COLORADO
Oil & Gas Conservation Commission
Department of Natural Resources

DIRECTOR'S RECOMMENDATION

Docket #220700189

TEP Rocky Mountain LLC (TEP), Operator ID #96850

South Leverich 13-09 OGDP (OGDP ID #482745)

Pursuant to Rule 306, the Director submits to the Commission this recommendation for the TEP South Leverich 13-09 Oil and Gas Development Plan (South Leverich OGDP) located in Garfield County. As detailed below, the Director recommends Commission approval of the South Leverich OGDP.

The underlying permit documents in support of this Recommendation may be found through the Colorado Oil and Gas Conservation Commission (COGCC) website under "Permits".

South Leverich 13-09 OGDP (OGDP ID #482745)
Form 2C #403064349
Form 2A #403064316
Form 2B #403064340

All supporting hearing documents, including TEP's South Leverich OGDP hearing application, may be found in COGCC's eFilings System under Docket No. 220700189.

BACKGROUND

On July 20, 2022, TEP submitted a Form 2C, Oil and Gas Development Plan Certification, and all required components for an Oil and Gas Development Plan (OGDP) application with the Colorado Oil and Gas Conservation Commission (COGCC). The Hearing Application was returned to the applicant once for revisions. The Director determined the application was complete on August 24, 2022. This Recommendation is based on information finalized in the Form 2A, Form 2B, and hearing application as of November 23, 2022. No additional revisions will be made to the application prior to the Commission Hearing scheduled for November 30, 2022.

TEP South Leverich 13-09 Pad Proposed Development:
The proposed South Leverich OGDP includes one amended Oil and Gas Location (OGL), the South Leverich 13-09 well pad (Location ID #335045). This OGDP includes the development and production of twenty-five (25) directional natural gas wells (4 existing and 21 new wells) from the proposed well pad. The South Leverich 13-09 well pad is on FEE surface with both FEE and FEDERAL minerals administered by the Bureau of Land Management (BLM). The development of approximately 799 acres of application lands are located in Township 7 South, Range 93 West, portions of Section 19 and Township 7 South, Range 94 West, portions of

Sections 13 and 24; please see the OGDP Map as approved in the Form 2C. Nineteen (19) of the new wells will be drilled into FEE Leases, while the other two (2) new wells will be drilled into FEDERAL Lease COC063721. The four existing wells are FEE minerals. The proposed surface lands are in a sparsely populated rangeland area of Garfield County, approximately 6 miles south of the City of Rifle.

The existing South Leverich 13-09 well pad will be re-constructed and expanded to accommodate the 21 new wells. In addition to the wells, the location will include twenty-six (26) separators, six (6) 400-barrel (bbl) condensate storage tanks, two (2) 80-bbl blowdown maintenance tanks, four (4) 500-gallon chemical tanks with pumps, one (1) air compressor / dual fuel generator, three (3) enclosed combustion devices (ECDs), and one (1) natural gas sales meter (Summit Midstream). Temporary equipment planned for completion and flowback operations includes three (3) 500-bbl frac tanks, two (2) high pressure separators, one (1) low pressure separator, one (1) low pressure ECD, one (1) water transfer pump, and various other flowback equipment. TEP plans to begin re-construction of this Location in the 4th Quarter of 2022 or 1st Quarter of 2023 (weather dependent), drilling in the 1st or 2nd Quarters of 2023, completions in the 2nd to 4th Quarters of 2023; placing the wells into production in the 1st Quarter of 2024, and conducting interim reclamation in the 2nd Quarter of 2024.

To support the increase in production volume from the South Leverich 13-09 well pad, Summit Midstream plans to install one (1) eight-inch (8”) steel natural gas pipeline (approximately 2,125 feet) from the South Leverich 13-09 pad to their existing / proposed gas gathering system tie-in point located on TEP surface south of the South Leverich 13-09 well pad. The proposed natural gas pipeline would be installed following the existing access road south of the location. A valve set will be installed at the tie-in location to support pipeline maintenance activities.

TEP plans to install one (1) six-inch (6”) flexpipe produced water pipeline (approximately 450 feet) from the separators on the South Leverich 13-09 pad to the existing pipeline corridor adjacent to the location. A ten-foot (10’) diameter valve will be installed at the tie-in point to support pipeline maintenance activities.

Youberg RU 44-7 for Remote Frac Support, Beaver Creek 11-7-793 pit as a Completions Produced Water Supply, and Youberg SR 43-12 for Produced Water Storage and Transfer: TEP will utilize three existing oil and gas Locations as support facilities during drilling, completions, and production operations associated with the proposed wells on the South Leverich 13-09 pad. These three Locations are not included as part of this proposed OGDP.

- The existing Youberg RU 44-7 location (Location ID #439173) will be utilized as a remote frac support pad for well stimulation operations for the twenty-one (21) proposed new directional wells, and will have completion and flowback equipment temporarily on site for approximately 30 weeks. TEP will install five (5) four and one-half inch (4.5”) temporary surface steel frac lines, approximately 14,712 feet in length each, from the Youberg RU 44-7 pad to the South Leverich 13-09 pad. The temporary surface frac lines will be installed following the existing access roads and existing pipeline right-of-way so no new disturbance will be required.

- The Beaver Creek Frac Pad 11-7-793 Pit (Location ID #432702) will provide produced water to be used for well completion operations for the 21 proposed wells on the South Leverich pad. Water will be transported from the Beaver Creek Pit to the Youberg RU 44-7 pad via existing water pipelines so no new disturbance will be required.
- The existing Youberg SR 43-12 well pad (Location ID #413683) will be utilized as a produced water storage and transport facility where produced water from the South Leverich Location will be temporarily stored and pumped before entering TEP's water management system.

Surface Lands:
The South Leverich 13-09 well pad is on FEE surface owned by TEP. The existing Location will be expanded from its current interim-reclaimed state.

- Oil and Gas Location disturbance - 6.43 total acres (5.44 acres of existing disturbance and 0.99 acres of new disturbance); reclaimed to 1.74 acres after interim reclamation;
- Working Pad Surface (WPS) disturbance - 3.78 total acres;
- Water and Gas Pipeline Corridor disturbance - 1.83 total acres (1.69 acres of existing disturbance and 0.14 acres of new disturbance);
- Access Road disturbance - no new disturbance; the existing Access Road from Garfield County Road 317 is approximately 3,700 feet in length, equating to approximately 1.70 acres of disturbance that remains after interim reclamation;
- The total new disturbance for the South Leverich 13-09 OGDP (Location and Pipeline Corridor) is approximately 1.13 acres (existing disturbance is 7.13 acres).

DRILLING AND SPACING CONSIDERATIONS

TEP is requesting the development of FEE and FEDERAL minerals covering approximately 799 total acres from the Williams Fork Formation as follows:

- <u>Existing Order 1-229</u>
    - Order 1-229 is a basin-wide order establishing the following requirements for wells drilled into the Williams Fork Formation in the Piceance Basin:
        - Well Density: one well per ten acres; and
        - Setbacks: no closer than 100 feet from the north and south boundaries and no closer than 600 feet from the east and west boundaries.
    - TEP seeks to drill twenty-one (21) new directional wells under existing Order 1-229 from the existing, amended South Leverich 13-09 Pad (Loc ID# 335045) location which has four (4) existing producing wells, for a total of twenty-five (25) wells on the location.

This development, as outlined in TEP's amended Hearing Application, complies with applicable COGCC rules.

Financial Assurance:
Staff confirmed that TEP has a valid blanket plugging bond on record consistent with Rule 702.

LOCAL GOVERNMENT PERMITTING AND PRE-APPLICATION CONSULTATIONS

Relevant Local and Proximate Governments:
Garfield County is the relevant local government for the OGDP. There are no proximate local governments to the proposed OGDP.

Local Government Permit Consultation with Garfield County:
On April 28, 2021, representatives from TEP and Garfield County met at the South Leverich 13-09 pad to review the proposed development plan and discuss the permitting requirements associated with this oil and gas location. TEP and Garfield County discussed siting considerations such as distance to existing building units, access routes, and vehicle traffic. During the April onsite, Garfield County representative Kirby Wynn informed TEP that Garfield County was in the process of amending the Land Use and Development Code for oil and gas operations.

In July 2021, Garfield County adopted the Oil and Gas amendment to the Land Use and Development Code, which requires operators within Garfield County to submit and obtain approval of an Oil and Gas Permit for any Oil and Gas Location that requires the submittal of an Alternative Location Analysis as part of the Form 2A, or if the operator is seeking a variance to COGCC Noise or Lighting Standards.

