

State of Colorado
Energy & Carbon Management Commission

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Document Number:
403808631
Receive Date:
06/13/2024
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 ECMC 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>PDC ENERGY INC</u>	Operator No: <u>69175</u>	Phone Numbers Phone: <u>(303) 860-5800</u> Mobile: <u>()</u>
Address: <u>1099 18TH STREET SUITE 1500</u>		
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Karen Olson</u>	Email: <u>taspillremediationcontractor@pdce.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 33447 Initial Form 27 Document #: 403626812

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: _____

SITE INFORMATION

Yes Multiple Facilities

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>123-37692</u>	County Name: <u>WELD</u>
Facility Name: <u>Merritt 6-66-9-0560CH</u>	Latitude: <u>40.509320</u>	Longitude: <u>-104.781140</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>9</u>	Twp: <u>6N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>123-37694</u>	County Name: <u>WELD</u>
Facility Name: <u>Merritt 6-66-9-0758BH</u>	Latitude: <u>40.509320</u>	Longitude: <u>-104.780700</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>9</u>	Twp: <u>6N</u>	Range: <u>66W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: WELL	Facility ID: _____	API #: 123-37706	County Name: WELD
Facility Name: Merritt 6-66-9-0857CH	Latitude: 40.509330	Longitude: -104.780480	
** correct Lat/Long if needed: Latitude: 40.509328		Longitude: -104.780489	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37710	County Name: WELD
Facility Name: Merritt 6-66-9-0659BH	Latitude: 40.509320	Longitude: -104.781030	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37713	County Name: WELD
Facility Name: Merritt 6-66-9-0659CH	Latitude: 40.509320	Longitude: -104.780980	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37722	County Name: WELD
Facility Name: Merritt 6-66-9-0560BH	Latitude: 40.509320	Longitude: -104.781200	
** correct Lat/Long if needed: Latitude: 40.509324		Longitude: -104.781206	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37729	County Name: WELD
Facility Name: Merritt 6-66-9-0758CDH	Latitude: 40.509330	Longitude: -104.780580	
** correct Lat/Long if needed: Latitude: 40.509328		Longitude: -104.780595	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37734	County Name: WELD
Facility Name: Merritt 6-66-9-0857BH	Latitude: 40.509330	Longitude: -104.780530	
** correct Lat/Long if needed: Latitude: 40.509327		Longitude: -104.780544	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes
Facility Type: WELL	Facility ID: _____	API #: 123-37740	County Name: WELD
Facility Name: Merritt 6-66-9-0758CH	Latitude: 40.509320	Longitude: -104.780640	
** correct Lat/Long if needed: Latitude: 40.509328		Longitude: -104.780646	
QtrQtr: NWNE	Sec: 9	Twp: 6N	Range: 66W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use Agricultural
 Is domestic water well within 1/4 mile? Yes 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

Wellheads (0560BH, CH; 0659BH, CH; 0758BH, CDH, CH; 0857BH, CH): Nearest Well: Temporary Dewatering Well - Between 439' and 618' NW; Surface Water: Intermittent Creek - Between 457' and 600' NW; Occupied Building: Between 362' and 478' SW; Livestock: Between 293' and 297' N; FWS Wetlands: Between 440' and 568' NW Riverine (R5UBFx); 100-Year Floodplain Between 206' and 548' SW of Wellheads.

Flowline Conflict: Flowlines Cross into 100-Year Floodplain Between Approximately 406' and 587' SW of Wellheads and Traverses Approximately 761' SW Through Floodplain. Flowlines Cross Intermittent Stream Between Approximately 790' and 982' SW of Wellheads.

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	Refer to attached figures & tables	Confirmation Soil Sampling

INITIAL ACTION SUMMARY

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

Between February 26 and April 3, 2024 decommissioning and confirmation sampling activities were conducted at the former Merritt 6-66-9-0560BH wellhead, Merritt 6-66-9-0560CH wellhead, Merritt 6-66-9-0659BH wellhead, Merritt 6-66-9-0758BH wellhead, Merritt 6-66-9-0758CDH wellhead, Merritt 6-66-9-0758CH wellhead, Merritt 6-66-9-0857BH wellhead, Merritt 6-66-9-0857CH wellhead, and removal of the associated flowlines. Due to field scheduling delays, the Merritt 6-66-9-0659CH wellhead has yet to be cut and capped. Confirmation sampling adjacent to the Merritt 6-66-9-0659CH wellhead is pending scheduling.

