

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is made and entered into by and between the City of Brighton, a Colorado home-rule city ("City") with an address of 500 S. 4th Ave., Brighton, CO 80601, and Petro Operating Company, LLC ("Operator"), with an address of 915 West Lehigh Avenue, No. 1394, Englewood, Colorado 80150. Operator and the City may be referred to individually as a "Party" or collectively as the "Parties."

BACKGROUND

- A. Operator is the owner or lessee of oil and gas leasehold and/or mineral interests within the City, and, as of the time of the execution of this MOU, has the right and intent to further develop its oil and gas leasehold and/or mineral interests within said portion of the City.
- B. The intent of this MOU is to provide the conditions under which Operator will develop and operate future oil and gas facilities in the City, in order to foster the efficient and economic production of oil and gas resources, to protect human health, safety and welfare and to protect the environment and wildlife resources, while at the same time providing for a predictable and expeditious administrative process for obtaining City land use approvals and permits for oil and gas facilities.
- C. The further intent of this MOU is to allow Operator an expedited procedure for obtaining City permits, without the need for any formal hearing on such permits, from the City for Operator's oil and gas operations and/or activities.

NOW, THEREFORE, the Parties agree as follows:

1. **Intent to Supplement COGCC Rules and Regulations, Not Replace.** The provisions of this MOU are intended to supplement and add to rules and regulations of the Colorado Oil and Gas Conservation Commission ("COGCC") and not to replace such rules and regulations. To the extent that any of the provisions of this MOU are in conflict with the Act or COGCC rules and regulations, the stricter standards shall govern.

2. **City Land Use Approvals.** Prior to the development or operation of any oil and gas facility in the City, Operator must obtain any required approval from the City pursuant to any validly adopted provisions in the City's Land Use and Development Code, Chapter 17 of the Brighton Municipal Code ("BMC") and specified in Attachment A to this MOU. If the requirements proposed by the City conflict with terms of this MOU, then the terms of this MOU shall control. The BMC specifically allows for expedited administrative approval of new oil and gas locations pursuant to an MOU, but does not waive any other provisions in the Code. (BMC Sections 17-64-310 to 17-64-420 as may be amended from time to time.) Operator and the City will use best efforts to obtain other required regulatory approvals necessary for the proposed operations on an expedited basis and before or contemporaneously with approval of this MOU, including but not limited to:

- a. Operator's use of City rights-of-way and culverts;
- b. Noise and visual mitigation requirements;
- c. Floodplain requirements;
- d. Water quality monitoring plan;
- e. Landscaping requirements;
- f. Responses to COGCC permit applications or other matters related to Operator's activities or proposed activities within the City; and
- g. Road Improvements and Maintenance Agreements.

3. **Surface Owner Involvement.** Operator shall provide City with summaries of all Surface Use Agreements and other contracts governing oil and gas operations on property proposed to be covered by this MOU, excluding confidential information. City may request a meeting with the Surface Owner to discuss the MOU and its applicability to Surface Owner's property and shall provide notice to Operator regarding such meeting. If the property is the subject of the Surface Use Agreement, Operator has the right, but not the obligation, to attend such meeting. If the property is not subject to a Surface Use Agreement or other specific agreement governing the siting of oil and gas locations, then Operator shall be required to attend such meeting.

4. **"Reasonably Practicable" and other Definitions.** Certain conditions of approval, as set forth in this MOU, may be excused if compliance with those conditions would not be "reasonably practicable". An Operator wishing to be excused from a condition within this MOU on the basis it is not "reasonably practicable" shall note that request in its written application materials. The non-exhaustive list of factors that the City Manager may use to determine if a MOU condition is not "reasonably practicable" includes the following:

- a. There is no technology commercially available at a reasonable cost to conduct the proposed oil and gas operations in compliance with the provision and waiver of the provision will not have an adverse effect on the public health, safety or welfare, or on the environment;
- b. An alternative approach not contemplated by the provision is demonstrated to provide a level of protection of the public health, safety and welfare and of the environment that would be at least equivalent to the applicable provision; or
- c. Application of the provision is impractical or would create an undue or unnecessary hardship 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 operation site, or inadequate public infrastructure to the site.

Operators who cannot meet the conditions of the MOU are encouraged to apply for a Conditional Use Permit as described in BMC Article 17-64.

All other terms used herein that are defined in the Brighton Municipal Code Section 17-64-30 or regulations promulgated by the COGCC and/or the Colorado Department of Public Health and

Environment shall be defined as provided in the Act or in such regulations. All other words used herein shall be 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 the oil and gas industry.

