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

Form C-144

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 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.

# 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.
Operator: BP AMERICA PRODUCTION COMPANY OGRID #: 778
Address: 200 Energy Court, Farmington, NM 87401
Facility or well name: NEIL A 021
API Number: 3004527811 OCD Permit Number:
U/L or Qtr/Qtr H Section 33.0 Township 32.0N Range 11W County: San Juan County
Center of Proposed Design: Latitude 36.942373 Longitude -107.989742 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 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
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
Selow-grade tank: Subsection I of 19.15.17.11 NMAC   Tank ID:   B
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.

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, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify 4' Hogwire with single barbed wire	hospital,			
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 19.15.16.8 NMAC				
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 consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for			
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	☐ Yes 🗷 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	Yes X No			
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)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes 🗷 No ☐ NA			
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  - 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 search; 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			

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   Previously Approved Design (attach copy of design) API 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 (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   Land Design - 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 H <sub>2</sub> S, 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 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)
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 G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, of									
facilities are required.  Disposal Facility Name:	Disposal Facility Permit Number:								
37									
Disposal Facility Name: Disposal Facility Permit Number:									
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 G 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 provided below. Requests regarding changes to certain siting criteria may requir considered an exception which must be submitted to the Santa Fe Environmental demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC f	e administrative approval from the appropriate distr Bureau office for consideration of approval. Justi,	rict office or may be							
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							
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							
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							
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark).  Topographic map; Visual inspection (certification) of the proposed site	nificant watercourse or lakebed, sinkhole, or playa	☐ 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									
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									
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; Visua	al 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 Society; Topographic map	& Mineral Resources; USGS; NM Geological	☐ 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 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of 9.15.17.13 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  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									

Operator Application Certification:  I hereby certify that the information submitted with this application is true, according to the control of the control	curate and complete to the best of my knowledge and belief.						
	Title: _ Field Environmental Advisor						
Signature: They H. Leave	Date: 06\14\2010						
e-mail address: Peace.Jeffrey@bp.com	Telephone: 505-326-9479						
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure	Plan (only) OCD Conditions (see attachment)						
OCD Representative Signature:	Approval Date:						
Title:	OCD Permit Number:						
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:  Waste Excavation and Removal On-Site Closure Method Alte If different from approved plan, please explain.	rnative Closure Method   Waste Removal (Closed-loop systems only)						
Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, at two facilities were utilized.  Disposal Facility Name:  Disposal Facility Name:  Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No Required for impacted areas which will not be used for future service and oper Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	Disposal Facility Permit Number:  Disposal Facility Permit Number:  Disposal Facility Permit Number:  or in areas that will not be used for future service and operations?  Pations:						
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	e)						
25. Operator Closure Certification:							
I hereby certify that the information and attachments submitted with this closur belief. I also certify that the closure complies with all applicable closure requir							
Name (Print):	Title:						
Signature:	Date:						

BP Tan	k Permit	Field In	spection Sheet			
San Juan County, New Mexico 2008						
Site Information Time: [15 pm Date: [1-14-03 Personnel: Haron						
Facility Name: NEIL A Oal - FT API# 300 95 27811						
Distance from BGT to	closest water cou	rse is greater th	nan 200 feet ? (V) N			
Distance from BGT to	closest permanen	nt residence is g	greater than 300 feet? (Y) N			
Base of tank is greater than 50 feet above ground water according to local well data, field observations, map and aerial photograph review? 7 / N						
Tank location is structu						
If "No" then inform clier	it by phone ASAP	Larry Schlotterb	ack (505) 330 4937			
Soil type: Jan	Outcrop?(V)N Geology type: 50	Ends tone	Surface water flow direction.			
Notes: Perm is low BGT is hor	th of pad	06111				
Site passes field inspec	tion for permit pro-	cess?(Y/N	North 1			
Photolog	V	iews included in	photograph			
#1		Location S	ign			
#2						
#3						
Environmental impacts Larry Schlotterback (50		cation and inform	n client by phone ASAP			



