

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
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

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.

2303

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
☒ 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 authority's rules, regulations or ordinances.

1. Operator: BP AMERICA PRODUCTION COMPANY OGRID # 778
Address: 200 ENERGY COURT, FARMINGTON, NM 87410
Facility or well name: GALLEGOS CANYON UNIT 544
API Number 3004529317 OCD Permit Number _____
U/L or Qtr/Qtr P Section 7 Township 28.0N Range 11W County San Juan
Center of Proposed Design: Latitude 36.67271 Longitude 108.03859 NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☐ **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 _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3. ☐ **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 _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4. ☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 95 bbl Type of fluid: Produced water
Tank Construction material: Steel
☒ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other (Double wall/ Double Bottom with leak detection + Closure Plan attached)
Liner type Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

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



11

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
- ☐ Alternate Please specify _____

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. (*Retrofit Modification to Below-grade Tank* ☐ *Design/ Construction & Operating/ Maintenance Plans attached*)
- ☐ 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.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
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. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
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 search; 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

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: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (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 **Method - Confirmation sampling only** ☐ **Protocols and Procedures included in attached Closure Plan***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

16.

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: _____ Disposal Facility Permit Number: _____

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

17.

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

☐ Yes ☐ No
☐ 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

☐ Yes ☐ No
☐ 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

☐ Yes ☐ No
☐ 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

☐ Yes ☐ 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

☐ Yes ☐ 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

☐ Yes ☐ 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

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

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

19. **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): LARRY SCHLOTTERBACK

Title: ENVIRONMENTAL COORDINATOR

Signature: 

Date: OCTOBER 21, 2008

e-mail address: larry.schlotterback@bp.com

Telephone: (505) 326-9200

20. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: 

Approval Date: 3/26/2012

Title: Compliance Officer

OCD Permit Number: _____

21. **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: _____

22. **Closure Method:**

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23. **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

24. **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)

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

25. **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: _____

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Below-Grade Tank Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) shall construct a below-grade tank (BGT) with the following guidelines. Any deviations from this plan will be addressed with the submittal of the New Mexico Oil Conservation Division's (NMCOD) form C-144 at the time of the pit permit application.

- 1) The BGT will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
- 2) Prior to constructing a BGT, top soil will be stripped for use as a final cover or fill at the time of closure.
- 3) An upright sign, not less than 12" x 24" with lettering not less than 2" height will be placed on the fence surrounding the BGT. Alternatively, a well sign in compliance with 19.15.3.103 NMAC will be posted at the well site. The sign will give BP's name, location by quarter-quarter or unit letter, section, township, range, and emergency phone numbers.
- 4) BP will fence its BGTs (and possibly associated surface equipment, i.e. separator units, production tanks, etc.) utilizing 48" steel mesh field-fence (hogwire) with a ½ inch diameter metal top rail (sucker rod). Perimeter T-post will be installed roughly every 10 feet. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including a BGT.
- 5) BP will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church with a chain link security fence, at least six (6) feet in height with at least two (2) strands of barbed wire at the top. BP will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
- 6) It is understood that the NMOCD District III office may approve an alternative to this requirement if BP can demonstrate that an alternative provides equivalent or better protection. BP also recognizes that the NMOCD District III office may impose additional fencing requirements for protection of wildlife in particular areas.
- 7) The following requirements adhere to Subsection I of 19.15.17.11 NMAC.
 - a. BP will ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight.
 - b. A BGT system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.
 - c. The BGT will be constructed to prevent overflow and the collection of surface water run-on by using earthen berms and/or diversion dikes.
 - d. Construction and usage of a BGT that does not have double walls provided that the BGT's side walls are open for visual inspection for leaks, the BGT's bottom is elevated a minimum of six (6) inches above the underlying ground surface and the BGT is underlain with a geomembrane liner, which may be covered with gravel, to divert leaked liquid to a location that can be visually inspected. BP will equip BGTs designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the NMOCD District III office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1×10^{-9} cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility will comply with EPA SW-846 method 9090A..