For the purposes of this MOU, "School" refers to both Public Schools and Private Schools as defined in Colorado Revised Statutes § 22-7-703(4) and § 22-30.5-103 (6.5).

5. **Setbacks for New Wells.** Operator shall comply with COGCC Order 1-189 and BMC Section 17-64-220 and agrees to use reasonably practicable efforts to locate the wellhead or Production Facility at least 1000' from the following:

- The City's public water supply wells;
- Any Building Units (unless waived by the affected Building Unit owner(s));
- Any School building;
- Any parcel of real property on which a future permanent or temporary School building is scheduled to be constructed within two years from the time Operator files an application for a new Oil and Gas Location; and
- Outside areas used for school activities, such as a playground, athletic field, or student loading area.

In addition, Operator shall comply with the setback provisions, if any, contained in Attachment A to this MOU. In the event the parties determine that locating a well or oil and gas location outside these distances is not reasonably practicable, Operator shall maximize equipment and wellhead setbacks from Building Units, the City's public water supply wells, school buildings and scheduled school buildings, and outside areas used for school activities.

6. **Pits and Waste Disposal.**

- a. Operator shall use closed-loop or modified closed loop systems, as defined below, for drilling and completions; however, emergency, or freshwater pits may be allowed if approved by COGCC in accordance with COGCC rules and applicable order.
- b. Modified closed-loop systems include oil and gas wells where air or fresh water is used to drill through the surface casing interval, defined as fifty (50) feet below the depth of the deepest aquifer, and a closed loop system is used for the remainder of the drilling and/or completion or recompletion procedures.
- c. No Class II injection wells are to be located within the City.

7. **Meetings to Monitor and Discuss MOU Issues.** The City and Operator agree to meet as necessary and reasonable, to monitor and discuss any pertinent issues associated with oil and gas facilities within the City at the request of either Party.

8. **Water Supply and Quality.** Operator will use pipelines and irrigation ditches for transportation of hydraulic fracturing water to the Homestead location. The operator will assure that the water supplier has acquired all of the necessary permitting, easements, etc. for this transportation. The transportation route and source will depend on which water supplier is chosen for the project; once confirmed, the Operator will provide the route and source to the City. Where reasonably practicable, Operator may utilize City Road Right-of-Way, and City drainage culverts for the laying and operation of temporary water lines on the surface, upon prior notice to the City of such intended use. If necessary, Operator will bury temporary water lines at existing driveway and gravel road crossings, or utilize existing culverts, if available.

9. **Water Quality Monitoring Plan.** In all areas of the City, Operator shall comply with COGCC Rules 609 and the steps identified in this section and Attachment A that go beyond that rule. In summary, this requires pre- and post-drilling testing. The rules require oil and gas operators to sample all "Available Water Sources" (if owner has given consent for sampling and testing and has consented to having the sample data obtained made available to the public), with a cap of four (4) water sources, within one-half (1/2) mile radius of a proposed well or multi-well site. Operator may rely on previously obtained water sampling analytical results in lieu of obtaining and testing a new water sample if the previous water sample was obtained within 18 months of the spudding of a proposed well or multi-well site. "Water Sources" includes registered water wells, permitted or adjudicated springs, and certain monitoring wells. Monitoring, sampling, and testing of well water required herein shall be at the sole expense of the operator.

- a. Where multiple defined aquifers are present, the sampling locations should attempt to sample from the alluvial aquifer when possible.
- c. Copies of all water test results shall be provided to the City and landowner within thirty (30) days of collecting the samples, or as soon as water test results are received by Operator, if not received within thirty (30) days of collecting the samples.
- d. If the methane concentration increases by more than 5.0 mg/l between sampling periods, or increases to more than 10 mg/l, the operator shall notify the City immediately.
- e. If there are no available water sources located within a 1/2 mile radius of a new oil and gas facility, the Operator, prior to construction, will test the nearest downgradient available water source that is within a one-mile radius of the oil and gas facility.

10. **Comprehensive Planning.** Within 90 days of the signing of this MOU, Operator shall provide the following information, with a copy to the COGCC Local Government Liaison ("LGL"):

- a. Based on Operator's current business plan, a good faith estimate of the number of wells (not including non-operated wells) that Operator intends to drill in the next five (5) years within the City limits or within 1 mile of the City limits.
- b. A map showing the location of Operator's existing Well Sites and related production facilities; and Well Sites for which Operator has, or has made application for, COGCC permits
- c. Discussion of sites identified for development on the operator's current drilling schedule, or projected five years in the future, for which it has not yet made application for COGCC permits.
- d. The plan provided to the LGD is acknowledged to be subject to change at Operator's sole discretion, and shall be updated by Operator if materially altered or at least once every year.

