

State of Colorado Oil and Gas Conservation Commission



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SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☒ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☐ Other (describe): _____

FOR OGCC USE ONLY

REM 9673

Facility ID 419311

Doc# 200440576

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: REM #9673

OGCC Operator Number: 10000

Name of Operator: BP America Production Company

Address: 380 Airport Road

City: Durango State: CO Zip: 81303

Contact Name and Telephone:

Andrew Hawk

No: (970) 375-7590 (970) 394-0253

Fax:

API Number: N/A

County: Archuleta

Facility Name: Perino Water Transfer Station

Facility Number: #419311

Well Name: N/A

Well Number: N/A

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWSE Sec 13 T 32N R 6W N PM Latitude: 37.015027 Longitude: -107.449557

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Fruitland Coal produced water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Impacted area is dry land range and within the facility..

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Soil is a clay loam with underlying cobble.

Potential receptors (water wells within 1/4 mi, surface waters, etc.): The closest water well is approximately 1500 feet to the NW of the release.

There is an irrigation storage pond approximately 1000 feet to the west of the release. The release occurred within in an area grazed by cattle.

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):



Soils



Vegetation



Groundwater



Surface Water

Extent of Impact:

Approximately 700 sq ft of soil surface.

No Impact

No impact

No Impact

How Determined:

Measurement of the wet area during the release.

The affected area is gravel surface and bare ground.

REMEDIALATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

See Document # 401034953 the initial Form 19 for this event. The Perino Water Transfer station is a stand alone water transfer station consisting of storage tanks and booster pumps. The location operator discovered a leak from a 1/4" nipple on a pressure transducer. The nipple had broken and was releasing water into the containment berm around the tanks. Cattle on the location had tampered the berm allowing the water to release from the berm. The release was confined to the location but did breach the berm. A vacuum truck was dispatched to the location and recovered approximately 30 barrels of water. Some water did saturate location soils and was not recoverable. The containment berm was reconstructed on April 23-24 and cattle panels have now been installed around the tank and berm to stop the cattle from damaging the berm.

Describe how source is to be removed:

The broken fitting was removed and replaced, stopping the release and removing the source of the release. The water transfer station has been returned to operation.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

See Document # 401045377 for additional information. 200 pounds of gypsum was applied, per the reclamation plan. Additional soil samples were collected on 10/7/2016 within the affected area. Results of those samples returned results that are compliant with COGCC Table 910-1 standards.



REMEDIATION WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Ground water was not impacted by this release. No monitoring plan required.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Two-hundred and twenty pounds of fairway grade gypsum will be applied to and then hand raked into the soils of the affected area. The majority of the affected area is within a gravel berm around the pipe riser on the location. The bermed area is intentionally kept free of weeds and plants. The affected area outside of the bermed area is bare soil due to cattle grazing. Visual inspection of the affected area on 10/7/2016 indicates that reseeding within the affected area, outside of the containment berm will not be needed.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

Two additional samples of soils within the affected area were collected on 10/7/2016.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

No E&P wastes have been created as a result of this release and subsequent remediation.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 4/25/2016 Date Site Investigation Completed: 4/25/2016 Date Remediation Plan Submitted: 5/18/2016
Remediation Start Date: 5/18/2016 Anticipated Completion Date: 11/17/2016 Actual Completion Date: _____

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

Print Name: Andrew Hawk

Signed: _____

Title: Field Environmental Coordinator

Date: 11/17/2016

OGCC Approved: _____

Title: Environmental Protection Specialist

Date: 11/22/16