

RECEIVED

District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
220 South St. Francis Dr.
Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
 Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: VANGUARD PERMIAN, LLC. OGRID #: 258350
Address: 1209 SOUTH MAIN LOVINGTON, NEW MEXICO 88260
Facility or well name: STATE SEC. "12" # 1
API Number: 30-025-39042 OCD Permit Number: P1-00207
U/L or Qtr/Qtr E Section 12 Township 17S Range 36E County: LEA
Center of Proposed Design: Latitude 32.852275N Longitude 103.314985W NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation Steel Pit
 Lined Unlined
Liner type: Thickness _____ mil LLDPE HDPE PVC
 Other _____ String-Reinforced
Seams: Welded Factory Other _____
Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

Closed-loop System: Subsection H of 19.15.17.11 NMAC
 Drying Pad Tanks Haul-off Bins Other _____
 Lined Unlined
Liner type: Thickness _____ mil LLDPE HDPE PVC
 Other _____
Seams: Welded Factory Other _____
Volume: _____ bbl _____ yd³
Dimensions: Length _____ x Width _____

Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl
Type of fluid: _____
Tank Construction material: _____
 Secondary containment with leak detection
 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
 Visible sidewalls and liner
 Visible sidewalls only
 Other _____
Liner type: Thickness _____ mil HDPE PVC
 Other _____

Fencing: Subsection D of 19.15.17.11 NMAC
 Chain link, six feet in height, two strands of barbed wire at top
 Four foot height, four strands of barbed wire evenly spaced between one and four feet
Netting: Subsection E of 19.15.17.11 NMAC
 Screen Netting Other _____
 Monthly inspections
Signs: Subsection C of 19.15.17.11 NMAC
 12'x24', 2' lettering, providing Operator's name, site location, and emergency telephone numbers
 Signed in compliance with 19.15.3.103 NMAC

Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Administrative Approvals and Exceptions:
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.
Please check a box if one or more of the following is requested, if not leave blank:
 Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Proposed Closure: 19.15.17.13 NMAC

- Type: Drilling Workover Emergency Cavitation Permanent Pit Below-grade Tank Closed-loop System Alternative
- Proposed Closure Method: Waste Excavation and Removal
 Waste Removal (Closed-loop systems only)
 On-site Closure Method (Only for temporary pits and closed-loop systems)
 In-place Burial On-site Trench Burial
 Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---|---|
| Ground water is less than 50 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.
- Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 500 feet of a wetland.
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within the area overlying a subsurface mine.
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within an unstable area.
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within a 100-year floodplain.
- FEMA map | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Siting Criteria (regarding permitting): 19.15.17.10 NMAC
Instructions: *The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. Yes No
 - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Yes No
 - Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Yes No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)
 NA
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Yes No
(Applies to permanent pits)
 NA
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. Yes No
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. Yes No
 - Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within 500 feet of a wetland. Yes No
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Within the area overlying a subsurface mine. Yes No
 - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area. Yes No
 - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain. Yes No
 - FEMA map

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: *Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
 Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
 Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
 Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
 Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: *Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 NMAC
 Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
 Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
 Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
 Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
 NMAC

Previously Approved Design (attach copy of design) API Number: _____

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) *Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.*

Disposal Facility Name: GANDY-MARLEY Disposal Facility Permit Number: NM-711-1-0020

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): NEWT PAINTER Title: PRODUCTION FOREMAN

Signature:  Date: 07/23/08

e-mail address: _____ Telephone: Office 575-396-0812

OCD Approval: Permit Application (including closure plan) Closure Plan (only)

OCD Representative Signature:  Approval Date: 7/24/08

Title: Dist. Supervisor OCD Permit Number: PI-00207

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Closure Completion Date: _____

Closure Method:

- Waste Excavation and Removal On-Site Closure Method Alternative Closure Method
- If different from approved plan, please explain.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice
- Proof of Deed Notice (if applicable)
- Plot Plan
- Confirmation Sampling Analytical Results
- Waste Material Sampling Analytical Results
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: 1927 1983

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Closed Loop System Design Plan

Equipment list,
2- 414 Swaco Centrifuges
2- 4 screen Mongoose shale shakers
2- 250 BBL tanks to hold fluid
2- CRI Bins with track system
2- 500 BBL frac tanks for fresh water
2- 500 BBL frac tanks for brine water

Operation and Maintenance

Closed Loop equipment will be inspected daily by each tour and any necessary maintenance performed
Any leak in system will be repaired and/or contained immediately
OCD notified within 48 hours
Remediation process started

Closure Plan

During drilling operations all liquids, drilling fluids and cuttings
Will be hauled off via CRI (Controlled Recovery Incorporated Permit R-
9166). *NM-01-~~0003~~ 0006*

Alternate Company for disposal of cuttings, drilling fluids. Gandy Marley
Permit # *NM-211-1-0020*