If COGCC enacts a new rule covering comprehensive planning, then the City and Operator shall negotiate in good faith to amend this paragraph 10 so that its terms are consistent with COGCC rules.

11. Noise Mitigation Measures. Operator shall prepare and implement a noise mitigation plan. The noise mitigation plan shall detail the reasonably practicable efforts to be used to reduce db(A) scale noise level for operations subject to the light industrial zone noise standard under COGCC Regulations 802.b and 604.c.(2)(A) to sixty (60) db(A) and to reduce the noise level for operations subject to the industrial zone noise standard under COGCC Regulations 802.b and 604.c.(2)(A) five (5) db(A) below the maximum level permitted by those Regulations. 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.

For db(C) scale noise, Operator shall comply with the requirements of COGCC Regulation 802 as amended from time to time.

In determining noise mitigation proposed in the mitigation plan, specific site characteristics shall be considered, including but not limited to the following:

- a. Nature and proximity of adjacent development, location and type;
- b. Prevailing weather patterns, including wind directions;
- c. Vegetative cover on or adjacent to the site;
- d. Topography; or
- e. Waivers or consents by surface owners.

Where the Well and Well Site are within an Urban Mitigation Area, or within 1,000 feet of a Useable Open Space, Operator shall conduct a noise mitigation study. Based upon the results of the mitigation study and the specific site characteristics, nature of the proposed activity, its proximity to surrounding development, and type and intensity of the noise emitted, noise abatement measures not included in the noise mitigation plan may be required. The level of required mitigation may increase with the proximity of the Well and Well Site to areas of particular noise sensitivity or the level of noise emitted by the Well and Well Site. The following noise mitigations shall be considered in the noise mitigation plan:

- f. Noise management plan identifying hours of maximum noise emissions, type, frequency, and level of noise to be emitted, and proposed mitigation measures; or
- g. Acoustically insulated housing or cover enclosing the motor or engine;
- h. Use of electric-powered engines for motors, compressors, and drilling and production equipment and for pumping systems in order to mitigate noise. If electricity from the grid is not available, Operator shall use propane or natural gas to power pumps and motors, if reasonably practicable.
- i. Any abatement measures required by the COGCC for high-density areas, if applicable.

Noise abatement measures may be implemented to the extent they are reasonably practicable. If COGCC enacts a new rule covering noise mitigation measures, then the City and Operator shall negotiate in good faith to amend this paragraph 11 so that its terms are consistent with COGCC rules.

12. **Oil Pipelines.** If reasonably practicable, the Operator agrees to tie into an oil pipeline to reduce or eliminate oil field traffic and the use of on-site storage tanks during the production phase of the oil and gas development

13. **Floodplain.** Any disturbance within a 100-year floodplain will be allowed only if Operator has complied with all the City's legally adopted floodplain and engineering regulations. Pits, except for emergency pits, will not be allowed in 100-year floodplain, as defined in the City's Stormwater Management Manual. A "100-year floodplain" shall be, for purposes of this Section, a "Special Flood Hazard Area" as identified and mapped by the Federal Emergency Management Agency's National Flood Insurance Program.

14. **Visual Impacts and Aesthetics.** Operator shall prepare and implement a visual mitigation plan and comply with applicable provisions of COGCC Rules 803 and 804 and the steps identified in Attachment A to this MOU.

15. **State Oil and Gas Permit Approvals.** Operator agrees to include the contents of each Attachment A of this MOU in all Forms 2 and 2A that it submits to the COGCC and

consents to the inclusion of the contents of Attachment A of this MOU as conditions of the issuance of any permit or other form of approval by the COGCC with regard to the location, development or operation of an oil and gas facility located on the lands described in such Attachment A, unless, and to the extent, waived or modified in writing by the City Manager, or waived or modified on the record at a public hearing before the City Council; further, the provisions of this MOU shall remain conditions of permit or other form of approval regardless of the subsequent sale or other transfer of any such oil and gas facilities or interest in such lands by Operator. If new facts or changed conditions render it necessary, the City shall utilize the LGD process described in the COGCC's Rules and may request that the COGCC impose site specific conditions as part of the state permit process that are in addition to Operator's practices or procedures agreed upon herein and Operator may respond to same as set forth in the COGCC's Rules. If the state permit has already been approved and the City and Operator are in agreement as to any subsequent, additional conditions to be placed on the state permit, Operator agrees to apply to the COGCC to modify the state permit by allowing such subsequent, additional conditions to be placed on the state permit. In the event a COGCC permit is extended, Operator shall notify LGD to allow for LGD to comment on extension of permit.

