

State of Colorado  
Oil and Gas Conservation Commission

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Document Number:  
401379557  
Receive Date:  
08/17/2017

Report taken by:  
KRIS NEIDEL

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27.

This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATON

Name of Operator: CHEVRON USA INC	Operator No: 16700	Phone Numbers Phone: (713) 3720289 Mobile: (832) 6931679
Address: 6301 DEAUVILLE BLVD		
City: MIDLAND	State: TX	Zip: 79706
Contact Person: Barberis Marcelo	Email: bmal@chevron.com	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 10501 Initial Form 27 Document #: 401379557

PURPOSE INFORMATION

- 901.e. Sensitive Area Determination
- 909.c.(1), Rule 905: Pit or PW vessel closure
- 909.c.(2), Rule 906: Spill/Release Remediation
- 909.c.(3), Rule 907.e.: Land treatment of oily waste
- 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure
- 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water
- Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b.
- Rule 909.e.(2)B.: Closure of remediation project
- Rule 906.c.: Director request
- Other Assessment Report

SITE INFORMATION

N Multiple Facilites ( in accordance with Rule 909.c. )

Facility Type: PIT	Facility ID: 102571	API #: _____	County Name: RIO BLANCO
Facility Name: RANGLEY WEBER STATION 47		Latitude: 40.094781	Longitude: -108.811852
		** correct Lat/Long if needed: Latitude: 40.094902	Longitude: 108.811965
QtrQtr: NWNE	Sec: 35	Twp: 2N	Range: 102W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications GC Most Sensitive Adjacent Land Use Dry Land  
Is domestic water well within 1/4 mile? No Is surface water within 1/4 mile? Yes  
Is groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

No wells, White River approximately 600 ft. North and 1200 ft. West of Site Location.

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste             | <input type="checkbox"/> Non-E&P Waste |
| <input type="checkbox"/> Produced Water       | <input type="checkbox"/> Workover Fluids             | _____                                  |
| <input checked="" type="checkbox"/> Oil       | <input type="checkbox"/> Tank Bottoms                |  |
| <input type="checkbox"/> Condensate           | <input type="checkbox"/> Pigging Waste               |  |
| <input type="checkbox"/> Drilling Fluids      | <input type="checkbox"/> Rig Wash                    |  |
| <input type="checkbox"/> Drill Cuttings       | <input type="checkbox"/> Spent Filters               |  |
|   | <input type="checkbox"/> Pit Bottoms                 |  |
|   | <input type="checkbox"/> Other (as described by EPA) | _____                                  |

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	HC Impacts near MW-1	Soil Boring-Soil Samples

## INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Advancement of a total of six soil borings (SB-01 through SB-06) and installation of two down-gradient monitoring wells (MW-04 and MW-05) was completed to address the COAs described in document # 401203492 (REM PROJ # 8564). See attached Soil Characterization Report - PIT CS-47.

## PROPOSED SAMPLING PLAN

### Proposed Soil Sampling

Will soil samples be collected as part of this investigation? ( Number, type (grab/composite), analyses, and locations of samples ):

Advance up to 18 soil borings (12 proposed and 6 contingent) to determine the lateral extent of petroleum hydrocarbons in soil. At each soil boring collect up to 3 samples at varying intervals. Refer to Soil Characterization Report - PIT CS-47 for details on proposed assessment.

### Proposed Groundwater Sampling

Will groundwater samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

Refer to Soil Characterization Report - PIT CS-47 for details on proposed assessment.

### Proposed Surface Water Sampling

Will surface water samples be collected as part of this investigation? ( Number, analyses, and locations of samples ):

### Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan ( summary ):

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected 13

Number of soil samples exceeding 910-1 9

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 2500

### NA / ND

--            Highest concentration of TPH (mg/kg) 37100

--            Highest concentration of SAR 30

BTEX > 910-1 Yes

Vertical Extent > 910-1 (in feet) 10

### Groundwater

Number of groundwater samples collected 7

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 11'

Number of groundwater monitoring wells installed 2

Number of groundwater samples exceeding 910-1 0

ND            Highest concentration of Benzene (µg/l)           

ND            Highest concentration of Toluene (µg/l)           

ND            Highest concentration of Ethylbenzene (µg/l)           

ND            Highest concentration of Xylene (µg/l)           

ND            Highest concentration of Methane (mg/l)           

### Surface Water

0 Number of surface water samples collected

0 Number of surface water samples exceeding 910-1

If surface water is impacted, other agency notification may be required.

## OTHER INVESTIGATION INFORMATION

Were impacts to adjacent property or offsite impacts identified?