CLIENT: BP	BLAGG EN	GIN	EER	IN	G, II	NC.		BLAGG ENGINEERING, INC.						
TOTAL#	P.O. BOX 87, BLOOMFIELD, NM 87413						CONTRA			T.1				
OF BGT: 2	(505) 632-1199						FIELD T	ECH.:		_R.	<u></u>			
FIELD INSPEC	TION: BELOV	N-	GF	7/	AD	E	T	41	١K	IN	VE	N	TC	DR
WELL NAME: Neil	4 51	O-C-MILLS - INC.	THE REAL PROPERTY.		Δ	PI #:		20	NI	527	0.	,	S. P. Sanda	
	EC. 23 TOWNSH	IP -	32	1	_	ANG		11		CO			53	_
	- 3.3							11						
1 A STATE OF THE PARTY OF THE P	36,94218 LONGIT	_			899					OTA	Ν (π.)	(	612	
SURFACE OWNERSHIP: FE	EDERAL X STATE	] PR	IVAT	E		TRI	BAI	LIN	DIAN	1				
OATES	ADV	T	BGT 1			BGT 2		E	GT 3	T	BGT 4		В	GT 5
CATEG	IURY		ep			w p.	t							
Tank construction material (S - steel, F - f	iberglass, other - state in remarks)	15	>		5									
Volume (in barrels - bbl) I.e 21 / 45 / 95		1	95			31								
Tank type (SW / DW / SB / DB)		54	170	B_	-	N DI	3		-	-				
Tank Diameter (ft.)		+	10	1	-	5_	-							
Latitude (I.e. 36.12345)		i												
Latitude (Le. 30.12343)		3/	9115	50	34	9423	2							
*****		100	1400	1	100.	1400	-			_				
Longitude (i.e. 107.12345)		İ												
		100	.990	17	200	1,989	22							
Distance to any existing nearby structure(	t) (in yards)	-	_			-			-					
Type of structures (i.e house, barn, etc.)			-			-								
Fencing present		YES	MNC		YES	NO		res [	NO	YES	NO		YES [	NO
Berm present		YES	NO			✓ NO	-	ES	NO	_YES	-	-	YES	NO
Tank sidewalls buried		-	× NO		-	NO	-	ES	NO	YES	- Contract	Second	YES	NO
Wooden retaining wall present (i.e cellar	)	YES	-	X			M	-	NO	YES	-	-	YES L	NO
Visible liner present		YES	NC	X	YES	NO	4	res [	NO	YES	NO		YES	NO [
			_		,		Property (**		-			_		
Above-grade tank (i.e disposal tank at or	above ground surface)	YES	NO		YES	_]HO		res [	NO	YES	NO		YES _	NO
ADDITIONA	L ITEMS													
		YES	No		YES	NO		ES	NO	YES	NO		YES	NO
		YES	□ NO		YES	NO		ES	NO	YES	NO		YES	NO [
SHARED LOCATION	IS:	D	RA	WI	N S	KE.	TC	H	(bac	k of page	a) *			
	(check berd			-	-	1111		• •			-	(check	k bost	
REMARKS: BGT-/	cone Top	210		ч.	C	<								
KEWAKKO. DOT-1	cone rop	1210	7	1.4	71.00	sy Si	Sp							
		-	-		-			-	-				-	
							_							
SITING PEOU	REMENT CATEGORIES													
GW < 50 ft. below the bottom of BGT	REMERI CATEGORIES	ivea	Tuo			-		Sec. 18.19	A T-54					
	any other similirant waternouses	YES	NO	-		}				NOTES	1			1
< 300 ft. flowing watercourse or < 200 ft. of < 300 ft. from a residence, school, hos		YES	(NO	=		1.	GL			GROU				1
< 500 ft. of a private, domestic fresh w		1	NO				GW BGT			GROUN			ANY	1
< 1000 ft. of any other fresh water well or		YES	NO	-			085			DOMES	Marine Later Contra			. 1
within incorporated municipal boundari		YES	NO	-		5.	MUN		AL =	CITY, T	TOWN,	ETC.		
within a defined municipal fresh water		YES	NO		1		SW			SINGLE				i
< 500 ft, of a wetland		YES	NO			11	SB			SINGLE				
within the area overlying a subsurfa	enim so	YES	NO			9.	DB	- 00 110-	=	DOUBL	E BOT	TOM		K
vithin an unstable area		YES.	NO					RING		COMP/				
within a 100-year floodplain		YES	NO			11,	N/A	•		NOT AS	FLICA	ort		
MEATHER MITE CONDICTO	NO.											-NAL		
WEATHER/SITE CONDITIO			_	-	-		-	-		William Statement	_			
RAINING / SNOWING / D	TI / WEI / MUDDY / VI	TICA	MUL	70	1/3	PLAO,	AA I	AC	TEL	1116	JUGI	1/1	PINIC	JU11

#### SITING AND HYDRO-GEOLOGICAL REPORT FOR NEIL A 021

#### Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be greater than 100 feet. This estimation is based on data from Stone and others (1983), and depth to groundwater data obtained from water wells permitted by the New Mexico State Engineer's Office (OSE, Figure 1). Local topography and proximity to adjacent water features is also considered. A topographic map of the site is provided as Figure 2 and demonstrates that the below grade tank (BGT) is not within 300 feet of any continuously flowing watercourse or within 200 feet of any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3 demonstrates that the BGT is not within 300 feet of a permanent residence, school, hospital, institution or church. Figure 4 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are no freshwater wells or springs within 1000 feet of the BGT. Figure 5 demonstrates that the BGT is not within a municipal boundary or a defined municipal freshwater well field. Figure 6 demonstrates that the BGT is not within 500 feet of a wetland. Figure 7 demonstrates that the BGT is not in an area overlying a subsurface mine. The BGT is not located in an unstable area. Figure 8 demonstrates that the BGT is not within the mapped FEMA 100-year floodplain.