On September 15, 2021, TEP completed the pre-application conference with Garfield County. At this meeting TEP presented the proposed development plan for the South Leverich 13-09 pad and reviewed the initial draft of the alternative location analysis. On October 28, 2021, TEP conducted a pre-application neighborhood meeting with surface owners and tenants of all properties within 2,000 of the proposed working pad surface of the oil and gas location as required by Section 9-203.D of the Garfield County Land Use and Development Code. On May 24, 2022, prior to submittal of the OGDP application and Oil and Gas Location Assessment Form 2A, TEP sent formal notice to Garfield County, the local government with land use authority over siting of the proposed South Leverich 13-09 pad, as required by COGCC Rule 302.e. and Rule 303.e.(2). and (3). TEP's Emergency Response Plan was coordinated with the Garfield County Sheriff's Office, Emergency Operations Commander/Manager, Chris Bornhodt, and was approved on April 6, 2021.

The Garfield County Oil and Gas Permit for the South Leverich 13-09 well pad was submitted on July 25, 2022. The hearing, conducted by the Community Development Department, for the Board of County Commissioners (BOCC) took place November 14, 2022. The BOCC has approved the TEP South Leverich 13-09 Well Pad Oil and Gas Permit.

Pre-Application Consultation with Colorado Parks and Wildlife (CPW):
TEP conducted two (2) pre-application consultation meetings with CPW to discuss the proposed development plan for the South Leverich 13-09 well pad and the potential impacts to wildlife as a result of construction and operations of the proposed facility. The South Leverich 13-09 well pad and associated permanent pipelines are not located within CPW-mapped High Priority

Habitat (HPH). However, based on the proximity of the oil and gas location to High Priority Habitat, TEP held a pre-application consultation meeting with CPW to discuss potential impacts associated with the facility and the existing access road.

The first pre-application consultation meeting occurred on April 28, 2021 and was held at the South Leverich 13-09 well pad. This meeting was the initial site review meeting by CPW, which provided CPW with the opportunity to review the staked oil and gas location and associated pipeline corridors and provide initial feedback on the development plan. The second pre-application consultation meeting occurred on June 23, 2022. During this meeting TEP provided updates to the proposed development plan, reviewed the draft Wildlife Protection Plan (WPP), discussed potential impacts to sensitive wildlife in the area, reviewed proposed best management practices (BMPs), and discussed any necessary waivers needed for planned operations. These pre-application consultations with CPW resulted in consensus between TEP and CPW, including a CPW-issued waiver for Rule 1202.a.(10).C.

Pre-Application Consultation with BLM:
On June 28, 2021, TEP held a field onsite with representatives from BLM and Summit Midstream to review the proposed gas and water pipeline corridors proposed for installation during development of the South Leviercn 13-09 pad. The meeting participants met on the South Leverich 13-09 pad and TEP provided an oral summary of the proposed operations including plans for installation of the proposed gas and water pipelines. The group then reviewed the pipeline corridor by vehicle to determine the scope of the proposed construction activities. Since limited new disturbance would be required for construction of the proposed gas pipeline and since the proposed water pipeline would tie-in adjacent to the oil and gas location, BLM and Summit Midstream did not have any significant changes or issues with proposed pipeline construction activities for the South Leverich 13-09 pad.

The BLM published the Upper Beaver Environmental Assessment (EA) in June 2022. TEP has obtained the BLM Right-of-Way Grant for the proposed frac lines and APDs for the 2 wells that will produce FEDERAL minerals.

CDPHE Consultation:
CDPHE initiated consultation with the Director on September 19, 2022; the consultation period was 35 days to accommodate CDPHE's review of ongoing revisions to the application. COGCC, CDPHE, and TEP attended a meeting on October 11, 2022 to discuss the TEP's South Leverich 13-09 OGDP and BMPs. CDPHE provided their Consultation letter to COGCC on October 11, 2022. CDPHE and TEP agreed to twelve (12) BMPs to minimize impacts to air resources, ten (10) BMPs to minimize impacts to water resources, two (2) BMPs to minimize impacts from wastes, and five (5) BMPs to minimize impacts from per- and poly-fluoroalkyl substances (PFAS). All BMPs have been placed on the Form 2A. See the "CDPHE Consultation" attachment on the Form 2A (which is also included in the Director's Recommendation) for details of CDPHE's recommendations and TEP's responses.

ADMINISTRATIVE CONSIDERATIONS

Condition of Approval (COA):
During Staff's review of the Noise Mitigation Plan, it was determined that although modeling shows the location is expected to be compliant with the rural standard, TEP will be conducting ambient noise monitoring adjustments occur during subsequent ambient noise monitoring, therefore, Staff added the following COA to the Form 2A:

> *"If the operator proposes to use ambient noise monitoring to increase the allowable noise level at the location, the operator will submit a Form 4 Sundry with an updated Noise Mitigation Plan that will be approved prior to new activity."*

CPW Waiver of Rule 1202.a.(10).C:
COGCC Rule 1202.a.(10).C. requires daily inspection frequency for locations within 1,000 feet and upgradient of a 1202.c.(1).Q. to S. habitats. CPW understands that the working pad surface for the South Leverich 13-09 well pad is within 1,000 feet and upgradient of a 1202.c.(1).Q. to S. habitat and requires adherence to the best management practices outlined under Rule 1202.a.(10). One of the listed BMPs requires daily inspections of the location unless a different inspection frequency or alternate method of compliance is identified. CPW agreed that with the use of remote monitoring (SCADA) and weekly visits after the first 6 to 9 months, there is no need for daily inspections at this facility. Furthermore, reducing the frequency of inspections will reduce overall vehicle traffic and disturbance to terrestrial wildlife species inhabiting this area. For these reasons, CPWdetermined that daily inspections of the location are not necessary, and granted TEP a waiver from Rule 1202.a.(10)C. The correspondence from CPW and CPW's written approval to waive the daily inspection frequency requirement under Rule 1202.a.(10).C. was obtained on June 30, 2022. The waiver would be granted administratively if the Commission approves the Form 2A, thus documenting the relief.

PUBLIC COMMENTS

The public comment period was open for 30 days from August 24, 2022 to September 23, 2022 per Rule 303.d.(1).A.ii. No public comments were received during the public comment period; No public comments were received in this docket in the eFiling system as of November 23, 2022.

COGCC STAFF'S TECHNICAL REVIEW HIGHLIGHTS

This section addresses issues related to public health, safety, welfare, the environment, and wildlife resources, as required by the Oil and Gas Conservation Act, 34-60-106(2.5)(a), for the TEP South Leverich 13-09 OGDP.

<u>Alternative Location Analysis (ALA)</u>

Proposed South Leverich 13-09 Pad:
The proposed South Leverich 13-09 Pad meets the following Rule 304.b.(2).B criteria:

- 304.b.(2).B.i. The proposed Working Pad Surface is within 2,000 feet of 1 or more Residential Building Units (RBUs) or High Occupancy Building Units;

It should be noted that although this location, as well as the alternatives, fall within COGCC-mapped Public Water Systems under Rule 411.a., the City of Rifle decommissioned its Beaver Creek Water Plant in 2018, affecting the regulation of the Beaver Creek watershed. On June 6, 2018, Ordinance 7-2018 eliminated the Beaver Creek potable water diversion point and removed the City's jurisdiction over Beaver Creek.and all of its tributaries. CDPHE's and COGCC's online GIS maps have yet to be updated to remove the internal, intermediate, and external buffer zones.

TEP formally evaluated five (5) technically feasible locations, including the proposed existing South Leverich 13-09 well pad. All locations (including one alternative location that is an existing location) are within 2,000 feet of at least one RBU and fall outside of HPH and any Disproportionately Impacted (DI) Communities.

Although neither the proposed location nor the four alternative locations avoid all potential receptors, utilizing any of the four alternative locations would be more impactful to the public, environment, and wildlife, create more new surface disturbance, and none of the alternative locations would allow for mineral coverage as successfully as the proposed location does.

From this existing well pad, TEP will be able to drill all twenty-one (21) proposed directional natural gas wells. The location maximizes the area of mineral development potential and the use of existing infrastructure.

The existing South Leverich 13-09 well pad also has the advantage of existing access and transportation routes, has existing produced water and gas gathering infrastructure that requires minor additional modifications; and the expansion for this location requires only 1.13 acres of new disturbance.

Public Health, Safety, and Welfare Considerations

Staff identified two interrelated concerns regarding public health, safety, and welfare in this proposed OGDP due to RBUs being within 2000 feet of the WPS and the request for approval of this location pursuant to Rule 604.b.(1), as discussed below.

The existing South Leverich 13-09 well pad has four (4) RBUs within 2,000 feet of the WPS. The WPS of the proposed location is approximately 1,195 feet from the nearest RBU, which is occupied full time by the owner. The second and third closest RBUs are located 1,393 feet and 1,489 feet respectively from the WPS and are owned by TEP. Both are currently unoccupied and TEP currently does not intend to have a tenant on the property. The fourth RBU is located 1,582 feet from the WPS and is owned by the surface owner who has entered into a Surface Use Agreement with TEP. This RBU is not a full-time residence and is only occupied periodically during the year for recreational purposes. All three RBU owners within 2,000 feet of the WPS

have provided informed consent letters for the proposed Oil and Gas Location (attached to the Form 2A).

