



RUH STATE SOUTH PAD SWMP

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Article I. Introduction

Location Information

This document provides site-specific information for the Ruh State South Pad within the Ruh State OGD. The information in this document relates specifically to the time during the construction, drilling, completion, and production of the eight (8) proposed horizontal wells on this location.

The proposed location is dryland crop on the west side of WCR 83 approximately 7392' south of the intersection with WCR 74. The Pad will be in the SENE of Section 11, Township 6 North, Range 62 West, Zoned Agricultural within Weld County Ag-Rural Planning Area. A 1041WOGLA Local Gov Permit was approved as 1041WOGLA22-0022.

The proposed Pad will be 10.90 acres, reduced to 8.54 after interim reclamation. The working pad surface will be 6.22 acres. The Pad is on Parcel 079711100004 owned by Marjorie L and William G Ruh. The location is currently used for farming.

The proposed production facility equipment for the Ruh State South Pad will be located within the Working Pad Surface adjacent to the wells and will consist of oil tanks, water tanks, meter buildings, separators, vapor recovery towers, compressors, vapor recovery units, LACT units, scrubbers, skids, pumps, and proposed electrical and/or solar equipment.

Phase	Duration (days)	Estimated Start Date
Construction	24	2 nd Quarter (May), 2024
Drilling	56	2 nd Quarter (June), 2024
Completion	56	3 rd Quarter (August), 2024
Flowback	90	3 rd Quarter (September), 2024
Production	9,150	4 th Quarter (December), 2024
Interim Reclamation	15	4 th Quarter (December), 2024*

**or the first favorable growing season.*

Article II. Site Information

Soil Description

- Soil type(s): 6 - Ascalon sandy loam, 3 to 5 percent slopes; 47 - Olney fine sandy loam, 1 to 3 percent slopes; 63 - Terry fine sandy loam, 3 to 9 percent slopes
- Total area of soil disturbance in acres including accesses: 10.97 acres

Vegetation Description

- Dry Land Crop

Known Weed Infestations

- None



Non-stormwater discharges

- Non-stormwater discharges are not expected. There are no municipal discharge outfalls within the immediate vicinity. Storm culverts and diversion ditches in close proximity to construction activities associated with this Project Area are detailed on the site-specific grading plans.

Receiving waters

- The Project area covered by CDPHE permit COR419118 includes the Cache La Poudre Subbasin (USGS Hydrologic Unit Code [HUC] 10190007), the Lone Tree-Owl Sub-basin (HUC 10190008), the Crow Sub-basin (HUC 10190009), and the Middle South Platte-Cherry Creek Sub-basin (HUC 10190003), which are part of the South Platte Basin (HUC 101900). The ultimate receiving water is the South Platte River.

CDPS Permit

- PERMIT COR419118.

Operator Stormwater Manager

- The authorized officer(s) for this SWMP:

HERV Oil, LLC
3839 McKinney Ave., Suite 155-830
Bennett Neale
Vice President of Land
405-883-7005
bennett.neale@hervoil.com

Article III. Stormwater Management Control Measures

Potential Pollution Sources

- Potential pollutant sources will be inspected on a regular basis and include:
 - All disturbed and stored soils
 - Vehicle tracking of sediments
 - Management of contaminated soils
 - Loading and unloading operations
 - Outdoor storage activities
 - Vehicle and equipment maintenance and fueling
 - Significant dust or particulate generating processes
 - Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.
 - On-site waste management practices
 - Truck/equipment washing
 - Non-industrial waste sources such as worker trash and portable toilets



Pollution Prevention

- As part of the regular stormwater inspections, all disturbed and stored soils will be monitored to ensure sediment transport is not occurring.
- Vehicle tracking pads will be installed where gravel county road meet access.
- Areas of contaminated soils will be identified through regular inspections. If found, contaminated soils will be excavated and disposed at an appropriate facility. Soil sampling will be conducted upon completion of excavation and removal activities to ensure contaminated soils have been removed.
- No fertilizers or building materials will be kept on-site. Bulk storage, 55 gallons or greater, for petroleum products and other liquid chemicals must have secondary containment.
- Limited vehicle and equipment maintenance and fueling is expected to occur at the project facilities. On-site maintenance and fueling will be done in designated areas cleared of vegetation and located away from any drainage areas.
- Areas of disturbed soils will be stabilized, and areas needed during the Production phase of operations will be hard surfaced after construction operations are completed.
- Dumpsters for worker trash will be maintained on site and portable toilets will be staked and located in a safe area where the potential of accidental tipping is reduced.

