for timely responding to odor complaints from the community and for identifying and implementing additional odor control measures to control odors emanating from the oil and gas facility. The plan shall also require the operator to notify the City no later than twenty-four (24) hours after receiving an odor complaint and cooperate with the City in responding to complaints.

(38) A floodplain and floodway plan that protects or minimizes adverse impacts to public health, safety and welfare, the environment, and wildlife resources. Facilities and equipment are prohibited in floodways, as defined by the Federal Emergency Management Agency. Facilities and equipment shall not be located in the one hundred (100)-year floodplain unless all alternate locations outside of the floodplain that allow for extraction or transportation of the resource are more detrimental than the proposed location in the floodplain. All above-ground oil and gas facilities approved in a floodplain shall comply with the flood protection measures in Title XI, Chapter 8, W.M.C. Tanks in the five hundred (500)-year floodplain also require flood protection measures.

(39) A cumulative impacts analysis that demonstrates that the cumulative impacts associated with the proposed facility, including the greenhouse gas emissions, air impacts, traffic impacts, noise, odor, water use and quality, wildlife, and other environmental impacts are avoided or are minimized and mitigated to the extent they cannot be avoided.

(40) If the Director determines that the City needs additional information, including underlying data, analysis, modeling, or reports or other documentation to determine whether the proposed oil and gas facility meets the approval criteria in subsection 11-4-14 (G), W.M.C., the Director may require the applicant to submit such information.

(G) STANDARDS FOR APPROVAL OF AN OFFICIAL DEVELOPMENT PLAN FOR OIL AND GAS OPERATIONS: An application for approval of an ODP for oil and gas development shall demonstrate that the provisions of the ODP protect and "minimize adverse impacts" to public health, safety, and welfare, the

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environment, and wildlife resources. "Minimize adverse impacts" means, to the extent necessary and reasonable, to protect public health, safety, and welfare and the environment by avoiding adverse impacts from oil and gas operations and minimizing and mitigating the extent and severity of those impacts that cannot be avoided. The Planning Commission and City Council shall consider the direct and cumulative impacts of the proposed facility in making this determination.

Planning Commission and City Council shall consider whether the ODP demonstrates that the following comply with the requirements set forth in subsection 11-4-14(F), W.M.C.:

- (1) Narrative and all site plans and vicinity maps, including setbacks.
- (2) Noise and vibration impact mitigation plan.
- (3) Recreation plan.
- (4) Light and dust mitigation plan.
- (5) Air quality plan.
- (6) Air monitoring plan.
- (7) Air quality mitigation plan.
- (8) Electrification plan.
- (9) Emergency preparedness and response plan.
- (10) Weed control plan.
- (11) Traffic control plan.
- (12) Visual mitigation plan.
- (13) Water supply plan.
- (14) Water quality control plan.
- (15) Land disturbance plan.
- (16) Stormwater management plan.
- (17) Risk analysis and risk management plan.
- (18) Phasing, abandonment, and reclamation plan.
- (19) Wetlands protection plan.
- (20) Hazardous materials management plan.
- (21) Waste management plan.
- (22) Historical and cultural resources plan.
- (23) Odor mitigation plan.
- (24) Floodplain and floodway plan.

(25) Financial security.

(26) Environmental impact assessment.

(27) Geological study.

(28) Cumulative impacts analysis.

Planning Commission and City Council shall also consider whether the ODP complies with the following:

(29) All applicable COGCC, AQCC, EPA, and CDPHE rules and regulations.

(30) All other site-specific requirements that are determined necessary by Planning Commission and City Council and are otherwise consistent with applicable law and regulations.

(H) FINAL REQUIRMENTS: All plans shall set forth in subsections 11-4-14(F) and (I), W.M.C., shall be finalized and approved by the City prior to the commencement of drilling. The operator shall provide written notice to the City no less than thirty (30) days prior to the commencement of construction, drilling, completion or any recompletion, re-drilling or plugging and abandonment of a well, for all approved facilities and provide the following:

(1) A response letter that outlines how the ODP requirements have been met.

(2) A list of all permits or approvals obtained or to be obtained from local, State, or federal agencies other than the COGCC.

(3) Copies of all permits requested, including any exceptions.

(4) A listing of all required fees and costs and proof of payment.

(5) Additional information. If the Director determines that the City needs additional information to determine whether the proposed oil and gas facility meets the criteria in subsection 11-4-14 (F), W.M.C., the Director may require the applicant to submit such information.

(I) CONDITIONS OF APPROVAL APPLICABLE TO OFFICIAL DEVELOPMENT PLAN APPLICATIONS: The following oil and gas facility operational requirements and mitigation measures are likely necessary to meet the standards for approval in subsection 11-4-14 (G), W.M.C. Accordingly, unless the City Council deems a condition unnecessary to establish compliance with this Section, all of the following shall apply to all oil and gas facilities in the form of conditions of approval applicable to each ODP:

(1) <u>Color</u>. Facilities shall be painted in a uniform, non-reflective color that blends with the surrounding landscape.

(2) <u>Anchoring</u>. Anchoring is required within floodplain or geological hazard areas, as needed to resist flotation, collapse, lateral movement, sinking, or subsidence, and in compliance with Federal Emergency Management Agency (FEMA). All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four feet in height and not greater than one (1) foot east of the guy line anchor.

(3) <u>Burning</u>. No open burning of trash, debris, or other flammable materials.

(4) <u>Chains</u>. Traction chains shall be removed from heavy equipment on City streets.

(5) <u>Discharge valves</u>. Discharge valves shall be secured, inaccessible to the public and located within the secondary containment area. Open-ended discharge valves shall be placed within the interior of the tank secondary containment.

(6) <u>Dust suppression and fugitive dust</u>. Dust associated with on-site activities and traffic on access roads shall be minimized throughout construction, drilling and operational activities such that there are no visible dust emissions from access roads or the site to the extent possible given wind conditions. No untreated produced water or other process fluids shall be used for dust suppression. The operator shall avoid creating dust or dust suppression activities within three hundred (300) feet of the ordinary high-water mark of any water body, unless the dust suppressant is water. Material Safety Data Sheets (MSDS) for any chemical-based dust suppressant shall be submitted to the City prior to use.

(7) <u>Exhaust</u>. All exhaust, including, but not limited to, exhaust from all engines, motors, coolers and other equipment shall be vented up or in a direction away from the nearest occupied building.

(8) <u>Air quality</u>.

(a) Flares and combustion devices. Flaring shall be eliminated other than during emergencies or upset conditions. All flaring shall be reported to the City. To the extent used, all flares, thermal oxidizers, or combustion devices shall be designed and operated as follows:

(i) Any flaring that is done shall be done with a flare that has a manufacturer specification of ninety-nine percent (99%) destruction removal efficiency or better.

(ii) The flare and or combustor shall be fired with natural gas.

(iii) The flare and or combustor shall be designed and operated in a manner that shall ensure no visible emissions during normal operation. Visible emissions means 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.

(iv) The flare and or combustor shall be operated with a flame present at all times when emissions may be vented to it.

(v) All combustion devices shall be equipped with an operating auto-igniter.

(vi) 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.

(vii) 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.

