QEP Energy Company

12-Point Surface Use Plan of Operations

Powder Wash #19-1
SHL: 1094' FSL, 1261' FEL
SESE, Section 19, T. 12 N., R. 97 W.
BHL: 1250' FSL, 830' FEL
SESE, Section 19, T. 12 N., R. 97 W.
Moffat County, Colorado
Federal Lease COC-081266

The Powder Wash #19-1 well site was surveyed and staked on October 28, 2015, by DR Griffin and Associates for QEP Energy Company (QEP Energy). An onsite for the location is tentatively scheduled for March 10, 2016.

1. Existing Roads

a. Access roads and location of well – See Exhibits 4 & 5.

b. Directions to the location are as follows:

Beginning at the intersection of County Road 4 and County Road 62, Moffat County, Colorado, travel northwesterly and southwesterly on County Road 4 for 3.3 miles. Turn right onto the staked access for the Powder Wash 19-1 and travel northeasterly for 2.8 miles to reach the proposed site.

c. All existing roads will be maintained in accordance with the BLM minimum standards for a resource road as described in BLM Manual 9113.

The lessee/operator will enter into a maintenance agreement with all other authorized users of the common access road(s) to the well site and that said agreement will include but is not limited to: installing, repairing, grading, and maintaining the road surface, drainage structures, ditches, culverts, and gravel layer. Weeds shall be controlled on disturbed areas within the limits of the road corridor. Upon request, the BLM Authorized Officer shall be provided with copies of any maintenance agreement entered into.

2. Access Roads to be Constructed and Reconstructed

a. Approximately 14,852.9 feet of new access road construction will be required on federal surface in order to access the well location – See Exhibit 4.

b. The new access road will be crowned and ditched, with a minimum running surface of fourteen (14) feet. The maximum disturbed width will be fifty (50) feet. Topsoil will be stripped and windrowed prior to road construction and respread in the borrow area.

c. Maximum grade of the road will be less than 8%.

d. Two (2) culverts will be installed as shown on Exhibit 4. No cattle guards will be necessary.

e. After road construction is completed and topsoil is pulled back down the cut slope, the travel way will be surfaced prior to moving in the drilling rig, if necessary.

f. Roads constructed on federal lands will be constructed and maintained in accordance with the BLM minimum standards for a resource road as described in BLM Manual 9113.

g. If required, QEP Energy requests that this APD serve as the application for the road right-of-way outside of Lease COC-081266.

3. Location of Existing Wells within a One-mile Radius – See Exhibit 5

a. There is one (1) known water well within the project area:
SENW, Sec. 29, T12N, R97W

b. There are no known injection or disposal wells within the project area.

c. There are six (6) known producing wells in the area:

NENE, Sec. 30, T12N, R97W	NESE, Sec. 30, T12N, R97W
SWNE, Sec. 29, T12N, R97W	NENW, Sec. 29, T12N, R97W
NWNE, Sec. 29, T12N, R97W	SESW, Sec. 20, T12N, R97W

d. There are no known drilling wells in the area.

e. There are five (5) known plugged or abandoned wells in the area:

NWNE, Sec. 30, T12N, R97W	SENW, Sec. 29, T12N, R97W
NESE, Sec. 20, T12N, R97W	SWSE, Sec. 20, T12N, R97W
SWSW, Sec. 20, T12N, R97W	

f. There is one (1) known shut-in well in the area:
SWNE, Sec. 30, T12N, R97W

g. There are no known monitoring or observation wells in the area.

h. There are no known proposed wells in the area.

4. Location of Existing and/or Proposed Facilities – See Exhibit 2 and 2A

On Well Pad

a. There are no existing facilities that will be utilized for this well.

b. The proposed production facilities are identified on Exhibit 2A.

c. Production facilities will be located on the disturbed portion of the well pad.

d. All flowlines from the well site to the battery site will be buried below frost line depth.

e. Tank batteries shall be surrounded by an impervious dike of sufficient size to hold 110% the capacity of the largest tank in the battery and still allow one (1) foot of freeboard.

f. In the event of production, the following items will occur:

1. Any necessary pits will be fenced to prevent livestock and wildlife entry.

2. The unused areas of the well location, if necessary, will be re-contoured to appropriate configurations (that allow lease operations and alleviate steep cut-and-fill slopes, minimizing accelerated erosion).

Off the Well Pad – Pipeline

The pipeline will be applied for either by Sundry Notice or right-of-way, as necessary.

