BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO

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IN THE MATTER OF CHANGES TO THE RULES AND REGULATIONS OF THE OIL & GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO CAUSE NO. 1R DOCKET NO. 191100692 TYPE: RULEMAKING

AFFILIATED LOCAL GOVERNMENT COALITION RESPONSE STATEMENT

Boulder County, the City of Lafayette, the City and County of Broomfield, the Town of Erie and the City of Longmont, participating as the Affiliated Local Government Coalition (the "ALGC"), by and through each party's respective undersigned counsel, greatly appreciate the opportunity to submit this response statement to the Colorado Oil and Gas Conservation Commission ("COGCC") Staff's Flowline Rulemaking.

The ALGC supports the effort of the Commission to consider additions and amendments to Commission Rules of Practice and Procedure, 2 C.C.R. 404-1 ("Rules"), 100-Series definitions; 215; 216; 316; 326; 333; 610; 711; 712; 713; 906; and the 1100-Series, as part of its rulemaking to adopt the "2019 Flowline Rules." The ALGC appreciates the time Staff has dedicated to revising its rules. Our response focuses on the issues raised by Staff in their November 4, 2019, "Memo to Stakeholders" and the language provided in Staff's Final Draft Proposed Rules November 4, 2019.

I. Specificity of Data Location Required for Existing Flowlines

COGCC Staff's November 4, 2019, Memo requested input on the specificity of data operators must provide to the COGCC when registering new off-location flowlines and crude oil transfer lines, and when updating registrations for existing lines.

For new and existing off-location flowlines and crude oil transfer lines, the ALGC recommends operators be required to provide data with a horizontal positional accuracy of one

meter for all flowlines. This is consistent with the COGCC requirement in R. 215.b that Global Positioning Systems instruments used to locate oil and gas facilities "shall be capable of one (1) meter accuracy after differential correction."¹ Industry has noted the difficulty of identifying with specificity existing lines, in particular those constructed with plastic pipe and constructed prior to 1996 when tracer lines were required to be incorporated into the construction.² However, technologies are available to locate existing poly lines that do not have a tracer wire. For example, CombiPhone is an available technology operators can use to locate buried PVC pipe that does not have a tracer wire. CombiPhone generates an acoustic sound that can be used to detect the pipe location.³ Accurate information as to the location of lines is critical to ensuring that local governments and other regulatory bodies know of the locations of pipelines in order to provide adequate emergency response in the event of an accident, to plan for future development and to work with developers.

II. Availability of Flowline Location Data Through COGCC's Online Mapping System

The ALGC supports a public map that contains sufficient information to allow a prospective homeowner or member of the public know if there are flowlines on or near a particular property.

We support Conservation Colorado's proposal that the scale of the COGCC map show the location of a flowline or crude oil transfer lines at scales greater than or equal to 1:1,200 (1 inch = 100 feet). We believe this provides sufficient information to inform the public of the general

¹ COGCC Rule 215.b.

² See e.g., CPC PHS, p.4; COGA PHS, p.5.

³ Utility Technologies, PVC Plastic, and Non-metallic Pipe Locators, <u>https://utility-</u>

technologies.myshopify.com/collections/pvc-plastic-and-non-metallic-pipe-locators; See also Aykome website, https://www.aykome.com.tr/en/urun/combiphone-akustik-boru-tespit-dedektoru/ (discussing the Combiphone technology).

location of a pipeline but is not so specific that a member of the public will be likely to rely on the COGCC map in lieu of calling 811.

III. Process for Abandoning Flowlines and Crude Oil Transfer Lines in Place

The ALCG has four concerns with the proposed abandonment rules: (1) the rules do not provide for notice to the local governments of an operators' intent to abandon an on-location flowline; (2) the rules do not provide sufficient time for the local government to comment on an operator's plan for abandonment; (3) the rules do not expressly acknowledge the authority of local governments to regulate abandonment and that where there is a local and a state rule regarding abandonment, the more protective of the two rules govern. We are also concerned by the lack of clarity as to what constitutes a sensitive area for wildlife or plants in R. 1105.e.(1)(B) and thus are recommending that the Director consult with the Division of Wildlife whenever an operator seeks to abandon a line in place in a sensitive area for wildlife.

