

State of Colorado  
Oil and Gas Conservation Commission

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Document Number:  
402354806

Date Received:  
04/08/2020

**FIR RESOLUTION FORM**

Overall Status: CAC

CA Summary:

4 of 4 CAs from the FIR responded to on this Form

4 CA Completed  
0 Factual Review Request

**OPERATOR INFORMATION**

OGCC Operator Number: 46685

Name of Operator: KINDER MORGAN CO2 CO LP

Address: 1001 LOUISIANA ST SUITE 1000

City: HOUSTON State: TX Zip: 77002

Contact Name and Telephone:

Name: \_\_\_\_\_

Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

Email: \_\_\_\_\_

Additional Operator Contact:

Contact Name

Phone

Email

Michael Hannigan

970-882-5532

michael\_hannigan@kindermorgan.com

**COGCC INSPECTION SUMMARY:**

FIR Document Number: 688800676

Inspection Date: 02/20/2020

FIR Submit Date: 02/24/2020

FIR Status: \_\_\_\_\_

**Inspected Operator Information:**

Company Name: KINDER MORGAN CO2 CO LP

Company Number: 46685

Address: 1001 LOUISIANA ST SUITE 1000

City: HOUSTON State: TX Zip: 77002

**LOCATION - Location ID: 436392**

Location Name: Yellow Jacket Compressor Station Number: \_\_\_\_\_ County: \_\_\_\_\_

Qtrqr: NWN Sec: 13 Twp: 37N Range: 18W Meridian: N  
W

Latitude: 37.470397 Longitude: -108.790697

**FACILITY - API Number: 05-083-00 Facility ID: 471621**

Facility Name: Yellow Jacket Produced Water Pump Number: 103B

Qtrqr: NWN Sec: 13 Twp: 37N Range: 18W Meridian: N  
W

Latitude: 37.470397 Longitude: -108.790697

**CORRECTIVE ACTIONS:**

1 ☒ CA# 136679

Corrective Action: Repair or install berms or other secondary containment devices per Rule 906.d.1.

Date: 03/24/2020

Response: CA COMPLETED

Date of Completion: 03/17/2020

Operator  
Comment:

The secondary containment structure at the Yellow Jacket central processing facility (CPF) that overflowed during the release of produced water was constructed in the mid-1980s. The concrete containment area, which was intended to contain minor spills from pumps and piping installed within, is curbed and has drains that discharge to a collection sump. The failure of the produced water triplex pump packing allowed produced water from tank T-

110 to leak through the pump and into the collection sump through the containment area drains. In order to prevent this situation from occurring in the future, the low level alarm for tank T-110 will be raised from 3 feet to 6 feet which is one foot below the operating range of 7 to 9 feet. This change will notify operations personnel of a potential upset condition and enable them to check on the situation and respond if necessary before the containment area and sump capacity are exceeded.

COGCC Decision: Approved

COGCC  
Representative:

2 ☒ CA# 136680

Corrective Action: Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d.

Date: 03/24/2020

Response: CA COMPLETED

Date of Completion: 03/17/2020

Operator Comment: This corrective action is related to the failure of the sump pump to activate which resulted in overflow conditions. An investigation of the incident determined that there were two root causes related to the sump pump failure: 1) Excessive wear/tear: solids had accumulated on the mechanical level transmitter (float) which prevented it from activating the pump; and 2) Inadequate inspection/monitoring. There is an annual preventive maintenance (PM) task for the sump level instrument that was scheduled to be performed in March 2020. There had been no visual inspection or PM conducted on the sump level instrument since March 2019. The incident investigation resulted in the following action items: 1) Immediately inspect all mechanical sump level transmitters at other Kinder Morgan CO2 facilities in southwest Colorado to confirm that they are operational; 2) Create a PM task for monthly visual inspection of all sump pumps and level transmitters; and 3) Replace all mechanical sump level transmitters (float type) with electronic level indicators (guided wave).

COGCC Decision: Approved

COGCC  
Representative:

3 ☒ CA# 136681

Corrective Action: Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d.

Date: 03/24/2020

Response: CA COMPLETED

Date of Completion: 03/17/2020

Operator Comment: This corrective action is related to the failure of the produced water triplex pump packing which resulted in produced water leaking from the pump. An investigation of the incident determined that the root causes related to the packing failure were 1) Inadequate repair and 2) Communication of needs. During the investigation it was discovered that packing nuts on triplex pumps of a particular vintage would become loose during normal operation. There had been attempts by maintenance personnel to install devices in order to prevent the packing nuts from backing off, however not all of those attempts were successful and mechanics would occasionally check the packing nuts and tighten if necessary. The issue of the packing nuts becoming loose during normal pump operations was never communicated such that a field-wide solution could be developed and implemented. The incident investigation resulted in the following action items: 1) Immediately inspect all produced water triplex pump packing nuts to confirm that they are properly adjusted; and 2) Investigate the triplex pump packing nut issue and develop a solution.

COGCC Decision: Approved

COGCC  
Representative:

4 ☒ CA# 136682

Corrective Action: The operator shall comply with Rule 910.b.3.

Date: 03/06/2020

Response: CA COMPLETED

Date of Completion: 03/27/2020

Operator Comment: A total of five (5) soil samples were collected from the three (3) separate areas impacted by the release of produced water associated with the packing failure of pump P-103B and submitted to Green Analytical Laboratories (GAL) for analysis of Table 910-1 screening levels (organics, inorganics and metals). Two (2) additional samples were collected from non-impacted native soil and submitted to GAL for analysis of pH, EC and SAR for the purpose of establishing background conditions. The results of analyses, plan for additional soil sample collection (if necessary) and a remediation plan will be submitted via Form 27.

COGCC Decision: Approved

COGCC  
Representative:

OPERATOR COMMENT AND SUBMITTAL

Comment:

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

Print Name: Michael Hannigan

Signed: \_\_\_\_\_

Title: EHS Supervisor

Date: 4/8/2020 8:19:49 AM

**ATTACHMENT LIST**

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

**Document Number**      **Description**

402354806	FIR RESOLUTION SUBMITTED
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Total Attach: 1 Files