5. Location and Type of Water Supply

a. Water will be obtained from a municipal water source from the cities of Baggs or Rock Springs, WY or from the Wexpro Company Powder Wash water source wells.

b. When possible, water will be transferred from the reserve pits of previously drilled wells, or water may be transferred from this reserve pit to subsequent reserve pits of wells scheduled to be drilled. This will allow for conservation and reuse of water.

c. Water will be transported by water trucks along state highways, county roads, existing and proposed access roads, and other BLM authorized roads.

6. Source of Construction Materials

a. Native soils from the road and location will be used for construction materials. Surfacing materials will be purchased from commercial suppliers in the area.

b. No material will be removed from federally-owned sources.

7. Methods of Handling Waste Disposal

a. Cuttings and drilling fluids will be placed in a lined pit which will be constructed with at least one-half (0.5) of its holding capacity below ground level. The reserve pit will be designed to prevent the collection of surface runoff. The pit will be lined with a twelve-millimeter or thicker polyethylene liner to prevent leakage of fluids. The bottom of the pit shall be smooth and free of any sharp rocks.

If the pit has a rocky bottom, it shall be bedded with a material such as soil, straw, or hay to avoid the possibility of puncturing the liner. The liner will be rolled in place and recurved at the ends, i.e. buried on the top of the pit berms.

After construction and prior to use, the reserve pit will be fenced "stock-tight" on all four sides and will be flagged to keep livestock and wildlife from entering. The fence will be removed on the front side during drilling and re-installed at the time of rig release, at which time the pit will again be flagged.

Drilling fluids, cuttings and produced water will be contained in the reserve pit. Fluids in the reserve pit will be allowed to evaporate prior to being backfilled. The pit will remain fenced until backfilled.

If necessary, QEP will use mechanical means to speed up evaporation of the reserve pit. Mechanical means would be installed upwind of the reserve pit to confine, to the greatest extent possible, any unevaporated water, etc., to the location. Depending on weather and humidity, evaporation will take from two (2) to eight (8) weeks.

b. Any hydrocarbons produced during completion work will be contained in test tanks and removed from location at a later date. No hydrocarbons will be allowed in the reserve pit.

c. Upon completion of the well, produced water will be stored in a tank on location and subsequently hauled off location and disposed of at Wexpro Company's DEQ-authorized lined pit at Kinney Unit #6, located in SESE Section 13, T 13N, R 101W, Sweetwater County, Wyoming, lease WYW-138912; Legend Services Inc.'s PRFED #15101 31I disposal well, located in SWNE Section 31, T 15N, R 101W, Sweetwater County, Wyoming, lease WYW-131432, or the nearest and/or most economically viable approved commercial water disposal facility. The haul route will be along state highways, county roads, existing and proposed access roads, and other BLM approved roads.

d. Sewage will be handled in self-contained, chemical-treated portable toilets and contents hauled off location to a CDPHE-authorized sanitary disposal facility in accordance with state and local regulations.

e. Garbage and other trash will be contained in a portable trash cage, which will be totally enclosed with small mesh wire. Cage and contents will be transported to a trash dump at a CDPHE-approved sanitary landfill. Any scattered trash will be picked up and placed in the trash cage as soon as practical after the rig is moved off.

f. Hazardous Materials: QEP maintains a file, per 29 CFR 1910.1200 (g) containing current *Material Safety Data Sheets* (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives).

8. Ancillary Facilities

There will be no ancillary facilities associated with this project.

9. Well Site Layout

a. Survey Plat – See Exhibit 1

b. Cut-and-Fill Cross Sections – See Exhibit 3

c. Location Layout and Flare Pit – See Exhibit 2

d. Typical Rig Layout – See Exhibit 2

e. Proposed production facilities – See Exhibit 2C.

f. All equipment and vehicles will be confined to the access road, well pad, and areas specified in the APD.

g. Prior to construction, approximately six (6) inches of topsoil (or maximum available) will be removed from the entire site and stockpiled, as shown on the well pad diagram.

h. The location (including the reserve pit) will be designed to prevent the collection of surface runoff.

i. The construction program and design are on the attached cut, fill, and cross section diagrams – See Exhibits 2 & 3.

10. Surface Reclamation Plans

a. Backfilling of the pit will be done when dry with a minimum of five (5) feet of soil material.

b. Prior to reclamation or abandonment of the well site and road, a joint inspection of the disturbed area will be held.

c. In the event of a dry hole, the location will be re-contoured; subsoils will be ripped to a depth of approximately twelve (12) inches; the topsoil will be evenly distributed over the entire location. The location will be prepared for seeding by scarifying, disking, or other means to create an appropriate seedbed.

