#### Community & Economic Development Department Development Services Division

www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000B Brighton, CO 80601-8218

PHONE 720.523.6800 FAX 720.523.6967

# **Request for Comments**

Case Name: Pioneer Produced Water Pipeline CUP

Case Number: RCU2020-00004

March 4, 2020

The Adams County Planning Commission is requesting comments on the following application: **Conditional Use Permit to allow for a produced water pipeline.** The applicant has provided one preferred and two alternative routes for the pipeline. The Assessor's Parcel Numbers are: 15691900005, 156919000015, 156920000017, 156930000001, 157101200007, 157101300001, 157101300002, 157102100003, 157102100004, 157102101014, 157104100005, 157104200003, 157104300002, 157106000007, 157106000002, 157106001001, 157106001002, 157106300002, 157107000002, 157107000014, 157107000016, 157107000023, 157107400001, 157108000001, 157108000004, 157108200002, 157109202001, 157111100010, 157112000033, 157112000038, 157112010003, 157121000016, 157121000017, 157122000001, 157122103001, 157122103003, 157123000026, 157123401001, 157124000015, 157124000016, 157124000017, 157311400008, 157311400009

Applicant Information: Pioneer Water Pipeline, LLC

Spence McCallie

600 17<sup>th</sup> Street, Suite 725 Denver, Colorado 80202

Please forward any written comments on this application to the Community and Economic Development Department at 4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601-8216 or call (720) 523-6800 by **03/27/2020** in order that your comments may be taken into consideration in the review of this case. If you would like your comments included verbatim please send your response by way of e-mail to GJBarnes@adcogov.org.

Once comments have been received and the staff report written, the staff report and notice of public hearing dates may be forwarded to you upon request. The full text of the proposed request and additional colored maps can be obtained by contacting this office or by accessing the Adams County web site at www.adcogov.org/planning/currentcases.

Thank you for your review of this case.

Greg Barnes Planner III

BOARD OF COUNTY COMMISSIONERS



February 28, 2020

Kristin Sullivan, Director
Adams County Community & Economic Development
Development Services Division, Community Planning and Development
4430 South Adams County Parkway
Brighton, Colorado 80601

RE: Pioneer Water Pipeline Project—Conditional Use Permit Application

Dear Ms. Sullivan:

On behalf of Pioneer Water Pipeline, LLC (Pioneer), a subsidiary of Expedition Water Resources Colorado, LLC, Tetra Tech, Inc. (Tetra Tech) is submitting a Conditional Use Permit (CUP) application for the proposed Pioneer Water Pipeline Project (Project). The Project consists of construction and operation of approximately 19.2 miles of new produced water gathering pipelines in Adams County. The purpose of the Project is to further Adams County's goal of reducing impacts to the community of oil and gas exploration by transferring the transportation of produced water from trucks to pipeline in both Adams and Weld counties. The pipeline will provide transportation service from 15 well sites in Adams County to Expedition's existing EWS #6 wastewater injection and disposal facility, significantly reducing truck traffic. Of the 19.2 miles in Adams County, approximately 12.3 miles are within unincorporated Adams County, and the remaining 6.9 miles are within the jurisdictional boundaries of the City of Brighton and City of Thornton. The City of Thornton and the City of Brighton would review the portions of the Project within their municipal limits.

Tetra Tech prepared this CUP application per the requirements of Chapter 2—Application and Permitting Procedures in the Adams County Development Standards and Regulations (ACDSR), the CUP Checklist. This permit application also includes submittal requirements outlined in Chapter 6—Regulations Governing Areas and Activities of State Interest (AASI) for supplemental environmental impact analysis as requested by the Adams County Department of Community Planning and Development during the Conceptual Review process (PRE2019-00065). Pioneer respectfully submits the following attachments:

- CUP Transmittal Items Checklist
- AASI Checklist
- CUP Development Application Form

Kristin Sullivan, Director Adams County Community & Economic Development Pioneer Water Pipeline Project Page 2 of 2

 CUP Application Package, including to requirements outlined in Section 06-07-02 under Chapter 6 Regulations governing AASI

The Conditional Use Permit application fee of \$1,000, and the Tri County Health Application Fee of \$360, as noted on the CUP Checklist, is being provided at the time the application submittal.

