



760 Horizon Drive, Suite 101  
Grand Junction, Colorado 81506

To: Alex Fischer  
Craig Burger

Re: Responses to COGCC Review of Form 28 Centralized E&P Waste  
Management Facility Permit Facility ID 159504, Pond 10  
Pit Facility ID 414396  
Laramie Energy LLC  
SESW Section 5, T7S, R97W, 6<sup>th</sup> PM, Garfield County, Colorado

Form 28 Centralized E&P Waste Management Facility Permit

1) Form 28, Attachment Checklist.

COGCC Comment: Site Drainage Map with structures is not checked. Please clarify.

**Laramie Response: The Site Drainage Map with structures was provided with the original submittal but the box was left unchecked by mistake. Additionally, this response package includes a diagram depicting the pipelines and valve sets serving this facility.**

3) Form 28, Question 2.

What are the average annual precipitation and evaporation rates for the site? Answer: Precipitation-21 inches/year. Evaporation-10 inches/year;.

COGCC Comment: The evaporation rate provided seems low.

**Laramie Response: A review of the existing data for Pan Evaporation in the vicinity of Grand Junction, Colorado indicates approximately 76 inches per year and approximately 10 inches per month. See attached data.**

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: Please Clarify.

**Laramie Response: Laramie Energy, LLC owns the subject parcel.**

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: Oxy will install an eight-foot-tall wildlife exclusion fence around the facility to limit access. Also, the Facility is within Oxy's Cascade Creek operational area which has a perimeter fence around the main road access along Conn Creek Road. Oxy will install netting to prevent birds from entering the Facility.

COGCC Comment: Netting was observed to have multiple large holes during a site visit by COGCC on 8/29/16. Repair all holes in netting. Perform scheduled inspections and repairs as necessary to prevent

bird entry.

**Laramie Response: The holes in the netting noted above have been repaired. Laramie conducts regular inspections and makes repairs to the netting as needed. During the 2017 operational season unusually high winds destroyed the existing net. A new net has been purchased and will be installed in early spring 2018.**

14) Form 28, Question 14.

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

COGCC Comment: Drawings indicate two 60 mil HOPE liners, a 300 mil GSE Hypernet geonet, and a GCL are planned. Quantity of materials required for use as a liner are not provided. Permit drawings have been provided. As-built drawings have not been provided. Please clarify.

**Laramie Response: Pond 10 benefits from the installation of two (2) sixty-mil liners. Each liner is approximately 18,200 sq/ft. Please see the attached As-Built and Engineered Drawings for Pond 10.**

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 \$???? (Surety ID:?????????) has been provided by the Operator. A Financial Assurance Cost Estimate 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.

**Laramie Response: Laramie has provided a Performance Surety Bond in the amount of \$642,120.00, Surety ID 20170013.**

19) Form 28, Question 19.

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

COGCC Comment: Provide the COGCC with a copy of the recorded LIR from Garfield County.

**Laramie Response: A copy of the Garfield County approved Land Use Permit is attached to this submittal.**

20) Form 28, Question 20.

Have permits and notifications required by local governments and other agencies been provided?

Answer: Yes.

COGCC Comment: Please see the previous comment above. Additionally, are there any permit requirements by the Colorado Department of Public Health and Environment (CDPHE)?

**Laramie Response: See response to Question 19 above. All appropriate CDPHE Air Quality Permit(s) for the operation of Pond 10 have been reviewed, updated and deemed adequate by Laramie Air Quality staff.**

Supplemental Narrative

Please submit a copy of a letter from the Colorado Division of Water Resources, confirming that this pit is classified as a non-jurisdictional dam and that capturing the storm water runoff from the approximately 1.3-acre pond is allowed.