(viii) Any flare, auto ignition system, recorder, vapor recovery device, or other equipment used to meet the hydrocarbon destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

(b) Leak and detection and repair (LDAR). The operator shall develop and maintain a leak detection and repair plan using modern leak detection technologies for equipment used at the facility. Inspections shall occur at least semi-annually. More frequent inspections may be required based on the design and size of the facility. If an infrared camera is used, operator shall retain an infrared image or video of all leaking components before and after repair. Such records shall be maintained for two (2) years and shall be made available to the City upon request. Any leaks discovered by operator, including any leaks that are reported to operator by a member of the public, shall be reported to the City immediately upon discovery. The operator shall repair leaks within forty-eight (48) hours. If the City determines that the leak presents an immediate threat to persons or property, the operator may not operate the affected component, equipment or pipeline segment until the operator has corrected the problem and the City agrees that the affected component, equipment or pipeline segment no longer poses a hazard to persons or property. In the event of

leaks that the City believes do not pose an immediate hazard to persons or property, if more than forty-eight-hours repair time is needed after a leak is discovered, operator shall contact the Director and provide an explanation of why more time is required. At least once (1) per year, the operator shall notify the City five (5) business days prior to an LDAR inspection of its facilities to provide the City the opportunity to observe the inspection. The plan shall include detailed recordkeeping of the inspections for leaking components.

(c) Emission control regulations and air protection requirements. To the extent used, all equipment shall comply with the following:

(i) Electrification from the power grid or from renewable sources of all permanent operation equipment that can be electrified.

(ii) Use of acoustically insulated housing or covers to enclose the motor or engine.

(iii) Any flare, auto ignition system, recorder, vapor recovery device, or other equipment used to meet the hydrocarbon destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

(iv) Dry seals on centrifugal compressors.

(v) Routing of emissions from rod-packing and other components on reciprocating compressors to vapor collection systems.

(vi) Emission controls of hydrocarbon emissions of ninety-eight percent (98%) or better for centrifugal compressors.

(vii) Best management practices during liquids unloading activities including the installation of artificial lift, automated plunger lifts and at least ninety percent (90%) emissions reductions when utilizing combustion to control any venting. If manual unloading is permitted, the operator shall remain onsite during any manual unloading.

(viii) Reduction or elimination of emissions from oil and gas pipeline maintenance activities such as pigging or blowdowns. If any maintenance activity will involve the intentional venting of gas from a well tank, compressor or pipeline, beyond routine pipeline maintenance activity and pigging, the operator shall provide forty-eight (48) hour advance written notice to the City of such proposed venting. Such notice shall identify the duration and nature of the venting event, a description as to why venting is necessary, a description of what vapors will likely be vented, what steps will be taken to limit the duration of venting, and what steps the operator proposes to undertake to minimize similar events in the future. If emergency venting is required, or if accidental venting occurs, the operator shall provide such notice to the City of such event as soon as, but in no event longer than twenty-four hours from, the time of the event, with the information listed above and with an explanation as to the cause and how the event will be avoided in the future.

(ix) Ninety-eight percent (98%) control of emissions from pigging operations.

(x) Telemetric control and monitoring systems, including surveillance monitors to detect when pilot lights on control devices are extinguished.

(xi) The operator agrees to participate in Natural Gas STAR program or other voluntary programs to encourage innovation in pollution control at facilities.

(xii) Proof of compliance with State-required dust control measures and imposition of an opacity requirement as tested using EPA Method 9.

(xiii) Monitoring as needed to respond to emergency events such as process upsets or accidental releases.

(xiv) The 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; and postponing construction activities. Within thirty days following the conclusion of each air quality action day season, operator shall submit a report to the City that details which measures it implemented during that air quality action day.

(xv) Shutdown protocols, approved by the City, with notification and inspection provisions to ensure safe shut-down and timely notification to local communities.

(xvi) Ongoing maintenance checks of all equipment to minimize the potential for gaseous or liquid leaks.

(xvii) Minimization of truck traffic to and from the site.

(xviii) Hydrocarbon control of ninety-nine percent (99%) or better for crude oil, condensate, and produced water tanks with uncontrolled actual emissions of VOCs greater than two TPY VOCs.

(xix) No venting other than when necessary for safety.

(xx) No venting or flaring of associated gas from hybrid gas-oil wells (i.e. gas that is co-produced from a well that primarily produces oil), unless during an emergency.

(xxi) Consolidation of product treatment and storage facilities within a facility.

(xxii) Centralization of compression facilities within a facility.

(xxiii) EPA Reduced Emission Completions for oil wells. Daily logs documenting reduced emission completions provided to the City.

(xxiv) EPA reduced emission completions for gas wells. Daily logs documenting reduced emission completions provided to the City.

(xxv) Closed loop, pitless drilling, completions and production systems.

(xxvi) Use of other best management practices as they become available.

(xxvii) The use of no-bleed continuous and intermittent pneumatic devices. This requirement can be met by replacing natural gas with electricity or instrument air, or routing the discharge emissions to a closed loop-system or process.

(xxviii) A root cause analysis for any Grade 1 gas leaks, as defined by COGCC.

(xxix) Automated tank monitoring and gauging as required by CDPHE.

(xxx) Compliance with all CDPHE permits, if any, and compliance with all OSHA work practice requirements with respect to benzene.

(d) The following may be required based on the size, nature, and location of the facility:

(i) Implementation of tankless production techniques.

(ii) The use of desiccant gas processing dehydrators or other zero emitting dehydrators.

(iii) Use of a pressure-suitable separator and vapor recovery unit where applicable.

(iv) Pipeline infrastructure for fresh water shall be constructed and placed into service prior to spudding for delivery of all fresh water to be used during the drilling, completion, production and operations phases.

(v) Pipeline infrastructure for produced water, natural gas, crude oil and condensate will be constructed and placed into service prior to the start of any fluid flow from any wellbore.

(e) Continuous monitoring to detect leaks or measure hydrocarbon emissions and monitor meteorological data shall be required. The City may require the operator to install and operate its own continuous monitoring system or may require operator to reimburse the City for costs associated with conducting its own continuous monitoring. Any continuous monitoring system shall be able to alert the operator of increases in air contaminant concentrations.

(f) Compliance. The operator shall submit annual reports to the City certifying (i) compliance with these air quality requirements and documenting any periods of material noncompliance, including the date and duration of each such deviation and a compliance plan and schedule to achieve compliance, and (ii) that the equipment at the facility 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 annual report shall contain a certification as to the truth, accuracy, and completeness of the reports, signed by a responsible corporate official. The operator will also provide the City with a copy of any self-reporting submissions that operator provides to the CDPHE due to any incidence of non-compliance with any CDPHE air quality rules or regulations at the facility.

(9) <u>Lighting</u>. During all phases of development and operation, the operator shall adhere to best management practices to minimize light escaping the facility, including making all lighting downward-facing and all bulbs fully shielded to prevent light emissions above a horizontal plane drawn from the

bottom of the fixture. During the drilling and completion phases, the operator shall install a minimum thirtytwo-foot (32') wall around well pads to reduce light escaping site. Consistent with applicable law, best management practices, including downward shielded lighting and lumens measurement outside of facility shall be required. Lights required by safety regulations, such as flashing lights for airplane visibility, are exempt from this requirement.

