



1120 Lincoln Street, Suite 801
Denver, CO 80203

May 25, 2016

Ms. Karolina Blaney
WPX Energy Rocky Mountain, LLC
1058 County Road 215
Parachute, Colorado 81635

Re: Review of Form 28 Centralized E&P Waste Management Facility Permit
Facility ID 444993, Mautz Ranch, Central Water Management Facility
Pit Facility ID 428428
WPX Energy Rocky Mountain, LLC
SENW Section 19, T2S, R98W, 6th PM, Rio Blanco County, Colorado

Dear Ms. Blaney:

The Colorado Oil and Gas Conservation Commission (COGCC) has received and reviewed your submittal for the above referenced permit application for COGCC Centralized Exploration and Production (CE&P) Facility ID 444993 and Pit Facility ID 428428. At this time, the COGCC has the following comments:

Form 28 Centralized E&P Waste Management Facility Permit

1) Form 28, Attachment Checklist.

COGCC Comment: None.

2) Form 28, Question 1.

Is the site in a sensitive area? Answer: No.

COGCC Comment: None.

3) Form 28, Question 2.

What are the average annual precipitation and evaporation rates for the site? Answer: Precipitation- 13.83 Inches/year. Evaporation – 40 inches/year.

COGCC Comment: None.

3) Form 28, Question 3.

Has a description of the site's general topography, geology, and hydrology been attached?

Answer: Yes.

COGCC Comment: None.

4) Form 28, Question 4.

Has a description of the adjacent land use been attached? Answer: Yes.

COGCC Comment: None.

P 303.894.2100 F 303.894.2109 www.colorado.gov/cogcc

Commissioners: Thomas L. Compton - Chairman, Richard Alward, John H. Benton, DeAnn Craig,
James W. Hawkins, Tommy Holton, Andrew L. Spielman, Mike King, Dr. Larry Wolk

John W. Hickenlooper, Governor | Robert Randall, Interim Executive Director, DNR | Matthew J. Lepore, Director



5) Form 28, Question 5.

Has a 1:24,000 topographic map showing the site location been attached? Answer: Yes.

COGCC Comment: None.

6) Form 28, Question 6.

Has a site plan showing drainage patterns, diversion or containment structures, roads, fencing, tanks, pits, buildings and any other pertinent construction details been attached? Answer: Yes.

COGCC Comment: None.

7) Form 28, Question 7.

If site is not owned by the operator, is written authorization of the surface owner attached?

Answer: Blank

COGCC Comment: Operator is surface owner per Section 4.1 and Attachment 14.

8) Form 28, Question 8.

Has a scaled drawing and survey showing the entire section(s) containing the proposed facility been attached? Answer: Yes.

COGCC Comment: None.

9) Form 28, Question 9.

What measures have been implemented to limit access to the facility by wildlife, domestic animals or by members of the public? Answer: The Pit is enclosed with a 6-foot chain link fence to prevent incidental access and is covered by netting to prevent wildlife access. The site is manned 24/7 to prevent from illegal dumping of waste.

COGCC Comment: Reword the last sentence for clarity.

10) Form 28, Question 10.

Is there a planned fire lane of at least 10 feet in width around the active treatment areas and within the perimeter fence? Answer: No.

COGCC Comment: Rule 908.b.(5).D. Centralized facilities shall have a fire lane of at least ten (10) feet in width around the active treatment areas and within the perimeter fence. In addition, a buffer zone of at least ten (10) feet shall be maintained within the perimeter fire lane. Please clarify.

11) Form 28, Question 11.

Is there an additional buffer zone of at least 10 feet in width within the perimeter fire lane? Answer: No.

COGCC Comment: Please see the previous comment above.

12) Form 28, Question 12.

Have surface water diversion structures been constructed to accommodate a 100-year, 24-hour event? Answer: Yes.

COGCC Comment: None.

13) Form 28, Question 13.

Has a waste profile been calculated according to Rule 908.b.6? Answer: Yes.

COGCC Comment: None.

14) Form 28, Question 14.

Has facility design and engineering been provided as required by Rule 908.b.7? Answer: Yes.