#### Local Geology and Hydrology

This particular site is located west of the Animas River between Aztec and Cedar Hill, New Mexico. The Nacimiento Formation of Tertiary age is exposed as interbedded siltstones, shales and sandstones that form steep to gentle slopes. The slopes are dissected by arroyos draining to the Animas River. The Nacimiento Formation is capped to the north by the more resistant cliff-forming sandstones of the San Jose Formation. The site is located greater than 5 miles northwest of the Animas River and hundreds of feet higher in elevation.

Conclusion that BGT is not within 100 feet of ground water is based on previous site visit from 2008. There is insufficient water well and surface water data to conclude otherwise.

#### Regional Geology and Hydrology

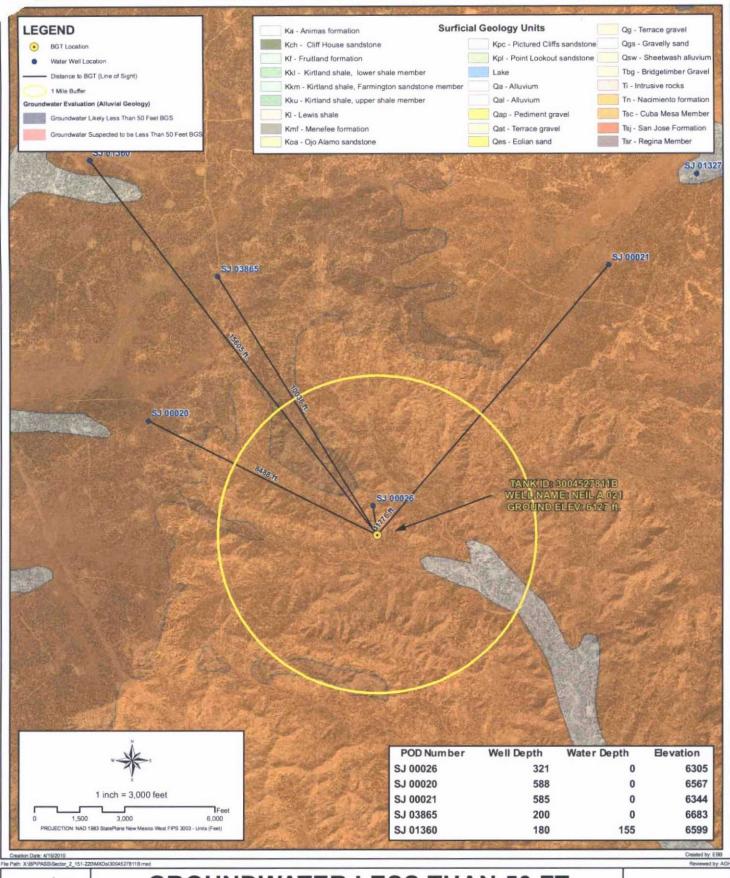
The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau. The San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). The Nacimiento Formation of Paleocene age occurs at the surface in a broad belt at the western and southern edges of the central San Juan Basin and dips beneath the San Jose Formation in the center. The lower part of the Nacimiento Formation is composed of interbedded black, carbonaceous mudstones and white coarse-grained sandstones. The upper part is comprised of mudstone and sandstone. It is generally slope-forming, even within the sandstone units. Thickness of the Nacimiento ranges from 418 to 2232 feet. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000 feet deep in this section of the basin. Wells within these bodies flow from 16 to 100 gallons per minute (gpm), and transmissivities are expected to be 100 ft²/d (Stone et al, 1983). Groundwater within these aquifers flows toward the Animas River.