Pioneer and Tetra Tech appreciate your assistance. If you have any questions, please contact me by telephone at (303) 253-1647 or email at <u>John.Heule@tetratech.com</u>.

Sincerely,

John Heule

**Environmental Planner** 

cc: Spence McCallie, Pioneer

Attachments (4):

**CUP Transmittal Items Checklist** 

**AASI Checklist** 

**CUP Development Application Form** 

**CUP Application Package** 



# 2. Conditional Use Permit Application Requirements

### 2.1 Development Application Form and CUP Checklist

The Adams County Development Application and AASI and CUP Checklists are included as part of this permit package as an attachment to the cover letter.

### 2.2 Application Fees

The \$1,000.00 application fee for the CUP permit and the \$360.00 Tri-County Health Department review fee are included with this application.

## 2.3 Written Explanation of the Project

### 2.3.1 Project Overview

The Project consists of construction and operation of approximately 19.2 miles of new produced water gathering pipelines in Adams County (Figures 1–2). Of the 19.2 miles in Adams County, approximately 12.3 miles are within unincorporated Adams County, and the remaining 6.9 miles are within the jurisdictional boundaries of the City of Brighton and City of Thornton. The City of Thornton and the City of Brighton would review the portions of the Project within municipal limits.

The Project is designed to transport produced water from 16 oil and gas production facilities located within Adams County and operated by Great Western Petroleum, LLC (see Section 2.3.2 for additional information about oil and gas production facility permits). An additional 29.3 miles of pipeline and connections to six additional oil and gas production facilities would be located within Weld County.

Produced water, also known as wastewater, is recovered as byproduct that is brought to the surface during oil and gas production. Oil, gas, and produced water leaves the well head at pressures up to 3,000 pounds per square inch (psi). The content of produced water varies with the formation where the water originates, but is generally high in salts with trace amounts of other minerals. After being brought to the surface, produced water is stored at the permitted oil and gas facilities in a storage tank. From the storage tank, the Project would transport the produced water via pipeline to Expedition's existing EWS #6 wastewater injection and disposal facility in Weld County. The pipeline would transport the produced water at a maximum pressure of approximately 240 psi until it reaches a storage tank at EWS #6. The maximum allowable pressure of the Pioneer Water Pipeline Project will be 333 psi. Expedition would increase the water pressure again at EWS #6 before it is injected underground.

#### 2.3.2 Oil and Gas Production Facilities

Sixteen of the 22 oil and gas production facilities that the Project would connect are located within Adams County. The remaining six oil and gas production facilities are located in Weld County. The pipeline will be capable of transporting approximately 39.2 thousand barrels per day, of which an estimated 33 thousand barrels per day would come from oil and gas production facilities in Adams County at peak flow. Table 3 identifies the permit status for the Adams County oil and gas production facilities.

Table 3:
Oil and Gas Production Facility Permitting Jurisdictions and Permitting Status

Oil and Gas Production Facility Name	Permitting Jurisdiction	Permit Number/Status
Baseline	Adams County	USR2018-00010
B-Farm	Adams County	USR2017-00004
Brant	Adams County	USR2018-00011
Gus	Adams County	USR2018-00013
lvey	Adams County	USR2016-00006
Kortum	Adams County	USR2018-00009
Ocho	Adams County	USR2016-00005
Rio	Adams County	USR2019-00001
Schaefer	Adams County	USR2016-00003
Seltzer	Adams County	USR2018-00002
Tollway	Adams County	USR2018-00005
Tower	Adams County	USR2018-00012
Sharp	Adams County	Application for USR in progress
Rico	Adams County	Application for USR in progress
Henderson	Adams County	Application for USR in progress
Prairie	Brighton	Located within the City of Brighton (Case File 18-00214)

USR = Use by Special Review

Great Western Petroleum, LLC would obtain Use by Special Review permits for the Sharp, Rico, and Henderson oil and gas production facilities from the Adams County Department of Community and Economic Development. Each Use by Special Review (USR) permit authorizes at least one produced water pipeline and associated appurtenances (pumps, valves, etc.) at the oil and gas production facility. Great Western Petroleum, LLC would assign the right to construct the produced water pipeline to Pioneer. Pioneer would construct the pipeline and appurtenances associated with the Project within the limits of the permitted well pad. This application therefore excludes Project facilities within the well pad. Pioneer would not construct the facilities at these locations until a USR permit has been issued to Great Western Petroleum, LLC.