Based on field observation and initial analytical results, on February 29, 2024, a historic release was discovered at the Merritt 6-66-9-0659BH Wellhead. Based on source material characterization soil sample analytical results (WH01-B, WC01), COCs for this release location include: BTEXN, TPH(C6-C36), pH, acenaphthene, benzo(a)anthracene, fluorene, pyrene, 1-methylnaphthalene (M), 2-M, arsenic, barium, cadmium, selenium, and zinc. Following the discovery of the release, approximately 24 cubic yards of impacted material were removed and transported to North Weld Waste Management in Ault, CO for disposal under PDC waste manifests. Between February 28 and March 1, 2024, 9 soil samples (SS01-SS05, WH01-[directional]) were collected from the base and sidewalls of the final excavation extent and were submitted for laboratory analysis of the full Table 915-1 analytical suite. Additionally, one soil sample (SS06) was collected from the root zone of the final excavation extent and submitted for laboratory analysis of pH, EC, SAR, and boron. Analytical results indicated organic compounds were below the applicable Table 915-1 Protection of Groundwater (POG) Soil Screening Levels (SSLs) from samples collected from the final excavation extent.

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):

On March 19, 2024, a second historic release was discovered following receipt of final analytical results from soil samples collected during decommissioning activities at the Merritt 6-66-9-0660CH Wellhead. Following the discovery of the release, approximately 9 cubic yards of impacted material were removed and transported to North Weld Waste Management in Ault, CO for disposal under a PDC waste manifest. On February 27, 2024, three soil samples (WH02, FLR02 & COMP01-FL02) were collected during the decommissioning of the wellhead. Soil samples were collected at depths ranging between approximately 4 feet and 6 feet below ground surface (bgs). The soil samples were submitted for laboratory analysis of the full ECMC Table 915-1 analytical suite. Final analytical results indicated that organic compounds were in exceedance of the applicable ECMC Table 915-1 POG SSLs in soil sample WH02, and release specific COCs include: BTEXN, TPH(C6-C36), pH, fluorene, 1-M, 2-M, and barium.

Proposed Groundwater Sampling

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

If groundwater is encountered during decommissioning and/or abandonment activities, a grab sample will be collected as soon as practical. If contaminated soil is in contact with groundwater or if free product/hydrocarbon sheen are observed, the release will be reported in accordance with Rule 912.b. Groundwater samples will be submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260, chloride and sulfate anions by EPA Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

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):

On June 6, 2024, a third historic release was discovered following review of analytical results from a soil sample collected during decommissioning activities at the Merritt 6-66-9-0659CH Wellhead at the flowline riser at the soil sample FLR05 location. On March 13, 2024, one soil sample (FLR05) was collected below flowline riser at a depth of approximately 4 feet below ground surface (bgs). One soil sample (COMP01-FL05) was collected below the compressor flowline riser at a depth of approximately 4 feet bgs. The soil samples were submitted for laboratory analysis of the full Table 915-1 analytical suite. Final analytical results indicated that organic compounds were in exceedance of the applicable ECMC Table 915-1 POG SSLs in soil sample FLR05, and release specific COCs include: BTEXN, TPH(C6-C36), pH, 1-M, 2-M, arsenic, barium and selenium.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 93

Number of soil samples exceeding 915-1 74

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

Approximate areal extent (square feet) 300

NA / ND

-- Highest concentration of TPH (mg/kg) 2090

-- Highest concentration of SAR 6

BTEX > 915-1 Yes

Vertical Extent > 915-1 (in feet) 9

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 915-1

 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 915-1

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?

Between March 1 and April 3, 2024, two soil borings (BKG01 & BKG02) were advanced in native material adjacent to the wellhead locations and soil samples were collected at depths ranging between 4 feet and 8 feet bgs. Samples were submitted for laboratory analysis of pH, EC, SAR, and the Table 915-1 metals. Analytical results indicated SAR, arsenic, and barium were observed in exceedance of the applicable Table 915-1 standards in native material soil samples.

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

Volume of solid waste (cubic yards) 35

Volume of liquid waste (barrels) 0

Is further site investigation required?

Due to field scheduling delays, cut and cap and corresponding confirmation soil sampling of the Merritt 6-66-9-0659CH wellhead is currently being scheduled. Confirmation soil sampling will be collected in conjunction with decommissioning activities or the warranted source mass removal activities associated with the release identified in the corresponding FLR05 soil sample.

Source mass removal activities for the release identified at the WH02 soil sample location are currently in progress. Confirmation soil samples will be collected from the base and sidewalls of the final excavation extent and analyzed for the ECOM Director's approved COC list.