16. **Amendment.** This MOU may be amended by mutual consent of the City and Operator. The City Manager has the discretion to refer any proposed amendments the City Council for its consideration and decision. Additional facilities may be exempted from some or all of the terms of this MOU, but only if approved in writing by the City Manager, or approved on the record at a public hearing before the City Council. If there is a new development in state law, rules or judicial decisions that substantially affect any provision of this MOU, the Parties agree to negotiate in an attempt to update this MOU in light of same by a written amendment executed by both Parties. No amendment to this MOU shall be effective unless in writing and signed by the Parties.

17. **Term.** This MOU is effective upon the execution by both Parties and shall remain in effect for a period of two years and so long as Operator, its successors or assigns, are engaged in leasing mineral interests within the City or the development or operation of oil and gas facilities within the City; provided, however, this MOU may be terminated by either Party with thirty (30) days prior written notice to the other Party. In the event this MOU expires or is otherwise terminated, the substantive requirements stated in this MOU, including all of Attachment A, shall survive and remain enforceable against the City or Operator or Operator's successors and assigns with respect to any oil and gas facilities that were permitted or otherwise approved under the provisions of this MOU, except to the extent waived or modified pursuant to the provisions of this MOU. Additionally, in the event this MOU expires or is otherwise terminated, no re-permitting of the wells shall be required solely as a result of the termination of this MOU.

18. **Obligation of Funds.** Nothing in this MOU shall commit either Party to obligate or transfer any funds to the other.

19. **Force Majeure.** If either Party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this MOU, that Party shall give the other Party prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the

obligations of the Party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. Both Parties shall use all reasonable diligence to remove the force majeure situation as quickly as practicable. "Force majeure" shall mean causes or conditions beyond a Party's reasonable control, including, without limitation, war, civil commotion, act of God, unavailability of equipment or materials, lack of access, strike or other stoppage (whether partial or total) of labor, or any law, decree, regulation or order of any government or governmental body (including any court or tribunal).

20. **Authority to Execute MOU.** Each Party represents that it has the full right and authority to enter into this MOU.

21. **Governing Law/Venue.** This MOU shall be governed and construed in accordance with the laws of the State of Colorado without reference to its conflict of law provisions. For any matter requiring judicial resolution, the Parties agree to the exclusive jurisdiction of the State District Court of the County of Adams, Colorado.

22. **Entire Agreement.** Except as expressly set forth herein, this MOU embodies the complete agreement between the Parties hereto with respect to the subject matter hereof and supersedes and preempts any prior understandings, agreements, or representations by or between the Parties, written or oral, which may have related to the subject matter hereof. No amendment to this MOU shall be effective unless in writing, signed by the Parties.

23. **Third Party Beneficiaries.** Except as specifically stated herein, this MOU is not intended to, and does not, create any right, benefit, responsibility or obligation that may be enforced by any non-party.

24. **Notices.** All notices and other correspondence related to this MOU shall be in writing and shall be delivered by: (i) certified mail with return receipt, (ii) hand delivery with signature or delivery receipt provided by a third party courier service (such as FedEx, UPS, etc.), (iii) fax transmission if verification of receipt is obtained, or (iv) email with return receipt, to the designated representative of the Party as indicated below. A Party may change its designated representative for notice purposes at any time by written notice to the other Party. The initial representatives of the Parties are as follows:

City:	City Manager's Office Brighton LGD 500 S. 4 th Avenue Brighton, CO 80601	City Attorney Margaret Brubaker 21 North 1 st Avenue, Suite 290 Brighton, CO 80601 mbrubaker@mmlc.com (303) 659-0752 Fax
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With a copy to:
Director of Community Development
500 S. 4th Avenue
Brighton, CO 80601

Operator: Petro Operating Company, LLC
915 West Lehigh Avenue, No. 1394
Englewood, CO 80150
rogeraparker9@aol.com

25. **Subsidiaries/Successors.** The provisions of this MOU shall apply to all successors and assigns of Operator with respect to any oil and gas facilities approved under the terms of this MOU. Operator shall require any successor and assign, by written agreement, to adhere to all terms and conditions of this MOU, and to expressly assume the defense and indemnity obligations to the City as set forth herein in a document acceptable in form to the City. Such assignment shall not relieve the assignor of any obligations that accrue during the period of operation of the assignor or otherwise arising out of the actions or inactions of the assignor during its period of operation.