(10) <u>Maintenance of machinery</u>. Routine field maintenance of non-stationary equipment involving hazardous materials within three hundred (300) feet of any water body is prohibited. All fueling shall occur over impervious material and shall not be done during storm events. The operator shall operate and maintain all equipment in accordance with manufacturer specifications. Regular maintenance checks shall be required for all equipment. For any oil and gas facility approved before July 5, 2021 that is within three hundred (300) feet of any water body, only permanent stationary equipment may undergo maintenance with hazardous materials.

(11) Noise. The operator shall control noise levels as follows.

(a) Beginning with construction and up to production, third-party consultant approved by the City shall conduct continuous noise monitoring in fifteen (15) minute increments near well sites and maintain records for two (2) years.

(b) For db(A) scale noise, the operator shall insure that the noise level from operations subject to the light industrial zone noise standard under COGCC Regulations 802.b and 604.c.(2)(A) does not exceed sixty (60) db(A) and that the noise level from Operations subject to the industrial zone noise standard under COGCC Regulations 802.b and 604.c.(2)(A) is reduced at least five (5) db(A) below the maximum level permitted by those Regulations. For this purpose, the noise level shall be measured as set forth in COGCC Regulations 802.b and c, except no measurements shall be taken when traffic is passing the sound level meter. Measurements shall be taken by third-party consultant approved by the City, and the operator shall be present during all measurements. The operator shall notify City at least two (2) days prior to taking measurements. As set forth in COGCC Regulation 802.b, the noise levels shall be subject to increase for a period not to exceed fifteen (15) minutes in any one (1) hour period and reduction for periodic, impulsive or shrill noises.

(c) For db(C) scale noise, the operator shall comply with the requirements of COGCC Regulation 802.

(d) To ensure the operator controls noise to the allowable levels set forth above, one (1) or more of the following may be required:

(i) Acoustically insulated housing or cover enclosing the motor or engine.

(ii) Noise management plan identifying hours of maximum noise emissions, type, frequency, and level of noise to be emitted, and proposed mitigation measures.

(iii) Obtain all power from utility line power or renewable sources.

(iv) Utilize the most current equipment to minimize noise impact during drilling, completions, and all phases of operation including the use of "Quiet Fleet" noise mitigation measures for completions.

(v) Sound walls around well drilling and completion activities to mitigate noise impacts.

(vi) Restrictions on the unloading of pipe or other tubular goods between six (6) P.M. and eight (8) A.M.

(vii) Any abatement measures required by COGCC for high-density areas, if applicable.

(viii) Use of quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent.

(ix) Electric drilling equipment.

(x) The use of Tier 4 or better diesel engines.

(12) <u>Reclamation</u>. The operator shall comply with COGCC interim and final reclamation requirements. Seeding shall take place when climate is conducive to seed germination. Final facility reclamation shall ensure compatibility with neighboring land uses at the time of reclamation.

(14) <u>Removal of debris</u>. All excess debris shall be removed during construction activities. Site shall remain free of debris and excess materials at all times during operations. No burning of debris permitted for any activity on facility, including, but not limited to, drilling, hydraulic fracturing, flowback, recompletion, redrilling or plugging and abandoning.

(15) <u>Removal of equipment</u>. No permanent storage of equipment shall be permitted. When no longer used, equipment shall be removed within thirty (30) days unless surface owner agrees and Director agrees to temporary equipment remaining on site for more than thirty (30) days.

(16) Pipelines.

(a) Any newly constructed or substantially modified off-location oil and gas flow lines or crude oil transfer lines proposed as part of an applicant's oil and gas facility are subject to an ODP review and approval under Section 11-4-14, W.M.C.

(b) Off-location flow lines and crude oil transfer lines shall be sited to avoid areas containing existing or proposed residential, commercial, and industrial buildings; places of public assembly; surface water bodies; areas that are disruptive to wildlife habitats; and City open space. Pipelines shall not be constructed within the Standley Lake Source Water Protection Zone or the Woman Creek Protection Zone.

(c) Without compromising pipeline integrity and safety, applicant shall share existing pipeline rights-of-way and consolidate new corridors for pipeline rights-of-way to minimize impact.

(d) For off-location flow lines and crude oil transfer lines, setbacks from residential, commercial, or industrial buildings, places of public assembly, the high-water mark of any surface water body and sensitive environmental features will be determined on a case-by-case basis in consideration of the size and type of pipeline proposed and features of the proposed site.

(e) The operator shall comply with the City's right-of-way permit, license agreement, public improvements agreement, or private improvement agreement, and easement processes, as applicable, for all crude oil transfer lines and off-location flowlines installed in City owned property or rights-of-way.

(f) Flow lines and crude oil transfer lines shall be located a minimum of one hundred and fifty (150) feet away from general residential, commercial, and industrial buildings, as well as the high-water mark of any surface water body unless technically infeasible, in which case pipelines shall be constructed in the next most protective location. This distance shall be measured from the nearest edge of the pipeline/flowline. Setbacks from sensitive environmental features will be determined on a case-by-case basis in consideration of the size and type of pipeline proposed and features of the proposed site.

(g) The operator shall conduct leak detection inspections or pressure testing in order to identify flowline leaks or integrity issues.

(h) The operator shall make available to the inspector upon request all records required to be kept by COGCC.

(i) Buried pipelines shall have a minimum of four (4) feet cover.

(j) New pipelines shall be constructed no closer than five (5) feet from property lines.

(k) New pipelines shall be constructed in public rights of way, unless technically infeasible.

(1) The operator shall notify City thirty (30) days prior to any flowline abandonment activities and shall receive final approval from City prior to proceeding with any type of flowline abandonment, whether in place or removal.

(m) The operator's emergency response plan shall address pipeline spills and ruptures.

(17) Gathering Lines.

(a) Gathering lines shall be sited to avoid areas containing existing or proposed residential, commercial, and industrial buildings; places of public assembly; surface water bodies; areas that are disruptive to wildlife habitats; and City open space. Gathering Lines shall not be constructed within the Standley Lake Source Water Protection Zone or the Woman Creek Protection Zone.

(b) Without compromising gathering line integrity and safety, the operator shall share existing pipeline rights-of-way and consolidate new corridors for pipeline rights-of-way to minimize impact.

(c) Setbacks from residential, commercial, or industrial buildings, places of public assembly, the high-water mark of any surface water body and sensitive environmental features will be determined on a case-by-case basis in consideration of the size and type of pipeline proposed and features of the proposed site.

(d) The operator shall make available to City upon request all records submitted to or the PUC including those related to inspections, pressure testing, pipeline accidents and other safety incidents.

(e) The operator's emergency response plan shall address gathering line spills and ruptures.

(18) <u>Spills and releases</u>. To minimize spills and releases from oil and gas facilities, the following measures shall be required, as applicable based on the nature and location of the facility:

(a) Berms or other secondary containment devices around crude oil, condensate, and produced water storage tanks enclosing an area sufficient to contain and provide secondary containment for one hundred and fifty percent (150%) of the largest single tank. Berms or other secondary containment devices shall be sufficiently impervious to contain any spilled or released material. Inspection of all berms and containment devices at regular intervals, but not less than monthly. Maintenance of all berms and containment devices in good condition. A prohibition on the storage of ignition sources inside the secondary containment area unless the containment area encloses a fired vessel.