The Staff rules should require operators submit notices of their intent to abandon onlocation flowlines as well as off-location flowlines and crude oil transfer lines. Currently, the November 4, 2019, Staff rules only require operators notify the COGCC of abandonment of offlocation flowlines and crude oil transfer lines. R. 1105.c.(1) (notice of removal of off-location flowline or crude oil transfer lines) and R. 1105.c.(2) (notice of plan to abandon off-location flowline or crude oil transfer lines in place). We recommend adding a notice requirement for abandonment, both abandonment in place and removal, for on-location flowlines as abandonment of on-location lines raises the same concerns regarding the protection of public health, safety, welfare, the environment and wildlife, as abandonment of off-location flowlines.

Second, we request additional time for the COGCC and local governments to review an operator's notice of abandonment and for the local government to provide comments to the

COGCC Director. The Nov. 4, 2019, rules require the operator notify the Director no less than 48 hours before commencing abandonment of off-location flowlines or crude oil transfer lines the operator intends to remove. For off-location lines the operator intends to remove, the rules require notification to the COGCC no less than twenty days before the operator commences abandonment. The Director must provide a copy of an Operator's Field Operations Notice, Form 42, to the LGD whenever an operator notifies the COGCC it intends to abandon a flowline or crude oil transfer line. R.1105.g.

The notice provisions do not allow sufficient time for local government input on an operator's proposed abandonment. Local governments have a keen interest in the manner in which on-location and off-location flowlines and crude oil transfer lines are abandoned and are likely to have information related to the various exceptions that may result in abandonment in place. For example, local governments likely will have information on whether a particular line is in a sensitive area for wildlife or plants and need time to gather this information and provide this information to the Director in the event an operators wishes to abandon a line in place that is located in a sensitive area for wildlife or plants. Draft R.1105.e.(1)(B). Similarly, local governments may have information on whether removal may damage a road, right of way, or bike path, per R.1105.e.(1)(D), or whether removal requires removal under a body of water. R.1105.e.(1)(E). In order to allow for sufficient time for local government input on a proposed abandonment, and sufficient time for the Director to consider the local government comments, and consult with the local government, if necessary, we suggest requiring operators notify the Director and the relevant local government at least thirty days of commencing abandonment activities for both on-location and off-location flowlines and crude oil transfer lines. We further suggest the local government be given 15 days to submit any concerns to the Director.

Third, we request the rules reflect the authority of local governments to regulate abandonment activities. SB 181 provides that local governments may regulate the "surface impacts" of oil and gas in a reasonable manner to address matters including land use, impacts to public facilities and services, water quality and source, land disturbance, reclamation procedures and "all other nuisance-type effects of oil and gas development."⁴ Abandonment activities may impact any of these matters. SB 181 further provides that "a local government's regulations may be more protective or stricter than state requirements."⁵ We suggest that Staff add clarifying language to the rules acknowledging that local governments may regulate abandonment and that if there is a conflict between the state and local rules governing abandonment, the more protective rule governs. If this language is not included in the rules, we request it be added to the Statement of Basis, Specific Statutory Authority, and Purpose.

IV. Off Location Flowlines Should Be Subject to Third-Party Inspector and Leak Protection, Detection and Monitoring Requirements

The ALGC supports third-party inspection requirements for all off-location flowlines, not just crude oil transfer lines. Rule 1102.h. As stated in our Prehearing Statement, off-location flow lines pose the same problems as other lines in terms of leaks or ruptures due to improper installation or construction. Subjecting the off-location lines to a third-party inspection, performed by a qualified engineer, will reduce the incidence of integrity failures due to improper construction or installation.

The ALGC also suggests that all off-location flowlines be required to conduct some form of leak detection monitoring. Various operators have agreed to using leak detection on their offlocation flowlines pursuant to Operator Agreements with local governments. Specifically,

⁴ C.R.S. § 29-20-104(1)(h).

⁵ C.R.S. § 34-60-131.

Extraction committed to using "in-out measurement for leak detection" and "to conduct leak detection, including aerial surveys at least 2 times per year" on its pipelines in Broomfield.⁶ Similarly, the OA between Elevation Midstream and the City of Aurora specifies that "for all Flowlines regulated by the COGCC leak protection and detection shall be provided through differential metering to meet zero-tolerance for migration of product from the pipe envelope. Operator to conduct additional leak detection through aerial surveys at least two times per year."⁷ These agreements demonstrate the availability of leak detection methods for off-location flowlines.

