

State of Colorado
Oil and Gas Conservation Commission

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Document Number:
402108184

Receive Date:
07/15/2019

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 INFORMATION

Name of Operator: <u>CHEVRON USA INC</u>	Operator No: <u>16700</u>	Phone Numbers
Address: <u>100 CHEVRON USA INC</u>		
City: <u>RANGELY</u>	State: <u>CO</u>	Zip: <u>81648</u>
Contact Person: <u>Chris Patterson</u>	Email: <u>spwu@chevron.com</u>	Phone: <u>(970) 675-3814</u>
		Mobile: <u>(307) 871-5363</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 13988 Initial Form 27 Document #: 402108184

PURPOSE INFORMATION

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

SITE INFORMATION

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

Facility Type: <u>SPILL OR RELEASE</u>	Facility ID: <u>464283</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>UP-104X20 1</u>	Latitude: <u>40.124878</u>	Longitude: <u>-108.871431</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SESW</u>	Sec: <u>20</u>	Twp: <u>2N</u>	Range: <u>102W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

SITE CONDITIONS

General soil type - USCS Classifications CH Most Sensitive Adjacent Land Use Non Crop 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? No

Other Potential Receptors within 1/4 mile

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 checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | _____ |
| <input 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
No	GROUNDWATER	None	No Impact
Yes	SOILS	1397ft. x 3ft. x 0.5 ft.)	Field determined with tape measure

INITIAL ACTION SUMMARY

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

Injection water leak occurred from spool on a 3-inch steel cement coated line due to internal corrosion. A total of 80 bbls of the 90 bbl spill was recovered via vac truck. The spill path was water washed with approximately 480 bbls of clean water and initial soil samples were collected. Soil samples were collected along the length of the spill. A soil sample location map and preliminary analytical results are included as an attachment. The area around sample location UP104X20-SS3 was subsequently field screened with a PID to delineate the area with elevated TPH for soil removal. A figure showing the anticipated excavation area is attached. Feel Free to add additional information here

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):

Preliminary soil samples were collected on June 4, 2019 from the impacted area. A total of five grab samples (five – analyzed for TPH – GRO & DRO, BTEX, SAR, EC and pH; and one background sample analyzed for SAR, EC and pH) were collected from approximately 0 to 6 inches below ground surface (ft-bgs). Results show mainly elevated SAR/EC levels within the impacted area. Elevated levels of DRO and GRO are present near sample location UP104X20-SS3 A soil sample location map and preliminary analytical results are included as an attachment. After TPH impacted soils are removed from the area around UP104X20-SS3 a conformation of cleanup soil sample will be collected. SAR and EC impacted soils will be treated in-situ by Natural Attenuation. After initial water wash seasonal precipitation events will be utilized. Subsequent soils samples will be collected during the summer of 2020 to monitor natural attenuation.

Proposed Groundwater Sampling

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

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 5
Number of soil samples exceeding 910-1 4
Was the areal and vertical extent of soil contamination delineated? Yes
Approximate areal extent (square feet) 4191

NA / ND

-- Highest concentration of TPH (mg/kg) 6600
-- Highest concentration of SAR 47
BTEX > 910-1 No
Vertical Extent > 910-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0
Was extent of groundwater contaminated delineated? No
Depth to groundwater (below ground surface, in feet)
Number of groundwater monitoring wells installed
Number of groundwater samples exceeding 910-1

NA Highest concentration of Benzene (µg/l)
NA Highest concentration of Toluene (µg/l)
NA Highest concentration of Ethylbenzene (µg/l)
NA Highest concentration of Xylene (µg/l)
NA 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?

One background grab soil sample was collected outside of impacted area at an approximated depth of 0-6 inches below ground surface. The sample was analyzed for SAR, EC and pH and will be referenced during final closure request. A soil sample location map and preliminary analytical results are included as an attachment.

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

Volume of solid waste (cubic yards) Volume of liquid waste (barrels)

Is further site investigation required?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Source removal summary – Insert the following
TPH impacted soils will be removed from the area around sample location UP104X20-SS3, an approximate area of 50 sq. ft. to a depth of 6 inches, by hand and equipment. TPH impacted soil will be taken to the Chevron Rangely Landfarm.

SAR and EC impacted soils will be treated in-situ by Natural Attenuation. After initial water wash seasonal precipitation events will be utilized. Subsequent soils samples will be collected during the summer of 2020 to monitor natural attenuation.

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.

TPH impacted soils will be removed from the area around sample location UP104X20-SS3, an approximate area of 50 sq. ft. to a depth of 6 inches, by hand and equipment. TPH impacted soil will be taken to the Chevron Rangely Landfarm.

SAR and EC impacted soils will be treated in-situ by Natural Attenuation. After initial water wash seasonal precipitation events will be utilized. Subsequent soils samples will be collected during the summer of 2020 to monitor natural attenuation.

Soil Remediation Summary

In Situ

 No Bioremediation (or enhanced bioremediation)

 No Chemical oxidation

 No Air sparge / Soil vapor extraction

 Yes Natural Attenuation

 Yes Other Impacted soil removal

Ex Situ

 Yes Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) 1

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.

TPH impacted soils will be removed from the area around sample location UP104X20-SS3, an approximate area of 50 sq. ft. to a depth of 6 inches, by hand and equipment. TPH impacted soil will be taken to the Chevron Rangely Landfarm.

Is the described reclamation complete? No _____

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? No _____

If NO, does the seed mix comply with local soil conservation district recommendations? No _____

IMPLEMENTATION SCHEDULE

PRIOR DATES

Date of Surface Owner notification/consultation, if required. _____

Actual Spill or Release date, if known. 05/04/2019

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 05/04/2019

Date of commencement of Site Investigation. 07/11/2019

Date of completion of Site Investigation. _____

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

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

Signed: ` Chris Patterson _____

Title: HES Specialist _____

Submit Date: ` 07/15/2019 _____

Email: spwu@chevron.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: 08/16/2019 _____

Remediation Project Number: 13988 _____

COA Type	Description
	Confirmation sample at sample id UP104x20-SS3 should include one sample for full table 910-1.
	Removal of remaining TPH should be completed as soon as possible. With soil samples submitted via Form 27 to document soils are below COGCC table 910-1.
	Operator should provide notice to Environmental staff, Kris Neidel (kris.neidel@state.co.us) or 970-871-1963 72hrs prior to mobilization at begin of all sampling events.
	Delineation around sample location UP104x20-SS3 should be adequate to determine that no impact remains. Samples location selection should be guided by rule 910.b(3)B.

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
402108184	FORM 27-INITIAL-SUBMITTED
402108292	ANALYTICAL RESULTS
402108688	SOIL SAMPLE LOCATION MAP

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Environmental	Additional water washing should be considered to lower the EC and SAR.	08/16/2019

Total: 1 comment(s)