The proposed WPS is within 2,000 feet of existing RBUs:
Staff's technical review identified four (4) RBUs within 2,000 feet of the proposed location. TEP will comply with rule requirements for notification and will practice continued engagement with the RBU owners/tenants within 2,000 feet of the location.

TEP has provided BMPs that address public health, safety and welfare considerations. The applicant's BMPs, which include administrative processes (coordination and permitting with the relevant local government), nuisance conditions (noise, lighting, odors and dust), provide for general safety (emergency response and vapor controls), address acute and cumulative impacts to public health (emission controls, connecting to pipelines), and promote welfare (communication with nearby RBU owners and tenants), if successfully implemented and maintained, will reduce, but not eliminate, adverse impacts to local residents. A summary of relevant minimization and mitigation measures includes:

1) The Location will have remote shut in capability.
2) TEP will minimize truck traffic by using pipeline infrastructure.
3) TEP will use water-based drilling fluids for all drilling, TEP will use speed restrictions, restriction of construction activity during high-wind days, regular road maintenance, and the use of fresh water or magnesium chloride for dust suppressant.
4) Air monitoring will be conducted according to CDPHE Regulation 7 during production drilling, completions and six months of production facility operations.

The applicant is requesting approval of the Location pursuant to Rule 604.b.(1):
Rule 604.b requires that no WPS will be located between 501 and 2,000 feet from a RBU unless one of four conditions are satisfied. Since TEP has obtained Informed Consent Letters from the three owners of the four RBUs, it has satisfied Rule 604.b.(1)

Staff has determined that the dialogue established between TEP and the RBU owners/tenants shows substantial engagement and agreement with the proposed location and operations.

Based on Staff review, the potential impact to RBUs is minimal. Potential impacts to RBUs include noise, light, odors, and air emissions originating from the Oil and Gas Location during construction, drilling, completions, and long term production operations. These impacts have been addressed through proposed site specific mitigation measures and best management practices (BMPs) to eliminate or minimize potential impacts to receptors.

Environmental Resource Considerations
Through an on-site visit and evaluation of information provided on the Hydrology Map, Staff has determined that the proposed WPS at this Oil and Gas Location does not lie within a Sensitive Area for water resources. Groundwater is a minimum of 90 feet below ground surface, and the nearest downgradient surface Waters of the State and wetland area are a minimum of approximately 640 feet west of the WPS.

Staff's technical review of the Layout Drawings, Stormwater Management Plan, Interim Reclamation Plan, Fluid Leak Detection Plan, Dust Mitigation Plan, Topsoil Protection Plan, and associated BMPs determined that there are few significant potential impacts to other environmental resources such as soils. Staff concludes that the risk of impacts to water and other environmental resources will be minimized by the successful implementation of the plans and proposed BMPs.

Wildlife Resource Considerations

The existing TEP South Leverich 13-09 well pad, which will be expanded to accommodate the proposed twenty-one (21) new directional gas wells, is not located within currently mapped CPW HPH areas. Use of this existing location and pipeline infrastructure minimizes disturbance, reduces the amount of traffic and traffic related impacts associated with production operations in the area, and reduces impacts to wildlife and other receptors.

A new temporary surface frac line will be installed through approximately 1,000 feet of Rule 1202.c.(1).R. cutthroat trout designated crucial habitat and native fish and other native aquatic species conservation waters; TEP indicated in its Wildlife Plan that this line will be installed in the existing access road right of way and near to the existing Youberg RU 44-7 pad, but since no new surface disturbance will occur, Rule 1202.c does not apply. TEP does intend to use Best Management Practices (BMPs) to minimize spills or leaks from the temporary frac line.

In consultation with CPW, TEP provided the following site-specific BMPs addressing the minimization of potential impacts during construction, drilling/completion, and production operations for the protection of wildlife resources at the proposed location:

1) Dust suppression in proximity to Beaver Creek shall utilize potable water from a nearby source instead of raw water to avoid the spread of disease organisms and aquatic nuisance species.
2) To minimize the potential for wildlife related traffic accidents, TEP has implemented speed restrictions on all lease roads and requires all TEP employees and contractors to adhere to all posted speed restrictions; production site visits will occur between 10:00 am to 3:00 pm.
3) All trucks on location will be prohibited from idling when not in use to prevent unnecessary noise.
4) Site lighting will be shielded and directed downward, inward, away from the nearby areas where wildlife may be present, and toward operations to avoid glare on nearby public roads or possible wildlife areas.
5) TEP will minimize direct impact to wildlife habitat by utilizing existing infrastructure and disturbance corridors.
6) Well telemetry equipment will be installed to minimize site visitation through remote monitoring of injection operations.

Based on the pad location, proposed schedule, and wildlife protection BMPs, Staff concludes that there are no significant potential adverse impacts to wildlife.

DIRECTOR'S RECOMMENDATION:

The Director has obtained and fully reviewed all required and supplemental information necessary to evaluate the OGDP's proposed operation and its potential impacts on public health, safety, welfare, the environment and wildlife resources. Through this review, the Director has determined that this OGDP complies with all applicable requirements of the Commission's Rules and recommends approval by the Commission.

COLORADO
Department of Public Health & Environment

October 18, 2022

Julie Murphy, Director
Colorado Oil and Gas Conservation Commission
1120 Lincoln St, Suite 801
Denver, CO 80203

Re: Colorado Department of Public Health and Environment's Rule 309.f Consultation Comments for the TEP Rocky Mountain LLC South Leverich 13-09 Oil and Gas Development Plan (Docket Number 220700189)

The Colorado Department of Public Health and Environment (CDPHE) appreciates the opportunity to consult on the TEP Rocky Mountain LLC (TEP) South Leverich 13-09 Oil and Gas Development Plan (OGDP), as well as the ongoing collaboration with the Colorado Oil and Gas Conservation Commission (COGCC) to fulfill our shared mission to protect public health and the environment. CDPHE's consultation timeline for this OGDP is as follows: CDPHE provided the Best Management Practices (BMPs) spreadsheet for CDPHE-COGCC Consultations to TEP and had an initial conversation with the operator on September 19, 2022. TEP provided to CDPHE its completed BMP spreadsheet for the South Leverich 13-09 OGDP on September 29, 2022.[1] A consultation meeting including CDPHE, COGCC, and TEP was held on October 11, 2022.

CDPHE notes that the Proposed Location has four Residential Building Unit (RBU) within 2,000 feet of the Working Pad Surface. Two RBUs are owned by TEP and are unoccupied. The third RBU is unoccupied and used as a hunting cabin. Informed consent was executed for the fourth RBU. The OGDP is also located within Garfield County, which currently meets all health-based National Ambient Air Quality Standards (NAAQS). The BMPs included in CDPHE's BMP List are evaluated on a case by case basis and some BMPs may not be applicable based on site specific factors. For example, the ozone mitigation on forecasted high ozone days BMPs do not apply to this proposed location. Due to the remote location of the proposed location TEP cannot connect to the electrical grid, rendering the electrification BMPs unworkable. Additional context is provided in TEP's response to the BMP list. To protect public health and air and

[1] TEP Rocky Mountain LLC - South Leverich 13-09 OGDP, Response to CDPHE BMP List, https://docs.google.com/spreadsheets/d/17dGJby8drSkf-AUmrnT3pGcAtL1rwHJB/edit?usp=sharing&ouid=116011492119467778154&rtpof=true&sd=true

water resources, CDPHE supports incorporation of each of the BMPs that TEP has committed to in the South Leverich 13-09 OGDP, as noted in the linked BMP spreadsheet and listed below.

Air BMPs

- Operator will implement ambient air quality monitoring on site.
- Operator will properly maintain vehicles and equipment.
- Operator will use non-emitting pneumatic controllers.
- Operator will implement a "hybrid production flowback method" or "modern production flowback method" (unlike the conventional or legacy flowback method, which uses temporary equipment to separate the oil, natural gas and water, the "hybrid-production flowback method" or "modern production flowback method" eliminates tanks by routing the oil, natural gas and water directly to permanent production equipment).
- Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations.
- Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better.
- Venting/Flaring: Operator will control bradenhead/casinghead venting.
- Pipelines: Operator will use pipelines to transport water for hydraulic fracturing to location.
- Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable.
- Odor mitigation: operator will cover trucks transporting drill cuttings.
- Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore.
- Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage.

Water BMPs

- Stormwater inspections: Operator will conduct stormwater inspections immediately after storm event.
- Operator will use Modular Large Volume Storage Tanks.
- Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank.
- Operator will recycle or beneficially reuse flowback and produced water for use downhole.
- Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events.

- Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections.
- Dust suppression: Operator will not use produced water or other process fluids for dust suppression.
- COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan).
- Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source .
- Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices.
- Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible - per specifications in Bayswater's Fieldwide Stormwater Management Plan (SWMP).

Waste BMPs

- Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream).
- Operator will properly test for and dispose of TENORM if CDPHE's 6 CCR 1007-1 Part 20 (TENORM) regulations apply to operations at this location.

PFAs BMPs

- Operator will not use fracturing fluids which contain PFAS compounds.
- Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard.
- If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination.
- If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions.
- If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water.

CDPHE appreciates this opportunity to consult and looks forward to continued collaboration with COGCC. CDPHE also appreciates TEP's engagement during this process and we have no

additional recommendations at this time. Please do not hesitate to contact me if you have any questions.

Sincerely,

Rick Coffin
Energy Liaison
Colorado Department of Public Health & Environment

FORM 2A Rev 05/22

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 403064316

Date Received: 07/20/2022

Oil and Gas Location Assessment

This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at https://cogcc.state.co.us/ for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID: **335045**
OGDP ID:
Expiration Date:

☐ New Location ☐ Refile ☒ Amend Existing Location # 335045

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

Docket Number	OGDP ID	OGDP Name
220700189		

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

<No existing OGDP number provided>

CONSULTATION

☐ This location is included in a Comprehensive Area Plan (CAP). CAP ID #
☐ This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.
☐ This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).
☐ This Location includes a Rule 309.e.(2).E variance request.
☐ This location includes a Rule 309.f.(1).A.ii. variance request.

Operator

Operator Number: 96850
Name: TEP ROCKY MOUNTAIN LLC
Address: 1058 COUNTY ROAD 215
City: PARACHUTE State: CO Zip: 81635

Contact Information

Name: Jeff Kirtland
Phone: (970) 263-2736
Fax: ( )
email: jkirltand@terraep.com

FINANCIAL ASSURANCE FOR THIS LOCATION (check all that apply)

☒ Plugging, Abandonment, and Reclamation 20160057
☐ Centralized E&P Waste Management Facility
☐ Gas Gathering, Gas Processing, and Underground Gas Storage Facilities
☐ Surface Owner Protection Bond.

Federal Financial Assurance

☒ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for one or more Wells on this Location.

Amount of Federal Financial Assurance $ 202500

LOCATION IDENTIFICATION

Name: South Leverich Number: 13-09 Pad

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

QuarterQuarter: LOT 3 Section: 13 Township: 7S Range: 94W Meridian: 6 Ground Elevation: 8007

Latitude: 39.435546 Longitude: -107.829300

GPS Quality Value: 2.4 Type of GPS Quality Value: PDOP Date of Measurement: 08/04/2021

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:	LOCATION ID #	FORM 2A DOC #
Well Site is served by Production Facilities	413683	

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: GARFIELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: Yes

Date Relevant Local Government permit application submitted: 07/25/2022

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: Approved

Status/disposition date: 11/14/2022

If Relevant Local Government permit has been approved or denied, attach final decision document(s).
Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: Kirby Winn Contact Phone: 970-625-5905

Contact Email: kwynn@garfield-county.com

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

< No row provided >

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: Yes

Date submitted: 09/22/2022

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location: Concurrent/Pending

Status/disposition Date: 09/22/2022

If Federal agency permit has been approved or denied, attach the final decision document(s).
Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: Wesley Toews Contact Phone: 970-876-9000

Contact Email: wtoews@blm.gov Field Office: Bureau of Land Management - CRVO

Additional explanation of local and/or federal process:

TEP will be acquiring APDs for 2 of the 21 wells that have bottom hole locations in Federal Oil & Gas Lease COC63721, and acquiring a Right-of-Way Grant (TUP) for the proposed frac pipelines. TEP has three (3) existing BLM Grants (COC-59786, COC-74411, & COC-76419) for access across BLM surface to the existing Youberg RU 44-7 pad (remote frac pad).
A siting permit application was submitted to the Relevant Local Government for this proposed Oil and Gas Location following the submittal of the Form 2A and was approved on November 14, 2022.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? Yes

Date of local government consultation: 04/28/2021

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? Yes

Date of federal consultation: 04/28/2021

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. Yes

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? Yes

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

- [X] i. WPS < 2,000 feet from RBU/HOBU
- [ ] ii. WPS < 2,000 feet from School/Child Care Center
- [ ] iii. WPS < 1,500 feet from DOAA
- [ ] iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA
- [ ] v. WPS within a Floodplain
- [ ] vi.aa. WPS within a surface water supply area
- [ ] vi.bb. WPS < 2,640 feet from Type III or GUDI well
- [ ] vii. WPS within/immediately upgradient of wetland/riparian corridor
- [ ] viii. WPS within HPH and CPW did not waive
- [ ] ix. Operator using Surface bond
- [ ] x. WPS < 2,000 feet from RBU/HOBU/School within a DIC

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A. No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: [ ]

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

#	latitude	longitude	i	ii	iii	iv	v	vi	vii	viii	ix	x	Variance Required?	Comments
	39.430858	-107.827144	x											ALA # 1: Rule 304.b.(2).B.i: There are two residential building units within 2000 feet. The RBUs are owned by TEP. Rule 304.b.(2).B.vi.aa: Oil and Gas Location is located within Internal Buffer of surface water supply area; however, the City of Rifle the water intake and no long utilizes Beaver Creek as a public water source. New disturbance. Surface owner (TEP and Leverich) may not approve location when an existing location is readily available.
	39.440109	-107.829681	x											ALA # 2: Rule 304.b.(2).B.i: There are three residential building units within 2000 feet. Rule 304.b.(2).B.vi.aa: Oil and Gas Location is located within Internal Buffer of surface water supply area; however, the City of Rifle the water intake and no long utilizes Beaver Creek as a public water source. New disturbance. Surface owner may not approve location when an existing location is readily available.
	39.434705	-107.843232	x										x	ALA # 3: Rule 304.b.(2).B.i: There is one residential building unit within 2000 feet. The RBU is within 500 feet of the working pad surface. Rule 304.b.(2).B.vi.aa: Oil and Gas Location is located within External Buffer of surface water supply area; however, the City of Rifle the water intake and no long utilizes Beaver Creek as a public water source. Nearest RBU owner does not support the siting of this location.
	39.434548	-107.824308	x											ALA # 4: Rule 304.b.(2).B.i: There are two residential building units within 2000 feet. One owned by the surface owner and one owned by TEP. Rule 304.b.(2).B.vi.aa: Oil and Gas Location is located within External Buffer of surface water supply area; however, the City of Rifle the water intake and no long utilizes Beaver Creek as a public water source. Existing O&G Location.

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Gordman Leverich, LLP Phone: 970-379-3342

Address: 555 E. Durant Avenue, Ste. 4A Fax:

Address: Email: cleverich@aol.com

City: Aspen State: CO Zip: 81611

Surface Owner at this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Check only one:

[ ] The Operator/Applicant is the surface owner.

[X] The Operator has a signed Surface Use Agreement for this Location – attach SUA.

[ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.

[ ] All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A Surety ID Number:

Mineral Owner beneath this Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

Lease description if necessary:

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells	25	Oil Tanks	0	Condensate Tanks	6	Water Tanks	0	Buried Produced Water Vaults	0
Drilling Pits	0	Production Pits	0	Special Purpose Pits	0	Multi-Well Pits	0	Modular Large Volume Tank	0
Pump Jacks	0	Separators	28	Injection Pumps	0	Heater-Treaters	0	Gas Compressors	0
Gas or Diesel Motors	0	Electric Motors	0	Electric Generators	0	Fuel Tanks	0	LACT Unit	0
Dehydrator Units	0	Vapor Recovery Unit	0	VOC Combustor	0	Flare	0	Enclosed Combustion Devices	3
Meter/Sales Building	0	Pigging Station	0			Vapor Recovery Towers	0		

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
Blowdown Tank - 80 bbl	1
Chemical Pumps	4
Vent Tank - 80 bbl	1
Air Compressor / Dual Fuel Gen	1
Chemical Tanks - 500 gal	4
Natural Gas Meter - Summit	1

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
Enclosed Water Tanks, 500 bbl - FB	3
Water Transfer Pump - FB	1
Buy Back Meter	1
Low Pressure P-Tank, 500 bbl - FB	1
High Pressure 4 Phase Sep - FB	2
Emissions Combustion Device(LP)-FB	1

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

Off- Location Flowlines:
1 - 8" Steel Gas Gathering Line - approx. 2,125'
1 - 6" FlexPipe Water Pipeline - approx. 450'

Off-Location Flowlines - Temporary:
5 - 4.5" Steel Surface Frac Lines - approx. 14,712'