Regulations at the federal level require operators of pipelines carrying natural gas and crude oil to conduct periodic leak detection. These requirements demonstrate the availability of leak detection methods for pipelines carrying crude oil or natural gas. Specifically, PHMSA requires all transmission lines carrying hazardous materials such as crude oil to have leak detection monitoring.⁸ PHMSA requires operators use leak detection equipment on various lines carrying natural gas, including gathering lines, transmission lines and distribution lines.⁹ Specifically, leakage surveys of transmission lines and Type A gathering lines¹⁰ must be conducted at intervals not exceeding 15 months, but at least once each calendar year. For transmission lines which transport gas without an odor or odorant, leakage surveys using leak detector equipment must be

⁶ Resolution No. 2017-186, Amended and Restated Oil and Gas Operator Agreement, Exhibit D, Design 5 and Operation & Maintenance 3, available at <u>https://www.broomfield.org/DocumentCenter/View/25064/Resolution-2017-186-and-Agreement?bidId=</u>, Exhibit B

⁷ Elevation Midstream OA, Exhibit D, 25, available at

https://www.auroragov.org/UserFiles/Servers/Server_1881137/File/Residents/Oil%20and%20Gas%20Drilling/Elev ation%20Midstream%20LLC_FINAL%20Oil%20and%20Gas%20Midstream%20Operator%20Agreement.pdf, Exhibit C

⁸ 84 Fed. Reg. 52260, 52295 (Oct. 1, 2019).

⁹ 49 C.F.R. §192.9(c); 49 C.F.R. §192.706; 49 C.F.R. §192.723.

¹⁰ Type A regulated onshore gathering lines consist of metallic lines whose maximum allowable operating pressure (MAOP) is 20% or more of specified minimum yield strength as well as nonmetallic lines with an MAOP of more than 125 pounds per square inch, gage (psig) in a Class 2, 3, or 4 location. 49 CFR § 192.8.

conducted more frequently, depending on the location of the pipeline.¹¹ Distribution lines require a leakage survey with leak detector equipment in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year.¹² A leakage survey with leak detector equipment must be conducted outside business districts as frequently as necessary, but at least once every five calendar years, at intervals not exceeding 63 months. For cathodically unprotected distribution lines on which electrical surveys for corrosion are impractical, a leakage survey must be conducted at least once every three calendar years at intervals not exceeding 39 months.¹³

There are a suite of technologies and methods for leak detection. A report prepared by Colorado State University and Colorado School of Mines for the COGCC last December discuses available and emerging technologies and methods for detecting or monitoring leaks in pipelines. The report identifies leak detection technologies to detect oil, gas, produced water and condensate leaks from below-ground, as well as above-ground, lines.¹⁴ One technology for detecting above-ground liquid leaks, including produced water leaks, mentioned in the report is remote sensing, such as satellite technology. According to one company, Satelytics, satellite technology can "continually monitor the entire length of your pipeline for hydrocarbon leaks" and alert operators to leaks.¹⁵ Satellite technology can identify a leak from an above-ground produced water line, and

¹¹ 49 C.F.R. §192.706.

¹² 49 C.F.R. §192.723.

¹³ Id.

¹⁴ Energy Institute Colorado State University and Colorado School of Mines COGCC: Integrity of Oil and Gas Pipelines, 12-22, December 31, 2018, available at

http://cogcc.state.co.us/library.html#/special projects/flowline imm workgroup.

¹⁵ Satelytics, Constant Vigilance: Pipeline Threat and Leak Detection, <u>https://www.satelytics.com/solutions/pipeline</u>.

also a leak from a buried line if the leak has migrated to the surface. The field of leak detection for pipelines is rapidly evolving and we anticipate additional technologies and methods being available in the coming years.¹⁶

Thank you for your consideration of these suggestions.

DATED this 12th day of November, 2019.