(b) Construction of containment berms using steel rings, designed and installed to prevent leakage and resist degradation from erosion or routine operation.

(c)Construction of secondary containment areas with a synthetic or engineered liner that contains all primary containment vessels and flowlines and is mechanically connected to the steel ring to prevent leakage.

(d) For locations within five hundred (500) feet and upgradient of a surface water body, tertiary containment, such as an earthen berm, around oil and gas facilities.

(e) A prohibition on more than two crude oil or condensate storage tanks within a single berm.

(f) Notification to the City of all spills of a gallon or more that leaves the facility, all spills of any material on permeable ground at the facility that has a reportable spill quantity under any law and copies of any self-reporting submissions that operator provides to the COGCC.

(g) The operator shall keep a daily incident log that is to be submitted to the City monthly.

(h) Prohibition of onsite storage of waste in excess of thirty (30) days.

(i) No permanent storage of drilling and completions chemicals. Drilling and completion chemicals shall be removed at most sixty (60) days after completion.

(19) <u>Temporary access roads</u>. The operator shall assure that temporary access roads are reclaimed and revegetated within sixty (60) days of discontinued use. Erosion shall be controlled while they are in use.

(20) <u>Water quality</u>. To minimize impacts to surface and sub-surface water bodies from oil and gas facilities, the following measures shall be required:

(a). To prevent harm to human health and odors, prohibitions on toxic, including orally toxic, Prohibition of chemicals dangerous to human health chemical additives in hydraulic fracturing fluids, including, but not limited to, all chemicals listed in COGCC Table 437-1 and Polysorbate 80.

(b) Decommissioned oil and gas well assessment. Prior to any hydraulic fracturing, and at periods following hydraulic fracturing, assessment and monitoring of plugged and decommissioned or removed from use, and dry and removed from use oil and gas wells (abandoned wells) within one-half (1/2) mile of the projected track of the borehole of a proposed well. This includes:

(i) Based upon examination of COGCC and other publicly available records, identification of all abandoned wells located within one-half (1/2) mile of the projected track of the borehole of a proposed well.

(ii) Risk assessment of leaking gas or water to the ground surface or into subsurface water resources, taking into account plugging and cementing procedures described in any recompletion or plugged and abandoned (P&A) report filed with the COGCC.

(iii) Notification of the Director and COGCC of the results of the assessment of the plugging and cementing procedures.

(iv) Permission from each surface owner who has an abandoned well on the surface owner's property to access the property in order to test the abandoned well. If a surface owner has not provided permission to access after thirty (30) days from receiving written notice, the applicant shall not be required to test the abandoned well.

(v) Soil gas surveys from various depths and at various distances, depending on results of risk assessment, of the abandoned well prior to hydraulic fracturing.

(vi) Soil gas surveys from various depths and at various distances, depending on results of risk assessment, of the abandoned well within one (1) year and then every three (3) years after production has commenced.

(vii) Provide the results of the soil gas survey to the Director and the COGCC within three (3) weeks of conducting the survey or advising the Director that access to the abandoned wells could not be obtained from the surface owner.

(viii) If contamination is detected during any soils testing, no further operations may continue until the cause of the contamination is detected and resolved and the City has given its approval for additional operations to continue.

(c) Groundwater Sampling Analysis Plan. Using records of the Colorado Division of Water Resources, the applicant shall identify and offer to sample all available water sources located within one-half (1/2) mile of the projected track of the borehole of a proposed well and within one-half (1/2) mile of the radius of the proposed well or facility. Sampling requirements include:

(i) Initial baseline samples and subsequent monitoring samples shall be collected from all available groundwater sources within one-half (1/2) mile of the projected track of the borehole of a proposed well and one-half (1/2) mile radius of the facility or multifacility.

(ii) Initial collection and testing of baseline samples from available groundwater sources shall occur within twelve (12) months prior to the commencement of drilling a well, or within twelve (12) months prior to the re-stimulation of an existing well for which no samples were collected and tested during the previous twelve (12) months.

(iii) Post-stimulation samples of available water sources shall be collected and tested pursuant to the following time frame:

(1) One (1) sample within six (6) months after completion.

(2) One (1) sample annually after completion throughout the life of the well.

(iv) The operator shall collect a sample from at least one (1) up-gradient and two (2) down-gradient water sources within a one-half (1/2) mile radius of the facility. If no such water sources are available, operator shall collect samples from additional water sources within a radius of up to one (1) mile from the facility until samples from a total of at least one (1) up-gradient and two (2) down-gradient water sources are collected. The operator should give priority to the selection of water sources closest to the facility.

(v) An operator may rely on existing groundwater sampling data collected from any groundwater source within the radii described above, provided the data was collected within the twelve (12) months preceding the commencement of drilling the well, the data includes measurement of all of the constituents measured in Table 1, and there has been no significant oil and gas activity within a one (1)-mile radius in the time period between the original sampling and the commencement of drilling the well. (vi) The operator shall make reasonable efforts to obtain the consent of the owner of the water source. If the operator is unable to locate and obtain permission from the surface owner of the Water Source, the operator shall advise the Director that the applicant could not obtain access to the water source from the surface owner.

(vii) Testing for all analytes listed in Table 1, and subsequent testing as necessary or appropriate.

(viii) The water quality plan shall notate the specific standard method to be used for the analysis of each analyte. The standard method used shall be industry standard and shall be appropriate for the application.

(ix) Reporting the location of the water source using a GPS with sub-meter resolution.

(x) Field observations. Reporting on damaged or unsanitary well conditions, adjacent potential pollution sources, odor, water color, sediment, bubbles, and effervescence.

(xi) Test results. Provide copies of all test results described above to the Director, COGCC, and the water source owners within two (2) weeks of receipt of test results and no longer than thirty (30) days after collecting the samples.

(xii) Subsequent sampling. City staff shall review water quality testing results and determine if sampling shows water contamination. Staff will use these standards and other standards as deemed appropriate to determine if further action is required.

(1) If free gas or a dissolved methane concentration level greater than four (4) micrograms per liter $(\mu g/l)$ is detected in a water source, determination of the gas type using gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen).

(2) If test results indicate thermogenic or a mixture of thermogenic a biogenic gas, an action plan shall be developed to determine the source of the gas and a mitigation plan shall be developed for sources resulting from the owner's operation.

(3) If any of the BTEX constituents (benzene, toluene, ethylbenzene, or xylene) are detected at levels above one half (0.5) μ g/L or if TPH is detected at any level, the operator shall immediately notify the Director of the Public Works and Utilities Department, COGCC, CDPHE, and the owner of the water source. Repeat sampling shall be completed within twenty-four (24) hours of receipt of initial test results. Preliminary test results shall be submitted to the Director, COGCC, and the water source owner within forty-eight (48) hours, and a complete analytical report with quality control information included shall be provided to the Director within five (5) business days after repeat sampling. If repeat sampling continues to show BTEX and/or TPH in the groundwater sample, the operator shall promptly identify a plan to identify the source of the contamination and to the extent contamination has resulted from the owner's activities a mitigation plan shall be created and implemented promptly.

(4) Further water source sampling in response to complaints from water source owners may be required.