**Laramie Response: The Colorado Division of Water Resources (CDWR) does not provide letters of confirmation in response to Non-Jurisdictional Dam submittals. Because this facility was constructed some time ago, Laramie has not been able to locate the original Non-Jurisdictional NOI submittal. Instead, Laramie staff reviewed the original plan set and the as-built drawings for Pond 10 to confirm the construction of the pond did not exceed the 10-foot (Non-Jurisdictional) Dam requirement. According to the CDWR rules, a Non-Jurisdictional structure cannot result in a berm (or dam) that is 10 feet above the**

**original surface elevation. The documents referenced above confirm Pond 10 meets this criterion. Those documents are attached to this submittal.**

Laramie Energy recognizes that it may need to replace out-of-priority depletions associated with precipitation that falls upon the impoundments/reservoirs in the operational area(s). Pursuant to C.R.S. § 37-80-120, water stored out-of-priority due to precipitation that falls upon the reservoirs may be replaced to Cascade Creek or Conn Creek from alternative fresh water sources. This substituted supply of water is of a quality and continuity to meet the requirements of use to which the senior appropriation has normally been put and can be made available to meet the appropriate requirements of the senior calling right(s), which are located within Laramie's area of operations. Laramie Energy will install a rain gauge at the Pond 10 water storage facility and provide appropriate substituted water supply as needed.

908.b.2.: Surface Owner & Legal Site Description:

COGCC Comment: States that surface owner is Oxy. Did surface ownership transfer to Laramie?

**Laramie Response: Please see Laramie's response to Form 28, Question 7 above.**

908.b.7.C.: Engineering Data:

COGCC Comment: Drawings indicate two 60 mil HOPE liners, a 300 mil GSE Hypernet geonet, and a GCL are planned. Quantity of material required for use as a liner are not provided. Permit drawings have been provided. As-built drawings have not been provided. Please clarify.

**Laramie Response: Please see Laramie's response to Form 28, Question 14 above.**

908.b.9.B.: Ground Water Monitoring:

COGCC Comment: Upload baseline water quality sampling by submitting EDD to the COGCC.

**Laramie Response: Laramie's water quality sampling data for Conn Creek and the monitoring wells in the vicinity of Pond 10 are available to the COGCC and can be provided after the COGCC's format preferences are identified.**

908.b.10.: Surface Water Monitoring:

COGCC Comment: Conn Creek is less than 500 ft from Pond 10. Provide a surface water sampling and analysis plan for Conn Creek.

**Laramie Response: As part of standard business operations, Laramie conducts quarterly water sampling along Conn Creek and collects samples from 3 monitoring wells in the vicinity of Pond 10.**

908.d: Financial Assurance:

COGCC Comment: A Financial Assurance Cost Estimate 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.

**Laramie Response: Please see the response to Form 28, Question 17 above.**

908.f: Annual Permit Review:

COGCC Comment: Include the "Contributing Wells" API numbers in the Annual Permit Review.

**Laramie Response: This request will be accommodated as part of Laramie's Annual Status submittal.**

908.g.: Closure:

COGCC Comment: Please see response to 908.d.

**Laramie Response: Same as above.**

908.h: Local Permitting:

COGCC Comment: See comment above.

**Laramie Response: Same as above.**

Form 28 Figures:

• COGCC Comment: Figure 8 indicates a GCL, geonet, two 60 mil HOPE liners, anchor trenches, and two leak detection sumps are planned. Please provide As-Built drawings.

**Laramie Response: Please see the response to Form 28, Question 17 above.**

II. Attachment: Geo-hydrology Report

• COGCC Comment: Rock fall hazard is not addressed in the Geologic Hazards section.

Please clarify.

**Laramie Response: In the event that rock fall results in damage to the pond facility Laramie will address the impacts as part of our typical operational activities. Damage to the facility will be assessed and if the liner is compromised, the facility will be drained immediately.**

III. Attachment: Operating Plan

• COGCC Comment: Please address odor control measures, if necessary.

**Laramie Response: Odor control measures will be implemented as needed.**

• COGCC Comment: Update plan to reflect new operator and any changed contacts.

**Laramie Response: Laramie has updated the operating plan to reflect new ownership and contact information.**

VI. Attachment: Reclamation Cost Estimate

• COGCC Comment: A Financial Assurance Cost Estimate 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.

**Laramie Response: Please see the response to Form 28, Question 17 above.**

If you have any questions or concerns related to these responses please contact me via the information below.

Yours,



**Lorne C. Prescott**

Regulatory and Environmental Compliance

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