26. **Default.** If a Party defaults in the performance of an obligation under this MOU, the defaulting Party shall have ten (10) days to cure the default after receipt of written notice of such default from the non-defaulting Party, provided the defaulting Party shall be entitled to a longer cure period if the default cannot reasonably be cured within ten (10) days and the defaulting Party commences the cure within such ten (10) day period and diligently pursues its completion; however, in the event that the default involves an issue that could have an immediate impact on public health, safety or welfare, or cause damage to property of another, the defaulting party shall immediately begin action to cure the default. Each alleged default shall be treated separately under this paragraph and notice of an alleged default shall not affect the processing of permit applications while the notice is being evaluated, contested or corrected. In the event of a default, the Parties shall be entitled to seek specific performance as well as any other available remedies. The remedy of specific performance, however, shall not be available if specific performance is not reasonably practicable and would not produce results significantly better than achievable under other available remedies. If the MOU is the subject of litigation, the Party who substantially prevails shall be entitled to recovery of its attorney fees and costs.

27. **Jurisdiction: Waiver of Rights.** The parties acknowledge, understand and agree that this MOU shall not be used as evidence that either party has waived any rights to assert its claims concerning the validity or extent of the City's land use jurisdiction. Nothing in this MOU shall be construed as an admission regarding the existence of proper jurisdictional authority or waiver by either party of any legal right or obligation, nor shall anything be construed as a bar to either party to seek any legal remedy available to it. Operator agrees, however, that it will not exert jurisdictional or preemption arguments with respect to the specific performance obligations contained in this MOU.

28. **Defense and Indemnity.** Operator agrees to defend and indemnify the City, its employees, officers, boards, agents and councilmembers (collectively "City Entities") from and against all claims and liability against the City Entities resulting from any action or inaction of Operator, its agents, subcontractors, representatives, or any other person for whom Operator is responsible at or in connection with the Oil and Gas Locations, 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 law. As used in this paragraph, the term "claim" means a claim

filed in any judicial forum, any administrative proceeding and any administrative order. Operator shall investigate, handle, respond to, satisfy the claim and bear all other costs and expenses related thereto, including court costs and attorneys' fees. This defense and indemnity does not apply to a claim or liability to the extent it arises from the negligence or willful misconduct of the City Entities. The obligations of this paragraph shall survive for so long as Operator is conducting operations in the City.

29. **Recording.** This MOU may be recorded with the Clerk and Recorder of the County of Adams and the County of Weld.

IN WITNESS WHEREOF, the Parties have caused this MOU to be executed by a duly authorized representative on the dates indicated below.

Petro Operating Company, LLC

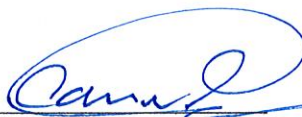
By: 
Erin Parker, Manager

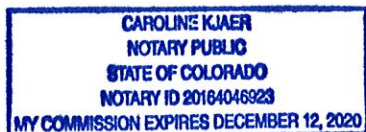
STATE OF Colorado)
) ss
COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 22nd day of February 2017, by Erin Parker, as Manager of Petro Operating Company, LLC.

My commission expires: 12/12/2020

Witness my hand and official seal.


Notary Public



City of Brighton

ATTEST:

By: Clint Blackhurst
Clint Blackhurst, Acting City Manager

By: Natalie Hoel
Natalie Hoel, City Clerk

County of Adams)
) ss.
State of Colorado)

The foregoing instrument was acknowledged before me this 1st day of March, 2017, by Clint Blackhurst, Acting City Manager of the City of Brighton.

My commission expires: June 23, 2018

Patricia Leyva Espanza
Witness my hand and official seal.
Notary Public
State of Colorado
Notary ID 20104013755
My Commission Expires June 23, 2018

Patricia Leyva Espanza
Notary Public

The foregoing instrument was acknowledged before me this 1st day of March, 2017, by Natalie Hoel, City Clerk.

My commission expires: June 23, 2018

Witness my hand and official seal.

Patricia Leyva Espanza
Notary Public
State of Colorado
Notary ID 20104013755
My Commission Expires June 23, 2018

Patricia Leyva Espanza
Notary Public

ATTACHMENT A

The following conditions will apply to all of Operator's newly permitted wells and facilities within the City of Brighton ("City") and located within Section 34, Township 1 North, Range 66 West and Section 3, Township 1 South, Range 66 West, as of the effective date of the fully executed MOU between the City and Operator. See Plat Amendment Map of Homestead location. Attachment A shall be incorporated into the COGCC permit approval process through the LGD process as described in the COGCC's Rules, or by Sundry Notice (COGCC Form 4) if there is agreement between Operator and the City.

