

State of Colorado  
Oil and Gas Conservation Commission

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Document Number:  
402593298  
Receive Date:  
02/08/2021

Report taken by:  
RICK ALLISON

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.

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

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>		
City: <u>LOS ANGELES</u>	State: <u>CA</u>	Zip: <u>90017</u>
Contact Person: <u>Dan Richmond</u>	Email: <u>dan@dsrcinc.net</u>	Phone: <u>(918) 6309912</u>
		Mobile: <u>(918) 6309912</u>

PROJECT, PURPOSE & SITE INFORMATION

**PROJECT INFORMATION**  
Remediation Project #: 15981 Initial Form 27 Document #: 402498609

**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 checked="" 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 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 checked="" type="checkbox"/> Other <u>Remediation Workplan</u>

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

Facility Type: <u>PIT</u>	Facility ID: <u>104590</u>	API #: _____	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: _____		Longitude: _____	
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:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> E&P Waste       | <input checked="" type="checkbox"/> Other E&P Waste  | <input type="checkbox"/> Non-E&P Waste |
| <input 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 checked="" 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	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 10  
Number of soil samples exceeding 910-1 6  
Was the areal and vertical extent of soil contamination delineated? No  
Approximate areal extent (square feet) 3900

### NA / ND

--          Highest concentration of TPH (mg/kg) 27108  
NA          Highest concentration of SAR           
BTEX > 910-1 No  
Vertical Extent > 910-1 (in feet) 10

### 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         

         Highest concentration of Benzene (µg/l)           
         Highest concentration of Toluene (µg/l)           
         Highest concentration of Ethylbenzene (µg/l)           
         Highest concentration of Xylene (µg/l)           
         Highest concentration of Methane (mg/l)         

### Surface Water

0 Number of surface water samples collected  
         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?

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

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

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

\_\_\_\_\_ Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_

\_\_\_\_\_ Natural Attenuation

\_\_\_\_\_ Excavate and onsite remediation

\_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_ 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 Skim Pit and Produced Water Pit Backfill Approval

**Report Type:**  Groundwater Monitoring  Land Treatment Progress Report  O&M Report  Other Removed Hydrocarbon Impacted Soil, Backfill Approval Request

## 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:

Hydrocarbon impacted soil hauled to republic Services Tower Landfill for their beneficial use

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? No

Do all soils meet Table 910-1 standards? \_\_\_\_\_

Does the previous reply indicate consideration of background concentrations? \_\_\_\_\_

Are the only residual soil impacts pH, SAR, or EC at depths greater than 3 feet below ground surface? \_\_\_\_\_

Does Groundwater meet Table 910-1 standards? \_\_\_\_\_

Is additional groundwater monitoring to be conducted? \_\_\_\_\_

## 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? 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? \_\_\_\_\_

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). 10/02/2020

Date of commencement of Site Investigation. 09/01/2020

Date of completion of Site Investigation. 10/30/2020

## **REMEDIAL ACTION DATES**

Date of commencement of Remediation. 01/11/2021

Date of completion of Remediation. 02/26/2021

## **SITE RECLAMATION DATES**

Date of commencement of Reclamation. 01/11/2021

Date of completion of Reclamation. 03/05/2021

**OPERATOR COMMENT**

Requesting approval to backfill the Gulley 1-D Skim Pit and Produced Water Pit with clean fill and cover with ~2 feet of top soil.

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: 02/08/2021

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: RICK ALLISON

Date: 02/10/2021

Remediation Project Number: 15981

**COA Type****Description**

	<p>1. Soil Suitability standards for Reclamation need to be analyzed in the shallow material remaining onsite. Samples should be obtained from the upper 0-2' of native/remaining soil around the pit and analyzed for pH, EC, SAR.</p> <p>2. The oil stained soil west of the tank battery needs to be removed, that area assessed and reported as required in the COA on Form 27 Doc# 402529448: "Field Operations Notice 402529236 indicates the Gulley 1-D is scheduled for plugging. It is the only well that produces to the tank battery south of the former pit area. Oily soil exists on the surface west of the tank battery and should be removed and properly disposed of along with any other oil soil encountered during removal of the crude tanks and separator. Include confirmation soil samples in the area west of the tanks for BTEX and TPH along with the pit confirmation soil sample results on a supplemental eForm 27."</p> <p>3. A spill reported near the heater-treater and assigned Spill ID #469938 remains unresolved. This Spill must be resolved with appropriate disposal documentation and confirmation soil sampling.</p>
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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**

402593298	FORM 27-SUPPLEMENTAL-SUBMITTED
402593301	CORRESPONDENCE
402593302	PHOTOS
402593303	ANALYTICAL RESULTS
402593304	ANALYTICAL RESULTS

Total Attach: 5 Files

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

		Stamp Upon Approval
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Total: 0 comment(s)