



**COMMUNITY AND ECONOMIC DEVELOPMENT
DEPARTMENT
STAFF REPORT**

Administrative Review Memo

January 8, 2019

CASE No.: USR2018-00006	CASE NAME: PetroShare – Palacios
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Owner's Name:	PetroShare Corporation
Applicant's Name:	PetroShare Corporation
Applicant's Address:	9635 Maroon Circle, Suite 400
Location of Request:	Section 15, Township 1S, Range 65W Parcel number 0156715400001
Nature of Request:	A Use by Special Review Permit to allow up to sixteen (16) horizontal wells and one (1) production facility on one (1) well pad for the production of oil and gas.
Zone District:	Agriculture - 3 (A-3)
Site Size:	Approximately 6.3 acres (38-acre parcel)
Proposed Uses:	Multi-well pad for the production of oil and gas
Existing Use:	Agriculture
Report Date:	January 8, 2019
Case Manager:	Christine Dougherty
Director Options:	Approval with 4 Findings of Fact, 4 Conditions Precedent, and 19 Conditions; Denial; or Referral to the Board of County Commissioners
Staff Recommendation:	Approval with 4 Findings of Fact, 4 Conditions Precedent, and 19 Conditions

SUMMARY OF APPLICATION

Background:

PetroShare Corporation (PetroShare), the applicant, engages in exploration and development of oil and natural gas, primarily in the Denver-Julesburg Basin. The applicant has proposed an oil and gas well pad location in unincorporated Adams County. The proposed project, Palacios, consists of the construction of one well pad with up to sixteen (16) horizontal wells, equipment, production facility, and one access road.

The proposed well pad location is on a 38-acre parcel, northwest of the intersection of East 144th Avenue and Hayesmount Road. Access to the site is proposed to be from East 144th Avenue, located on the southern boundary of the property. A residential structure and several out buildings are currently located on the northern portion of the parcel.

Summary of Application:

The project proposed by PetroShare consists of sixteen (16) wells and one (1) production facility on a single well pad, with one (1) access road to accommodate all traffic during construction, production, and long-term maintenance. The project is has three primary phases: construction, drilling/completions, and production. Construction of the well pad may take up to three (3) weeks to complete. The drilling period is expected to last up to twelve (12) days per well, and up to an additional ten (10) days for completions, totaling up to twenty-two (22) days per well.

The pad size during the drilling and completion phases will be approximately six and three tenths (6.3) acres. After the completions phase, the site will undergo interim restoration, during which the area of the facility will be reduced to three and one tenth (3.1) acres. During interim restoration, landscaping will be installed to reduce the overall visual impacts of the facility. Final reclamation will occur when the wells are plugged and abandoned.

The equipment, which will remain on site during the production phase, includes two (2) oil tanks, two (2) produced water tanks, four (4) separators, and one (1) Vapor Recovery Unit.

The mitigation measures that have been proposed by PetroShare include the following:

- **Planning:** PetroShare is pursuing an Oil and Gas Location Assessment permit (Form 2A) for a multi well pad through the Colorado Oil and Gas Conservation Commission (COGCC). This will eliminate the need for multiple single well pads, which would spread out the impacts over more surface area increasing the overall footprint of the project.
- **Pipelines:** PetroShare intends to construct and utilize pipelines to transfer oil and gas off site in place of onsite storage of the product. This will greatly reduce truck traffic in and out of the location for the lifetime of the well. The utilization of pipelines also ensures a safer operation as it greatly reduces the number of tanks that are required on location.
- **Noise:** PetroShare will abide by COGCC rule 604.c.(2)A noise standards for all activities, and post a 24-hour, 7 days a week, contact information to address all noise complaints arising from the oil and gas facility. To assist with mitigating noise impacts, a thirty-two (32) foot tall temporary sound wall will be constructed along the edge of the site. An additional sixteen (16) foot wall may also be constructed around the generators to ensure compliance.

- **Odor Mitigation:** During drilling operations, a closed loop system will be used, reducing odor emissions. PetroShare will also utilize a Volatile Organic Combustor to reduce emissions.
- **Visual Mitigation:** When implemented, sound walls will reduce visual impacts during the drilling and completion phases and landscaping will reduce visual impacts during the production phase. In addition, pursuant to COGCC Rule 804, the tank battery will be painted in uniform, non-contrasting, non-reflective color tones with the colors matched to but slightly darker than the surrounding landscape.
- **Landscaping:** PetroShare will adhere to all Adams County requirements and/or surface owner requests, including minimizing impacts to native vegetation. Landscaping, serving as interim restoration, will consist of a perimeter fence bordered with a mixture of native grasses, shrubs, and plants along the perimeter of the facility to reduce visual impacts. Final reclamation will consist of removing all equipment and landscaping, returning the area to pre-disturbance conditions.