1. Pits. Operator's Pit Practices within the City.

- a. Operator shall use closed-loop or modified closed loop systems, as defined below, for drilling and completions; however, emergency or freshwater pits may be allowed if approved by the Colorado Oil and Gas Conservation Commission ("COGCC") in accordance with COGCC's Rules and applicable orders.
- b. Modified closed-loop systems include oil and gas wells where air or fresh water is used to drill through the surface casing interval, defined as fifty (50) feet below the depth of the deepest aquifer, and a closed loop system is used for the remainder of the drilling and/or completion or recompletion procedures.

2. Containment berms. Operator shall utilize steel-rim berms as secondary containment around tanks and separators at well sites with sufficient capacity to contain 1.5 times the volume of the largest tank enclosed by the berm plus sufficient freeboard to prevent overflow. All berms and containment devices shall be inspected by Operator at regular intervals and maintained in good condition. No potential ignition sources shall be installed inside the secondary containment area unless the containment area encloses a fired vessel. For purposes of this paragraph, "regular intervals" shall mean at least as frequently as every pumper/lease operator site visit unless remote sensing equipment is utilized.

- a. Secondary containment for tanks shall be constructed with a synthetic or engineered liner that contains all primary containment vessels and is mechanically connected to the steel ring to prevent leakage.
- b. For locations within five hundred (500) feet and upgradient of a surface water body, tertiary containment, such as an earthen berm, is required around production facilities. Such tertiary containment berm shall have a capacity of two (2) times the largest individual tank.

3. Water Supply and Quality. Water for use in drilling operations will be secured from local vendors. The exact source will be selected based on price and availability at the time of operations. Petro Operating will commit to using pipelines and

irrigation ditches for transportation of hydraulic fracturing water to the Homestead location. The Operator shall assure that the water supplier has acquired all the necessary permitting, easement, etc. for this transportation. The transportation route and source will depend on which water supplier is chosen for the project; once confirmed, the Operator will provide the route and source to the City.

The water supplier will do all the necessary permitting for this transportation. The transportation route and source will depend on which water supplier is chosen for the project.

A closed loop drilling fluid system will be used during the drilling process to recycle fluids and no pits will be constructed to store waste drilling fluid. Drill cuttings and drilling fluid used to drill the well will be hauled offsite to a COGCC approved land farm location. If a spill occurs, Operator will report it in accordance with COGCC spill reporting requirements. If a Form 19 Spill/Release Report is submitted to COGCC it will also be provided to the City.

4. **Noise.** The location of wellhead and production facilities has been selected to minimize any noise impacts to surrounding residents. In addition, Operator's noise mitigation plan is contained in Section 3.5 of the Development Application and also includes the provisions listed in Section 11 of the MOU and applicable COGCC rules. Operator will include the terms of Section 3.5 of the Development Application and Section 11 of the MOU as conditions for COGCC permits. Operator shall comply with applicable provisions of its noise mitigation plan.

5. **Setbacks for New Wells.** Operator shall comply with COGCC Order 1-189 and BMC Section 17-64-220 and will locate the wellhead or Production Facility at least 1000' from the following:

- The City's public water supply wells;
- Any existing Building Units (unless waived by the affected Building Unit owner(s));
- Any School building and the parcel of property on which it is located;
- Any parcel of real property on which a future permanent or temporary School building is scheduled to be constructed within two years from the time Operator files an application for a new Oil and Gas Location; and
- Outside areas used for school activities, such as a playground, athletic field, or student loading area.

6. **Discharge Valves.** The oil and gas facilities proposed by Operator are not located in an Urban Mitigation Area or a Useable Open Space. In the event that the Homestead location becomes an Urban Mitigation Area or within 1,000 feet of Useable Open Space, open-ended discharge valves on all storage tanks, pipelines and other containers shall be secured where the operation site is unattended or is accessible to the general public. Open-ended discharge valves shall be placed within the interior of the tank secondary containment. As used in this paragraph, the term "secured" means locked or otherwise secured such that the public cannot operate the valve. If reasonably practicable, such valves shall contain remote alarms to alert Operator that a valve has been opened.

7. **Burning.** No open burning, other than flaring of natural gas, shall occur on the site of any oil and gas operation. Open flaring of natural gas shall be limited to well completion/flowback activities or as required in an emergency, pipeline pressure adjustment or upset condition unless permission is given by the City.

8. **Chemical Storage.** Operator shall remove hydraulic fracturing chemicals and flowback from hydraulic fracturing, from the Well Sites within 30 days of completion of fracturing operations, except that hydraulic fracturing chemicals and flowback from hydraulic fracturing on multi-well pads may remain on location or at proximate location as allowed by COGCC so long as drilling operations are ongoing location or if written approval is granted by the City.

