FORM
FIRR
Rev 5/16

State of Colorado
Oil and Gas Conservation Commission

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Document Number: 403012323

Date Received: 04/12/2022

FIR RESOLUTION FORM

Overall Status: CAC

CA Summary:

3 of 5 CAs from the FIR responded to on this Form

3 CA Completed
0 Factual Review Request

OPERATOR INFORMATION

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

Contact Name and Telephone:
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COGCC INSPECTION SUMMARY:

FIR Document Number: 696203469
Inspection Date: 03/09/2022 FIR Submit Date: 03/11/2022 FIR Status:

Inspected Operator Information:

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

LOCATION - Location ID: 335177
Location Name: DOE-66S96W Number: 36SWNE County:
Qtrqtr: SWNE Sec: 36 Twp: 6S Range: 96W Meridian: 6
Latitude: 39.482351 Longitude: -108.053591

FACILITY - API Number: 05-045- -00 Facility ID: 335177
Facility Name: DOE-66S96W Number: 36SWNE
Qtrqtr: SWNE Sec: 36 Twp: 6S Range: 96W Meridian: 6
Latitude: 39.482351 Longitude: -108.053591

`CORRECTIVE ACTIONS:

1 CA# 160099

Corrective Action: In the event that a spill/release is discovered, TEP shall contact COGCC EPS and comply with Rule 912 reporting requirements upon discovery.

Any remediation of a spill/release will be required to be completed no later than 6/1/2022.

Date: 06/01/2022

Response: CA COMPLETED

Date of Completion: 04/12/2022

Operator Comment: TEP investigated the location immediately upon being notified of a suspected leak by COGCC Reclamation Inspector Trujillo. TEP investigated the seep area of concern by physically walking down the side slope to inspect the seep, immediately conducting a new pressure test of dump /flow lines, and reviewing historical pressure testing data for the past two years. Recent and historical data indicate that the dump / flow lines are not leaking. A copy of historical pressure testing data is submitted as an attachment to this document. In addition, soil samples from the seep area below the pad were collected and submitted for full Table 915-1 analysis. The samples were submitted for expedited processing by the lab, but results have not yet been received.

At this time, based upon recent and historical pressure testing data, an investigation of the soils collected from the seep itself, and the presence of other numerous seeps in the immediate area (see attached photos), TEP does not believe that the seep is related to the operations or activities associated with the DOE 2-M-36 well pad. Based upon the information that is available, TEP believes that this is a natural seep that is recharged from annual snow melt and from localized storm events. TEP has monitored this seep for several years and it is observed to "dry up" after annual snow melt conditions subside. The source of the white staining observed around the seep area is natural alkali that is leached from the soils and is brought to the ground surface either through groundwater seeps, or as wet soils dry and the alkali salts are concentrated on the soil surface through capillary actions. There are several similar natural seeps that are highly visible from the DOE 2-M-36 pad that show similar conditions on the steep slopes immediately above this pad (see attached photos).

Update 4/12/22:
Pressure tests were successfully completed for all flowlines associated with this location. Pressure testing was witnessed by Richard Murray as summarized in COGCC FIR Doc #693201050 (3/24/2022). All witnessed pressure tests passed, and there were no corrective actions stemming from the FIR submitted by Mr. Murray. In addition, TEP collected a soil sample from the seep area on 3/15/2022. The sample was submitted for 915-1 analysis (see attached results). As shown in the attached analytical data, the only parameters that exceed 915-1 cleanup standards are arsenic, electrical conductivity, and SAR; however, these parameters are consistent with results observed for nearby background sample locations. The elevated arsenic value due to the elevated, naturally-occurring levels of arsenic that are common throughout the Piceance Basin area, and the elevated SAR and electrical conductivity values are attributable to the naturally-occurring high salt content of the soils (i.e., alkali) that is being leached out by naturally-occurring ground water. Two, un-related nearby background sampling locations show similar results for elevated SAR and electrical conductivity.

The successful / passing pressure testing results (witnessed by COGCC staff) combined with the analytical results for a soil sample collected from the naturally-occurring seep below the pad provides conclusive evidence that there is no spill / release occurring with operations being conducted at this location. Consequently, remediation activities are not warranted.

COGCC Decision: Approved

COGCC Representative: CA has been resolved.

3 CA# 160101

Corrective Action: Conduct pressure testing to determine integrity of all dump lines and all flowlines, for all wells/associated wells on and off the Location. COGCC Integrity Staff required to be on Location to witness pressure test; pressure testing required within next two weeks.

Submit pressure test data, as well as test data from the past two years attached to a Form 4 Sundry to both Western Integrity Inspector Richard Murray.

Date: 03/25/2022

Response: CA COMPLETED

Date of Completion: 03/24/2022

Operator Comment: Pressure testing data showing the successful testing of dump / flow lines for the past two years has been submitted as an attachment to this document. TEP will coordinate with Richard Murray before 3/25/22 to conduct an additional pressure test that can be witnessed by Mr. Murray.

Update 4/12/2022:
Pressure testing of all dump / flow lines related to this location was conducted on several occasions during March 24 - April 7, 2022. Richard Murray (COGCC Western Area Integrity Inspector) was present to witness these pressure tests as noted in COGCC FIR doc #693201050. All pressure tests were successful (passed), and there were no corrective actions identified by Mr. Murray after conducting the pressure / integrity tests. Pressure test data will be sent to Mr. Murray via a Form as requested.

COGCC Decision: Approved pending re-inspection

COGCC Representative: CA has been resolved.