Development Standards and Regulations Requirements:

In order to obtain an Administrative Use by Special Review approval, an Oil and Gas Facility must satisfy certain criteria.

1. Memorandum of Understanding (MOU)

PetroShare signed the standard County MOU, which was executed by Adams County Board of County Commissioners on March 22, 2016.

2. Satisfy Submittal Requirements

The applicant has satisfied all required submittal items as outlined in the Development Standards and Regulations. These include:

- Conceptual Review Meeting – PetroShare attended a Conceptual Review Meeting with the Adams County Development Review Team to discuss their proposed site on February 26, 2018.
- Neighborhood Meeting – PetroShare notified property owners within one-half mile of the parcel boundary of the proposed oil and gas facility and invited them to an open house neighborhood meeting where residents could ask the applicant questions directly. The Neighborhood Meeting was held on May 10, 2018, at the Great Rock Fire Station, located at 15229 Great Rock Road, Brighton, CO 80603. At the meeting, PetroShare provided an overview of the project, operation timeline, and proposed mitigation measures outlined in this report.

- Application Form and Fees – PetroShare submitted the required applications and paid the applicable permit fees. A traffic impact fee will be assessed consistent with the application and the Oil and Gas Traffic Impact Fee Schedule. The operator may also be required to obtain a Right-of-Way permit, Access Permit, and/or an Oversize Load Permit before starting construction activities.
- Oil and Gas Operations Plan – PetroShare submitted an Oil and Gas Operations Plan, an Impact Area Map showing all oil and gas wells and water wells within one half mile, a Drilling Operation Plan, a Production Plan, and a Sign Plan.
- Emergency Preparedness Plan – The applicant submitted a site-specific Emergency Preparedness Plan that has been reviewed and approved by the Adams County Office of Emergency Management.
- Engineering Documents – PetroShare provided a Grading, Erosion, and Sediment Control Report & Plan, as well as a Traffic Impact Plan, in accordance with the Development Standards and Regulations.
- Surface Owner Documentation – PetroShare provided a Memorandum of Surface Use Agreement to show the proposed oil and gas facility is authorized by the surface owner.

3. Compatibility / Land Use Impacts

The subject site is approximately thirty-eight (38) acres, of which six and three-tenths (6.3) acres is proposed to be used for the development of a sixteen (16) well oil and gas well pad, associated production facility, and access road. Currently, the parcel is occupied by a residential structure and several outbuildings. The parcel is bordered on the east, north, and west by parcels zoned Agriculture 3 (A-3). The purpose of the Agricultural-3 District is to provide land primarily in holdings of at least thirty-five (35) acres for dryland or irrigated farming, pasturage, or other related food production uses.

According to the Adams County Comprehensive Plan, the future land use designation for this parcel is Agricultural. The Agricultural designation is intended for areas that are not expected to develop, except for limited areas of very low residential density of one (1) dwelling per thirty-five (35) acres. Secondary uses for this zoning may include open space, and other non-urban uses incidental to agriculture. Multi-well oil and gas facilities can provide alternative means of income for landowners while preserving the agricultural uses of the land, which contributes the compatibility of this use.

Industrial impacts inherent to large-scale oil and gas development require mitigation from residential and commercial development. Taking into consideration the compatibility requirements of the Adams County Development Standards and Regulations, PetroShare has agreed to connect the facility to the Boardwalk Pipeline (RCU2016-00016), located on the east side of Powhaton Road for the transportation of oil and gas products from the facility. Connection to this pipeline will allow for a reduction of onsite storage tanks and it will reduce

the overall truck volume accessing the site during the production phase. Additional mitigation measures include the use of a sound wall to reduce noise and visual impacts during the drilling and completions phase, as well as the implementation of landscaping, which will reduce long-term visual impacts.

The Boardwalk Pipeline was presented to the Adams County Planning Commission on November 10, 2016. A recommendation of approval was forwarded to the Board of County Commissioners for a hearing on December 8, 2016. After approval, the pipeline was constructed and is currently in operation. Connection to the Boardwalk Pipeline will reduce truck traffic, reduce on-site storage, and reduce the facilities surface area, all of which supports compatibility with the current and planned future land uses in the area.