#### References

Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976

Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p



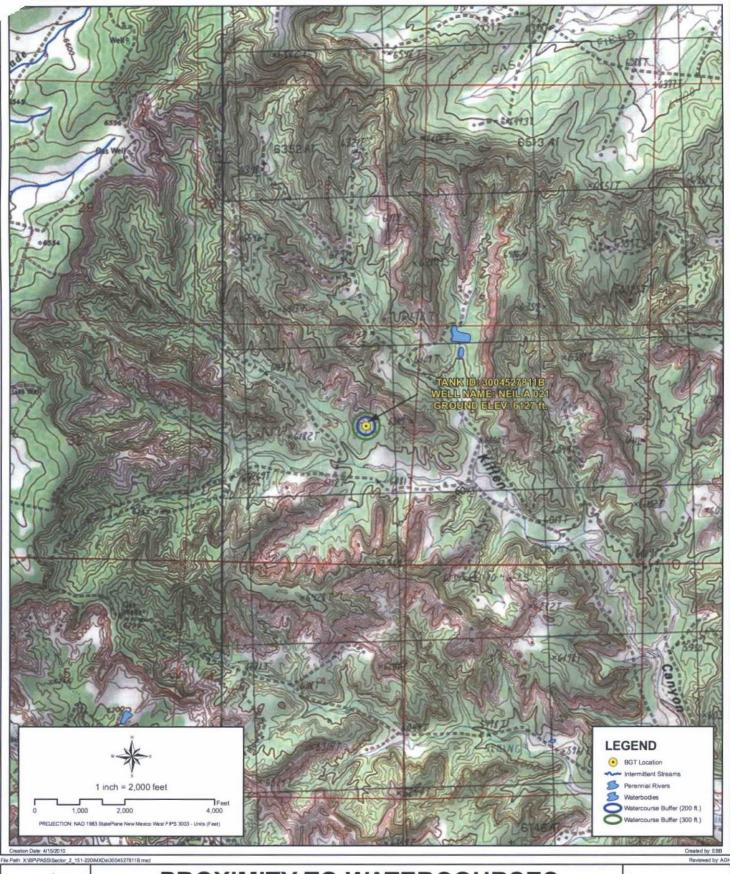


## **GROUNDWATER LESS THAN 50 FT.**

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23

**FIGURE** 



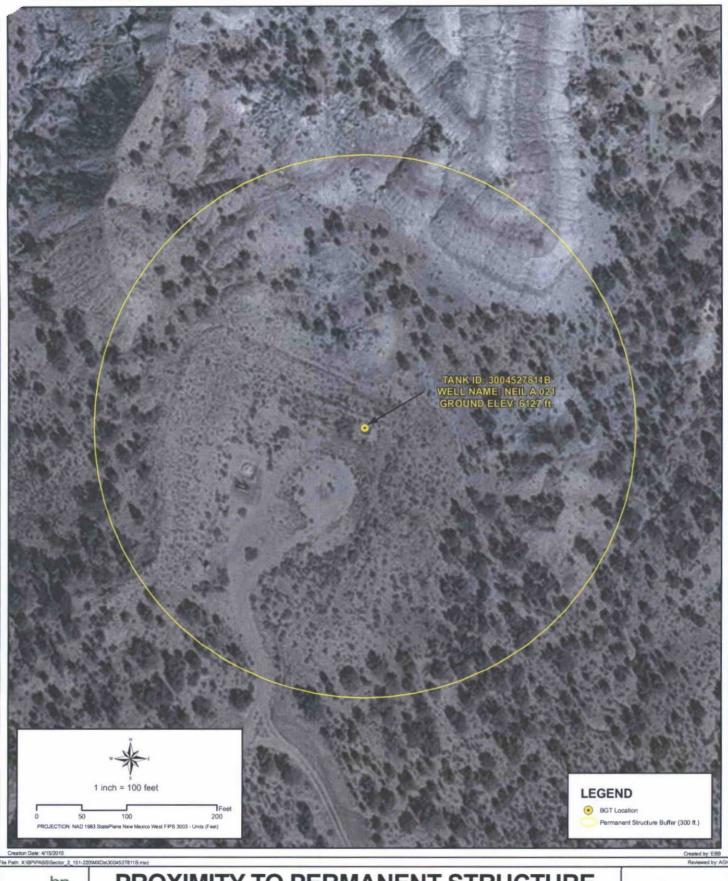


# **PROXIMITY TO WATERCOURSES**

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23

FIGURE



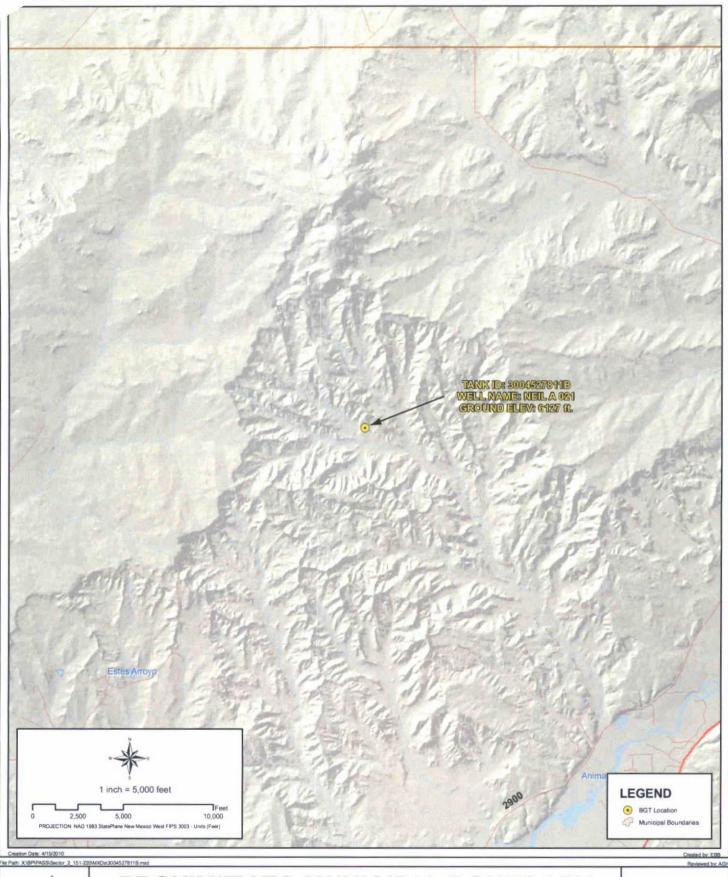


## PROXIMITY TO PERMANENT STRUCTURE

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23

FIGURE



