

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

402794356

Receive Date:

Report taken by:

## Site Investigation and Remediation Workplan (Supplemental 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.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

### OPERATOR INFORMATION

Name of Operator: <u>PADCO LLC</u>	Operator No: <u>24500</u>	<b>Phone Numbers</b>
Address: <u>800 W 6TH STREET SUITE 1010</u>		Phone: <u>(918) 6309912</u>
City: <u>LOS ANGELES</u> State: <u>CA</u> Zip: <u>90017</u>		Mobile: <u>(918) 6309912</u>
Contact Person: <u>Dan Richmond</u>	Email: <u>dan@dsrinc.net</u>	

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 15981 Initial Form 27 Document #: 402498609

#### PURPOSE INFORMATION

- ☐ Rule 913.c.(1): Pit or Cuttings Trench closure.
- ☐ Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- ☐ Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- ☐ Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- ☐ Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- ☐ Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- ☐ Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- ☐ Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- ☐ Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- ☐ Rule 913.g: Changes of Operator.
- ☐ Rule 915.b: Request to leave elevated inorganics in situ.
- ☒ Other: Remediation (ID# 15981) closure, Resolve COA (ID# 402529236) and historic spill (ID#469838) closure

#### SITE INFORMATION

No Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>104590</u>	API #: <u></u>	County Name: <u>WASHINGTON</u>
Facility Name: <u>GULLEY 1-D</u>	Latitude: <u>39.865019</u>	Longitude: <u>-103.311837</u>	
** correct Lat/Long if needed: Latitude: <u></u>		Longitude: <u></u>	
QtrQtr: <u>SENE</u>	Sec: <u>21</u>	Twp: <u>2S</u>	Range: <u>53W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

#### SITE CONDITIONS

General soil type - USCS Classifications SC Most Sensitive Adjacent Land Use Agriculture

Is domestic water well within 1/4 mile? No Is surface water within 1/4 mile? No

Is groundwater less than 20 feet below ground surface? No

**Other Potential Receptors within 1/4 mile**

None

**SITE INVESTIGATION PLAN****TYPE OF WASTE:**☐ E&P Waste ☒ Other E&P Waste ☐ Non-E&P Waste☐ Produced Water☐ Workover Fluids☐ Oil☐ Tank Bottoms☐ Condensate☐ Pigging Waste☐ Drilling Fluids☐ Rig Wash☐ Drill Cuttings☐ Spent Filters☒ Pit Bottoms☐ Other (as described by EPA)**DESCRIPTION OF IMPACT**

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	Pit boundary	Visual

**INITIAL ACTION SUMMARY**

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

Historic produced water pit, initial Form 27 submitted on 09/828/2020, performed initial sampling on 10/02/2020, sample analysis results dated 10/12/2020 indicated soil impacted by hydrocarbons

**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 ):

Excavate sample points 1 and 2 (see attachment A-C) to a depth of ~8-10 feet with a backhoe. Observe soil during excavation, obtain grab samples for layers of concern (if any, record depth) if not grab sample at deepest point (record depth). Repeat grab sample procedure for points 3,4,5, & 6. Analysis for TPH, pH. Grab sample from at ~2-3 feet at points 1 and 2 for pH, SAR, EC.

**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 11

Number of soil samples exceeding 915-1 0

Was the areal and vertical extent of soil contamination delineated? Yes

Approximate areal extent (square feet) 6500

**Groundwater**

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 1

Number of groundwater monitoring wells installed 1

Number of groundwater samples exceeding 915-1 1

**Surface Water**

0 Number of surface water samples collected

Number of surface water samples exceeding 915-1

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

**NA / ND**

ND Highest concentration of TPH (mg/kg) 11

-- Highest concentration of SAR 4.1

BTEX &gt; 915-1 No

Vertical Extent &gt; 915-1 (in feet) 20

Highest concentration of Benzene (µg/l) 11

Highest concentration of Toluene (µg/l) 11

Highest concentration of Ethylbenzene (µg/l) 11

Highest concentration of Xylene (µg/l) 11

Highest concentration of Methane (mg/l) 11

**OTHER INVESTIGATION INFORMATION**☐ Were impacts to adjacent property or offsite impacts identified?☐ Were background samples collected as part of this site investigation?☐ 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?**REMEDIAL ACTION PLAN**

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

**SOURCE REMOVAL SUMMARY**

Describe how source is to be removed.