Following the review of decommissioning confirmation soil samples and infrastructure layout, PDC identified two locations along the flowline between the wellhead pad and Merritt Tank Battery which confirmation soil samples are warranted. Following landowner and crew availability, two additional soil borings will be advanced along the former flowline location to collect confirmation soil samples adjacent to a bend in the gas line and in the previously proposed soil sample location, near FL01-06. Proposed soil boring locations are detailed on Figure 5.

Concurrent or subsequent to the source mass removal activities, additional soil samples will be collected in native material to further evaluate soil suitability for reclamation (SSR) or Table 915-1 metal concentrations in native material.

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.

On February 27, 2024, approximately 9 cubic yards of impacted material were removed adjacent to the former Merritt 6-66-9-0560CH Wellhead. Between February 28 and March 1, 2024, approximately 24 cubic yards of impacted material were removed adjacent to the former Merritt 6-66-9-0659BH Wellhead. On February 29, 2024, approximately 2 cubic yards of impacted material were removed adjacent to the former Merritt 6-66-9-0857BH Wellhead.

All impacted soils removed from site was transported to North Weld Waste Management in Ault, CO for disposal under PDC waste manifests.

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.

A total of 86 confirmation soil samples were collected during the decommissioning of the former Merritt 6-66-9-0560BH wellhead, Merritt 6-66-9-0560CH wellhead, Merritt 6-66-9-0659BH wellhead, Merritt 6-66-9-0659CH wellhead, Merritt 6-66-9-0758BH wellhead, Merritt 6-66-9-0758CDH wellhead, Merritt 6-66-9-0758CH wellhead, Merritt 6-66-9-0857BH wellhead, Merritt 6-66-9-0857CH wellhead, removal of the associated flowlines, and decommissioning of the equipment manifolds. Additionally, the ground and sub surfaces were visually inspected for hydrocarbon impacts during abandonment activities, including field screened soil samples collected from the surface in cardinal directions of the wellheads. In response to the COA issued on initial form 27 Document # 403626812, a total of 22 soil samples were collected adjacent to the equipment manifold. Confirmation soil samples were submitted for laboratory analysis of the Full Table 915-1 analytical suite. Any organic exceedances were identified and described in the aforementioned sections of this SF27. Decommissioning confirmation soil sample analytical results also indicated pH, arsenic, cadmium, and selenium were commonly observed in exceedance of the applicable ECMC Table 915-1 standards. Following the completion of the Merritt 6-66-9-0659CH wellhead decommissioning and aforementioned source mass removal activities to address remaining organic impacts, soil samples will be collected adjacent to the wellheads to further evaluate SSR and metal constituents in native material. Following review of results a sitewide remedial plan will be provided to address remaining SSR or metal exceedances remaining on location in exceedance of ECMC Table 915-1 standards or representative background concentrations.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

Yes _____ Excavate and offsite disposal

_____ Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) _____ 35

_____ Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or ECMC 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

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 Confirmation Sample Summary, Site inv. & source mass removal proposal, & analyte red. request, TU _____

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Operator does not have site-specific financial assurance for this project; however, Operator has inactive well, blanket, and surface bonding including Surety IDs 106077122, 106473808, and 106473820, as well as commercial general liability and/or umbrella/excess insurance meeting the requirements of Rule 705.b. Operator does not anticipate making an insurance claim for this project.

- Decommissioning and confirmation soil sampling activities associated with the former Merritt 6-66-9-0560BH wellhead, Merritt 6-66-9-0560CH wellhead, Merritt 6-66-9-0659BH wellhead, Merritt 6-66-9-0758BH wellhead, Merritt 6-66-9-0758CDH wellhead, Merritt 6-66-9-0758CH wellhead, Merritt 6-66-9-0857BH wellhead, Merritt 6-66-9-0857CH wellhead, and removal of the associated flowlines have been completed
- Decommissioning and confirmation soil sampling of the Merritt 6-66-9-0659CH flowline has been completed, Merritt 6-66-9-0659CH wellhead decommissioning is currently being scheduled.
- Source mass removal activities adjacent to the Merritt 6-66-9-0659CH Wellhead and Merritt 6-66-9-0660CH Wellhead are currently ongoing
- Additional site investigation activities are warranted to address SSR and metal conditions in native material.

Costs included herein are estimates only and may change over time based on numerous factors. Accordingly, Operator makes no guarantees as to the accuracy of such cost estimates, thus providing an estimate for the next year below.

Operator anticipates the remaining cost for this project to be: \$ 50000 _____

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 _____ 35

E&P waste (solid) description Hydrocarbon Impacted Material

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: North Weld Waste Management

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

E&P waste (liquid) description _____

ECMC Disposal Facility ID #, if applicable: _____

Non-ECMC Disposal Facility: _____

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No

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? _____

Does the previous reply indicate consideration of background concentrations? _____

Does Groundwater meet Table 915-1 standards? _____

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the ECMC 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.