Respectfully submitted,

CITY AND COUNTY OF BROOMFIELD, COLORADO

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¹⁶ Ipipe, <u>https://ipipepartnership.com/</u>

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CERTIFICATE OF SERVICE

I hereby certify that, on November 12th, 2019, I caused the above Affiliated Local Government Coalition's Response Statement to be electronically filed and served as follows:

By: Tracy G. Kozak

Electronic Copy to the COGCC: DNR_COGCC.Rulemaking@state .co.us

Electronic copy:

P.O.&G. Operating, LLC URSA OPERATING COMPANY LLC Foster Graham Milstein & Calisher, LLP Climate Reality Denver-Boulder Chapter City of Greeley TEP Rocky Mountain LLC and Terra Energy Partners West Slope Colorado Oil and Gas Association Small Operator Society

Extraction Oil & Gas, Inc.

Verdad Resources LLC Petron Development Company

American Petroleum Institute Colorado ConocoPhillips Company Noble Energy, Inc.

Occidental Petroleum Corporation

PDC Energy, Inc.

City of Thornton SG Interests Crestone Peak Resources HighPoint Resources Caerus Piceance LLC Gunnison County Morning Gun Exploration LLC Energy Council Adams County Chevron Grand Valley Citizens Alliance Weld Air and Water george_oggero@pogresources.com kmuldoon@ursaresources.com ecarlson@fostergraham.com Motor.mouth.jan@icloud.com brad.mueller@greeleygov.com mjewell@bfwlaw.com

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Oil and Gas Education Group City of Aurora

Affiliated Local Government Coalition

Richmond American Homes, Inc. Colorado Oil & Gas Association Defend Colorado

SRC Energy Inc. Weise Consulting Larimer Alliance for Health, Safety & the Environment Colorado Sierra Club League of Oil and Gas Impacted Coloradans Oil and Gas Accountability Project ("OGAP") Citizens for a Healthy Community Noble Midstream Partners Colorado Association of Home Builders Great Western Oil and Gas

Together Against Neighborhood Drilling The Lookout Alliance Colorado Rising 350 Colorado BHSF-Broomfield Health and Safety First North Range Concerned Citizens Western Colorado Alliance

Conservation Colorado

Grand Valley Citizens Alliance

Garfield County & the Western & Rural Local Governments Coalition

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EXHIBIT A ALTERNATIVE RULE LANGUAGE (COGCC modifications in blue, ALGC suggestions in red)

- 1101.b. Off-Location Flowline Registration.
 - (3) For off-location flowlines in existence prior to May 1, 2018, and already registered with the Commission, operators must submit, on or before December 1, 2020, a geodatabase containingGeographic Information System (GIS) data that includes the pipelineflowline alignment with a horizontal positional accuracy of one meter for all flowlines in the North American Datum of 1983 (NAD 83) withand the following attributes: fluid type, pipe material type, and pipe size. GIS data must be submitted in the North American Datum of 1983 (NAD 83) and in a format approved by the Director.

1101.fe. Disclosure of Form 44 Data.

- (1) The Director will make Form 44 geodatabase information Geographic Information System (GIS) data for off-location flowlines, crude oil transfer lines, and produced water transfer systems available on the Commission's publicly accessible online map.through a publicly accessible online map viewer. Line attributes available to the public will include the spatial location, operator, fluid type, pipe material type, and pipe size. Online map viewer data only will be available at scales greater than or equal to 1:1,200 (1 inch = 100 feet) [TBD]. An individual may view spatial data at scales less than [TBD] for an individual parcel at the Commission's office.
- (2)B.ix. Copy of the operator's off-location flowline or crude oil leak protection and monitoring plan prepared in accordance with 1104.g. If an operator has previously filed with the Commission a current copy of its leak protection and monitoring plan it may cross reference the oil and gas facility or location for which the leak protection and monitoring plan was previously filed with reference to the API, facility identification number, or COGCC document number.
- 1102.h. **Inspection.** All off-location flowlines and crude oil transfer lines must be inspected by a third-party inspector who is a Professional Engineer registered with the State of Colorado-or, who is working under the supervision of a Professional Engineer registered with the State of Colorado, or who is a National Welding Inspection School Certified Pipeline Welding Inspector (CPWI), an American Welding Society Certified Welding Inspector (CWI), a National Welding Inspector, a National Association of Corrosion Engineers Certified Coating Inspector (Level 1 or higher), or an API Certified Pipeline Inspector before being placed into active status. The third-party inspector must be trained in the installation of crude oil transfer lines. The operator must maintain inspection records, including at a minimum:
 - (1) The third-party inspector's certification that the off-location flowline or crude oil transfer line was installed as prescribed by the manufacturer's specifications and in accordance with the requirements of the 1100 Series rules; and
 - (2) The third-party inspector's trainingcertification qualifications.