- e. Any other BGT, in which the side walls are not open for visible inspection for leaks shall be double walled with leak detection capability.
- f. BP's BGTs constructed and installed prior to June 16, 2008 that have the side walls open for visual inspection and are placed upon a geomembrane liner but does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC are not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as the BGTs demonstrate integrity. If the existing BGTs do not demonstrate integrity, then BP will promptly remove those BGT and install a BGT that do comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- g. BP's BGTs constructed and installed prior to June 16, 2008 that do not comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC or do not comply with Paragraph (5) of Subsection I of 19.15.17.11 NMAC will equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, within five (5) years after June 16, 2008. If existing BGTs do not demonstrate integrity, BP will promptly remove those BGTs and install a BGT that do comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

BP AMERICA PRODUCTION COMPANY
San Juan Basin in Northwest New Mexico
Below-Grade Tank Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following guidelines. Any deviations from this plan will be addressed with the submittal to the New Mexico Oil Conservation Division's (NMOCD) form C-144 at the time of the BGT permit application.

- 1) The BGT will be operated and maintained to contain liquids and prevent contamination of fresh water, protect public health and the environment.
- 2) The fluids contents will be re-used, recycled or disposed in a manner to protect fresh water, public health and the environment. Disposal is addressed in the Closure Plan for the site.
- 3) No hazardous waste will be discharged or stored in a BGT.
- 4) If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then BP will notify the NMOCD's District III office within 48 hours of the discovery and repair the damage or replace the liner.
- 5) If a BGT develops a leak, or if any penetration of the pit liner or BGT occurs below the liquid's surface, then BP will remove all liquid above the damage or leak line within 48 hours, notify the NMOCD's District III office within 48 hours of the discovery and repair the damage or replace the pit liner and/or BGT.
- 6) BP will install a BGT to prevent the collection of surface water run-on.
- 7) The following requirements adhere to Subsection D of 19.15.17.12 NMAC.
 - a. BP will not allow its BGTs to overflow or allow surface water run-on to enter into its BGTs.
 - b. BP will remove any visible or measurable layer of oil from the fluid surface of any of its BGTs.
 - c. BP will inspect BGTs at least monthly and maintain a written record of each inspection for five (5) years.
 - d. BP will maintain adequate freeboard to prevent overtopping of its BGT.

BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

As stipulated in Rule 19.15.17.13 NMAC, the following information adheres to the requirements established in closing below-grade tanks (BGTs) on BP America Production Company (BP) well sites. This plan will address the standard protocols and procedures for closure of below grade tanks. If deviations from this plan are necessary, any specific changes will be included with New Mexico Oil Conservation Division (NMOCD) form C-144.

BP shall close its existing BGTs that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five (5) years after June 16, 2008, if not retrofitted to comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC. BP shall close its permitted BGTs within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC in accordance with this closure plan after receiving NMOCD's division District III office approval.

The following outline addresses all requirements for closure of BP's BGTs;

1. Notification to the surface owner by certified mail, with return receipt request, will be given prior to BP's intent on conducting, with NMOCD's pre-approval, confirmation sampling for closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is understood to demonstrate compliance with this requirement.
2. In addition, notification will also be given to the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the well name and number to be closed, legal description utilizing unit letter, section, township, range, and API number.
3. Remove liquids and sludge from the BGTs prior to implementing a closure method (confirmation sampling) and dispose of the liquids and sludge in a NMOCD's division-approved facility. A list of BP approved disposal facilities are included at the end of this document.
4. Remove the BGTs and dispose of it in a NMOCD's division-approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD's division District III office approves.
5. Remove any on-site equipment associated with a BGTs unless the equipment is required for some other purpose.
6. BP will test the soils beneath the BGTs to determine whether a release has occurred. At a minimum, a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release will be analyzed for BTEX, TPH and chlorides. The testing methods and closure standards for those constituents are as follows;

Constituents	Testing Method	Closure Standards (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	100
Chlorides	US EPA Method 300.0	250 or background

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA method that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

7. BP will notify the division District III office of its results on form C-141. It is understood that the NMOCD may require additional delineation upon review of the results.
8. If it is determined that a release has occurred, then BP will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
9. If the confirmation sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP will backfill the excavation, with NMOCD's pre-approval, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The NMOCD prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