Structural and Non-Structural Practices

- Structural practices used on the project include earthen berms, fiber rolls, diversion ditches (lined and unlined), check dams, culvert outlet protection, temporary slope drains, and sediment traps.
- Non-structural erosion and sediment control techniques include phasing construction, minimizing disturbance to existing vegetation, preservation of natural vegetation, re-establishing/replacing vegetation, mulching, rolled erosion control products, surface roughening, and land grading.

Erosion Controls

- Please see BMP below for site-specific Erosion Control BMP.

Vehicle Tracking Control

- VTCs include, but are not limited to, asphalt- or rock-armored entrances or utilizing street sweeping operations to control tracking of sediment onto adjacent roads.

Materials handling and Spill prevention

- Materials stored at the construction site will be covered or otherwise protected from the elements



- The quantity of fuel and lubricants stored on the construction site will be limited to the amount that is reasonable to support the specific construction or maintenance activity
- Bulk storage areas for materials not consumed daily will be enclosed and protected from the elements and contained in a manner to prevent release to the environment
- General construction site debris will be stored in trash containers and removed from the job site on a regular basis to prevent overflowing.

Management of Waste Material

- Wastes will be managed so as to not contribute to stormwater pollution as detailed in the Waste Management Plan.

Article IV. Site-Specific Construction and Stormwater/Erosion Control Measures

Initial Construction Layout Drawings

- Please see Grading Plan sheets.

Interim Reclamation and Production Areas Construction Layout Drawings

- Please see Grading Plan sheets.

Article V. Inspections and Maintenance Procedures

Training

- Please see BMP below for site-specific training BMP.

Scope of Inspections

- The construction site perimeter, all disturbed areas, designated haul roads, material and waste storage areas exposed to precipitation, locations where stormwater has the potential to discharge offsite, and locations where vehicles exit the site will be inspected for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters. During the inspection, the operator, or their designee, will:
 - Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges.
 - Determine if there are new potential sources of pollutants.
 - Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges.



- Identify all areas of noncompliance with the Permit requirements and, if necessary, implement corrective actions.

State and Local Inspection Requirements

- All inspections shall be in accordance with the Colorado Department of Public Health and Environment's CDPS General Permit for Stormwater Discharges Associated with Construction Activity, and the Colorado Oil and Gas Conservation Commission (COGCC) 304.c.15 and 1002.f rules and requirements.

Inspection Procedures and Frequency

- Audible, Visual, and Olfactory (AVO) inspections of the facility are conducted daily by HERV. Any valve or fitting that is found to be ineffective is either repaired immediately or well shut-in procedures are implemented.
- Equipment and transfer lines will be monitored daily during well drilling and completion for signs of drips, leaks, or spills, which will be corrected promptly.
- Similar to production, AVO inspections include a comprehensive evaluation of all pre-production equipment located on-site (tanks, engines, piping, etc.). In addition to frequent AVOs, the locations are manned and monitored on-site 24/7, and additional comprehensive inspections are conducted for drilling and completions/workovers. During drilling activities, a pre-spud inspection is completed before moving to a new well.
- During drilling operations, regular Auditory, Visual, and Olfactory Monitoring (AVO) inspections are performed on equipment containing hydrocarbons, fluids, or associated chemicals. AVO inspections include taking the time to look, smell and listen for leaks. The fluid management system used during drilling operations is monitored from the rig floor ("dog-house") for changes in pressure, volume, or rate which are used as indicators for leak detection. In the event abrupt changes in operating conditions are identified on surface equipment used to manage fluids, the rig including transfer lines and storage tanks are inspected by personnel onsite. Operator utilizes an impermeable polyethylene liner beneath the drilling rig during drilling operations. The use of this liner prevents hydrocarbons and other fluids from reaching the soil in the unlikely event a leak does occur. The liner is inspected for integrity throughout drilling operations and maintenance/repair to the liner occurs as needed.
- During completion operations, regular AVO inspections are performed on all lines, tanks, totes, or other vessels containing hydrocarbon, fluids, or fluid additives as well as any lines through which hydrocarbons or other fluids pass through. The fluid transfer system used during completion operations is monitored from the on-site mobile command center for changes in pressure, volume, or rate which are used as indicators for leak detection. In the event abrupt changes in operating conditions are identified on equipment used to in fluid transfer, completions personnel are deployed to inspect the system including pumps, transfer lines and storage tanks. Operator utilizes an impermeable polyethylene liner beneath the drilling rig during drilling operations. The use of this liner prevents hydrocarbons and other fluids from reaching the soil in the unlikely event a leak does occur. The liner is inspected for integrity throughout drilling operations and maintenance/repair to the liner occurs as needed.