On-Location Flowlines:
25 - 2" Coated Steel Wellhead flowlines - approx. 200'
5 - 2" Coated Steel Surface Condensate Dump Lines - approx. 100'
1 - 2" Coated Steel Surface Water Vent Line - approx. 100'
1 - 2" Coated Steel Surface Blowdown Line - approx. 100'
1 - 4" Aluminum Surface ECD Process Piping - approx. 80'
1 - 1" Coated Steel Surface Fuel Gas Line to ECD - approx. 20'
1 - 1" Coated Steel Surface Fuel Gas Line to Tank Burners - approx. 80'
1 - 2" Coated Steel Fuel Gas Pipeline to the Rig - approx. 200'

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

	Distance		Direction	Rule 604.b Conditions Satisfied (check all that apply): 604.b. (1)	604.b. (2)	604.b. (3)	Details of Condition(s)	604.b. (4)
Building:	1401	Feet	S					
Residential Building Unit (RBU):	1195	Feet	W	X			Signed Informed Consent Letters are attached.	
High Occupancy Building Unit(HOBU)	5280	Feet	N					
Designated Outside Activity Area:	5280	Feet	N					
Public Road:	731	Feet	SW					
Above Ground Utility:	5280	Feet	N					
Railroad:	5280	Feet	N					
Property Line:	623	Feet	W					
School Facility:	5280	Feet	N					
Child Care Center:	5280	Feet	N					
Disproportionately Impacted (DI) Community:	5280	Feet	N					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	N					

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

	0-500 feet	501-1,000 feet	1,001-2,000 feet
Building Units	0	0	4
Residential Building Units	0	0	4
High Occupancy Building Units	0	0	0
School Properties	0	0	0
School Facilities	0	0	0
Designated Outside Activity Areas	0	0	0

CONSTRUCTION

Size of disturbed area during construction in acres: 6.43

Size of location after interim reclamation in acres: 1.74

Estimated post-construction ground elevation: 8007

DRILLING PROGRAM

Will a closed-loop drilling system be used? Yes

Is H2S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If YES, attach H2S Drilling Operations Plan.

Will salt sections be encountered during drilling: No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☒ Rangeland ☐ Forestry ☒ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

The current land use for this property is considered rangeland / recreational. The property in the immediate vicinity of the Oil and Gas Location is primarily used for cattle grazing but is also periodically used for recreation, including hunting.

Describe the Relevant Local Government's land use or zoning designation:

Garfield County currently has the property zoned as Rural (agricultural resource lands).

Describe any applicable Federal land use designation:

Not applicable since this location is on private property and not federal.

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land:	☐ Irrigated	☐ Non-Irrigated	☐ Conservation Reserve Program (CRP)	
Non-Crop Land:	☒ Rangeland	☐ Forestry	☒ Recreation	☐ Other
Subdivided:	☐ Industrial	☐ Commercial	☐ Residential	

REFERENCE AREA INFORMATION

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:

Describe landowner's designated final land use(s):

The surface owner does not intend to modify the current land use. Therefore, the final land use designation will remain as rangeland / recreational. The property in the immediate vicinity of the Oil and Gas Location is primarily used for cattle grazing but is also periodically used for recreation, including hunting.

Reference Area Latitude: 39.434680 Reference Area Latitude: -107.829267

Provide a list of plant communities and dominant vegetation found in the Reference Area.

Plant Community	Dominant vegetation
Shrub Land	Rocky Mountain Maple
Forest Land	Quaking Aspen
Shrub Land	Wyoming Big Sagebrush
Shrub Land	Gambel's Oak
Shrub Land	Serviceberry

Noxious weeds present: Yes

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/ or from the COGCC website GIS Online map page. Instructions are provided within the COGCC website help section.

NRCS Map Unit Name: 45 - Morval-Tridell complex, 6 to 25 percent slopes

NRCS Map Unit Name: 16 - Cimarron loam, 2 to 12 percent slopes

NRCS Map Unit Name:

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 1089 Feet W

Spring or Seep: 1460 Feet NE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 90 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

State Engineers Office and USGS records were reviewed indicating only one permitted monitoring well (permit no. 314384) located 1,089 feet west of the well pad. The well is 160 feet deep, with solid casing from 0-120 feet and perforated pipe from 120-165 feet. The static water level is 90 feet with an estimated well yield of 15 gallons per minute (gpm). Hydrogeological indicators do not support the occurrence of shallow groundwater at the site. Depth to groundwater is likely greater than 90 feet in the underlying bedrock. Potential impacts to groundwater resources at the site is deemed to be low based on the site hydrogeology. Sensitive Area Determination Checklist, WestWater Engineering 9/17/2021.

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 640 Feet W

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water System intake? No

Provide the distance and direction to the nearest downgradient wetland, measured from the Working Pad Surface: 640 Feet W

Provide a description of the nearest downgradient surface Waters of the State:

The nearest downgradient surface Waters of the State is Beaver Creek which is a perennial stream that eventually discharges to the Colorado River near Rifle CO.

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type:

Public Water System Administrator - Contact Name Email

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

☒ Federal (FEMA) ☐ State ☒ County ☐ Local

☐ Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

☐

This location is included in a Wildlife Mitigation Plan

☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.

☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.

☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.

☐ This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

☒ A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred on: 06/23/2022

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

☐ The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.

☐ The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.

☐ The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.

☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.

☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.

☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.

☒ The applicant has obtained a Rule 1202.a CPW waiver.

☐ The applicant has obtained a Rule 1202.b CPW waiver.

☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation

Rule(s): _____

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

High Priority Habitat (list all that apply)	Oil and Gas Location	Access Road	Utility or Pipeline Corridor
1202.c.(1).R - Cutthroat trout habitat and others		x	x

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

NA

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Direct impact habitat mitigation fee amount: $

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

NA

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Indirect impact habitat mitigation fee amount: $

Operator Proposed Wildlife BMPs

No	Target Species	BMP Type	Description
1	BLACK BEAR	Wildlife - Avoidance	The operator agrees to report bear conflicts immediately to CPW staff.
2	BLACK BEAR	Wildlife - Avoidance	TEP will install and utilized bear proof dumpsters and trash receptacles for food- related trash at all facilities that generate trash.
3	RAPTORS	Wildlife - Minimization	Exclusionary devices will be installed to prevent birds and other wildlife from accessing equipment stacks, vents, and openings.
4	RAPTORS	Wildlife - Minimization	TEP will conduct vegetation removal activities outside the migratory bird nesting season (April 1 - August 30). If vegetation removal must occur during the nesting season, TEP will implement hazing or other exclusionary measures prior to April 1 to avoid take of migratory birds. Alternatively, TEP may conduct a migratory bird survey prior to vegetation removal as required by COGCC Rule 1202.a.(8) to avoid take of migratory birds.
5	MULE DEER & ELK	Wildlife - Avoidance	The operator agrees to reclaim mule deer and elk habitats with CPW-identified native shrubs, grasses, and forbs appropriate to the ecological site disturbed.
6	MULE DEER & ELK	Wildlife - Minimization	To minimize the potential for wildlife related traffic accidents, TEP has implemented speed restrictions for all lease roads and requires that all TEP employees and contractors adhere to these posted speed restrictions.
7	MULE DEER & ELK	Wildlife - Minimization	Certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife will be used. TEP will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.

8	CUTTHROAT TROUT	Wildlife - Minimization	Minimization: TEP will utilize fresh water from Beaver Creek if available or potable water from a nearby source for dust suppression within cutthroat trout designated crucial habitat and native fish and other native aquatic species conservation waters. If feasible, dust suppression in proximity to Beaver Creek shall utilize potable water from a nearby source instead of raw water to avoid the spread of disease organisms and aquatic nuisance species.
9	CUTTHROAT TROUT	Wildlife - Minimization	TEP will stage a spill response trailer at the RU 31-12V pad adjacent to Beaver Creek, which will have supplies available for immediate response to spills or releases during operations on the oil and gas location.