(xiii) Qualified independent professional consultant. All abandoned well assessments and water source testing shall be conducted by the applicant or, if requested by a surface owner or the City, by a qualified independent professional consultant approved by the Director. The City may require split samples to be made available to the City for testing by the City or by a third-party contractor.

(d) Surface Water Sampling Analysis Plan. The applicant shall identify all surface water bodies to include ditches, reservoirs, streams, and rivers within five hundred (500) feet of the proposed facility. Sampling requirements include:

(i) Initial baseline samples and subsequent monitoring samples shall be collected from all water sources within five hundred (500) feet of the proposed facility.

(ii) Initial collection and testing of baseline samples from available water sources shall occur within one (1) month prior to the commencement of drilling a well, or within one (1) months prior to the re-stimulation of an existing well.

(iii) Post-stimulation samples of available water sources shall be collected and tested quarterly over the life of the well and shall appropriately address seasonal variability in water flows.

(iv) The operator shall make reasonable efforts to obtain the consent of the surface owner of all surface water sources. If the operator is unable to locate and obtain permission from the surface owner, the operator shall advise the Director that the applicant could not obtain access to the water source from the surface owner. The City may evaluate if alternate testing locations are possible, and the operator shall work with the City to address alternate locations.

(v) Testing for all analytes listed in Table 1, and subsequent testing as necessary or appropriate.

(vi) The water quality plan shall notate the specific Standard Method to be used for the analysis of each analyte. The Standard Methods used shall be industry standard and shall be appropriate for the application.

(vii) Reporting the location of the water source using a GPS with sub-meter resolution.

(viii) Test results. Provide copies of all test results described above to the Director and the COGCC within two (2) weeks of receipt of test results and no longer than thirty (30) days after collecting the samples.

(ix) Subsequent sampling. City staff shall review water quality testing results and determine if sampling shows water contamination. Staff will use these standards and other standards as deemed appropriate to determine if further action is required.

(1) If free gas or a dissolved methane concentration level greater than one (1) milligram per liter (mg/l) is detected in a water source, determination of the gas type using gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen).

(2) If test results indicate thermogenic or a mixture of thermogenic a biogenic gas, an action plan shall be developed to determine the source of the gas and a mitigation plan shall be developed for sources resulting from the owner's operation.

(3) If any of the BTEX constituents (benzene, toluene, ethylbenzene, or xylene) are detected at levels above one half $(0.5) \mu g/L$, if TPH is detected at any level, or if any metals are detected above baseline sampling, the operator shall immediately notify the Director, COGCC, CDPHE, and the owner of the water source. Repeat sampling shall be completed within twenty-four (24) hours of receipt of initial test results. Preliminary test results shall be submitted to the Director, COGCC, and the water source owner within forty eight (48) hours, and a complete analytical report with quality control information included shall be provided to the Director within five (5) business days after repeat sampling.

(4) Further water source sampling in response to other water quality concerns related to oil and gas operations may be required.

(x) Qualified independent professional consultant. Water source testing shall be conducted by the applicant or, if requested by a surface owner or the City, by a qualified independent professional consultant approved by the Director. The City may require split samples to be made available to the City for testing by the City or by a third party contractor.

(e) The water quality plan shall include all necessary components to meet all permitting requirements of the City's stormwater MS4 permit program.

(f) The water quality plan shall include a control plan that establishes that all facilities shall use most effective performance techniques and best management practices to minimize impacts to water quality, including plans for water quality testing, prevention of illicit or inadvertent discharges, and containment of pollutants as required by the Code, and State and federal requirements.

Table 1. Water Quality Analytes	
GENERAL WATER QUALITY	Alkalinity Conductivity & TDS Ph Dissolved Organic Carbon (or Total Organic Carbon) Bacteria Hydrogen Sulphide
MAJOR IONS	Bromide Chloride Fluoride Magnesium Potassium Sodium Sulfate NO ³ NO ² + Ammonia
METALS	Arsenic Barium Boron Chromium Copper Iron Lead Manganese Selenium Strontium
DISSOLVED GASES AND VOLATILE ORGANIC COMPOUNDS	Methane Ethane Propane BTEX as Benzene, Toluene, Ethylbenzene, Xylenes Total Petroleum Hydrocarbons (TPH)
OTHER	Water Level Stable isotopes of water (Oxygen, Hydrogen, Carbon) Phosphorus

(21) <u>Weed control</u>. Weed control shall be required at the facility until final reclamation and abandonment.

(22) <u>Well abandonment or decommissioning</u>. The operator shall comply with any COGCC rules and regulations regarding well abandonment, decommission, or reclamation. Upon plugging and reclaiming a well, the applicant shall provide the City with surveyed coordinates of the decommissioned or reclaimed well. The City inspector shall be onsite during plugging and abandoning.

(23) Pipeline abandonment.

(a) The operator shall receive final approval from the City before proceeding with pipeline abandonment activities. The City will require removal of pipelines, unless the City determines

removal causes greater adverse impacts to public health, safety, welfare, the environment, and wildlife resources than abandonment in place.

(b) With respect to pipelines abandoned in place, a tracer shall be placed in any nonmetal line.

(c) All lands disturbed by removal of pipelines shall be reclaimed and revegetated.

(24) <u>Regulations</u>. The operator shall comply with all applicable State and federal laws and regulations, as such regulations exist now and as may be more stringent in the future.

(25) <u>Sight access and security</u>. The site shall be properly secured, including, but not limited to, security fencing or barriers to prevent unauthorized access to the site. The site shall be properly secured prior to the start of drilling. Proposed fencing, barriers, and screening shall be included in visual mitigation plan.

(26) <u>Flammable material</u>. The area twenty-five (25) feet around anything flammable shall be kept free of dry grass or weeds, conform to COGCC safety standards, and applicable fire code. The operator's pre-application and application shall be reviewed by the City Fire Department.

(27) <u>Mud tracking</u>. Mud tracking on City streets shall be de minimus. The operator shall take all practical measures to prevent mud and operator shall clean up any mud tracked onto City streets from all construction and operations within a reasonable time not to exceed two (2) hours.

(28) <u>Trailers</u>. A construction trailer is permitted during active drilling and completions only. No residential trailers shall be allowed. Only equipment needed for the project is permitted to be on site.

(29) <u>Visual screening</u>. The operator shall construct a thirty-two (32)-foot wall to screen facility from view and provide noise and light mitigation with such walls to be colors that blend with the surrounding natural background. Screening shall be clearly identified on the phasing plan to identify when and what type of screening is required.

(30) <u>Landscaping</u>. A landscaping and berming plan approved by City shall include maintenance and irrigation requirements for planted vegetation throughout the duration of operations, including production. The operator shall be required to provide maintenance financial security to ensure funds are available for upkeep.

(31) <u>Odor</u>. The operator shall take odor mitigation measures, including the following, as required by the City based on the nature of the facility:

(a) Adding an odorant which is not a masking agent or adding chillers to the muds.

(b) Enclosing shale shaker to contain fumes from exposed mud, where safe.

(c) Wiping down the drill pipe each time the drilling operation "trips" out of the hole.

(d) Increasing additive concentrations during peak hours.

(e) Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that operator shall not mask odors by using masking fragrances.

(f) Using category IV or better drilling muds.