1104.g. Leak protection, detection, and monitoring.

- (1) All off-location flowline and crude oil transfer line operators must prepare and file with the Director a leak protection and monitoring plan with their registration.
- (2) All crude oil transfer line operators must develop and maintain a plan to coordinate the assessment of all inflow and outflow data. The plan must provide for the assessment of inflow and outflow data between the production facility operator, the crude oil transfer line operator, and the operator at the point or points of disposal, storage, or sale. Upon discovery of a material data discrepancy, the discovering party is to notify all other appropriate parties and take action to determine the cause. The crude oil transfer line operator is to retain a record of all material data discrepancies.
- (3) All off-location flowlines must have a system for monitoring or detecting leaks.
- 1105.c. <u>Notice of Abandonment of on-location flowlines</u>, off-location flowline or crude oil transfer line for inspection.
 - (1) If the on-location flowline, off-location flowline or crude oil transfer line will be removed, the operator must submit notice to the Director with a Field Operations Notice, Form 42 Abandonment of Flowlines, of the scheduled date for commencing abandonment. The operator must submit the Field Operations Notice no less than forty-eight (48) hours-thirty (30) days before the operator will commence abandonment.
 - (2) If the operator plans to abandon the on-location flowline, off-location flowline or crude oil transfer line in place, the operator must submit notice to the Director and the relevant Local Government with a Field Operations Notice, Form 42 Abandonment of Flowlines, of the scheduled date for commencing abandonment. The operator must submit the Field Operations Notice no less than thirty (30) twenty (20) days before the operator will commence abandonment and include documentation supporting the applicable reason for abandonment in place consistent with Rule 1105.e(1). The Director may review the Field Operations Notice prior to the commencement of abandonment procedures to determine whether abandonment in place is appropriate. The Director may approve, deny, request additional information, or impose additional Conditions of Approval.
 - (3) Unless waived, the operator must provide notice to the surface owner simultaneously with submitting notice to the Commission pursuant to this Rule 1105.c.
- 1105.e. <u>Abandonment.</u> Operators must remove the flowline or crude oil transfer line and its risers, the riser associated with cathodic protection, and above-ground equipment, unless one of the below exceptions applies allowing abandonment in place.
 - (1) Reasons for abandoning in place:
 - A. Surface owner agreement.
 - B. Successful revegetation has occurred or is in process and removal of the flowline or crude oil transfer line would harm revegetation and the line is in a sensitive area for wildlife or plants. The Director shall consult with the Division of Wildlife if the line is in a sensitive area for wildlife.
 - C. The federal government directs abandonment in place.

- D. Removal of a segment of the line requires damaging a public road, railroad, bike path, or public right of way.
- E. Removal requires removal from under a body of water.
- F. The flowline or crude oil transfer line is co-located with other active utilities or is in a recorded right of way.
- 1105.g. The Director will provide a Field Operations Notice, Form 42 Abandonment of Flowlines, for an on-location flowline or a Flowline Report, Form 44, filed pursuant to Rule 1105..c. or Rule 1105.f. for an off-location flowline or crude oil transfer line abandonment to the appropriate Local Governmental Designee and CO 811. The Local Government Designee will have fifteen (15) days to submit to the Director any concerns regarding the abandonment.
- 1105.h. Local governments may regulate abandonment. In the event that a local rule governing abandonment differs from the COGCC rules, the more protective rule governs.

ALGC EXHIBIT B TO RESPONSE STATEMENT

EXHIBIT D PIPELINE SPECIFICATIONS

<u>Design</u>

- 1. Pipeline shall be constructed with a Class 4 Design (0.40 Design Factor) for steel pipelines.
- 2. For steel pipelines, utilize Fusion Bond Epoxy (FBE) Coated Pipe (or equivalent), which is intended to protect pipe from corrosion
- 3. Utilize a cathodic protection system
- 4. Hydrostatic test to 1.25 times the Maximum Operating Pressure for four (4) hours for exposed pipe and eight (8) hours for buried pipe
- 5. Utilize In-Out measurement for Leak Detection
- 6. Utilize automated systems for over pressure protection & low pressure detection that shuts-in the pipe in order for Operator to investigate