QEP Energy will use a drill seeder on the contour to plant seeds at appropriate depths. Certified seed will be used with appropriate germination rates and purity levels. Mulching with certified weed-free straw or hay may be applied and crimped post-seeding to facilitate soil moisture retention and reduce erosion.

d. In the event of production, those areas not needed for operations will be re-contoured and seeded with native vegetation to reduce erosion. Unnecessary disturbed areas will be re-contoured; subsoils will be ripped to a depth of approximately twelve (12) inches; the topsoil will be evenly distributed over the reclamation area and the area will be prepared for seeding by scarifying, disking, or other means to create an appropriate seedbed.

QEP Energy will use a drill seeder on the contour to plant seeds at appropriate depths. Certified seed will be used with appropriate germination rates and purity levels. Mulching with certified weed-free straw or hay may be applied and crimped post-seeding to facilitate soil moisture retention and reduce erosion.

A seed mixture similar to the one below or other mixture specified by the BLM will be used.

Seed Mixture	**Drilled Rate LBS/Acre PLS**
Western wheatgrass (Rosana)	1.0 – 1.2 lbs PLS/ac; L
Thickspike wheatgrass (Critana)	2.0 – 2.4 lbs PLS/ac; L
Bluebunch wheatgrass (Goldar)	1.0 – 1.2 lbs PLS/ac; L
Indian ricegrass (Rimrock)	3.0 – 3.6 lbs PLS/ac; L
Bottlebrush squirreltail	2.0 – 2.4 lbs PLS/ac; L
Needle-and-thread	3.0 – 3.6 lbs PLS/ac; L
Sandberg bluegrass	0.5 – 0.6 lbs PLS/ac; SF
Rocky Mountain beeplant	1.0 – 1.2 lbs PLS/ac; L
Lewis blue flax (Maple Grove)	0.5 – 0.6 lbs PLS/ac; L
Prairie aster	0.1 – 0.12 lbs PLS/ac; SF
Fourwing saltbush (NM high elev.)	0.5 – 0.6 lbs PLS/ac; L
Shadscale saltbush	0.5 – 0.6 lbs PLS/ac; L
Gardner saltbush	1.0 – 1.2 lbs PLS/ac; L
Wyoming big sagebrush	0.75 – 0.9 lbs PLS/ac; SF
Winterfat	0.5 – 0.6 lbs PLS/ac; SF

Total lbs PLS/ac will be approximately 17.35 – 20.82. Large (L) seed will be planted at approximately 0.5 inch depths; whereas small/fluffy seed (SF) will be planted near surface.

e. QEP will provide for BLM approval a reclamation sundry prior to initiating any reclamation efforts.

f. QEP Energy will control noxious weeds on the location in conformance with EPA and BLM guidelines.

g. Reclamation will begin upon concluding drilling and completion operations. Complete reclamation will depend on weather conditions and the amount of time required to dry the reserve pit.

11. Surface Ownership

Well Site and Access Road

USDI – Bureau of Land Management
Kremmling Field Office

2103 E. Park Avenue
Kremmling, CO 80459

12. Other Information

a. A Class III Cultural Resources inventory has been/will be completed by Western Archaeological Services and submitted under separate cover.

If historic or archaeological materials are uncovered, QEP Energy will suspend all operations that might further disturb such materials and immediately contact the Authorized Officer.

b. A Paleontological Field Survey has been/will be completed by Intermountain Paleo-consulting and submitted under separate cover.

c. A "Sundry Notice and Report of Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations.

d. The dirt contractor will be provided with a complete copy of the approved APD with COAs.

Certification

I have full knowledge of the state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by QEP Energy Company and its contractors in conformity with the APD package and the terms and conditions under which it is approved. I also certify that the company I represent is responsible for the operations conducted under this application. These statements are subject to the provisions of the 18 U.S.C. 1001 for filing of a false statement.

Jennifer Kester 1/18/16

Jennifer Kester, Regulatory Affairs Analyst
QEP Energy Company

Lessee's or Operator's Representative and Certification

Kari Phillips - Operations Engineer
1050 17th Street, Suite 800
Denver, CO 80265
Phone: 303.405.6670
kari.phillips@qepres.com

Jennifer Kester - Permitting/Regulatory
QEP Energy Company
1050 17th Street, Suite 800
Denver, CO 80265
Phone: 303.308.3627
jennifer.kester@qepres.com