### 2.3.3 Pipelines

The Project would consist of construction of approximately 48.5 miles of 4- to 12 inch-diameter HDPE produced water gathering pipelines and associated appurtenances in Adams and Weld counties. Pioneer is seeking a permanent easement for its pipelines that is approximately 10 feet wide as well as an additional 30 feet of temporary easement for pipeline construction.

The pressure and capacity of produced water pipelines is dependent on the distance from the pipeline origin (at each oil and gas production facility). The temperature of the produced water when it is extracted from the ground is high (close to formation temperature) and it cools and contracts as it travels through pipelines away from the well head. The Project pipelines would operate at an estimated 240 psi but may operate at a higher pressure depending on temperature. The maximum allowable pressure will be

333 psi. Pioneer would control pressure and monitor temperature using remotely operated valves located along the Project route. Illustration 1 in Section 1.4 of this document provides a graphical representation of the pipeline from the permitted oil and gas production facilities to EWS#6. Table 4 and Figures 1 and 2 provide the pipeline segment names, diameters, and total length of each within unincorporated Adams County. Brighton and Thornton would review and approve the remaining approximately 6.9 miles of pipeline in Adams County. Section 3.6 provides information on existing land use and zoning districts crossed by the Project.

Table 4: Proposed Pipeline Segments within Unincorporated Adams County

Pipeline	Diameter (inches)	Length within Unincorporated Adams County (miles)
B-Farm Connection	6	0.15
Baseline Lateral	6	0.23
Gus Lateral	6	0.28
Henderson Lateral	4	0.11
Ivey Lateral	8	0.15
Kortum Lateral	8	0.14
North Adams Trunk	10	1.81
Ocho Connection	6	0.19
Pioneer Mainline	12	4.29
Rio Lateral	8	0.19
South Adams Trunk	10–12	3.6
Seltzer Lateral	4	0.08
Tollway Connection	6	0.12
Tower Lateral	6	0.92

To date, Pioneer has conducted a detailed routing effort to identify a preferred route. Pioneer is currently in the final stages of civil survey and anticipates finalizing landowner agreements and survey by the end of March 2020. The Project route may undergo minor route changes within the same parcels currently crossed by the Project as survey has been completed and landowner agreements are finalized. Pipeline construction often results in minor changes to the pipeline centerline within the permanent easement as a result of information gathered during construction. Pioneer would alert Adams County if information gathered in the field resulted in a change in the permanent and easement and would provide as-built spatial data identifying the pipeline centerline to Adams County upon completion of construction.

Pioneer's construction contractor would install the pipeline using mechanically excavated open-cut trenching techniques. The pipeline would be buried at a depth of 48 inches of cover or more. Pioneer's construction contractor would string pipe segments along the ditch line, fuse sections together using thermal fusion, and lower the pipeline into the open cut ditches. Each fusion joint would be logged by a data recorder with the results audited by qualified technicians, then lowered into the trench and backfilled. Upon completion of construction, the pipeline would be hydrostatically pressure tested to industry standards prior to operations.

Pioneer routed the Project to make use of existing rights-of-way (ROWs), property boundaries, and utility corridors associated with the oil and gas production facilities to the extent possible. Pioneer would obtain Adams County road ROW permits as required prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. Pioneer has received preliminary approval to install pipelines within the E-470 Public Highway Authority ROW. Pioneer would obtain easements where the pipeline would cross private property. The pipeline would cross parcel 157123401001, which is owned by Adams County (reference Section 2.6). Additional information about the routing process is included in Section 3.3.2.

