



September 18, 2023

Ms. Krystal Heibel
Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

**RE: Remediation Project 28912; Request for No Further Action
COGCC Operator ID 24500; PADCO, LLC**

Ms. Heibel,

PADCO (COGCC operator ID 24500) is requesting a finding of No Further Action (NFA) associated with the Gulley #1-D off-location flowline removal. The off-location flowline (Flowline ID 317112) was removed, and appropriate sampling/analysis has been performed showing the site meets Table 915 thresholds. PADCO is now requesting a finding of NFA allowing PADCO to backfill the flowline trench.

BACKGROUND:

The Gulley #1-D well was in the SENE of Section 21, Township 2 South, Range 53 West in Washington County, Colorado. PADCO plugged the Gulley #1-D (API 05-121-08922) in November 2020 and received a “no further action” approval associated with the remediation/reclamation of the Gulley Production Facility and historic produced water pits on September 15, 2021. The land use associated with the Gulley #1-D off-location flowline is a “dry farmed” agricultural field.

The Gulley #1-D off-location flowline follows a straight line from the Gulley #1-D well head (API 05-121-08922) approximately 475 feet to where it connected to the heater treater at the Gulley Production Facility (see Attachment A). The flowline crosses an agricultural field. Form 44 was filed on September 7, 2022 (Form 44 doc# 403126347) indicating the flowline would be removed per COGCC Rule 1105. An initial Form 27 (doc# 403356248) was filed on March 25 and received a Remediation Project number of 28912. The Initial Form 27 was approved on April 19, 2023.

A Supplemental Form-27 was filed on June 5, 2023 (COGCC Doc ID 403423114), with results from initial sampling and a request for NFA. The NFA was denied pending resolution of four (4) conditions of approval (COA) as issued on June 20, 2023.

CONDITIONS OF APPROVAL:

1. *Operator shall submit a revised "Soil Sampling Location Map" that includes: a scale, an aerial photograph that shows the location of field screenings, sample(s), and background sample(s).*

A “soil sample location map” was submitted with the first supplemental Form 27 but did not include actual points where sample were taken. Attachment B is a revised “soil sample location map” that shows the location of the screening, sampling, and background samples.

2. *Operator did not characterize site soil for Table 915-1 Metals in Soils. Operator shall characterize site for Table 915-1 Metals in Soils prior to requesting No Further Action.*

PADCO did not consider characterizing the soils from the flowline ditch for Table 915-1 metals as a part of the off-location flowline closure requirements per COGCC Operator Guidance Rule 911.A.(4). PADCO has obtained a soil sample from the Gully #1-D off-location flowline ditch and had it analyzed for Table 915-1 metals.

The soil sample (G1c5) analysis, from sample point G1c, indicated values that exceeded Table 915 for 'arsenic' and 'barium' (based on "Protection of Groundwater" Soil Screening Level (SSL) concentrations). Two (2) background samples were obtained (sample A and WTB-BG) and analyzed, indicating the natural background 'arsenic' and 'barium' concentrations are higher than Table 915 thresholds in this area. PADCO is requesting a NFA determination based on this information.

3. *Operator shall provide justification for use of Residential SSL.*

PADCO has replaced the use of Table 915-1 "Residential" SSL with "Protection of Groundwater" SSL thresholds in this Supplemental Form 27 and Soil Sample Analysis Summary Table (Attachment C).

All closure samples were below the thresholds from Table 915-1 "Protection of Groundwater" SSL. The only exception to this were the 'arsenic' and 'barium' concentrations, which were higher than Table 915-1 "Protection of Groundwater" SSLs at sample point G1c and the two (2) background sample points (A and WTB-BG). Since the background samples also were high, this higher concentration level should be considered 'native' and a finding of NFA should be granted.