CPW Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? Yes

Operator Proposed BMPs

No	BMP Target	CDPHE Recommendation	COGCC Action
	PFAS	Adopt As BMP	Adopt as BMP
	Description	Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable	
	CDPHE Comment		
	Waste	Adopt As BMP	Adopt as BMP
	Description	Operator will properly test for and dispose of TENORM	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Stormwater inspections: Operator will conduct stormwater inspections immediately after storm event	
	CDPHE Comment		
	PFAS	Adopt As BMP	Adopt as BMP
	Description	Operator will not use fracturing fluids which contain PFAS compounds	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Operator will properly maintain vehicles and equipment	

	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Pipelines: Operator will use pipelines to transport water for hydraulic fracturing to and from location	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Operator will recycle or beneficially reuse flowback and produced water for use downhole	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations	
	CDPHE Comment		
	PFAS	Adopt As BMP	Adopt as BMP
	Description	If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Operator will implement ambient air quality monitoring on site	
	CDPHE Comment		
	Waste	Adopt As BMP	Adopt as BMP
	Description	Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream)	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Odor mitigation: operator will cover trucks transporting drill cuttings	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan)	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Operator will implement a "hybrid production flowack method" or "modern production flowback method" (unlike the conventional or legacy flowback method, which uses temporary equipment to separate the oil, natural gas and water, the "hybrid-production flowback method" or "modern production flowback method" eliminates tanks by routing the oil, natural gas and water directly to permanent production equipment)	
	CDPHE Comment		
	PFAS	Adopt As BMP	Adopt as BMP
	Description	If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP

	Description	Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel.	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Operator will use non-emitting pneumatic controllers	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections	
	CDPHE Comment		
	Air	Adopt As BMP	Adopt as BMP
	Description	Venting/Flaring: Operator will control bradenhead/casinghead venting	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Dust suppression: Operator will not use produced water or other process fluids for dust suppression	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source	
	CDPHE Comment		
	PFAS	Adopt As BMP	Adopt as BMP
	Description	If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and exent of contamination	
	CDPHE Comment		
	Water	Adopt As BMP	Adopt as BMP
	Description	Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible.	
	CDPHE Comment		

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 15

- [ ] (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- [X] (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- [X] (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- [X] (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- [X] (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- [X] (6) Transportation Plan
- [X] (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- [X] (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- [ ] (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- [ ] (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- [X] (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- [ ] (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- [X] (13) Fluid Leak Detection Plan
- [X] (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- [X] (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- [X] (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- [X] (17) Wildlife Plan consistent with the requirements of Rule 1201
- [X] (18) Water Plan
- [X] (19) Cumulative Impacts Plan
- [ ] (20) Community Outreach Plan
- [ ] (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

- [ ] This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from COGCC Rule or Commission Order number: _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- ☐ 304.b.(1). Local Government Siting Information
- ☐ 304.b.(2). Alternative Location Analysis
- ☐ 304.b.(3). Cultural Distances
- ☐ 304.b.(4). Location Pictures
- ☐ 304.b.(5). Site Equipment List
- ☐ 304.b.(6). Flowline Descriptions
- ☐ 304.b.(7). Drawings
- ☐ 304.b.(8). Geographic Information System (GIS) Data
- ☐ 304.b.(9). Land Use Description
- ☐ 304.b.(10). NRCS Map Unit Description
- ☐ 304.b.(11). Best Management Practices
- ☐ 304.b.(12). Surface Owner Information
- ☐ 304.b.(13). Proximate Local Government
- ☐ 304.b.(14). Wetlands
- ☐ 304.b.(15). Schools and Child Care Centers
- ☐ 304.c.(1). Emergency Spill Response Program
- ☐ 304.c.(2). Noise Mitigation Plan
- ☐ 304.c.(3). Light Mitigation Plan
- ☐ 304.c.(4). Odor Mitigation Plan
- ☐ 304.c.(5). Dust Mitigation Plan
- ☐ 304.c.(6). Transportation Plan
- ☐ 304.c.(7). Operations Safety Management Program
- ☐ 304.c.(8). Emergency Response Plan
- ☐ 304.c.(9). Flood Shut-In Plan
- ☐ 304.c.(10). Hydrogen Sulfide Drilling Operations Plan
- ☐ 304.c.(11). Waste Management Plan
- ☐ 304.c.(12). Gas Capture Plan
- ☐ 304.c.(13). Fluid Leak Detection Plan
- ☐ 304.c.(14). Topsoil Protection Plan
- ☐ 304.c.(15). Stormwater Management Plan
- ☐ 304.c.(16). Interim Reclamation Plan
- ☐ 304.c.(17). Wildlife Plan
- ☐ 304.c.(18). Water Plan
- ☐ 304.c.(19). Cumulative Impacts Plan
- ☐ 304.c.(20). Community Outreach Plan
- ☐ 304.c.(21). Geologic Hazard Plan

OPERATOR COMMENTS AND SUBMITTAL

Comments

TEP Rocky Mountain LLC (TEP) is proposing to drill, complete, and operate twenty-one (25) directional natural gas wells (twenty-one [21] new wells and four [4] existing producing wells) from the existing South Leverich 13-09 pad.

The following 304.c Plans are not required for this submittal:
- Emergency Spill Response Program - Location not within 2640' of groundwater under the direct influence of a surface water well or Type III well or surface water that is 15 miles or less upstream from a PWS intake.
- Flood Shut-in Plan - Location is not within a flood plain.
- Hydrogen Sulfide Drilling Plan - Do not expect to encounter H2S during drilling.
- Community Outreach Plan - Location is not w/in 2000' of a RBU, HOBU, or school located w/in a DIC.
- Gas Capture Plan - Will connect to a mid stream gas gathering system prior to commencement of production ops.
- Geologic Hazard Plan - the landslides identified have been inactive since the last glacial period and pose minimal to no risk to oil and gas operations at this Location.

Noise:
Under Garfield County's land use code, the Rural zoning district includes "agricultural resource lands". Garfield County does not have an Agricultural zoning district. Please see Article 3: Zoning; Division 1. General Provisions; 3-101. Establishment of Zone Districts; A. Rural (R). 'definition' below. Even though the property is zoned Rural, the most appropriate land use designation under Rule 423 is "Agricultural", which allows for a production noise limit of 60dBA during the day and 55dBA at night. Even though our operations during production activities are expected to fall under the rural limitations stated in Table 423-1, we want to make the clarification that this site will be subject to the agricultural limits.
Article 3: Zoning;
Division 1. General Provisions;
3-101. Establishment of Zone Districts, The following zone districts are established;
A. Rural (R). The Rural Zone District is comprised of the County's agricultural resource lands, agricultural production areas, and natural resource areas. Uses, densities, and standards established for this zone district are intended to protect the existing character of the area from uncontrolled and unmitigated residential, commercial, and industrial use. The zone district provides for the use of natural resources, recreational development rural residential, and other uses.

It should be noted that although this location, as well as the alternatives, fall within COGCC-mapped Public Water Systems under Rule 411.a., the City of Rifle decommissioned its Beaver Creek Water Plant in 2018, affecting the regulation of the Beaver Creek watershed. On June 6, 2018, Ordinance 7-2018 eliminated the Beaver Creek potable water diversion point and removed the City's jurisdiction over Beaver Creek.and all of its tributaries. CDPHE's and COGCC's online GIS maps have yet to be updated to remove the internal, intermediate, and external buffer zones.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 07/20/2022 Email: mluke@terraep.com

Print Name: Melissa Luke Title: Regulatory Specialist

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ **Director of COGCC** Date: _____

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type	Description
Noise mitigation	If the operator proposes to use ambient noise monitoring to increase the allowable noise level at the location, the operator will submit a Form 4 Sundry with an updated Noise Mitigation Plan that will be approved prior to new activity.
1 COA	

Best Management Practices

No	BMP/COA Type	Description
1	Planning	• Prior to submittal of the Application for Permit to Drill (BLM-APD/Form 2) and the Oil and Gas Location Assessment (Form 2A), TEP conducted onsite reviews and meetings with the Bureau of Land Management (BLM), Colorado Parks and Wildlife, and the associated private landowners. These onsite reviews and meetings were held to discuss TEP's proposed development plan for the South Leverich 13-09 pad and associated support facilities. Changes were made to the proposed development plan based on feedback received from all stakeholders and included in the APD. • The development plan for the South Leverich 13-09 pad was prepared to minimize surface impacts to the greatest extent possible through the development of multiple wells from one location by utilizing directional drilling technology and utilizing existing facilities and infrastructure where possible. This ultimately minimizes the surface area needed to conduct operations on the South Leverich 13-09 pad. • Existing infrastructure operated by Summit and TEP will be utilized for transportation of natural gas and produced water to minimize the surface disturbance required for tying in gathering facilities.
2	Planning	Air Monitoring BMPs: • Per APCD requirements, TEP will implement ambient air quality monitoring on site during drilling, completion, and the first six (6) months of production operations; an air monitoring plan will be submitted 60 days prior to start of drilling; • TEP will properly maintain vehicles and equipment; • Other than safety devices, TEP will use non-emitting pneumatic controllers; and • TEP will have adequate and committed pipeline take away capacity for all produced gas and oil.
3	Pre-Construction	Pre-Construction: • Prior to commencement of construction activities, TEP will hold a pre-construction meeting with contractors to review proposed site construction and installation of stormwater control measures. The site will be staked for construction prior to preconstruction meeting. Staking will identify the boundaries of the proposed site to protect existing vegetation in areas that should not be disturbed.
4	General Housekeeping	General Housekeeping BMPs: • Vehicular traffic will be minimized as much as possible to reduce nuisance dust and prevent soil erosion; • Any trash generated during the project will be disposed of properly at a commercial disposal facility; • Any chemicals used will be kept to a minimum; • Any chemical or hydrocarbon spills will be cleaned up immediately in accordance with established company procedures; • All materials will be stored in a neat and orderly manner in their appropriate containers; and • TEP will follow manufacturers' recommendations and company policies for proper use and disposal of products.
5	Wildlife	• TEP will inform and educate all employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife. • TEP will install a proposed water pipeline from the Oil and Gas Location to TEP's existing water management system to minimize truck traffic to the location and minimize the potential impacts to wildlife. • TEP will minimize direct impact to wildlife habitat by utilizing existing infrastructure and disturbance corridors whenever possible. • Well telemetry equipment will be installed to minimize site visitation through remote monitoring of production operations. • The operator agrees to report bear conflicts immediately to CPW staff. TEP will install and utilize bear proof dumpsters and trash receptacles for food- related trash at all facilities that generate trash. • Exclusionary devices will be installed to prevent birds and other wildlife from accessing equipment stacks, vents, and openings. TEP will conduct vegetation removal activities outside the migratory bird nesting season (April 1 - August 30). If vegetation removal must occur during the nesting season, TEP will implement hazing or other exclusionary measures prior to April 1 to avoid take of migratory birds. Alternatively, TEP may conduct a migratory bird survey prior to vegetation removal as required by COGCC Rule 1202.a.(8) to avoid take of migratory birds.