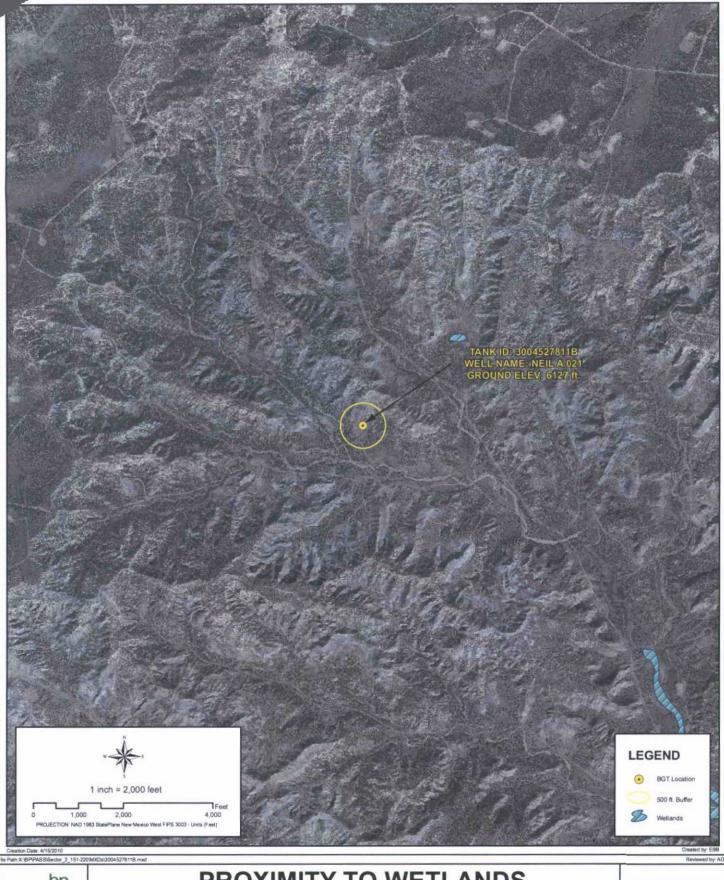


## PROXIMITY TO MUNICIPAL BOUNDARY

**WELL NAME: NEIL A 021** 

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23

FIGURE 5

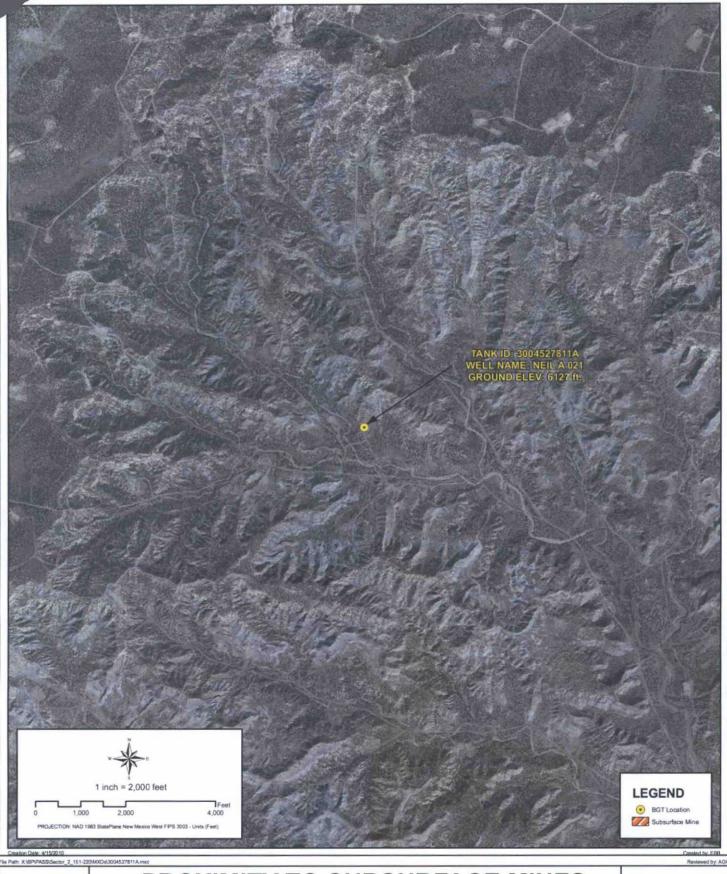




# **PROXIMITY TO WETLANDS**

**WELL NAME: NEIL A 021** 

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23 FIGURE



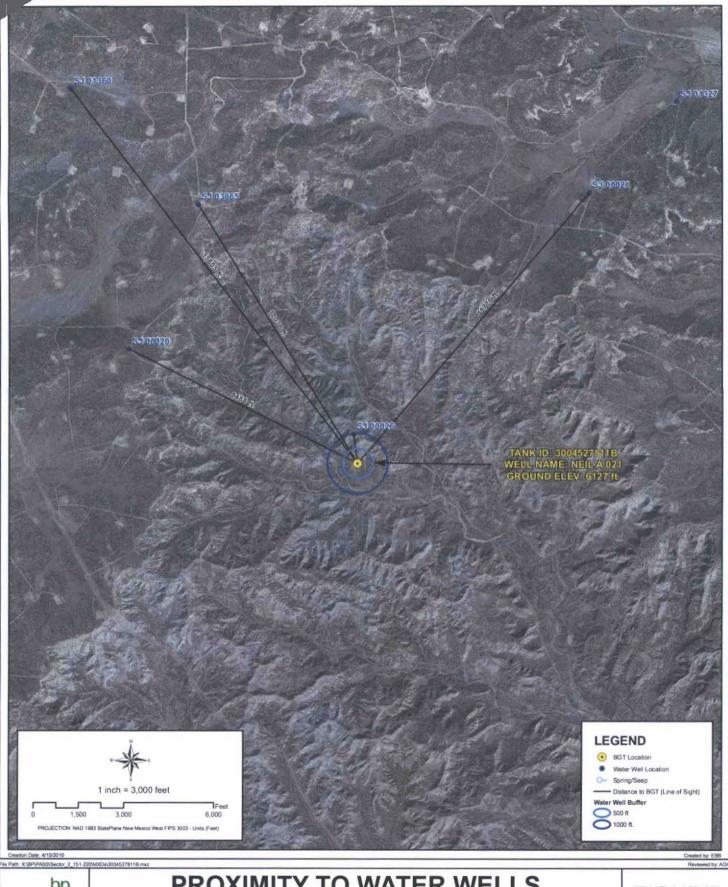


# PROXIMITY TO SUBSURFACE MINES

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811A SECTON 33, TOWNSHIP 32.0N, RANGE11W, P.M.NM23

FIGURE

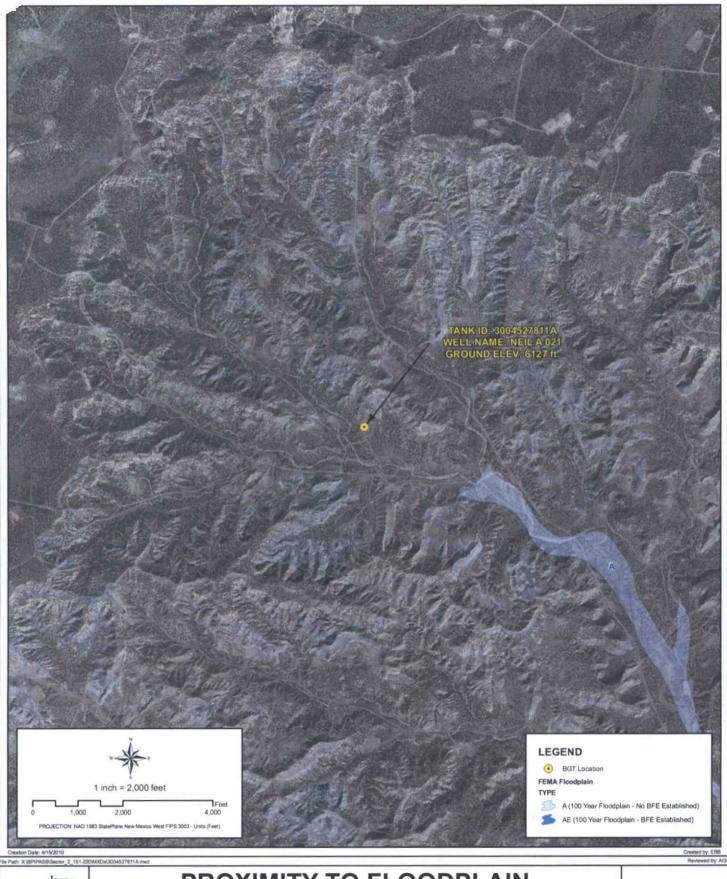




# **PROXIMITY TO WATER WELLS**

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811B SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23 **FIGURE** 





# PROXIMITY TO FLOODPLAIN

WELL NAME: NEIL A 021

API NUMBER: 3004527811 TANK ID: 3004527811A SECTION 33, TOWNSHIP 32.0N, RANGE 11W, P.M. NM23

**FIGURE** 

#### SOUTHERN SAN JUAN BASIN (SSJB)

## Figure Citation List March 2010

#### Figure 1: Groundwater Less Than 50 ft.

#### Layers:

Water Wells: iWaters Database: NMOSE/ISC (Dec. 2009)

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters\_db\_index.html.