COGCC Comment: None.

15) Form 28, Question 15.

Has an operating plan been completed as required by Rule 908.b.8? Answer: Yes.

COGCC Comment: None.

16) Form 28, Question 16.

Has ground water monitoring for the site been provided? Answer: Yes.

COGCC Comment: Please clarify. See comments below. Ground water monitoring may be required at a later date.

17) Form 28, Question 17.

Has financial assurance been provided as required by Rule 704? Answer: Yes.

COGCC Comment: A Performance Surety Bond in the amount of \$653,000 (Surety ID: 20160011) has been provided by the Operator. Provide an itemized breakdown on how this amount was derived. The COGCC is currently having a third party review the closure of the facility and prepare an independent closure cost estimate.

18) Form 28, Question 18.

Has a closure plan been provided? Answer: Yes.

COGCC Comment: None.

19) Form 28, Question 19.

Have local government requirements for zoning and construction been complied with? Answer: Yes.

COGCC Comment: None.

20) Form 28, Question 20.

Have permits and notifications required by local governments and other agencies been provided? Answer: Yes.

COGCC Comment: The September 19, 2011 Special Use Permit 11-08 is for a Multi-Well Pit and Equipment Storage Yard. Provide a statement or verification from Rio Blanco County that the approval is applicable for the permanent C&P Facility. Are there any permit requirements by the Colorado Department of Public Health and Environment (CDPHE)?

Introduction

Please submit a copy of the letter from the Colorado Division of Water Resources, confirming that this pit is classified as a non-jurisdictional dam and that capturing the runoff from the 3.79 acre stormwater retention area is allowed.

1. Rule 904.b:

COGCC Comment: A statement is made that five holes in the existing liner were repaired in March 2015. Provide a root cause analysis of the cause of the holes.

2. Rule 904.d:

COGCC Comment:

- The liner system consists of a 60 mil HDPE liner, a 200 mil Hypernet Geonet Drain Mat, a 36 mil HDPE liner, and a BentoMatDN GCL. A leak detection system is present (Attachment 5)
- The narrative in "Section 6.8 Evaluation of Potential Impacts to Surface and Groundwater – 908.b.(7).B.vii." states "The approved liner system consists of a 60 mil HDPE primary liner, a 200 mil geogrid, 40 mil secondary HDPE liner, and tertiary geosynthetic liner."
- The narrative in "Section 8. Facility Design and Engineering – 908.b.(7)." Discusses two (2) 60 mil primary liners and one (1) 36 mil secondary liner.
- The September 6, 2012 Hydrotest Results states "The lining system consists of a primary 60 mil polypropylene liner and secondary 40 mil polypropylene liner underlain with a tertiary geosynthetic clay liner."

Please clarify.

3. Rule 907.c:

COGCC Comment: A "Loading Station" is shown on the as built drawings. Provide additional detail, including a description of where the surface drain drains to and how fluids in the drain are disposed.

4. 908.b.3.: Legal Site Description:

COGCC Comment: None.

5. 908.b.5.B.: Survey Drawings:

COGCC Comment: None.

6. 908.b.5.C.: Access Control Measures:

COGCC Comment: None.

7. 908.b.(5).D.: Fire Lane:

COGCC Comment: Rule 908.b.(5).D. Centralized facilities shall have a fire lane of at least ten (10) feet in width around the active treatment areas and within the perimeter fence. In addition, a buffer zone of at least ten (10) feet shall be maintained within the perimeter fire lane. The drawing referenced for the fire access around the pit does not show the required 10' wide fire access lane around the pit, please clarify. Variance request has been submitted.

8. 908.b.5.E.: Surface Water Diversion Structures:

COGCC Comment: See comment on Attachment 30.

9. 908.b.6.: Waste Profile:

COGCC Comment: None.

10. 908.b.(7).A.: Geologic Data:

COGCC Comment: A statement is made that the Uinta thickness is unknown. There is a typo in #5 of the geologic hazards section. "There are no moderate or severe [sic] located near or adjacent to the facility."