6	Storm Water/Erosion Control	• Stormwater control measures will be in place during all phases of development to control stormwater runoff in a manner that minimizes erosion, transportation of sediment offsite, and site degradation. • Stormwater control measures will include perimeter controls such as sediment traps, diversion diches, check dams, wattles, and other control measures necessary to control stormwater run-on and run-off and minimize offsite movement of sediment. Control measures will also include site degradation control measure such as grading, slope stabilization methods (i.e., seeding, mulching, surface roughening), perimeter berms, surfacing materials (i.e., gravel), and other necessary controls to minimize site degradation. • Topsoil will be stored within a topsoil stockpile south of the proposed pad and will be segregated from all subsurface material. Wattles will be placed around the entire perimeter of the topsoil stockpile to minimize potential for loss of organic materials. • A post-construction stormwater program will be developed for the facility as required per Rule 1002.f.(3). Stormwater control is also addressed under a field-wide Stormwater Management Plan. • Installation of stormwater control measures will be installed based on the Appendix A, Construction Layout Drawing. • Bi-weekly inspection of the pad and stormwater control measures (berms, ditches, sediment basins), and the cuttings trench (berms and precipitation buildup). When necessary, precipitation within the cuttings trench will be pumped out and sent into the TEP proposed produced water management system for disposal.
7	Material Handling and Spill Prevention	Water Resource Protection: • Informal inspections of all tanks and storage facilities will occur daily during drilling, completions, and production operations; • A closed loop drilling system will be employed; • The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts; • Temporary frac tanks placed on location will have proper secondary containment including a perimeter berm around the Working Pad Surface and containment under the frac tanks; • Flowback and stimulation fluids will be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids are placed into any pipeline storage vessel, other open top containment located on the well pad; or into tanker trucks for offsite disposal; no open top tanks will be used for initial flowback fluids containment; • Any temporary surface or permanent surface/buried pipelines (flowlines from wellheads to separators to tanks; and any temporary surface lines used for hydraulic stimulation and/or flowback operations) will be pressure tested in accordance with the 1100-series rules prior to being placed into initial service and following any reconfiguration of the pipeline network; all permanent flowlines from wellheads to separators and from the separators to the tank will also be pressure tested annually; • Tank batteries will be placed within engineered, steel secondary containment with an impervious liner system or other secondary containment systems; • Pollution control containers (spill boxes) to be used on truck loading lines within the limits of the secondary containment systems; • TEP will properly characterize and dispose of all waste streams at facilities approved for acceptance of each waste stream; • All wells located on this pad will be equipped with remote shut-in capabilities; and • The use of cathodic protection on buried steel lines to mitigate corrosion.

8	Material Handling and Spill Prevention	Fluid Leak Detection: • Audio, Visual, and Olfactory (AVO) inspections: AVO inspections will be conducted monthly at the oil and gas location throughout the life of the well pad. Routine inspection of all production equipment, wellheads, temporary equipment, etc.; As described above, routine inspections to be conducted at the oil and gas location will include: Routine physical inspections of production equipment (by TEP production personnel); Air Compliance inspections and monitoring (by TEP Air Compliance staff); SPCC Inspections (by 3rd party contractor), Storm Water Management inspections (by 3rd party contractor), and continuous, dedicated SCADA monitoring of fluid production rates and pressures, and fluid storage volumes (by TEP production personnel). • As part of our LDAR, STEM, ooooa inspection / compliance programs, TEP will adhere to the use of Approved Instrument Monitoring Methods (AIMM) for inspecting production equipment and facilities at the oil and gas location. • Spill prevention training is provided to all field employees on a monthly basis. The monthly training consists of reviewing past incidents, root causes of the incidents, and what specific actions (lessons-learned) could be taken to prevent the reoccurrence of such incidents in the future. • Flowlines will be integrity-tested per the 1100 Series rules. • TEP spill response procedures will be adhered to for any spills or releases occurring at the oil and gas location. All spills will be managed in accordance with the COGCC 900 Series rules. • Leak Detection and Repair (LDAR) inspections are performed at all locations; however, the inspection frequency is tiered based upon the level of emission controls that are required / employed at each location. • Storage Tank Emission Monitoring (STEM) inspections are performed monthly at any location where emissions must be controlled (> 2 tpy). • OOOOa inspections are performed semi-annually on any facility constructed after 2015. • Flare Logs are completed daily for all locations where active flares and emissions controls are required. • Spill prevention training will be provided to all field employees on an annual basis; • Any leaks or spills detected during monitoring will be reported within 24 hours in accordance with Rule 912.b; • Annual flowline testing will also occur according to COGCC rules 1101 and 1102. Inspection and record retention of flowline testing will be in accordance with COGCC regulation; all records will be made available to the COGCC upon request; • All load lines will be bull plugged or capped; • All on-location flowlines will be inspected and tested per Rule 1104; • All equipment deficiencies will be corrected immediately or as soon as practical (all identified problems and corrections/repairs will be documented and records will be maintained in the TEP's office); • TEP will track and clean up all spills, including those that are not reportable; • TEP will temporarily shut in all production wells on the pad in the event of any upset condition; • All piping is pressure tested and inspected for leaks prior to flowback; and • Automation technology will be utilized at this location; this technology includes the use of fluid level monitoring for the tanks and high-level shut offs.
9	Material Handling and Spill Prevention	Per- and Polyfluoroalkyl Substances [PFAS]: • If PFAS-containing foam is used at a location, TEP will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions; • If PFAS-containing foam is used at a location, TEP will properly capture and dispose of PFAS contaminated soil and fire and flush water; and • If PFAS-containing foam is used at a location: TEP will properly characterize the site to determine the level, nature and extent of contamination.

10	Dust control	• Fresh water will be periodically applied to disturbance areas during construction to minimize fugitive dust. • Construction During High Wind: Construction contractor will monitor wind conditions during site construction. Contractor will apply freshwater to dry soils during high wind conditions when safe and feasible to do so. During sustained high wind events in excess of 20 miles per hour, contractor will evaluate site conditions and may temporarily suspend ground disturbance activities to minimize fugitive dust. • The existing lease road will be spot graveled during site construction to ensure there is sufficient gravel on the road to minimize fugitive dust. • TEP has implemented speed restrictions on all lease roads and requires all TEP employees and contractors to adhere to all posted speed restrictions. • During long-term production operations, TEP will conduct annual inspections of the existing road and will perform maintenance actions as necessary to ensure road integrity and minimize fugitive dust. Road maintenance actions may include, but not limited to, regrading, spot graveling, storm water control maintenance, and application of magnesium chloride (MgCl2) and / or fresh water. • TEP will utilize telemetry equipment to minimize well site visitation, when possible, to reduce fugitive dust from vehicles traveling the dirt / gravel roads. • If feasible, dust suppression in proximity to Beaver Creek shall utilize potable water from a nearby source instead of raw water to avoid the spread of disease organisms and aquatic nuisance species.
11	Noise mitigation	• Any operations involving the use of a drilling rig, workover rig, or fracturing and any equipment used in the drilling, completion or production of a well are subject to and will comply with the Agricultural maximum permissible noise levels in Rule 423.a.(2).A. of 65 db(A) in the hours between 7:00 a.m. to 7:00 p.m. and 60 db(A) in the hours between 7:00 p.m. to 7:00 a.m.; and If a noise complaint is made to either TEP directly, the COGCC, or the local government, and • TEP is notified of the complaint, noise levels will be measured within 48 hours of receipt of the complaint; TEP will contact the concerned party (if contact information is available) to discuss the complaint and the results of the noise measurements.
12	Emissions mitigation	• TEP will install equipment designed specifically to aid in the mitigation of VOC emissions from this location; this equipment includes emission control devices (ECDs) and tank load out controls; if one of these pieces of equipment is not operational, facility controls will automatically shut-in the pad until the equipment is back on-line; • Test separators and associated flowlines, sand traps, and emission control systems will be installed onsite to accommodate green completions techniques; and • Venting/Flaring - TEP will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations.
13	Drilling/Completion Operations	• All cuttings generated during drilling will be kept in a bermed portion of the well pad prior to disposition; • The moisture content of any water/bentonite-based drilling mud (WBM) generated cuttings will be minimized through good engineering practices and mechanical processes to prevent the accumulation of liquids greater than de minimis amounts; • Solids control and separation equipment will be utilized to separate WBM-generated cuttings solids from liquids (water/bentonite drilling mud); • In the event that drill cuttings analytically demonstrate constituents above able 915-1 standards, the cuttings will be remediated prior to interim reclamation activities to levels below all applicable standards of Table 915-1; • Contingency Sampling of the water/bentonite based drill cuttings will occur regardless of whether the original "background" or "baseline" samples collected from each well drilled are compliant with Table 915-1. The 6-point composite from each well may be used for preliminary analysis and waste profiling; however, discrete sample results will be required for confirmation sampling. The operator will need to close out the cuttings trench with a Form 27. The operator will propose the number of discrete samples, the locations, and depth intervals for the confirmation samples. The depth intervals will be selected to provide sufficient coverage between 0 and 19 feet below the final top surface of the cuttings within the trench. Upon approval of the Form 27, TEP will collect the proposed samples and analyze them for the Table 915-1 constituents.