#### Cathodic Wells:

Tierra Corrosion Control, Inc. (Aug. 2008)

Tierra Corrosion Control, Inc. 1700 Schofield Ln. Farmington, NM 87401. Driller's Data Log. (Data collected: All data are associated with cathodic protection wells installed at BP facilities between 2008-2009. Data received: 05/06/2010).

#### Hydrogeological Evaluation:

Wright Water Engineers, Inc. (2008)

Evaluation completed by Wright Water Engineers, Inc. Durango Office. Data created using digital statewide geology at 1:500,000 from USGS in combination with 10m Digital Elevation Model (DEM) from NRCS. (Data compiled: 2008.)

Results: Spatial Polygons representing "Groundwater likely to be less than 50 ft." and "Groundwater suspected to be less than 50 ft.".

#### Surficial Geology:

USGS (1963/1987)

Data digitized and rectified by Geospatial Consultants. (Data digitized: 03/23/2010). Original hard copy maps sourced from United States Geological Survey (USGS). Data available from: <a href="http://pubs.er.usgs.gov/">http://pubs.er.usgs.gov/</a>.

Geology, Structure and Uranium Deposits of the Shiprock Quadrangle, New Mexico and Arizonia. 1:250,000. I - 345. Compiled by Robert B. O'Sullivan and Helen M. Beikman. 1963.

Geologic Map of the Aztec 1 x 2 Quadrangle, Northwestern New Mexico and Southern Colorado. 1:250,000. I - 1730. Compiled by Kim Manley, Glenn R. Scott, and Reinhard A. Wobus. 1987.

#### Aerial Imagery:

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

#### Figure 2: Proximity to Watercourses

#### Layers:

#### Perennial Streams:

NHD, USGS (2010)

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

#### **Intermittent Streams:**

NHD, USGS (2010)

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

#### Water Bodies:

NHD, USGS (2010)

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: <a href="http://nhd.usgs.gov/">http://nhd.usgs.gov/</a>.

#### **USGS Topographic Maps:**

USGS (2007)

USGS 24k Topographic map series. 1:24000. Maps are seamless, scanned images of USGS paper topographic maps. Data available from: <a href="http://store.usgs.gov">http://store.usgs.gov</a>.

#### Figure 3: Proximity to Permanent Structure

#### Layers:

#### Aerial Imagery:

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

#### Figure 4: Proximity to Water Wells

#### Layers:

Water Wells: iWaters Database: NMOSE/ISC (Dec. 2009)

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters db index.html.

Springs/Seeps: NHD, USGS (2010)

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Aerial Imagery: Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

#### Figure 5: Proximity to Municipal Boundary

Layers:

Municipal Boundary: San Juan County, New Mexico (2010)

Data provided by San Juan County GIS Division. (Data received: 03/25/2010).

Shaded Relief: NED, USGS (1999)

National Elevation Dataset (NED). U.S. Geological Survey, EROS Data Center. (Data created: 1999. Data downloaded: April, 2010). Resolution: 10 meter (1/3 arc-second). Data available from: <a href="http://ned.usgs.gov/">http://ned.usgs.gov/</a>.

StreetMap North America: Tele Atlas North America, Inc., ESRI (2008)

Data derived from Tele Atlas Dynamap/Transportation North America, version 5.2. (Data updated: annually. Data series issue: 2008).

#### Figure 6: Proximity to Wetlands

#### Layers:

Wetlands:

NWI (2010)

National Wetlands Inventory (NWI). U.S Fish and Wildlife Service. (Data last updated: 09/25/2009. Data received: 03/21/2010). Data available from: http://www.fws.gov/wetlands/.

Aerial Imagery:

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

#### Figure 7: Proximity to Subsurface Mine

#### Layers:

#### Subsurface Mine:

NM Mining and Minerals Division (2010)

New Mexico Mining and Minerals Division. (Data received: 03/12/2010). Contact: Susan Lucas Kamat, Geologist. Provided PLSS NM locations (Sections) for the two subsurface mines located in San Juan and Rio Arriba counties.