(32) <u>Risk analysis</u>. The operator shall submit a site-specific detailed quantitative and qualitative risk management plan for pipelines and oil and gas facilities. The plan shall identify risks, include a qualitative and quantitative risk assessment and list methods of risk avoidance and control that implement techniques to prevent accidents and losses and reduce the impact or cost of an accident or loss after it occurs.

(33) <u>Safety management plan and management system applicable to all covered processes at the facility</u>. Safety management system shall provide for employees and systems to oversee implementation and periodic revision of the plan. The plan shall include the following elements and describe the manner in which each of the following elements will be applied to the covered processes:

(a) Process safety information. Compilation of written process safety information needed to conduct process hazard analysis. Process safety information shall include information pertaining to hazards of substances and chemicals used by the process, information pertaining to the technology of the process, information pertaining to the equipment used in the process, and information pertaining to the hazards of the substances or chemicals in the process. Documentation that equipment used in the process complies with recognized and generally accepted good engineering practices.

(b) Operating procedures. Written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information, and at least annual review of operating procedures to ensure they reflect current operating practices.

(c) Employee participation. A plan for ensuring employee participation in conduct and development of process hazards analysis and access to process hazards analysis.

(d) Training. Written procedures detailing initial and refresher employee training requirements and documentation of employee training.

(e) Mechanical integrity. Written procedures designed to maintain the on-going integrity of process equipment, ensure employees involved in maintenance are properly trained to ensure the ongoing integrity of process equipment, ensure that process equipment is tested and inspected in accordance with manufacturer specifications, correct deficiencies in equipment in a safe and timely manner, and ensure that new equipment is installed or constructed properly.

(f) Management of change. Written procedures to manage changes to covered processes, technologies, equipment and procedures.

(g) Pre-startup reviews. Written procedures regarding pre-startup safety reviews.

(h) Compliance audits. Written procedures requiring an audit every three (3) years to verify compliance with the procedures and practices developed under the safety management plan, and procedures requiring correction of any deficiencies identified in audit; the operator shall make results of audit available to inspector upon request.

(i) Incident investigation. Written procedures requiring investigations of all near-misses and incidents, including root cause analysis of all incidents resulting in fatalities or serious environmental harm, establishing a system to promptly address and resolve the incident, and requiring that all employees and contractors whose job tasks are relevant to the investigation of the near miss or incident review the investigation report.

(j) Hot work. The facility shall ensure that all hot work complies with City and State fire prevention and protection requirements.

(k) Contractors. Written procedures describing how the operator screens, oversees, shares process safety and emergency response and preparedness information with contractors.

(1) Process hazard analysis. Process hazard analysis for each covered process.

(m) Incident history. List of all incidents that have occurred at the operator's facilities in the United States within the last five (5) years, along with any investigation reports, root cause analysis, and operational or process changes that resulted from the investigation of the accident.

(n) Safety culture assessment. Written procedures requiring the operator to periodically review safety culture, and at a minimum conduct such review after each major accident.

(o) Inherently safer systems analysis. Require analysis at least every five (5) years, whenever a change is proposed at the facility that could result in an incident, after an incident if recommended by the investigation report or root cause analysis, and during the design of new processes, equipment or facilities.

The safety management plan is subject to review by the Director periodically, but at least every three (3) years and after any incident. The City may retain outside consultants to review the plan and may request modifications based on its review and public input.

(34) Safety and accidents.

(a) Incidents. Within a week for any safety incident, the operator shall submit a report to the City, including the following, to the extent available:

(i) Fuel source, location, proximity to residences and other occupied buildings, cause, duration, intensity, volume, specifics and degree of damage to properties, if any

beyond the facility, injuries to persons, emergency response, and remedial and preventative measures to be taken within a specified amount of time.

(ii) The City may require the operator to conduct root cause analysis of any incidents.

(b) Automatic safety protective systems and surface safety valves. The operator shall install an automated safety system prior to commencement of production. The automated safety system shall include the installation, monitoring, and remote control of a subsurface safety valve and shall be able to remotely shut in wells on demand. The subsurface safety valve shall be equipped to operate remotely via the automated safety protective system. The operator shall test automated safety system quarterly to ensure functionality and provide results of testing to City quarterly.

(35) Financial security/insurance requirements.

(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 form, including coverage for bodily injury and property damage for operations and products and completed operations with limits of not less than \$1,000,000 each and every occurrence and an aggregate of not less than \$2,000,000.

(ii) Automobile liability insurance with limits of not less than \$1,000,000 each and every occurrence. Workers' compensation coverage for all employees, including employer's liability insurance with limits of \$100,000 each accident, \$100,000 disease– each employee and \$500,000 disease policy limit.

(iii) 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.

(iv) Umbrella/excess liability insurance in excess of general liability, employer's liability, and automobile liability with limits no less than \$25,000,000 per occurrence; provided, however, that for so long as the construction phase, drilling phase or completions phase is ongoing at any of the well sites, the operator shall maintain such insurance with limits no less than \$100,000,000 per occurrence.

(v)Environmental liability/pollution legal liability insurance with limits of not less than \$5,000,000 per pollution incident. Coverage shall include gradual pollution events. Should this insurance be on a claims-made basis, the retroactive date shall precede the date field activities were initiated.

(vi) A surety bond or other financial security deemed acceptable by the City is required from the operator to ensure performance of all obligations of the operator in compliance with all rules, regulations, and laws imposed by the City, including the obligation to properly plug, abandon, and reclaim all wells, well sites, and pipelines. Prior to the commencement of the drilling of any new oil and gas well, the operator shall procure and deposit with the City a surety bond or other financial security issued by an insurer authorized by the State of Colorado and carrying a financial strength rating from A. M. Best of no less than A- VII. The amount of financial security required is \$12 per linear foot of the aggregate wellbore of all wells to be drilled subject to a minimum of \$100,000 and a maximum of \$1,000,000. The applicable security amount shall be reviewed annually (or earlier by mutual agreement) and shall be released or reduced as wells are plugged, abandoned, and after reclamation.

(b) The operator shall waive and cause its insurers to waive for the benefit of the City any right of recovery or subrogation which the insurer may have or acquire against the City or any of

its affiliates, or its or their employees, officers, or directors for payments made or to be made under such policies.

(c) The operator shall add the City and its elected and appointed officials and employees as additional insureds under general liability (including operations and completed operations), auto liability, and umbrella liability policies.

(d) The operator shall ensure that each of the policies are endorsed to provide that they are primary without right of contribution from the City or any insurance or self-insurance otherwise maintained by the City, and not in excess of any insurance issued to the City.

(e) The operator shall ensure that each of the policies above (excluding workers' compensation and control of well/operators extra expense) are endorsed to state that the inclusion of more than one (1) insured under such insurance policy shall not operate to impair the rights of one (1) insured against another insured and that the coverage afforded by each insurance policy shall apply as though a separate policy had been issued to each insured.

(f) All policies shall be endorsed such that they cannot be canceled or non-renewed without at least thirty (30) days' advanced written notice to the operator and the City, 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 obligations are limited to "endeavor to" are not acceptable.

(g) The operator shall, prior to permit issuance, and at least annually, deliver certificates of insurance reasonably acceptable to the City confirming all required minimum insurance is in full force and effect.