Pioneer proposes to cross state highways, county roads, railroads, and wetlands and streams and other existing infrastructure where practicable via horizontal directional drilling (HDD) to mitigate impacts to infrastructure and sensitive resources to the maximum extent practicable. Table 5 lists the county and state road crossings where the pipeline would be installed using HDD within Adams County. Section 3.11.5 describes Pioneer's commitment to avoiding impacts to wetlands and surface waters. The crossings listed in Table 5 are also depicted on Figure 3. Typical road and culvert crossings are provided in Exhibit D. Pioneer would repair or replace any Adams County infrastructure damaged during construction of the Project to pre-construction conditions.

Table 5: Adams County Road Crossings

Crossing ID (Figure 3)	Street	Nearest Cross Streets <sup>1</sup>	Road Type
1	Colorado Blvd	E 156th Ave & Colorado Blvd	Local Road
2	Holly St	State Highway 7 & Holly St	Local Road
3	Monaco St	State Highway 7 & Monaco St	Local Road
4	Quebec St	State Highway 7 & Quebec St (South)	Local Road
5	County Road 2 - #3	County Rd 2 & Quebec St	County
6	County Road 2 - #4	County Rd 2 & Yosemite St	County
7	County Road 2 - #2	County Rd 2 & Lima St	County
8	County Road 2 - #1	County Rd 2 & Tucson St	County
9	Riverdale Rd #1	Riverdale Rd & State Highway 7 (South)	Local Road
10	Riverdale Rd #2	E-470 & Riverdale Rd	Local Road
11	E 136th Ave #1	E 136th Ave & Potomac St (West)	Local Road
12	E 136th Ave #2	E 136th Ave & Potomac St (East)	Local Road
13	Potomac St	E 136th Ave & Potomac St (South)	Local Road

### 2.3.4 Aboveground Appurtenances and Construction Laydown Areas

Construction of the pipelines would require an approximately 10-foot-wide permanent easement plus an additional 30-foot-wide temporary easement for a total construction corridor of 40 feet in width. Appurtenant aboveground facilities such as isolation valves, pumps, and cleaning tool launcher and receivers would be located at the existing oil and gas production facilities. Approximately five aboveground appurtenances consisting of three mainline valve sets and two cleaning tool launchers or receivers would be located on private easements within unincorporated Adams County. Pioneer would

site aboveground appurtenances outside of floodplains and outside of Adams County ROWs on private land. Easement negotiations for the aboveground locations are currently underway. Final locations of valves and other appurtenances would be provided to the Adams County Department of Community and Economic Development prior to public hearings.

Pioneer would design the project to be remotely operated through an automated supervisory control and data acquisition (SCADA) system. In the event of a leak or other unsafe condition, the SCADA system would automatically close valves and stop the flow of produced water.

Pioneer would use exiting laydown areas in Weld County and at EWS #6 to stage equipment and materials for Project construction. Pioneer does not anticipate using additional temporary workspaces in unincorporated Adams County besides those located along the pipeline route (see Exhibit A for the locations) that would be used to excavate trench, fuse pipeline segments, deliver the HDD equipment and pipe segments, excavate HDD entry and receiving pits, temporarily stockpile excavated soil from the pits, and serve as laydown for pipe segments. Pioneer's construction contractor would backfill, compact, and restore and revegetate the pipeline trench upon completion of the pipe installation. Following construction, the contractor would return temporary workspaces to pre-construction conditions.

### 2.3.5 Project Construction and Operation Safety

Pioneer is committed to safety and the Project would comply with all federal, state, and local rules and regulations to provide safe, reliable service. The Colorado Oil and Gas Conservation Commission (COGCC) would regulate the Project under the COGCC Series 1100 rules for flowlines (Series 1100 Rules), which references various technical standards and design, installation, construction reclamation, and operating/integrity management requirements. The Series 1100 Rules require Pioneer to submit a Flowline Report (Form 44) within 90 days of placing the Project into active status. Form 44 would include the location and specifications of the Project. The COGCC would have the authority to inspect the Project, and Pioneer would be required to notify the COGCC of the location of the Project within 30 days of construction.