9. **Water Quality Monitoring Plan.** Operator shall comply with COGCC Rules 609 at this location and the steps identified in this MOU that go beyond that rule.

10. **Floodplain.** The oil and gas facilities proposed by Operator are not located in a 100-year floodplain. In the event that Operator must change the location of the oil and gas facilities within a 100-year floodplain, disturbance within a 100-year floodplain will be allowed if Operator has complied with all the City's legally adopted floodplain and engineering regulations. Unless approved by the Director of the COGCC, pits, except emergency pits, will not be allowed in 100-year floodplain, as defined in the City's Stormwater Management Manual. A "100-year floodplain" shall be, for purposes of this Section, a "Special Flood Hazard Area" as identified and mapped by the Federal Emergency Management Agency's National Flood Insurance Program

11. **Visual Impacts and Aesthetics.** The location of wellhead and production facilities has been selected to minimize any visual impacts to surrounding residents. In addition, Operator's visual mitigation plan is contained in Sections 3.2 and 3.5 of the Development Application and also includes applicable COGCC rules. Operator will include the terms of Sections 3.2 and 3.5 of the Development Application as conditions for COGCC permits. Operator shall comply with applicable provisions of its visual mitigation plan. To the maximum extent reasonably practicable, Operator shall comply with the following aesthetic provisions:

- a. Operator shall use fencing and the existing berm to mitigate visual impacts.
- b. Structures shall be of minimal size to satisfy present and future functional requirements;
- c. Operator shall consult with the City Director of Parks and Recreation when clearing trees and vegetation for construction of oil and gas facilities and feathering and thinning;
- d. Align access roads to follow existing grades and minimize cuts and fills.

- e. Landscaping shall be coordinated with the surface estate developer and staged to accommodate surface development. The initial phase will utilize natural topography and fencing surrounding the Homestead location, as well spruce trees already established to the north. Initial landscaping will be installed within 6 months of finishing drilling and completion operations. The second phase of the landscaping will begin after all 24 wells are drilled and before development of phase 3 of the Homestead subdivision begins. At that time Petro Operating will fence and landscape the Homestead location to fit the design of the subdivision and the requirements set forth by the City of Brighton.
- f. The oil and gas facilities proposed by Operator are not located in an Urban Mitigation Area or a Useable Open Space. In the event that Operator must change the location of the oil and gas facilities to a location within an Urban Mitigation Area or Useable Open Space, one or more of the following landscaping practices may be required by the City where reasonably practicable, on a site-specific basis:
 - i. Landscaping requirements found in Sec. 17-48-170;
 - ii. Establishment and proper maintenance of ground covers, shrubs, trees;
 - iii. Shaping cuts and fills to appear as natural forms;
 - iv. Cutting rock areas to create irregular forms;
 - v. Designing the facility to utilize natural screens; or
 - vi. Construction of fences for use with or instead of landscaping.

12. **Electric Equipment.** Operator shall use electric-powered engines for motors, compressors, and drilling and production equipment and for pumping systems in order to mitigate noise and to reduce emissions, unless use of such equipment in a particular situation is not reasonably practicable or available to Operator within Operator's drilling schedule. If electricity from the grid is not available, Operator shall use propane or natural gas to power pumps and motors, if reasonably practicable and available to Operator within Operator's drilling schedule.

13. **Air Quality Mitigations.**

- a. In addition to the requirements under Colorado Air Quality Control Program, Title 25, Section 7, C.R.S., oil and gas production facilities located within 1,320 feet of a building unit shall be:

- i. Subjected to an instrument-based leak detection and repair (LDAR) inspection at least once a year unless the well is shut in or otherwise not in production;
 - ii. VOCs destruction or control technologies with at least 95% efficiency must be employed on all tanks capable of emitting over 2 tons of VOCs annually;
 - iii. If a gas leak of over 10,000 ppm hydrocarbons is discovered the first attempt to repair the leak shall begin no later than 24 hours after discovery. If a repair is not possible within 24 hours, the well should be shut down until a repair can be made. If shutting down the well will not stop the leak, efforts should be made to minimize the leak within the first 24 hours and it shall be reported to the City Local Government Designee; and
 - iv. Tank unloading without opening thief hatch using technologies available to Operator within Operator's drilling schedule, such as Automatic Custody Transfer (LACT) meters to limit emissions during tank unloading.
- b. To the extent practicable, exhaust from all engines, motors, coolers, and other mechanized equipment shall be vented in a direction away from occupied buildings.
 - c. Operator must maintain the following records on file for inspection by the City: (a) certification of compliance with these City and state air quality requirements and documenting any periods of non-compliance, including the date and duration of each deviation and a compliance plan and schedule to achieve compliance; and (b) that the equipment at the well site 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. Operator may satisfy this obligation in whole or in part by making its AQCC Regulation No. 7 semi-annual reports and annual self-inspection reports available to the City for the prior calendar year.