6. 908.b.(7).B.: Hydrologic Data:

COGCC Comment: Section 6.2 incorrectly discusses the Wasatch formation. Discussion of depth to groundwater implies that the depth is unknown. The Geotechnical Investigation Report and Water Table Map (potentiometric map) discuss shallow groundwater. The data used in the potentiometric map contradicts the test hole logs in the geotechnical report. A statement is made that the chance of flooding is 1 to 5% per year. Consider rewording this statement unless floodplain modeling has been performed. The shallow groundwater has not been sampled although it is identified on the potentiometric map and presents in springs. Please clarify.

7. 908.b.(7).C.: Facility Design and Engineering:

COGCC Comment: See previous comments regarding the liner discrepancies.

16. 908.b.8.: Operating Plan:

COGCC Comment: None.

17. 908.b.9.A.: Water Wells:

COGCC Comment: None.

18. 908.b.(9).B.: Monitoring Wells:

COGCC Comment: Additional Site Specific Monitoring Wells may be required at a later date.

19. 908.b.10.: Surface Water Monitoring:

COGCC Comment: Surface water has been monitored annually (September 2012, April 2013, June 2014). It is not clear if the surface water is from springs or ephemeral flow. Please clarify.

19. 908.d.: Financial Assurance:

COGCC Comment: See previous comments.

20. 908.e: Facility Modifications:

COGCC Comment: None.

21. 908.f: Annual Permit Review:

COGCC Comment: None.

22. 908.g.1.A. Preliminary Closure Plan:

COGCC Comment: Please see response to 908.d.

23. 908.g.1.B.: Preliminary Closure Cost:

COGCC Comment: See previous comments.

24. 908.g.2.: Final Closure Plan:

COGCC Comment: None.

25. 908.h.: Other Permits and Notifications:

COGCC Comment: None.

Form 28 Attachments:

I. Attachment 1: Form 2A:

COGCC Comment: None.

II. Attachment 2: Form 15:

COGCC Comment: None.

III. Attachment 3: Pit Operation Start Date, Form 4:

COGCC Comment: None.

IV. Attachment 4: Pit Life Extension Request, Form 4:

COGCC Comment: None.

V. Attachment 5: Liner Specification and Installation Report:

COGCC Comment: See previous comments.

VI. Attachment 6: Netting and Fencing Drawings:

COGCC Comment: None.

VII. Attachment 7: Hydrotest Results:

COGCC Comment: None.

VIII. Attachment 8: Pit Inspection Reports:

COGCC Comment: Pit inspection reports document "Tears in the liner" from 5/26/14 to 5/31/14, 4/4/15 to 11/29/15 and 12/28/15 to 12/31/15. Oil accumulation on the pit is noted on many dates. Please clarify.

IX. Attachment 9: Hydrotest Results:

COGCC Comment: None.

X. Attachment 10: Liner Maintenance Report:

COGCC Comment: See Attachment 8 comments.

XI. Attachment 11: Pump Building Sundry, Form 4:

COGCC Comment: None.

XII. Attachment 12: Tanks and Load Out Sundry, Form 4:

COGCC Comment: None.

XIII. Attachment 13: Water Share Agreement, Form 4:

COGCC Comment: None.

XIV. Attachment 14: Parcel Map:

COGCC Comment: None.

XV. Attachment 15: Topo and Access Map:

COGCC Comment: None.

XVI. Attachment 16: Adjacent Land Use Map:

COGCC Comment: None.

Attachment 17: Sensitive Area Determination Checklist:

COGCC Comment: None.

Attachment 18: NRCS Report:

COGCC Comment: None.

Attachment 19: GeoTech Investigation Report:

COGCC Comment: Were the recommendations in this report followed? The text description of groundwater does not match with the logs of test holes. Please clarify.

Attachment 20: Surface Water Features Within 2 Mile Radius:

COGCC Comment: None.

Attachment 21: Water Wells Within 1 Mile Radius:

COGCC Comment: None.

Attachment 22: Water Table Map:

COGCC Comment: The legend on the figure is insufficient and the data is not corroborated by the geotech report.