Excavate and loadout into haul trucks an estimated 350 cubic yards of potential hydrocarbon contaminated soil associated with historic skim pit (20'x20') and produced water pit (60'x55'). Topsoil (~0-4') will be removed and stored adjacent to area, grab sample of topsoil will be tested to confirm "clean" per Table 9-10. Impacted soil from from two (2) areas will be removed, onsite PID readings or lab analysis will be used to determine limits of what is removed. Final soil excavation will be to remove soil until "clean" characteristics are achieved based on COGCC Table 9-10 thresholds.

**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.

After potential contaminated soils are removed, closure grab samples will analyzed to validate "clean" per Table 9-10. Verified "clean" fill soil will be hauled in and/or used from historic berms around production equipment (which is being removed). "Topsoil" will be returned and dressed to match agriculture field soil height. Existing field topsoil will be sampled for a background and the replaced topsoil will be amended (if necessary) to match with existing agricultural soil parameters. Land will be returned to the farmer for future crop planting.

**Soil Remediation Summary**☐ In Situ☒ Ex Situ

Bioremediation ( or enhanced bioremediation )

Yes Excavate and offsite disposal

\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Air sparge / Soil vapor extraction  
\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_ 350  
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

#### Approved Reporting Schedule:

☐ Quarterly☐ Semi-Annually☐ Annually☒ Other

#### ☐ Request Alternative Reporting Schedule:

☐ Semi-Annually☐ Annually☐ Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

#### 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? Yes

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

Volume of E&P Waste (solid) in cubic yards 500

E&P waste (solid) description Hydrocarbon Impacted Soil

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility: Republic Services Tower Landfill

Volume of E&P Waste (liquid) in barrels 0

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

## REMEDIATION COMPLETION REPORT

### REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? Yes

If YES:

☒ Compliant with Rule 913.h.(1).☒ Compliant with Rule 913.h.(2).☒ Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards? Yes

Does the previous reply indicate consideration of background concentrations? No

Does Groundwater meet Table 915-1 standards? Yes

Is additional groundwater monitoring to be conducted?

Operator shall comply with the COGCC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

## 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.

Remove/set aside topsoil, removal of potential contaminated soil, relace with "clean" (per Table 9-10) fill soil, replace topsoil, turn back to farmer for agricultural use (no seeding anticipated)

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

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

☐ Interim

☒ Final

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

If YES, does the seed mix comply with local soil conservation district recommendations? \_\_\_\_\_

Did the local soil conservation district provide the seed mix? \_\_\_\_\_

### **SITE RECLAMATION DATES**

Proposed date of commencement of Reclamation. 01/11/2021

Proposed date of completion of Reclamation. 03/05/2021

## IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

### **PRIOR DATES**

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

Actual Spill or Release date, or date of discovery. \_\_\_\_\_

### **SITE INVESTIGATION DATES**

Date of Initial Actions described in Site Investigation Plan (start date). 10/02/2020

Proposed site investigation commencement. 09/01/2020

Proposed completion of site investigation. 10/30/2020

### **REMEDIAL ACTION DATES**

Proposed start date of Remediation. 01/11/2021

Proposed date of completion of Remediation. 02/26/2021

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

☐ Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

**OPERATOR COMMENT**

Documentation indicating the three (3) conditions of approval contained in COGCC document number 402593298 (remediation project 15981) have been met.

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

Signed: Ty J Smith

Title: Consultant

Submit Date:

Email: tysmith@lesair.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:

Date:

Remediation Project Number: 15981

**COA Type****Description**

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**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**

402803211	DISPOSAL MANIFESTS
402803213	PHOTO DOCUMENTATION
402803214	CORRESPONDENCE
402803216	ANALYTICAL RESULTS
402803217	ANALYTICAL RESULTS

Total Attach: 5 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)