Reporting and Recordkeeping Requirements

- Spill response includes notifications, reporting, response actions, remediation, and corrective actions. Waste be properly classified as E&P or non-E&P wastes. For E&P waste, all spills greater than 1 barrel (outside containment) or greater than 5 barrels (inside containment) will be reported to the COGCC using a Form 19. Should remediation be required, Form 27 will also be submitted. Spills related to non-E&P waste will be managed in accordance with CDPHE and EPA regulations depending on the volume spilled. HERV tracks and cleans up all spills, including those that are not reportable. HERV documents the monitoring process and copies of inspection and maintenance logs are available upon request.

Article VI. Site-Specific Construction and Stormwater/Erosion Control BMP

- Stabilization and revegetation will be performed as part of interim reclamation.
- Ingress, egress, and parking will occur in designated areas.
- Stormwater inspection will be performed at least every 7 days during well production and every 30 days after interim reclamation.
- Operator will install stormwater controls, constructed in a manner that is consistent with good engineering practices, that will prevent offsite migration of sediment/contaminant, into the nearby sensitive areas.
- Stormwater controls shall be installed prior to construction activities.
- Gas, oil, and water gathering lines will be co-located to minimize potential for erosion associated with construction of any pipeline(s).
- The stormwater system for the Ruh State South Pad includes one emergency spillway w/ concrete cutoff wall, a diversion channel, and a detention pond with an outlet structure.
- All segregated soil horizons removed from crop lands will be replaced to their original relative positions and contour and will be tilled adequately to re-establish a proper seedbed and treated as needed for erosion control and invasive species prevention. Any perennial forage crops that were present before disturbance will be reestablished.
- Operator will be responsible for segregating the topsoil, backfilling, re-compacting any backfill, reseeding, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations and will reclaim such area to be returned to preexisting conditions as best as possible with control of all weeds.
- Any areas reclaimed that will not be returned to farming operations will be planted with the recommended CPW/Weld County seed mix.
- Those persons responsible for inspections and monitoring will be trained on the contents of the Plan and the requirements herein.
- Operator shall install stormwater controls, constructed in a manner that is consistent with good engineering practices, that will prevent offsite migration of sediment/contaminant, into the nearby sensitive areas. Stormwater controls shall be installed prior to construction activities. Gas, oil, and water gathering lines will be co-located to minimize potential for erosion associated with construction of any pipeline(s).
- Pumper will visit the location daily and visually inspect all wellheads and fittings for leaks, corrosion, or other conditions that could lead to a discharge.

Article VII. Exhibits/References/Appendices



CDPHE Stormwater General Permit



COLORADO

**Department of Public
Health & Environment**

**CERTIFICATION TO DISCHARGE
UNDER
CDPS GENERAL PERMIT COR400000
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES**

Certification Number: COR419118

This Certification to Discharge specifically authorizes:

**Owner HERV Oil, LLC
Operator HERV Oil, LLC
to discharge stormwater from the facility identified as**

Ruh South

To the waters of the State of Colorado, including, but not limited to:

South Platte River

Facility Activity : Oil and Gas Exploration and Well Pad Development

Disturbed Acres: 8.54 acres

Facility Located at: 7500-ft south of the intersection of Weld County roads 74 and 83
Briggsdale CO 80611
Weld County
Latitude 40.502637 Longitude -104.281977

**Specific Information
(if applicable):**

Certification is issued and effective: 12/28/2022
Expiration date of general permit: 3/31/2024

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

This certification was approved by:
Randi Johnson-Hufford, Permits Unit 1 Manager
Permits Section
Water Quality Control Division