Were background samples collected as part of this site investigation?

MW-2, which is located hydraulically upgradient of observed hydrocarbon impacts to soil.

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 1

Volume of liquid waste (barrels) 1

Is further site investigation required?

Advance up to 18 soil borings (12 proposed and 6 contingent) to determine the lateral extent of petroleum hydrocarbons in soil. At each soil boring collect up to 3 samples at varying intervals. Refer to Soil Characterization Report - PIT CS-47 for details on proposed assessment.

# REMEDIAL ACTION PLAN

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Currently assessing the vertical and horizontal extents of hydrocarbons in soil. Following assessment, a remedial action plan will be developed describing the approach to remediate hydrocarbon impacts.

## REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

Currently assessing the vertical and horizontal extents of hydrocarbons in soil. Following assessment, a remedial action plan will be developed describing the approach to remediate hydrocarbon impacts.

## Soil Remediation Summary

### In Situ

- \_\_\_\_\_ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Air sparge / Soil vapor extraction
- \_\_\_\_\_ Natural Attenuation
- \_\_\_\_\_ Other \_\_\_\_\_

### Ex Situ

- \_\_\_\_\_ Excavate and offsite disposal
- \_\_\_\_\_ If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_
- \_\_\_\_\_ Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_
- \_\_\_\_\_ Excavate and onsite remediation
- \_\_\_\_\_ Land Treatment
- \_\_\_\_\_ Bioremediation (or enhanced bioremediation)
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Other \_\_\_\_\_

## Groundwater Remediation Summary

- \_\_\_\_\_ Bioremediation ( or enhanced bioremediation )
- \_\_\_\_\_ Chemical oxidation
- \_\_\_\_\_ Air sparge / Soil vapor extraction
- \_\_\_\_\_ Natural Attenuation
- \_\_\_\_\_ Other \_\_\_\_\_

## GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

# REMEDIATION PROGRESS UPDATE

## PERIODIC REPORTING

**Frequency:**  Quarterly  Semi-Annually  Annually  Other \_\_\_\_\_

**Report Type:**  Groundwater Monitoring  Land Treatment Progress Report  O&M Report  
 Other \_\_\_\_\_

## WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? \_\_\_\_\_

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards \_\_\_\_\_

E&P waste (solid) description \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC Disposal Facility: \_\_\_\_\_

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_

E&P waste (liquid) description \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_

Non-COGCC Disposal Facility: \_\_\_\_\_

## RECLAMATION PLAN

### RECLAMATION PLANNING

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.

TBD

Is the described reclamation complete? \_\_\_\_\_

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

Interim?  Final?

Did the Surface Owner approve the seed mix? \_\_\_\_\_

If NO, does the seed mix comply with local soil conservation district recommendations? \_\_\_\_\_

## IMPLEMENTATION SCHEDULE

### PRIOR DATES

Date of Surface Owner notification/consultation, if required. \_\_\_\_\_

Actual Spill or Release date, if known. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/15/2017

Date of commencement of Site Investigation. 05/15/2017

Date of completion of Site Investigation. 05/19/2017

### REMEDIAL ACTION DATES

Date of commencement of Remediation. \_\_\_\_\_

Date of completion of Remediation. \_\_\_\_\_

### SITE RECLAMATION DATES

Date of commencement of Reclamation. \_\_\_\_\_

Date of completion of Reclamation. \_\_\_\_\_

**OPERATOR COMMENT**

Per coorespondance with Kris Neidel, Remediation Number 9141 may be closed following receipt and review of COAs. Assessment activities associated with hydrocarbon impacts observed near MW-1 at CS-47 will be assigned a new Remediation number.

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

Signed: Brent Lucyk \_\_\_\_\_

Title: Senior Geologist \_\_\_\_\_

Submit Date: 08/17/2017 \_\_\_\_\_

Email: brent.lucyk@stantec.com \_\_\_\_\_

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: KRIS NEIDEL \_\_\_\_\_

Date: 09/19/2017 \_\_\_\_\_

Remediation Project Number: 10501 \_\_\_\_\_

**COA Type****Description**

	Operator should provide notice to Environmental staff Kris Neidel (kris.neidel@state.co.us) or 970-871-1963 72hrs prior to mobilization of field work.
	Work plan is approved; however additional information and remediation may be required during the course of investigation and remediation.

**Attachment Check List**

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

**Att Doc Num****Name**

401379557	FORM 27-INITIAL-SUBMITTED
401379709	SITE INVESTIGATION REPORT

Total Attach: 2 Files

**General Comments****User Group****Comment****Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)