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

Type of action:  
[X] 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
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted 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 authorities’ rules, regulations or ordinances

Operator: Marshall and Winston Incorporated  OGRID #: 014187
Address: P.O. Box 50880, Midland, TX 79710-0880
Facility or well name: Boot Hill 25 # 1

API Number: 30-015-38552  OCD Permit Number: 212623
U/L or OR/QT B to J  Section 36 to 25  Township 19 S  Range 25 E  County: Eddy
Center of Proposed Design: Latitude 32.622702 N  Longitude 106.807322 W  NAD: 1927 1983
Surface Owner: ☐ Federal  ☑ State  ☑ Private  ☐ Tribal Trust or Indian Allotment  (Crosses Section Lines)

[ ] Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary:  ☐ Drilling  ☐ Workover
☐ Permanent  ☐ Emergency  ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined  Liner type: Thickness _________ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other  Closed Loop System
☐ String-Reinforced
☐ Liner Seams: ☐ Welded ☐ Factory ☐ Other
Volume: _________ bbl  Dimensions: L _____ x W _____ x D _____

[ ] Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A  ☑ Drilling a new well  ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☑ Haul-off Bins ☐ Other and steel tanks
☐ Lined ☐ Unlined  Liner type: Thickness _________ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ Liner Seams: ☐ Welded ☐ Factory ☐ Other

[ ] 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

[ ] Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
6. **Fencing:** Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
- Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)
- Four foot height, four strands of barbed wire evenly spaced between one and four feet

7. **Netting:** Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)
- Screen
- Netting
- Other
- Monthly inspections (If netting or screening is not physically feasible)

8. **Signs:** Subsection C of 19.15.17.11 NMAC
- 12" x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- Signed in compliance with 19.15.3.103 NMAC

9. **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.

10. **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.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</td>
<td></td>
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<tr>
<td>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</td>
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<td>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).</td>
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<tr>
<td>- Topographic map; Visual inspection (certification) of the proposed site</td>
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<tr>
<td>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks)</td>
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<tr>
<td>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</td>
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<tr>
<td>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)</td>
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<td>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</td>
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<td>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.</td>
<td></td>
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<td>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</td>
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<td>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.</td>
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<td>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</td>
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<tr>
<td>Within 500 feet of a wetland.</td>
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<tr>
<td>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</td>
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<td>Within the area overlying a subsurface mine.</td>
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<tr>
<td>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</td>
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<td>Within an unstable area.</td>
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<tr>
<td>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</td>
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<tr>
<td>Within a 100-year floodplain.</td>
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<td>- FEMA map</td>
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11. 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 (Please complete Boxes 14 through 18, if applicable) - 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: ____________________

12. 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 (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- Siting Criteria Compliance Demonstrations (only 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 (Please complete Boxes 14 through 18, if applicable) - 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: 30-025-39946

- Previously Approved Operating and Maintenance Plan  

API Number: 30-025-39946 (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13. 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

14. Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type: Drilling  Workover  Emergency  Cavitation  P&A  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)

15. 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 Above Ground Steel Tanks or 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. Use attachment if more than two facilities are required.

Disposal Facility Name: Controlled Recovery Inc.  Disposal Facility Permit Number: NM 01-0006

Disposal Facility Name:  Disposal Facility Permit Number:

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?

☐ Yes (If yes, please provide the information below)  ☒ No

Required for impacted areas which will not be used for future service and operations:

☐ 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

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

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

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

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
- Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial operation.
- 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 operation.
- NM Office of the State Engineer - IWATERS database; 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.
- Written confirmation or verification from the municipality; Written approval obtained from the municipality
- Within 500 feet of a wetland.
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site
- Within the area overlying a subsurface mine.
- Written confirmation or verification or map from the NM EMNRM-Mining and Mineral Division
- Within an unstable area.
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map
- Within a 100-year floodplain.
- FEMA map

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/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - 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): Vernon D. Dyer  
Title: Agent: D. Oil & Gas Properties

Signature: Vernon D. Dyer  
Date: 2-23-2011

e-mail address: vdyeroil@cableone.net  
Telephone: (575) 420-0355

OCD Approval: [X] Permit Application (including closure plan)  [ ] Closure Plan (only)  [ ] OCD Conditions (see attachment)

OCD Representative Signature: [Signature]  
OCD Permit Number: 212623

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

[ ] Closure Completion Date: ____________________________

Closure Method:
If different from approved plan, please explain.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: ____________________________  Disposal Facility Permit Number: ____________________________

Disposal Facility Name: ____________________________  Disposal Facility Permit Number: ____________________________

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?
[ ] Yes (If yes, please demonstrate compliance to the items below)  [ ] No

Required for impacted areas which will not be used for future service and operations:
[ ] Site Reclamation (Photo Documentation)  [ ] Soil Backfilling and Cover Installation  [ ] Re-vegetation Application Rates and Seeding Technique

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 (surface owner and division)
[ ] Proof of Deed Notice (required for on-site closure)
[ ] Plot Plan (for on-site closures and temporary pits)
[ ] Confirmation Sampling Analytical Results (if applicable)
[ ] Waste Material Sampling Analytical Results (required for on-site closure)
[ ] Disposal Facility Name and Permit Number
[ ] Soil Backfilling and Cover Installation
[ ] Re-vegetation Application Rates and Seeding Technique
[ ] Site Reclamation (Photo Documentation)

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 Maintenance Summary
NMOCD Rule 19.15.17 NMAC
District I, NMOCD,
Hobbs, NM at (575) 393-6161

Operator and Well:

Marshall and Winston Incorporated
Boot Hill 25 #1
SL: Sec. 36-B, T. 19 S., R. 25 E.,
BL Sec. 25-J T. 19 S., R. 25 E.
Eddy County, NM

Equipment:

The anticipated equipment shall consist of:
Above Ground steel tanks and or Roll-off steel tanks.
Dual motion shale shakers, solid removal centrifuges, gas separator, one 500 bbl
fresh water and one 500 bbl brine water frac tanks. The closed loop mud system
shall follow the guidance of regulations NM 19.15.17.11 NMAC.

Maintenance:

The drilling crew will inspect the closed loop circulating system at least once during
each tour. Inspections or maintenance shall be entered into the driller’s log. Any
release of spill discovered will be reported to the NMOCD at (575) 393-6161 within
24 hours in accordance to NMOCD Rule 19.15.29 NMAC.

Closure:

All circulating fluids and cuttings deemed for disposal shall be transported to one of
the following state permitted waste disposal sites to be determined:
1) Gandy Marley Inc., waste disposal site, Route 45 Crossroads, Hwy 380,
permit no. NM 711-01-020, EPID 0001002484.
2) Alternative disposal sites are Sundance Services, waste disposal site, located
three miles east of Eunice, NM permit no. NM-01-0003.
3) Control Recovery Inc. waste disposal site, Halfway, Hwy 62, permit no. NM-
01-0006.
Standard Closed Loop Mud System
March 1st, 2011

Donna Mull
NMOCMD
1625 N. French Dr.
Hobbs, NM 88240

Re: Attached is the C-144 for the Boot Hill 25 # 1

Dear Donna,

I submitted APD’s on February 28, 2011 for the Boot Hill 25 # 1 and # 2, Marshall & Winston, T. 19S. R. 25 E, the SHL is in sec. 36, BHL in sec. 25. The C-144 application for the No. 1 was not included. I am attaching it now.

Should the APD’s have error or incomplete regarding any matters, please contact me for any necessary requirements. Thank you.

Sincerely,

[Signature]

Gary Gourley