4. *The boron reading of 5.84mg/l in sample location "G1a" and the pH reading of 8.43 in sample location "G1c2" exceed Table 915-1 SSLs. The operator should perform sampling and analysis to fully delineate the lateral and vertical extent of those impacts; therefore, COGCC has removed the facility closure request.*

At sample point "G1a", a closure soil sample (G1a1) from ~66" bgl (below ground level) had a Boron concentration of 0.31 mg/l, delineating the vertical extent. Sample G1-WHR with a Boron concentration of 0.75 mg/l indicated the horizontal extent was less than 30'. Six inches (6") of additional soil was removed along the ditch bottom and sent to Pawnee Waste for disposal from the area around sample point "G1a". See Attachment C for Soil Sample Analysis Summary Table Results.

At sample point "G1c", a closure soil sample (G1c5) with a pH of 7.92 from ~79" bgl was obtained defining the vertical extent. Samples from G1-TRTR (pH 7.85) and G1b (pH 7.36) defined the horizontal extent. Six inches (6") of additional soil was removed along the ditch bottom and sent to Pawnee Waste for disposal from the area around sample point "G1c". See Attachment C for Soil Sample Analysis Summary Table Results.

PROJECT:

On May 9, 2023, the Gully #1-D off-location flowline was uncovered. The flowline was a fiberglass flowline about 475 feet in length. The 475 feet was comprised of about 415 feet of fiberglass flowline, with a 30-foot joint of steel flowline at each end (see Attachment A).

Soil samples were taken at the required points (per the original conditions of approval issued April 19, 2023) along the flowline (see Attachment B). During excavation the flowline trench was visually inspected for potential signs of contamination. Per Rule 913.h, soil samples were taken from areas most likely impacted during the operation of the flowline, at the wellhead riser (G1-WHR), the riser to connect to the heater treater (G1-TRTR), at unions and/or connections or line type transitions found during excavation (G1a, G1b) and any points that are considered suspect due to visual observations (G1c). The COA also called for a determination of the presence or absence of contamination at least every 250' of the flowline length (field screening sample point "G1f"). These sample points are shown on Attachment B and the analysis results are summarized in Attachment C.

There were some sample points that had indications of contaminations (G1b, G1c). The contaminated soil was removed (~25 cubic yards) and has been hauled off to Pawnee Waste. The areal extent of the contamination was verified as removed by the final samples taken associated with these two (2) sample points (see Attachment C).

Due to an extremely rainy and wet Spring and Summer season the Gulley #1-D off-location flowline removal project experienced delays in being able to access the site for sampling and additional soil removal. Conditions have now dried up and the necessary additional sampling and soil removal has been completed.

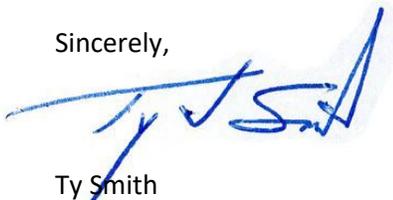
During initial sampling, an anomalous boron value was shown in sample analysis results (5.84 mg/l) at sample point G1a at approximately 60 inches below ground level (bgl). Additional sampling indicated that at 66" bgl the boron reading was only 0.31 mg/l. PADCO will remove this soil pocket (~6" of soil) around sample point "G1a" and haul this soil to Pawnee Waste.

During initial sampling, at sample point "G1c", a pH value of 8.43 (Table 915 Threshold is 8.3) was noted at a depth of approximately 76 inches bgl. Samples at 72" bgl and 79" bgl indicated pH values of 7.97 and 7.92 respectively. PADCO will remove this 6" layer of soil from this area and have it hauled to Pawnee Waste.

After your review, PADCO is requesting the Commission return a finding of "No Further Action" and allow the flowline trench to be filled in with native soil and graded level with the surrounding agricultural field. PADCO plans to complete these final steps of reclamation within 30-days of receiving the NFA approval, the area will then be returned to the farmer for agricultural use.

Please contact either Ty Smith at 303.903.4443 (tysmith@lesair.com) or Mr. Dan Richmond at 918.630.9912 (dan@dsrinc.net) if you have any questions.

Sincerely,



Ty Smith
Senior Project Manager
Lesair Environmental, Inc.