Construction

- 1. Conduct X-ray on 100% of welds.
- 2. For buried pipe, pipe shall be buried a minimum of 48" from the surface.
- 3. Conduct survey and logging for every girth weld in place.
- 4. Utilize jeeping (holiday detector) as well as visual inspection of coating. Once a jeep (damage) is detected, pipe coating shall be repaired and re-jeeped until damage is repaired and does not cause a jeep or detection.
- 5. Following construction, site shall be left in as good a condition as prior to construction and Operator shall work with the applicable surface owner on restoration. Operator shall restore the site to a substantially similar condition as it existed prior to construction unless otherwise agreed by the City in writing.
- 6. All steps and or phases of construction shall be inspected by Operator's 3rd party inspectors.
- 7. Roads, creeks and other encumbrances shall be bored underneath at a safe depth.

Operation & Maintenance

- 1. Operator to conduct regular pigging on the pipelines
- 2. Operator to conduct smart pigging every 5 years to detect anomalies such as internal and external corrosion or denting.
- 3. Operator to conduct leak detection, including aerial surveys at least 2 times per year.
- 4. With respect to each Well Site, Operator to conduct pre-drill and post-drill pressure testing, pressure testing before commencing every phase of operations, and annual pressure testing thereafter.
- 5. To the maximum extent feasible, all flow lines, gathering lines, and transmission lines shall be sited 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. This distance shall be measured from the nearest edge of the pipeline

or flowline. Pipelines and gathering lines that pass within 150 feet of general residential, commercial, and industrial buildings or the high water mark of any surface water body shall incorporate leak detection, secondary containment, or other mitigation, as appropriate. The mitigation plan for such pipelines and gathering lines shall be submitted to the City.

- 6. To the maximum extent feasible, Operator shall use boring technology when crossing streams, rivers, or irrigation ditches with a pipeline to minimize negative impacts to the channel, bank, and riparian areas
- 7. All new pipelines shall have the legal description of the location recorded with the Clerk and Recorder of the City within thirty (30) days of completion of construction.
- 8. Operator will submit to City all records required to be submitted to PHMSA or the PUC including those related to inspections, pressure testing, pipeline accidents and other safety incidents.

ALGC EXHIBIT C TO RESPONSE STATEMENT

EXHIBIT D

PIPELINE REQUIREMENTS FOR GATHERING SYSTEMS and FLOWLINES

- 1. *Easements*. All pipeline right-of-ways ("ROWs") or easements shall be located outside existing and future road ROWs based on the latest available roadway information.
- 2. *License Agreements*. License Agreements are required for all crossing of City ROW and City easements.
- 3. *Stormwater Management*. Operator must apply for and obtain a City stormwater and erosion control permit. Erosion and sedimentation control is required.
- 4. The pipeline buried depth should be a minimum of forty-eight (48) inches for all pipes outside of the City ROW. All pipes within the arterial City ROWs shall be a minimum of twenty (20) feet depth. All pipes within all other City ROWs shall be a minimum of fifteen (15) feet depth. All pipelines installed beneath public ROW shall be bored unless otherwise approved by the City Engineer.
- 5. Operator is responsible for locating all existing and proposed utility crossings and ensure a minimum vertical separation of ten (10) feet below said crossing. If during the crossing design, a reduced vertical separation is requested due to site specific factors, the City Engineer can approve a crossing with as little separation as five (5) feet. Some crossing locations may be subject to additional requirements including enhanced stabilization.
- 6. All pipeline utility crossings shall be perpendicular or a minimum crossing angle sixty (60) degrees.
- 7. Horizontal offsets to all existing and proposed City utilities shall be a minimum of ten (10) feet edge to edge with the exception of critical infrastructure or planned critical infrastructure then the horizontal offset shall be a minimum of thirty (30) feet. Construction equipment is not allowed on top of critical infrastructure unless additional protection, as approved by the City, is applied.
- 8. The pipeline shall not have an undue adverse effect on existing and future development on the surrounding area as set forth in applicable City Master Plans and mitigates negative impacts on the surrounding area to the greatest extent feasible.
- 9. The nature and location or expansion of the pipeline will not unreasonably interfere with any significant wildlife habitat and will not unreasonably affect any endangered wildlife species, unique natural resource, known historic landmark or archaeological site within the affected area.