14. Fugitive Dust Suppression. Silica dust must be contained to the maximum extent reasonably practicable during the hydraulic fracturing process. 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 reasonably practicable. No untreated or unrecycled produced water or other process fluids shall be used for dust suppression. Operator will avoid dust suppression activities within three hundred (300) feet of the high water mark of any waterbody as defined in Section 17-12-20. Definitions, BMC, as the same may be amended from time to time, unless the dust

suppressant is water. Safety Data Sheets (MSDS) for any chemical based dust suppressant shall be submitted to the City Manager for approval prior to use.

15. **Flammable Material.** All ground within twenty five (25) feet of any tank, or other structure containing flammable or combustible materials shall be kept free of dry weeds, grass or rubbish, and shall conform to COGCC 600 Series Safety Regulations and the applicable Fire Code.

16. **Flow Lines.** Any newly constructed or substantially modified flow lines on site shall be constructed and operated under the provisions of the COGCC 1100 Series Flow line Regulations and any applicable surface use agreements with the surface owners. To the maximum extent reasonably practicable, any newly constructed or substantially modified flow lines on site shall meet the following requirements:

- a. All flow lines, shall be sited a minimum of fifty (50) feet away from existing 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.
- b. Pipelines shall be aligned with established roads in order to minimize surface impacts and reduce disturbance.
- c. Operators shall share existing pipeline rights-of-way and consolidate new corridors for pipeline rights-of-way to minimize surface impacts.
- d. When crossing streams, rivers, or irrigation ditches with a pipeline, Operator shall use boring technology, or other technologies approved by the City, to minimize negative impacts to the channel, bank, and riparian areas.

17. **Oil Pipelines.** If reasonably practicable, the Operator agrees to tie into an oil pipeline to reduce or eliminate oil field traffic and the use of on-site storage tanks during the production phase of the oil and gas development.

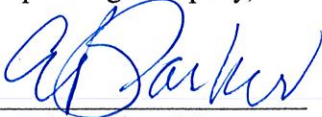
18. **Removal of Debris and Excess Materials and Equipment.** When each oil and gas operation is completed, all construction-related waste debris related to that operation shall be removed from the site for proper disposal. The site shall be maintained free of debris at all times during operation. Materials and/or waste shall not be buried or burned on-site.

All excess equipment and materials used for drilling, completion, or re-completion and maintenance of the facility shall be removed from the site within thirty (30) days of completion of those activities, weather conditions permitting, unless otherwise agreed to by the City and surface owner. Excess equipment and materials include, but are not limited to casing pipe, sand (proppant), water containers, and unused tanks. Permanent storage of excess equipment and materials on Well Pad sites shall not be allowed. It is understood that drilling and completion equipment and materials necessary for multi-well pads may remain on location, so long as

drilling or completion operations are ongoing on that location or at proximate locations as allowed by COGCC or if written approval is granted by the City and the surface owner.

IN WITNESS WHEREOF, the Parties have caused this MOU to be executed by a duly authorized representative on the day and year indicated below.

Petro Operating Company, LLC

By: 
Erin Parker, Manager

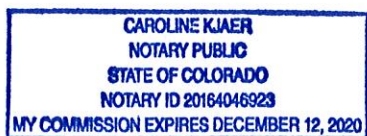
STATE OF Colorado)
) ss
COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 22th day of February, 2017, by Erin Parker, as Manager of Petro Operating Company.

My commission expires: 12/12/2020

Witness my hand and official seal.


Notary Public



City of Brighton

ATTEST:

By: Clint Blackhurst
Clint Blackhurst, Acting City Manager

By: Natalie Hoel
Natalie Hoel, City Clerk

County of Adams)
) ss.
State of Colorado)

The foregoing instrument was acknowledged before me this 1st day of March, 2017, by
Clint Blackhurst, Acting City Manager of the City of Brighton.

My commission expires: June 23, 2018

Witness my hand and official seal.
Patricia Leyva Esparza
Notary Public
State of Colorado
Notary ID 20104013755
The foregoing instrument was acknowledged before me this 1st day of March, 2017, by
Natalie Hoel, City Clerk.

My commission expires: June 23, 2018

Witness my hand and official seal.

Patricia Leyva Esparza
Notary Public
State of Colorado
Notary ID 20104013755
My Commission Expires June 23, 2018

Patricia Leyva Esparza
Notary Public