Pioneer's parent company, Expedition, is rated Platinum by Independent Energy Standards, which place Expedition in the top 10 percent of similar companies for safety, environmental stewardship, and responsibility. Expedition's Occupational Safety and Health Administration's Form 300, "Summary of Work-Related Injuries and Illnesses," is included with this application as Exhibit E.

In the event of an emergency, the Project's SCADA system would automatically stop flow in the pipelines. Emergency response procedures would be described in an Emergency Response Plan for the Project, which can be provided to Adams County upon request.

#### 2.3.6 Impact Avoidance and Minimization

Pioneer would design the Project to minimize impacts to sensitive resources and existing infrastructure such as utilities and roadways through the use of HDD. County and public road crossings would be constructed using HDD. Major construction activities for construction the Project would include staging materials, pipeline trenching and road crossing, pipeline installation, pressure-testing, backfilling, and restoration.

#### 2.4 Construction Schedule

Pioneer proposes to begin construction activities in Weld County as early as March 2020 and in Adams County in fall 2020. Construction is expected to take approximately 6 months, with the Project fully inservice by the first quarter of 2021. Table 6 summarizes the Project's anticipated schedule in Adams County.

Table 6: Project Schedule

Project Schedule Milestone	Approximate Milestone Date
Adams County Neighborhood Meeting	December 2019
CUP Application Filed with Adams County	February 2020
Anticipated Adams County Planning Commission Hearing	June 2020
Anticipated Board of County Commissioners (BOCC) Hearing	July 2020
Anticipated Development Agreement Signed by BOCC	July 2020
Begin Construction Adams County	July 2020
Pipeline Testing	Late Fall 2020
Project In-Service	First Quarter 2021

### 2.5 Site Plan Showing Proposed Development

An overview of the Project is included as Figure 1. An Adams County overview map is provided as Figure 2. Alignment sheets according to CUP Application standards showing existing and proposed improvements for the gathering system are provided as Exhibit A.

# 2.6 Proof of Ownership (Warranty Deed or Title Policy)

Pioneer would secure applicable easements and executed ROW agreements with landowners authorizing the right to construct, operate, and maintain the Project on privately and publicly owned properties. Pioneer would execute agreements with property owners and would record these agreements with the Adams County Clerk and Recorders Office prior to the commencement of construction activities. At this time, easements are in place for a majority of the Project route within Adams County. Pioneer would provide easements to Adams County for the Project prior to construction.

The pipeline would cross one Adams County-owned parcel (parcel #157123401001) via HDD, and Pioneer has contacted Adams County to obtain a license agreement from Adams County Real Property division. The License Agreement would not inhibit Adams County's continued use of this parcel as open space and South Platte River Trail.

Pioneer would obtain Adams County road ROW permits from Adams County as required prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. A map depicting unincorporated Adams County road crossings is included as Figure 3. A list of parcels within unincorporated Adams County on which the Project would be located is included in Exhibit F.

#### 2.7 Proof of Water and Sewer Services

#### 2.7.1 Water Services

Pioneer's construction contractor would use water during construction for dust suppression, weed control, soil conditioning, and testing of the pipeline. Pioneer's construction contractor would obtain water under permit or delivered to the site as needed from local supplier and would not require a municipal water supply. Additional information is available in Section 3.4.4.

#### 2.7.2 Sewer Services

The operation of the Project would not require water or sanitary services. Temporary sanitary facilities would be provided for construction workers along the pipeline ROW during construction.

### 2.8 Proof of Utilities (e.g., Electric, Gas)

A utility connection is not required to construct or operate the Project.

### 2.9 Legal Description

Exhibit A shows parcels crossed by the Project and their legal descriptions.

#### 2.10 Certificate of Taxes Paid

Prior to commencement of construction activities, Pioneer would obtain applicable easements and executed ROW agreements for the pipeline. As easement holder, Pioneer is not responsible for the payment of property taxes on the parcels; they remain the responsibility of the landowner.