(h) Deductibles or retentions shall be the responsibility of the operator. Deductibles or retentions shall be listed on the certificate of insurance required herein and are subject to the reasonable approval of the City.

(i) The operator shall require any of its subcontractors to carry the types of coverage and in the minimum amounts in accordance with the requirements this Section. The operator agrees that it shall be responsible for any damage or loss suffered by the City as a result of non-compliance by the operator or any subcontractor with these requirements.

(j) If the operator's coverage lapses, is cancelled or otherwise not in force, the City reserves the right to obtain insurance required herein and charge all costs and associated expenses to the operator, which shall become due and payable immediately.

(k) Term. All required insurance, bonds, or other financial security required by this Section shall be provided to the City prior to commencement of any work, including well pad construction, and shall remain in effect until all wells operated by the operator have been plugged and abandoned and the well site and any associated pipelines, roads, or other facilities have been adequately reclaimed, as determined by the City, unless the financial security has been replaced, released, or reduced by the City. No financial security shall be released or reduced, unless: (A) alternate financial security is provided; or (B) the Director determines that the amount of financial security released or reduced is not necessary to ensure the purpose for which it was provided.

(36) <u>Land disturbance and compatibility</u>. Conditions of approval that will reduce impacts to the site, residential development, natural resources, environmental resources, agricultural resources, floodways and floodplains, wetlands, and recreational activities, and will enhance compatibility with the surrounding area or scenic and rural character may be required, including, but not limited to, one (1) or more of the following:

(a) Reduction. A reduction of the number of wells on a single pad.

(b) Pad dimensions. Adjustment of pad dimensions to the minimum size necessary to accommodate operational needs while minimizing surface disturbance.

(c) Structures and surface equipment. Adjustment of structures and surface equipment to the minimal numbers and size necessary to satisfy operational needs.

(d) Shared infrastructure. Use of shared existing infrastructure by oil and gas operations, minimizing the installation of new facilities and avoiding additional disturbance to lands in a manner that reduces the introduction of significant new facility impacts to the environment, landowners and natural resources.

(e) Vegetation. Maximization of the amount of natural screening available for the facility. Natural screening includes, but is not limited to, the use of existing vegetation as a background, the

construction of the facility near screening stands of vegetation, or placement in valleys allowing topographic screening. Construction of the facility in a manner that minimizes the removal of and damage to existing trees and vegetation. If the facility requires clearing trees or vegetation, feathering and thinning of the edges of the cleared vegetation and mowing or brush-hogging of the vegetation while leaving root structure intact, instead of scraping the surface.

(f) Equipment. Use of low-profile tanks and less intrusive equipment.

(g) Spills and leaks. A plan to monitor for fluid leaks or spills.

(h) The operator shall identify and mitigate through location of facilities and berms potential environmental impacts to drainage ways in a form acceptable by the City.

(i) Transportation. Conditions of approval that will ensure public safety for all modes of travel along travel routes to and from the site and maintain quality of life for other users of the City transportation system, adjacent residents, and affected property owners, including a requirement that the applicant use a particular route for some or all of the pad construction, drilling, and completion phases of the oil and gas facility; maintenance practices on the proposed route during pad construction, drilling, and completion designed and implement to adequately minimize impacts; and, compliance with City transportation standards.

(37) <u>New technologies.</u> The operator shall review its operations every five (5) years and retrofit with new beneficial technology if feasible in consultation with the City.

(J) APPROVAL REQUIRED: Development of an oil and gas facility shall not commence until and unless and ODP has been approved and all required permits from COGCC and from the City have been obtained.

(K) VARIANCES:

(1) <u>Variance request</u>. In the ODP process, an applicant may request a variance from any provision of this Section. A request for a variance under this subsection may be included in the applicant's application and shall be processed, reviewed and granted, granted with conditions, or denied in accordance with and as part of the ODP approval process, as applicable. The variance provisions of Section 2-2-8, W.M.C. or Section 11-11-8, W.M.C. shall not be applicable to a variance request under this subsection.

(2) <u>Grounds for variance</u>. A variance from the application of any provision of this Section, other than Section 11-4-14(F)(5), W.M.C., may be granted on the basis of one (1) or more of the following grounds. A variance may be in the form of a waiver or modification, as applicable:

(a) There is no technology commercially available at a reasonable cost to conduct the proposed oil and gas operation in compliance with the provision, and granting a variance from the operation of the provision will not have an adverse effect on the public health, safety, or welfare, the environment, or wildlife resources.

(b) An alternative approach not contemplated by the provision is demonstrated to provide a level of protection of the public health, safety, and welfare, the environment, and wildlife resources that would be at least equivalent to the applicable provision.

(c) Application of the provision is impractical or would create an undue or unnecessary hardship or would jeopardize public health, safety, welfare, the environment, or wildlife resources because of unique physical circumstances or conditions existing on or near the site of the oil and gas facility, which may include, without limitation, topographical conditions, shape or dimension of the facility site, inadequate public infrastructure to the site, or close proximity of occupied buildings.

(3) <u>Grounds for a variance from Section 11-4-14(F)(5)</u>, W.M.C. A variance from the application of Section 11-4-14(F)(5), W.M.C. may be granted if City Council finds, after a hearing, that the proposed oil and gas location and conditions of approval will provide substantially equivalent protections for public health, safety, welfare, the environment, and wildlife resources.

(L) TRANSFER OF OFFICIAL DEVELOPMENT PLAN: Official Development Plans may be assigned to another operator only with the prior written consent of the Director and upon a showing to the City that the new operator can and will comply with all conditions of the transferred ODP and with all of the

applicable provisions of this Section. The existing operator shall assign the ODP to the new operator on a form provided by the City and the new operator shall also sign the form agreeing to comply with all of the conditions of the ODP and all applicable provisions of this Section.

(M) CONFLICTING PROVISIONS; ENFORCEABILITY: In the event of a conflict between the provisions of this Section and any other provision of this Title, the provisions of this Section shall control.

(N) UNLAWFUL ACTS: Except as otherwise provided in this Section, it is unlawful to construct, install, or cause to be constructed or installed, any oil and gas facility within the City, unless approval has been granted by the City with an ODP. The unlawful drilling or redrilling of any well or the production therefrom is a violation of this Section.

(O) REMEDIATION OF LEAKS AND SPILLS: Upon immediate discovery of any leaks or spills, the operator shall suspend all operations. The operator shall immediately notify the City pursuant to the emergency preparedness and response plan and any others entities as required by the COGCC rules and regulations and City-approved plans. The operator shall immediately take action to stop the leak or spill and begin clean-up and remediation pursuant to COGCC rules and regulations and City-approved plans.

(P) SUSPENSION OR REVOCATION OF OFFICIAL DEVELOPMENT PLAN: If the City believes the operator has violated a condition of the ODP or that there are material changes in the approved oil and gas facility, the City after investigating, may, for good cause, temporarily suspend the ODP. Upon oral or written notification, the operator shall cease operations immediately. As a condition precedent to terminating the ODP, the City shall provide written notice to the operator specifying, in reasonable detail, the failure and the remedy required. The operator shall then have a period of forty-five (45) days in which to remedy the failure, or if the failure is of a nature that cannot be remedied within that forty-five (45)-day period, the operator shall have commenced to remedy the failure and shall diligently complete the remedy. City authorization is required to re-start facilities that have been suspended under an ODP. If operator fails to remedy a material default in the manner set forth above, upon written notice, the City may terminate the ODP and revoke any or all approvals for operations of the subject oil and gas facilities. Upon such revocation, the operator shall cease operating such oil and gas facilities, except those mitigation and remediation measures necessary to address the violations, until it obtains approval for such wells under the then-applicable Code.