Existing land uses in the area include large tracts of dry and irrigated farmland, and residentially occupied parcels of two and one-half (2.5) acres or greater. The applicant has thoughtfully considered the impacts to the surrounding properties, future land use, and local roadways. These have been mitigated through a combination of site planning decisions, traffic and access management, utilization of a pipeline for all products, and long-term compatibility is addressed through the requirement for reclamation upon conclusion of surface operations. It is staff's recommendation that this criterion has been satisfied by the applicant's proposal, and through the recommended conditions of approval within this staff report.

4. *Emergency Service Providers*

The applicant provided the required 'will serve' letter from the Brighton Fire District, the emergency service provider for that area.

Staff Recommendation:

Based upon the application, the criteria for an Administrative Use by Special Review permit, and a recent site visit, staff recommends approval of this request with 4 findings-of-fact, 4 conditions precedent, and 19 conditions.

Findings of Fact:

1. The applicant and the County have executed a Memorandum of Understanding (MOU) that is currently in full force and effect, and the oil and gas facility is in compliance with the provisions of the MOU.
2. The applicant has satisfied the submittal requirements for an Administrative Use by Special Review application, as outlined in the Development Standards and Regulations.
3. Based upon compliance with the recommended conditions of approval, the oil and gas facility is compatible with the surrounding area and does not create any site specific or material impacts to nearby land uses.

4. The applicant has provided a commitment to serve the facility from the authority having jurisdiction for providing emergency services.

Recommended Conditions of Approval:

Conditions Precedent:

1. Pad construction and/or drilling shall not commence until combined State approval of Colorado Oil and Gas Conservation Commission (COGCC) Form 2 and 2A and County approval of AUSR permit. Drilling shall only occur during the COGCC Form 2 permit validity timeframe.
 - a. Per section 4-10-02-03-03-07-10 of the Adams County Development Standards and Regulations, proposed changes to the plans, including but not limited to, any changes in the source or location of water to be used by the Oil and Gas Facility, shall be submitted as amendments to the Administrative Use by Special Review application, reviewed by staff, and approved by the Director or BOCC (if the BOCC approved the original application).
2. The applicant or the applicant's subcontractors may be required to obtain Oversize Load Permits, and/or Access Permits, and/or a Right-of-Way Construction Permit. These permits may be obtained through the Adams County One-Stop permit center.
3. A traffic impact fee in the amount of \$314,721 for the construction and production of sixteen (16) oil and gas wells using fresh water and product pipelines is due prior to ground disturbing activities.
4. The applicant shall receive a "Notice to Proceed" from the Department of Community and Economic Development. Written proof that all of the conditions precedents have been satisfied shall be required prior to receiving this notice.

Conditions:

1. The approved traffic route for travelling to and from the site will be as follows:
 - i. From the access road, east on East 144th Avenue,
 - ii. North on Hayesmount Road to East 152nd Avenue,
 - iii. West on East 152nd Avenue to US-85 or I-76
2. The applicant shall implement the best management practices as identified in the Ambient Sound Study provided as part of the application and provided in Exhibit 2.3 (Ambient Sound Study). These mitigation measures include 32-foot high sound walls around the perimeter of the site, and 16-foot sound walls as needed around the equipment within the site during drilling and hydraulic fracturing (completion) operations. Noise levels during the construction, drilling, completions, and production life cycles shall not exceed those outlined in COGCC Section 802.