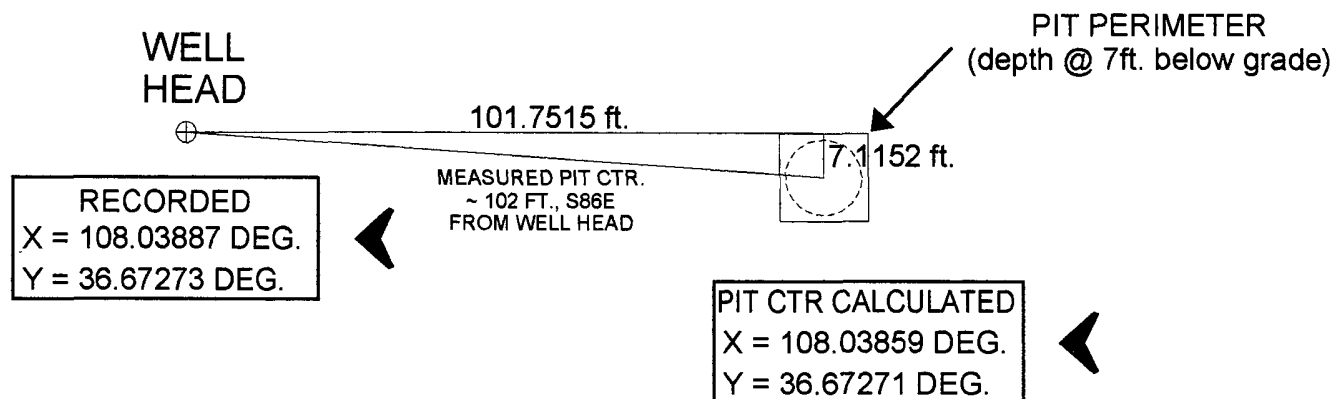
10. Within 60 days of closure completion, submittal of a closure report on NMOCD's form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where and if applicable, will be furnished. BP will certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan
11. Reclamation will follow 19.15.17.13G (1) and (2).
 - a. Once the BGT has been approved for closure by NMOCD, the BGT location and all areas associated with the BGT including associated access roads will be reclaimed to a safe and stable condition that blends with the surrounding undisturbed area. It is understood that BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.
12. Soil cover will follow 19.15.17.13H (1) and (3).
 - a. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
 - b. The soil cover will be constructed to the site's existing grade and all possible efforts will be conducted to prevent ponding of water and erosion of the cover material.
13. Revegetation will follow 19.15.17.13I (1), (2), (3), (4) and (5).
 - a. Revegetation of the pit location and any associated access road(s) will be attempted during the first growing season after closure of the pit with seeding or planting of the disturbed areas. Seeding will be accomplished by tilling/plowing on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
 - b. Seeding or planting will be repeated until it successfully achieves the required vegetative cover.
 - c. When conditions are not favorable for the establishment of vegetation, such as periods of drought, it is understood that the division may allow sufficient time to delay seeding or planting until soil moisture conditions become favorable. In addition, the division may require BP to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices.
 - d. Notification will be given to the division District III office when seeding or planting has been successfully achieved.

Proposed waste disposal sites:

BP Crouch Mesa Landfarm, Permit NM-02-003
JFJ Landfarm, Permit NM-01-010(B)
Basin Disposal, Permit NM-01-0005
BP Operated E.E. Elliott SWD #1, API 30-045-27799
BP Operated 13 GCU SWD #1, API 30-045-28601
BP Operated GCU 259 SWD, API 30-045-20006
BP Operated GCU 306 SWD, API 30-045-24286
BP Operated GCU 307 SWD, API 30-045-24248
BP Operated GCU 328 SWD, API 30-045-24735
BP Operated Pritchard SWD #1, API 30-045-28351



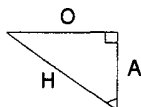
FIGURE 1



1 DEGREES = 364,567.20 FEET

0.0001 DEG.	=	X / Y DEG.
36.45672 FT.		KNOWN FT.

X INCREASES TO LEFT
Y DECREASES TO BOTTOM



SIN θ = OPPOSITE/HYPOTHENUSE
COS θ = ADJACENT/HYPOTHENUSE
TAN θ = OPPOSITE/ADJACENT

150 FT

0 0 6F

PIT & WELL HEAD LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE, BEARING, & GPS COORDINATES FROM & AT THE WELL HEAD (GARMIN GPS UNIT, TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS) ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE

BP AMERICA PRODUCTION CO

GCU # 544

SE/4 SE/4 SEC 7, T28N, R11W

SAN JUAN COUNTY, NEW MEXICO

B

I



DATE: 10-20-08 NJV

PLOT PLAN

10/08