Reclamation will be conducted in accordance with ECMC 1004 Series Rules.

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. 02/28/2024

Proposed date of completion of Reclamation. 06/13/2029

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. 10/26/2023

Actual Spill or Release date, or date of discovery. 02/29/2024

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/08/2024

Proposed site investigation commencement. 06/13/2024

Proposed completion of site investigation. 09/30/2024

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/13/2024

Proposed date of completion of Remediation. 09/30/2024

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:

The implementation schedule has been updated to reflect the necessity to complete decommissioning activities at the Merritt 6-66-9-0659CH Wellhead, as well as conduct supplemental source mass removal activities adjacent to the Merritt 6-66-9-0659CH Wellhead and Merritt 6-66-9-0660CH Wellhead. All activities are currently ongoing or in the process of being scheduled.

OPERATOR COMMENT

This supplemental form 27 was submitted to summarize the decommissioning and confirmation soil sampling activities conducted at the former Merritt 6-66-9-0560BH wellhead, Merritt 6-66-9-0560CH wellhead, Merritt 6-66-9-0659BH wellhead, Merritt 6-66-9-0758BH wellhead, Merritt 6-66-9-0758CDH wellhead, Merritt 6-66-9-0758CH wellhead, Merritt 6-66-9-0857BH wellhead, Merritt 6-66-9-0857CH wellhead, partial decommissioning of the Merritt 6-66-9-0659CH wellhead, removal of the associated manifolds, and removal of the associated flowlines. Due to field scheduling delays, the Merritt 6-66-9-0659CH wellhead decommissioning is currently being scheduled.

Three historic reportable releases were discovered during decommissioning activities, one at each of the following locations: Merritt 6-66-9-0659CH, Merritt 6-66-9-0560CH, Merritt 6-66-9-0659BH.

Based on the source material characterization sample collected adjacent to the former Merritt 6-66-9-0659CH Wellhead PDC requests COCs for this release location to include: BTEXN, TPH(C6-C36), pH, acenaphthene, benzo(a)anthracene, fluorene, pyrene, 1-methylnaphthalene (M), 2-M, arsenic, barium, cadmium, selenium, and zinc.

Based on decommissioning field observations, it appears the releases discovered adjacent to the former Merritt 6-66-9-0660CH Wellhead and the former Merritt 6-66-9-0659CH Wellhead are combined. With this in consideration, PDC requests the COCs for the above two release be limited to: BTEXN, TPH(C6-C36), pH, fluorene,1-M, 2-M, arsenic, barium and selenium.

Source mass removal activities for the release identified at the WH02 soil sample location are currently in progress. Additionally, Confirmation soil samples will be collected in conjunction with decommissioning activities or the warranted source mass removal activities associated with the release identified in the corresponding FLR05 soil sample. Confirmation soil samples will be collected from the base and sidewalls of the final excavation extent and analyzed for the ECMC Director's approved COC list.

Concurrent or subsequent to the source mass removal activities, additional soil samples will be collected in native material to further evaluate soil suitability for reclamation (SSR) or Table 915-1 metal concentrations in native material. Two additional soil borings will be advanced along the former flowline location to collect confirmation soil samples adjacent to a bend in the gas line and in the previously proposed soil sample location, near FL01-06.

PDC will continue to provide quarterly timeline updates through the submittal of Supplemental Form 27 reports until closure criteria is achieved.

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

Signed: Karen Olson

Title: Remediation Advisor

Submit Date: 06/13/2024

Email: taspillremediationcontractor@pdce.com

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

ECMC Approved: RICK ALLISON

Date: 06/18/2024

Remediation Project Number: 33447

COA Type

Description

	ECMC requests Operator to list associated well names and spill ID numbers on soil sample summary table above associated with soil sample locations.
	Operator shall continue to analyze soil samples at all release locations for Table 915-1 Organic Compounds in Soil, Soil TPH (C6-C36), arsenic, barium selenium and pH.
2 COAs	

ATTACHMENT 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

403808631	FORM 27-SUPPLEMENTAL-SUBMITTED
403824007	ANALYTICAL RESULTS
403824011	SOIL SAMPLE LOCATION MAP
403824067	SITE INVESTIGATION PLAN

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	ECMC notes well Merritt 6-66-9-0659BH well not yet assessed.	06/18/2024
Environmental	ECMC notes background sample locations BKG01 and BKG02 appear to be from within the original Merritt 6-66-9 well pad.	06/18/2024

Total: 2 comment(s)