3. The applicant shall submit written certification that the facility is connected to a pipeline for the transfer of product off-site prior to the initiation of production.
4. The applicant has submitted a landscaping and screening plan for the site, which has been reviewed and approved by the Community & Economic Development Department staff. Screening of the site shall be provided through a combination of fencing and landscape materials. This plan shall serve as the interim restoration plan and it shall be implemented by the applicant within 90 days of completion of the final well, if all sixteen (16) approved wells are drilled and completed at the same time. If the applicant develops the facility in phases (i.e., completes a lesser number of wells initially with plans to drill and complete additional wells at a future date), then the interim restoration plan shall be implemented within 90 days of completion of the initial set of wells.
5. If requested by the surface owner, or practicable for site security, the fence shall contain a gate and the gate shall remain closed and locked when the well pad and associated facilities are not in use.
 - a. The local fire district shall have access to ALL gate key(s)/combination(s) at all times for use in case of emergency.
 - b. Adams County oil & gas inspector shall have access to ALL gate key(s)/combination(s) at all times for use in case of emergency.
6. Maintenance of required landscaping and fencing shall comply with the Adams County Development Standards and Regulations at all times.
7. Applicant is required to receive an approved waiver of responsibility/completion of reclamation from Adams County upon abandonment and reclamation of well pad and associated facilities.
8. Well pad, associated facilities, and access road shall be free of any county and state identified noxious weeds throughout the drilling, completion and production portions of operations.
9. As referenced in 8(c.) of the PetroShare/Adams County MOU, the applicant agrees to conduct a baseline test of any registered water well requested by the owner, on a one-time basis, if such well is within a ½ mile radius of the new oil and gas facility.
10. PetroShare is required to provide notice to parcel owners and occupants located within a one-half mile radius of the parcel boundary on which the well pad is located at least 14 days prior to the commencement of any drilling or completions operations.
11. Per Section 14 of the executed MOU, fresh water as referenced in the COGCC's rules and Regulations, or another source as approved by the County on a case-by-case basis, may be applied to roads and land surfaces for purpose of dust mitigation. Absolutely no other liquid or substance generated by the production of the operator's facility, including, but not limited to, exploration and production waste (as defined by the COGCC) or any

other application of liquids that would have negative impact to natural resources, shall be permitted to be applied to roads and land surfaces.

12. Per COGCC Section 604.c (4) B. IV. Zero Flaring or venting of gas upon completion of flowback, excepting upset or emergency, or with prior written approval from the COGCC Director for necessary maintenance operations.
 - a. The applicant shall provide a copy of written COGCC Director approval to the CEDD Director within 24 hours of flaring operations and/or approval, whichever occurs first.
13. Upon request by the County's Local Government Designee, Emergency Manager, Local Emergency Planning Commission, Sherriff's Office, site-specific Fire District, or Transportation Department, a tabletop exercise pertaining to the Emergency Response Plan will be required.
14. All permanent lighting shall be directed downward and internally. Temporary lighting shall conform to COGCC Rule 803 and not adversely affect adjacent residential properties. Any complaints regarding lighting shall be communicated to the Adams County Oil & Gas Inspector in order to ensure resolution.
15. PetroShare will construct the access road and make improvements to East 144th Avenue, from Hayesmount Road west to the access road, that are consistent with the County's regulations and, at a minimum, be capable of supporting a 75,000-pound emergency response vehicle.
16. The applicant shall be responsible for the cleanliness and safety of all roadways adjacent to this site. If at any time, Adams County staff determines these roadways to be dangerous or not passable due to debris or mud, the applicant will cease use of the roadways until the roadway conditions have improved and are deemed acceptable by the County. If the contractor/applicant fails to keep the adjacent roadways clean and free from debris, Adams County has the option to complete the required clean up and bill the charges directly to the applicant, PetroShare.
17. Per Section 5 of the executed MOU, in an effort to reduce truck traffic, where feasible, the Operator will identify a water source lawfully available for industrial use, including oil and gas development, close to the facility location, to be utilized by operator and its suppliers. Operator will comply with the Colorado Department of Public Health and Environment requirements and Tri-County Health Department (TCHD) regulations concerning water quality. With respect to wastewater treatment, Operator agrees to comply with TCHD's Regulations NO O-14, On-site Wastewater Treatment Systems, as adopted or modified. The Operator agrees to contact TCHD in a timely manner to arrange for the processing of appropriate application matters and required inspections.
18. All representations and commitments of the applicant made during the AUSR process are incorporated herein as conditions of approval.

19. Provided at least one well is drilled and completed within a three (3) year period following approval of a multi-well pad locations, such approval permanently vests the permitted location for the number of wells as contained within the initial permit approval. If additional wells are to be drilled following expiration of the initial three (3) year period, the permits for those wells shall be revised pursuant to the Development Standards and Regulations section 4-10-02-03-03-07-07(3).

CITIZEN COMMENTS

Of the sixty-eight (68) referral notices sent to property owners and current residents located within one-half mile of the subject parcel boundary, five comments were received. The application and Request for Comments were also posted on the Adams County website for review by the public. The concerns presented by the residents include health impacts, environmental impacts, safety, and property values. These concerns have been addressed by the applicant, the COGCC Rules, the Adams County Development Standards and Regulations, and the Conditions of Approval attached to this application.