#### 2.11 Certificate of Notice to Mineral Estate Owners/and Lessees

Pursuant to Colorado Revised Statues (CRS) Section 24-65.5-102 (2)(a), a pipeline does not constitute an "application for development" that would trigger the requirements of the Surface Development Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

# 2.12 Notice of Surface Development

Pursuant to CRS Section 24-65.5-102 (2)(a), a pipeline does not constitute an "application for development" that would trigger the requirements of the Surface Development Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

# 2.13 Supplemental CUP Information

# 2.13.1 Neighborhood Meeting Summary

Pioneer held a neighborhood meeting in accordance with the ACDSR from 5 p.m. to 8 p.m. on Tuesday, December 10, 2019, at Todd Creek Golf Club (8455 Heritage Dr., Thornton, CO 80602). The purpose of the neighborhood meeting was to provide the community a description of the Project and answer related questions from the attendees. A copy of the notification, neighborhood meeting materials, and a summary of the neighborhood meeting is provided in Exhibit G.

#### 2.13.2 Solid Waste Transfer Station

Not applicable. The Project does not involve a solid waste transfer station.

### 2.13.3 Solid Waste Composting Facility

Not applicable. The Project does not involve a solid waste composting facility.

### 2.13.4 Scrap Tire Recycling Facility

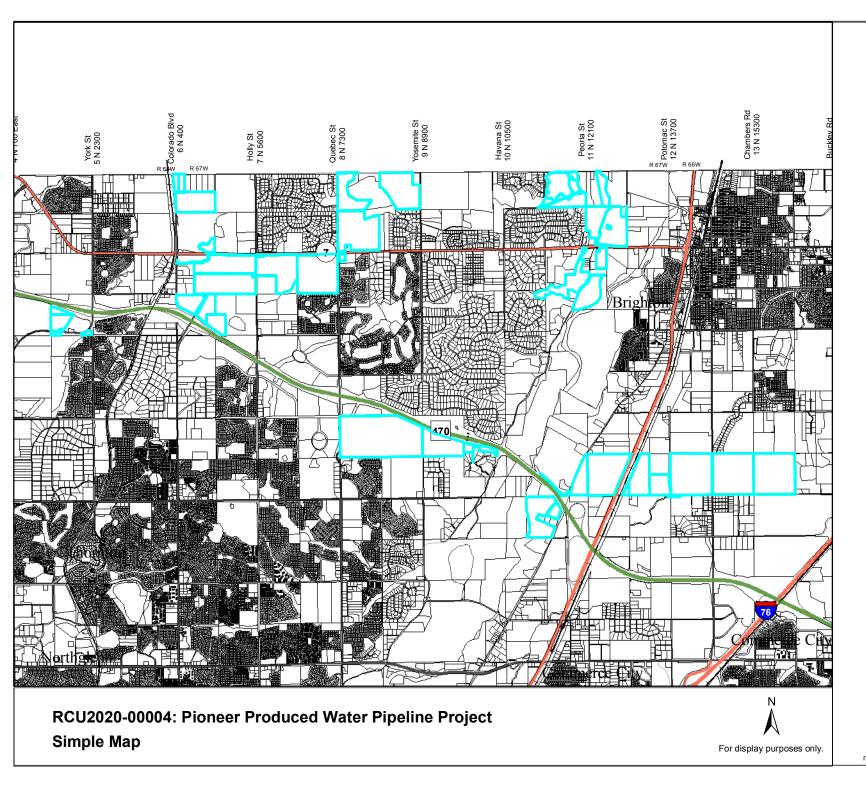
Not applicable. The Project does not involve a solid tire recycling facility.

#### 2.13.5 Inert Fill

Not applicable. The Project does not involve inert fill.

### 2.13.6 AASI Requirements

This permit application also includes AASI requirements as requested by the Adams County Department of Community Planning and Development during the Conceptual Review process. Refer to Section 3 of this application package.





This map is made possible by the Adams County GIS group, which assumes no responsibility for its accuracy