14	Drilling/Completion Operations	Drilling Operations • Oil and gas operations will be in compliance with applicable BLM regulations, the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. • Fresh water mud system will be utilized for drilling all proposed wells. • Upon tripping out of the hole, the drill pipe will be wiped to remove any residual mud. • A catch pan will be mounted around the BOP to catch any mud that falls through the rotary table preventing any spillage and source of odor. • The storage of excess drilling fluids (fluids not being used in the active mud system) will be in enclosed, upright tanks. • Odor neutralizer will be used in the active mud system for management of odors within 24 hours of receipt of a complaint.
15	Drilling/Completion Operations	Completions Operations • Completion operations will be conducted remotely from the Youberg RU 44-7 Pad (Location ID #439173). The RU 44-7 pad is located in a remote area of Garfield County, Colorado, more than 1-mile from the nearest Residential Building. • Produced water used for frac water will be treated with Sodium Hypochlorite. Sodium Hypochlorite (NaOCL), commonly referred to as biocide or bleach, will be used for bacterial and microbial control, as well as odor prevention and neutralization. TEP will utilize alternative chemicals if needed to effectively treat various microbials that can develop in produced water.
16	Drilling/Completion Operations	Flowback Operations • All hydrocarbons and produced water recovered will be contained within piping, 4-phase separators, and sealed tanks ensuring all odors are contained. Separated gas will be sent to a gas sales line or high efficiency combustor. • In compliance with the Air Pollution Control Division Regulation No. 7, flowback tanks containing hydrocarbon vapors will be fully enclosed with hatches sealed. All vapor present in tanks will be routed to a high efficiency combustor with at least a 98% design destruction efficiency. All produced water from enclosed flowback tanks will be pumped off-location into a pipeline. • Odor neutralizer will be added to produced water during flowback for management of odors within 24 hours of receipt of a complaint.
17	Drilling/Completion Operations	Production Operations • Produced water will be transported via pipeline to a centralized tank battery on the Youberg SR 43-12 pad eliminating the need for produced water storage tanks on the oil and gas location and a potential odor source. • Hydrocarbon odors from production facilities will be minimized by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors; oil and gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. • All tanks will be sealed with thief hatches and gaskets. Tank vapors are controlled with properly sized piping and combustors.
18	Interim Reclamation	• The Oil and Gas Location will be re-contoured to blend as nearly as possible with the natural topography during site reclamation. All subsoil and topsoil separated and segregated during site construction will be replaced to a uniform depth during reclamation recontouring operations. • The Oil and Gas Location will be reseeded by drill, broadcast, or hydroseed methods. Drill seeding will be utilized wherever soil characteristics and slope allow for effective operation of a rangeland seed drill. • TEP will use a seed mix approved by the surface owner. • Erosion control will be implemented per the Stormwater Management Plan included in the Form 2A for this location and will be inspected and maintained as required by Federal, State, and Local regulations. • Noxious weeds which may be introduced due to soil disturbance during reclamation would be treated in accordance will applicable Federal, State, and local regulations. • Site reclamation will occur within six (6) months following well completion operations.

19	Interim Reclamation	• Interim reclamation will occur within six (6) months following completion of well drilling and completion operations; • The areas identified to be interim reclaimed will be re-contoured to blend as nearly as possible with the natural topography during site reclamation; all topsoil will be moved from the stockpile area and placed over the facility's cut and fill slopes to a uniform depth to ensure long term topsoil health including protection from erosion, prevention of weed establishment, and maintaining soil microbial activity until final reclamation; • The location will be reseeded by drill, broadcast, or hydroseed methods; drill seeding will be utilized wherever soil characteristics and slope allow for effective operation of a rangeland seed drill; • The seed bed will be prepared on all topsoiled areas to alleviate compaction and minimize the potential for erosion; • Topsoiled areas will be planted with desirable species or a seed mixture provided by the Surface Owner for this particular location; • Protection from Wind and Water Erosion - topsoiled areas will be covered with certified weed free mulch at an application rate specified by the product's manufacturer, or a specification sheet that follows good engineering practices; and • Weed Establishment Prevention - TEP uses Cultural, Mechanical, Biological, and Chemical controls to prevent the establishment of weeds.

Total: 19 comment(s)

Attachment List

Att Doc Num	Name
2141003	BEAVER CREEK WATER PLANT DECOMMISSIONING, ORDINANCE No. 7
4223002	PLAN OF DEVELOPMENT
4223003	BIOLOGICAL SURVEY REPORT
4223004	INFORMED CONSENT LETTER
4223005	SENSITIVE AREA DETERMINATION
4223007	LAYOUT DRAWINGS
4223008	CDPHE CONSULTATION
403064316	FORM 2A SUBMITTED
403068859	SURFACE AGRMT/SURETY
403110748	LOCATION DRAWING
403110765	WILDLIFE HABITAT DRAWING
403110770	PRELIMINARY PROCESS FLOW DIAGRAMS
403110771	HYDROLOGY MAP
403110773	ACCESS ROAD MAP
403110781	RELATED LOCATION AND FLOWLINE MAP
403110783	DIRECTIONAL WELL PLAT
403110786	LOCATION PICTURES
403110788	REFERENCE AREA MAP
403110797	NRCS MAP UNIT DESC
403110799	OIL AND GAS LOCATION GIS SHP
403110809	CPW WAIVER
403110812	FEDERAL ENVIRONMENTAL ANALYSIS
403110819	CONSULTATION SUMMARY
403110830	ALA NARRATIVE SUMMARY
403121693	CPW CONSULTATION
403121724	REFERENCE AREA PICTURES
403122947	CULTURAL FEATURES MAP
403122955	ALA DATASHEET
403122981	GEOLOGIC HAZARD MAP

Total Attach: 29 Files

General Comments

User Group	Comment	Comment Date
OGLA	The Director has determined that the OGDP application that this Form is a component of conditionally meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A.	11/23/2022
OGLA	Attached the CDPHE Consultation document received on October 18, 2022. Revised CDPHE BMPs as needed.	11/15/2022
OGLA	Based on discussions and concurrence with the operator, updated the local permit decision of approval on 11/14/2022, attached the revised Layout Drawings, and added a comment concerning the land use zoning differences between COGCC and Garfield County. Since location no longer falls within an active 411.a. area, unchecked the 304.b.(2).B.vi.aa. criteria and subsequent boxes under the alternatives.	11/15/2022
OGLA	Placed the following Best Management Practices (selected from the submitted plans and supplemental BMPs submitted by TEP in their plans and separate documents on the Form 2A): planning, pre-construction, general housekeeping, wildlife protection, stormwater/erosion control, material handling and spill prevention, dust control, noise mitigation, emissions mitigation, drilling/completion operations, and interim reclamation.	10/31/2022
OGLA	Per operator request, attached updated Biological Survey Report, Informed Consent Letters, and Sensitive Area Determination attachments.	10/11/2022
OGLA	Per operator request, attached updated Waste Management Plan.	10/04/2022
OGLA	The Director has determined this OGDP application is complete. Form pushed to IN PROCESS.	08/24/2022

Total: 7 comment(s)

Public Comments

No public comments were received on this application during the comment period.