Referral Notifications Sent	Referral Comments Received
68	5

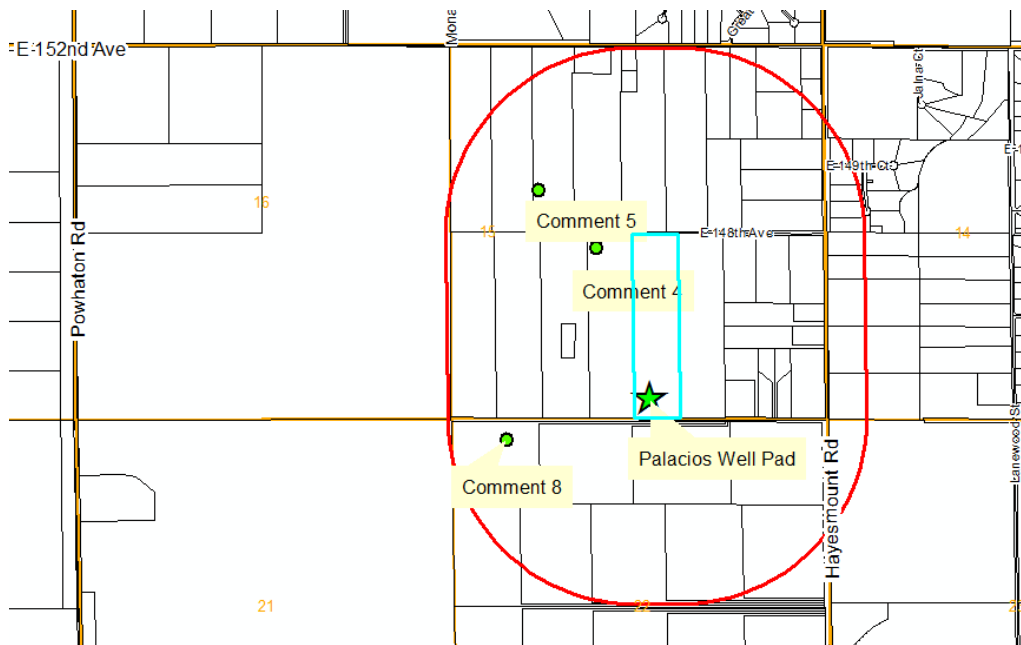


Figure 1. Map showing the 1/2 mile mailed referral radius from the parcel boundary.

COUNTY REFERRAL COMMENTS

Engineering informed the applicant that roadway improvements for East 144th Avenue from the property boundary to the access road would be required.

The landscaping plans provided by the applicant were reviewed by staff and amendments were required. PetroShare has responded to the requested changes with a resubmittal of their landscape plans, which have been reviewed and approved by staff.

The case manager requested additional information about the water wells that were identified for obtaining baseline testing of the ground water. Additional information was also requested concerning the required water source, project schedule, produce water disposal, and information pertaining to the proposed pipelines. PetroShare has provided responses to the comments and inquiries made by staff, and there are no outstanding items.

AGENCY REFERRAL COMMENTS

Responding with Concerns:

Brighton Fire and Rescue requested that the District's emergency phone number be updated. The applicant has submitted an updated contact sheet for the Emergency Response Plan.

Colorado Department of Health and Environment (CDPHE) provided guidance on six (6) topics related to oil and gas development; electrical equipment, odor mitigation, waste management, use of pipelines, flaring, and plugging and abandoning of the well(s). PetroShare has reviewed the Best Management Practices, and have agreed to implement them where it is feasible and/or required.

Colorado Parks and Wildlife (CPW) provided guidance on Best Management Practices when prairie dogs, raptors and /or migratory birds are present. CPW also provided guidance to minimize the spreading of noxious weeds. PetroShare has agreed to follow the guidance and recommendations provided.

Notified but not Responding / Considered a Favorable Response:

Adams County Office of Emergency Management
Adams County Sheriff's Office
Brighton School District 27J
Tri-County Health Department
United Power

Exhibits Table of Contents

Exhibit 1- Maps

- 1.1 Zoning Map
- 1.2 Aerial Map
- 1.3 Simple Map
- 1.4 Comprehensive Plan Map

Exhibit 2- Applicant Information

- 2.1 Applicant Written Explanation
- 2.2 Applicant Site Plan
- 2.3 Ambient Sound Study
- 2.4 Traffic Impact Fee Schedule

Exhibit 3- Referral Comments

- 3.1 Requests for Comments
- 3.2 Comments Received
- 3.3 Applicant Response to Comments

Exhibit 4- Associated Case Materials

- 4.1 Notification Map
- 4.2 Notification Mailing Labels