(Q) PENALTY: Subject to other applicable provisions of law, any person who constructs, installs, or uses, or who causes to be constructed, installed, or used, any oil, gas, or injection well, or facility in violation of any provision of this Section or of the conditions and requirements of the ODP, may be punished as provided in Section 11-1-3, W.M.C. Each day of such unlawful operation constitutes a separate violation.

(R) CIVIL ACTION; ENFORCEMENT: In case of any violation of this Section, including, but not limited to: (a) nonconformance with an ODP, (b) nonconformance with plans submitted and approved by the City pursuant to this Section, or (c) a building or structure is or is proposed to be erected, constructed, reconstructed, altered, or used, or any land is or is proposed to be used, in violation of any provision of this article or the conditions and requirements of the ODP, the City Attorney, in addition to the other remedies provided by law, ordinance, or resolution, may institute an injunction, mandamus, abatement, or other appropriate action or proceeding to prevent, enjoin, abate, or remove such unlawful erection, construction, reconstruction, alteration, or use. The enforcement provisions of this Section shall apply to all ODPs approved pursuant to this Section.

(S) FALSE OR INACCURATE INFORMATION: The Director may revoke approval of an ODP if it is determined after an administrative hearing, held on at least ten (10) days' notice to the applicant, that the applicant provided information or documentation upon which the approval was based, which the applicant, its agents, servants, and employees, knew, or reasonably should have known, was materially false, misleading, deceptive, or inaccurate.

(T) SEVERABILITY: If any provision of this Section is found by a court of competent jurisdiction to be invalid, the remaining provisions of this Section shall remain valid, it being the intent of the City that the provisions of this Section are severable.

(U) PROSPECTIVE APPLICATION: Unless specifically provided otherwise, this Section shall apply only to wells which are drilled in the City on and after the date this Section is adopted. The reentering of a well in existence prior to the date of adoption of this Section, for purposes of deepening, recompleting, or reworking, shall not require approval of an ODP as required by this Section, unless such work requires a new or modified permit from COGCC.

(V) ABANDONMENT AND PLUGGING OF WELLS: The approval of an ODP shall not relieve the operator from complying with all COGCC rules and regulations with respect to abandonment and plugging of wells. The operator shall provide the City with COGCC Form 4 at the time that it is filed with the COGCC.

(W) APPLICATION, INSPECTION, MONITORING AND FACILITY FEES: When an application is submitted to the City for an ODP under this Section, the applicant shall pay to the City a five thousand-dollar (\$5,000.00) oil and gas application review fee for each facility. The operator shall pay for any reasonable expenses the City may incur pursuant to hiring the City's third-party consultants to perform reviews, inspections, or monitoring in connection with the operator's oil and gas facility.

(X) COORDINATION WITH AIR QUALITY CONTROL COMMISSION: Pursuant to Section 25-7-128(4), C.R.S., upon the issuance of any enforcement order or granting of any permit, the City shall transmit to the AQCC a copy of the order or permit. Pursuant to Section 25-7-128(6), C.R.S., the City shall confer and coordinate its activities regarding efforts to control or abate air pollution consistent with that provision.

(Y) DEFENSE AND INDEMNITY: The operator shall defend and indemnify the City, its employees, boards, agents, and City Council (the "City entities") from and against all claims and liability against the City Entities arising out of or related to the operations of the operator at any oil and gas facility and any action or inaction of the operator at or in connection with any oil and gas facility, including but not limited to, claims for bodily injury, death, property or other damage, remediation or other costs, or claims under any local, State, or federal environmental law. As used in this paragraph, the term "claim" means any claim filed in any judicial or administrative forum and any administrative proceeding or order. The defense and indemnity does not apply to a claim or liability that arises from the negligence or willful misconduct of the City Entities.

(Z) HEARINGS, ENFORCEMENT, AND APPEAL PROCEDURES REQUIRED BY THE AIR POLLUTION PREVENTION AND CONTROL ACT:

(1) <u>Hearings.</u> An operator may request a hearing in front of City Council to contest any alleged violations of conditions of approval contained in subsection 11-4-14(I)(8), W.M.C. City Council may appoint a hearing officer to hear and decide any contested alleged violation of an emission control regulation. The following procedures are applicable to all such hearings.

(a) Requests for a hearing shall be granted within fifteen (15) days of receipt of such request. A hearing date shall be set within ninety (90) days. Notice of the hearing shall be printed in a newspaper of general circulation in the area where the oil and gas facility is located. The Director shall appear as a party in all hearings adjudicating decisions regarding alleged violations.

(b) The Director shall have the same right to judicial review as other parties. All testimony shall be under oath or affirmation. A full and complete record of proceedings and testimony presented shall be taken and filed.

(c) Information related to secret processes or methods of manufacture or production shall be kept confidential, to the extent permitted by law. The person seeking to keep information confidential has the burden of proof. Except as provided in the Clean Air Act, information claimed to be related to secret processes or methods of manufacture or production which is emissions data may not be withheld as confidential; except such information may be submitted under a claim of confidentiality and the City shall not disclose such information, unless required under the Clean Air Act.

(d) Any person who is affected and not adequately represented shall have an opportunity to be a party upon prior application to and approval by City Council or the hearing officer, in

Council's or the hearing officer's discretion; such party shall have the right to be heard and cross-examine witnesses.

(e) City Council or the hearing officer shall make a decision within thirty (30) days of completion of the hearing.

(f) The burden of proof is on the Director with respect to the alleged violations.

(g) When the operator requests a hearing before City Council on an ODP involving air quality provisions contained therein, the operator bears the burden of proof with respect to justification therefore and information, data, and analysis supportive thereof or required with respect to its request for a hearing contesting the alleged violation.

(AA) RESPONSE PROTOCOL TO COMPLAINTS: In the event of any complaint that an oil and gas facility is causing an adverse impact to public health, safety, welfare, the environment, or wildlife resources, the City may require the operator to take any or all of the following actions to eliminate or mitigate the cause of the adverse impact:

(1) Institute a protocol to determine the cause of the impact.

(2) Employ best management practices to eliminate or mitigate the cause of the impact. Best management practices may include the use of a new technology or method.

(3) Provide any information related to activities at the oil and gas facility.

Section 4. This ordinance shall take effect upon its passage after second reading. The title and purpose of this ordinance shall be published prior to its consideration on second reading. The full text of this ordinance shall be published within ten (10) days after its enactment after second reading.

INTRODUCED, PASSED ON FIRST READING, AND TITLE AND PURPOSE ORDERED PUBLISHED this ____ day of _____, 20__.

PASSED, ENACTED ON SECOND READING, AND FULL TEXT ORDERED PUBLISHED this _____ day of ______, 20__.

ATTEST:

City Clerk

Mayor

APPROVED AS TO LEGAL FORM:

City Attorney's Office