- 10. No adverse impact, from stormwater runoff, to the public ROWs, of water supply and/or surrounding properties will result because of the pipeline.
- 11. Operator shall mitigate any conflicts with any mutual irrigation ditch and/or structures used to transport water within the easement or ROW of the pipeline.
- 12. No pipeline shall be constructed in any zoning district until approved by the City.
- 13. Pipeline route shall follow quarter-sections, or existing ROW and may not traverse properties diagonally unless diagonal distance is less than two hundred fifty (250) feet unless specified by landowner or developer, with coordination of the City. For all routes on non-platted parcel of land that do not meet the criteria in this paragraph, the Operator shall consult the City as to an acceptable pipeline route.
- 14. No pipelines shall be allowed in City ROW, with the exception of ROW crossings, and the edge of the closest pipeline to ROW must be a minimum distance of thirty (30) feet. Any pipeline which is located within an easement obtained on or after the Effective Date, and within an existing and/or future ROW, shall be moved at the expense of the operator and/or permitted upon receipt of notice by City of its intent to improve or construct a roadway within the ROW.
- 15. Maximum pipeline corridor width shall be seventy-five (75) feet. Temporary construction easements are not included in maximum width.
- 16. To the maximum extent feasible, all pipelines shall be sited a minimum of one hundred fifty (150) feet away from general residential, commercial, and industrial buildings, as well as the high-water mark or floodplain of any water of the United States as defined by the EPA. This distance shall be measured from the nearest edge of the pipelines or Flowlines. Gathering Systems that pass within one hundred fifty (150) feet of general residential, commercial, and industrial buildings or the high water mark or floodplain of any water of the United States as defined by the EPA shall incorporate leak detection, secondary containment, or other mitigation, as appropriate. The mitigation plan for such pipelines shall be submitted to the City.
- 17. Operator will conduct an x-ray or other non-destructive examination on all welds and conduct survey and logging for every girth weld in place.
- 18. Operator will conduct survey and logging for every girth weld in place.
- 19. Operator will Utilize jeeping (holiday detector) as well as visual inspection of coating. Once a jeep (damage) is detected, pipe coating shall be repaired and re-jeeped until damage is repaired and does not cause a jeep or detection.
- 20. Following construction, site shall be left in as good a condition as prior to construction and Operator shall work with the applicable surface owner on restoration. Operator

shall restore the site to a substantially similar condition as it existed prior to construction unless otherwise agreed by the City in writing.

- 21. All steps and or phases of construction shall be inspected by Operator's third party inspectors or the City.
- 22. Floodways, creeks, ditches, and other conveyances shall be bored underneath at a depth no less than twenty (20) feet as determined by a Professional Engineer stamped geotechnical report and horizontal directional drill design.
- 23. A DOT Operational Control Center (OCC) will be used to monitor and control the DOT regulated pipelines. Safety and pipeline systems actively monitor for rupture, leak and flow anomalies.
- 24. Operator to conduct quarterly pigging on the pipelines.
- 25. On all Flowlines regulated by the COGCC leak protection and detection shall be provided through differential metering to meet zero tolerance levels for migration of product from the pipe envelope. Operator to conduct additional leak detection through aerial surveys at least 2 times per year.
- 26. On all Flowlines regulated by the COGCC Operator shall hydrostatic test to 1.25 times the Maximum Operating Pressure for four (4) hours for exposed pipe and eight (8) hours for buried pipe.
- 27. On all Flowlines regulated by the COGCC Operator shall utilize automated systems for over pressure protection & low pressure detection that shut-in the pipe in order for Operator to investigate.
- 28. All new pipelines shall have the legal description of the location recorded with the Clerk and Recorder of the City within thirty (30) days of completion of construction and provide the City GIS feature classes in the projection identified by the City. GIS data shared with the City shall not be shared with the public.
- 29. Operator will submit to City all records required to be submitted to PHMSA or the PUC including those related to inspections, pressure testing, pipeline accidents and other safety incidents.
- 30. Once the non-water pipelines are no longer in use, they shall be properly abandoned in place using flowfill or similar or removed. At this time the easement shall be released to the property owner or to the City. All pipelines, installed greater than fifty (50) years ago, shall be properly abandoned or re-certified by a third party and the certification shall be provided to the City.