5 ☑ CA# 160103

Corrective Action: Comply with 1002.f; Install or repair slope drain in accordance with good engineering practices; and implement temporary stormwater and erosion control measures on the southern slopes to minimize further degradation and sediment transport by 3/25/2022.

Repair and Reclamation of the degraded areas, and the installation/implementation of long term stormwater and erosion control measures will be required to be completed no later than 6/1/2022.

Date: 06/01/2022

Response: CA COMPLETED

Date of Completion: 04/12/2022

Operator Comment: The well pad has been recently bladed and graveled. The access road has also been graded to remove ruts. Even if the seep is proven to be from naturally occurring ground water, TEP will closely monitor the slope and any further encroachment towards the pad and equipment. TEP has been monitoring this are for several years and there has been no recent change or threat to the location. However, if it is determined that the slope is presenting an undue risk to the pad and equipment, the production equipment will be re-located to a different portion of the pad away from the slope.

Update 4/12/2022:
TEP is re-working the sediment trap and slope drain as requested. The sediment trap will be lined with a poly, geo-fabric material to prevent any ponded water from leaching into the subsurface. TEP will install a new slope drain from the discharge point of the sediment trap and will re-direct the outfall of the slope drain directly to the drainage feature located southeast of the pad. In addition, TEP will re-cut the storm water collection ditch located at the base of the cut slope to achieve positive drainage away from the pad surface and to facilitate the collection and removal of water from the cut slope area. The objective of these measures is to minimize the amount of water that is ponding / collecting on the pad surface, and that may otherwise seep into the subsurface and feed the natural seep that is discharging on the side slope below the south edge of the pad. Lastly, TEP will install Erosion Control Points at surveyed elevations for the purposes of determining any incremental changes in elevation to the pad surface. These surveyed control points will be installed around the production equipment and adjacent to the slope immediately above the seep area. The elevations of the monitoring points will be surveyed and documented semi-annually (November and April) to determine if there are any subtle movements occurring along the southern edge of the pad. Any changes to the elevations observed at these control points will be reviewed and evaluated semi-annually. Appropriate actions to mitigate any risk to the equipment on the pad will be taken as warranted.

Since the surface of the location is owned / administered by the U.S. Bureau of Land Management, TEP met with BLM staff at the location on 04/06/2022 to review and evaluate site conditions and to determine future actions needed to safeguard the location. The above actions were determined in consultation with, and the approval of BLM Natural Resource Specialists, Reclamation staff, and management from the BLM Colorado River Valley Field Office.

COGCC Decision: Approved pending re-inspection

COGCC Representative: Approved pending re-inspection of this FIR resolution acknowledges the document was received. It is not an acknowledgement that the corrective action has been passed. A field inspection will be conducted at a future date to evaluate compliance with COGCC rules.

OPERATOR COMMENT AND SUBMITTAL

Comment:

The following items were discussed with BLM-CRVFO personnel at the DOE 2-M-36 on 4/6/22. In attendance: J. Byers, A. Crocket, C. Wooley, D. Jones, W. Toews, B. Baker, P. Fortunato, H. Foor, M. Gardner, BJ Russel.

• Recent pressure testing of all oil and water lines from the pad passed. No losses noted during any of the tests.
• Soil samples collected from the seep area were analyzed for 915-1 analysis. Results show non-detect for hydrocarbon and PAHs. Only naturally-occurring arsenic and salts were detected.
• TEP met with BLM staff to discuss recent COGCC inspection findings. TEP has buy-in on path forward from the Federal Regulatory Agency / Surface Administrator responsible for this location.
• TEP requested 3rd party consultants (Mr. Rex Goodrich, Professional Engineer and Professional Geologist, and Mr. Bruce Smith, Hydrogeologist) inspect the location on March 24, 2022. all agree that seep is naturally occurring and not the result of any leak or release associated with oil and gas operations at the site.
• TEP will line the sediment trap in SE corner of pad and install a more substantial slope drain extending from sediment basin to the bottom of the natural drainage feature south of the pad.
• TEP will install Erosion Control Points on the pad at surveyed elevations to detect any potential change, shift, subsidence, or movement on the pad surface. Points will be surveyed semi-annually: Once before winter (November 1), and once after winter (April 30).
• TEP will re-slope the drainage ditch at the base of the cut slope to achieve positive drainage. Appears to be a slight divide in the ditch elevations. Lining ditch is not required. Objective is to prevent water from ponding /pooling on the pad and seeping into subsurface. Get water off the location as soon as possible.
• TEP / BLM discussed that source of seep water may actually be related to the large, flat surface area of the pad itself. The pad is acting as a large sponge and is collecting and storing natural precip water and discharging at the path of least resistance. Over the years, this has resulted in a perched water system where water is slowly released on the south side of the pad at the seep location.
• If slope movement or a change to the pad surface is identified, moving the production equipment to a different and more stable location on the pad is an option.
• Established vegetation observed in the seep area (i.e., rabbit brush and greasewood) are indicators of wet, saline soils. Vegetation observed within the seep area has been established for several years and shows no sign of disturbance due to any recent slope movement.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Michael Gardner Signed:

Title: TEP Environmental Lead Date: 4/12/2022 12:22:53 PM

ATTACHMENT LIST

View Attachments in Imaged Documents on COGCC website (http://ogccweblink.state.co.us/) - Search by Document Number.

Document Number	Description
403012323	FIR RESOLUTION SUBMITTED
403012575	Data Summary Table - Seep Sample
403012582	Lab Results for Seep Sample
403012654	Witnessed Pressure Test Results

Total Attach: 4 Files