Attachment 23: Stormwater Permit, BMP Map, and Water Control Analysis:

COGCC Comment: Has a new stormwater permit been issued (expired 2012) or is the permit still administratively continued?

Attachment 24: SPCC Site Specific Details:

COGCC Comment: None.

Attachment 25: Produced Water Profile and SDS:

COGCC Comment: None.

Attachment 26: Form 26:

COGCC Comment: The TDS of each well is listed as 11,000. Please clarify.

Attachment 27: Service Area Map:

COGCC Comment: None.

Attachment 28: Produced Water Laboratory Report:

COGCC Comment: None.

Attachment 29: Condensate Profile and SDS:

COGCC Comment: The waste profile EHS Considerations carcinogen check box is not marked but the

SDS states "May cause cancer". Please clarify.

Attachment 30: Certified As-Constructed Drawing:

COGCC Comment: Per Rule 908.b(7)C.iii., data is to include "Location, dimensions, and grades of all surface water diversion structures; iv. Location and dimensions of all surface water containment structures." Please clarify.

Attachment 31: Water Line System:

COGCC Comment: Submit a GIS shapefile with information in a suitable electronic format showing the location of flowlines, type of pipe used in each segment, monitor points, valve locations, booster pump locations (if any) and update as part of the annual report.

Attachment 32: Pipeline Specifications:

COGCC Comment: None.

Attachment 33: Down Joint Diagram:

COGCC Comment: Provide as built details.

Attachment 34: Liner Maintenance Recommendations:

COGCC Comment: None.

Attachment 35: Fire Lane and Buffer Variance:

COGCC Comment: Variance request has been submitted.

Attachment 36: Pipeline Pressure Test Report:

COGCC Comment: The date of the test on page 4 appears incorrect. Duplicate pages submitted.

Attachment 37: Pipeline Pressure Test Procedures:

COGCC Comment: The frequency of testing is not specified. Please clarify.

Attachment 38: Operating Plan:

COGCC Comment: The plan states that "The pit will remain free of oil." Pit inspection Reports frequently indicated oil on the pit. Please clarify.

Attachment 39: Baseline Water Sampling:

COGCC Comment: None.

Attachment 40: 2013 Annual Water Sampling:

COGCC Comment: None.

Attachment 41: 2014 Annual Water Sampling:

COGCC Comment: None.

Attachment 42: 2015 Annual Water Sampling:

COGCC Comment: None.

Attachment 43: Baseline Water Quality Evaluation:

Review of Form 28 Centralized E&P Waste Management Facility Permit Application
Facility ID 444993, Mautz Ranch, Central Water Management Facility
Pit Facility ID 428428
WPX Energy Rocky Mountain, LLC
SENW Section 19, T2S, R98W, 6th PM, Rio County, Colorado

COGCC Comment: None.

Attachment 44: Emergency Response Plan:

COGCC Comment: The Emergency Notification List shall be updated when changes in personnel are made.

Attachment 45: Spill Prevention and Response Plan:

COGCC Comment: The WPX Energy Emergency Contact Card shall be updated when changes in personnel are made.

Attachment 46: Financial Assurance Cost Estimate:

COGCC Comment: A Financial Assurance Cost Estimate of \$653,000 was provided with the submittal. Prior to approval, financial assurance shall be provided. The COGCC is currently having a third party review the closure of the facility and prepare an independent closure cost estimate.

Attachment 47: Performance Bond, Form 3:

COGCC Comment: None.

Attachment 48: Reclamation Plan:

COGCC Comment: Environmental sampling shall focus in those areas where there is visible impact and areas that are more susceptible to spills or releases. Reclamation shall be completed per the COGCC 1000 Series Rules.

Attachment 49: Local Government Compliance:

COGCC Comment: See previous comment.

Should you have any questions, please contact me at 303-894-2100 extension 5138.

Sincerely,



Alex Fischer, P.G.
Environmental Supervisor-Western Colorado

Cc: Craig Burger, P.E.
Northwest Area Engineer

Stan Spencer
Environmental Protection Specialist - NW