#### Aerial Imagery:

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

#### Figure 8: Proximity to FEMA Floodplain

#### Layers:

#### **FEMA Floodplain:**

#### FEMA (varying years)

Data digitized and rectified by Wright Water Engineers, Inc. (Data digitized: August 2008). Digitized from hard copy Flood Insurance Rate Maps (FIRMs) (varying years) of San Juan County.

#### **Aerial Imagery:**

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery.

Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure Citation List: Page 5 of 5

#### BP AMERICA PRODUCTION COMPANY

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

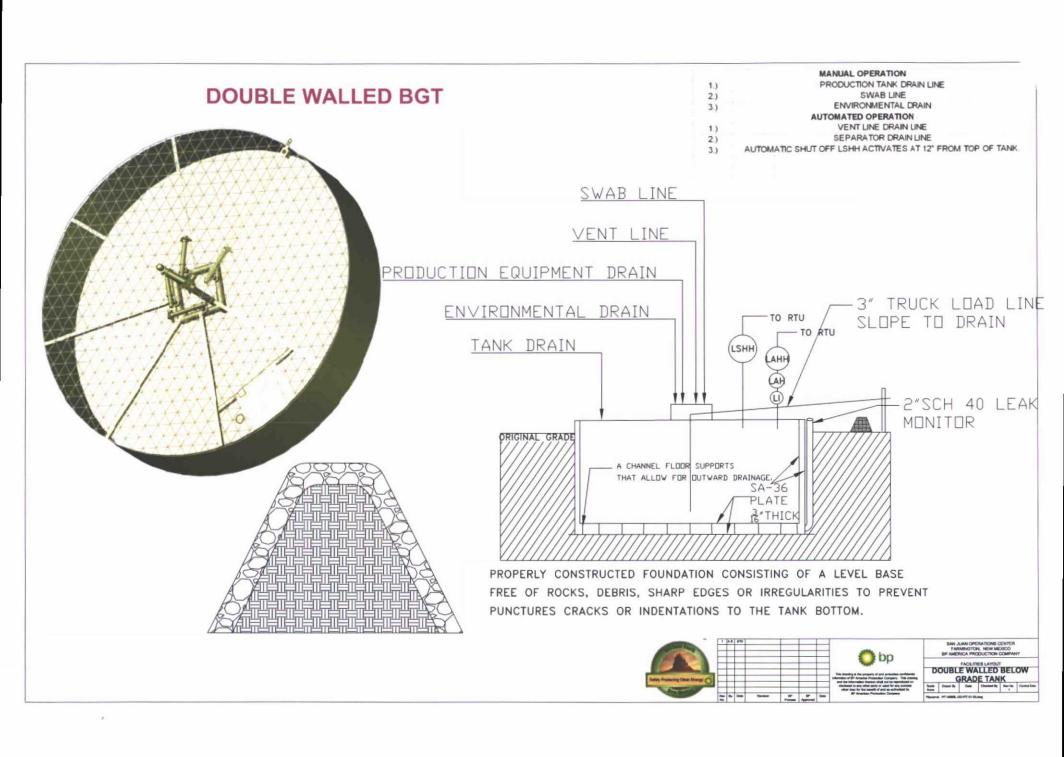
Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) shall construct a below-grade tank (BGT) or modify an existing permitted BGT according to the following plan. Any deviations from this plan will be addressed on the New Mexico Oil Conservation Division's (NMCOD) form C-144 at the time of submittal.

#### **Design and Construction Plan**

- BP will design and construct a BGT which will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
- BP is the well operator and shall install and maintain a well sign that is in compliance with 19.15.16.8 NMAC. The sign will be posted at the well site to address, at a minimum;
  - a. Well Number
  - b. Property name
  - c. Operators name
  - d. Location by footage, quarter-quarter section, township and range (or unit letter)
  - e. API number
  - f. Emergency contact information
- BP will fence or enclose its BGTs in a manner that prevents unauthorized access and shall maintain its fence in good repair.
- 4. BP will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church with, at a minimum 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 onsite.
- 5. BP is requesting NMOCD's approval for an alternative fence design that provides, at a minimum, equivalent protection to the design specified in Paragraph 3 of Subsection D of 19.15.17.11 NMAC for BGTs beyond the stated distance in paragraph 4 of this document. BP's proposed design for its BGTs will utilize 48" steel mesh field-fence (hogwire) with a metal or steel top rail. Perimeter T-post will be installed roughly every 10 feet.
- BP will construct an expanded metal covering that completely covers the top of the BGT.
   The covering will be constructed such that it will prevent hazardous conditions to wildlife, including migratory birds
- BP shall construct the BGT of materials that are resistant to produced water, any contained liquids, and damage from sunlight. BP's BGTs will be constructed of carbon steel that meets the requirements of ASTM A36.
- 8. BP's BGTs shall have a properly constructed earthen foundation consisting of a level base free of rocks, debris, sharp edges, or irregularities as to prevent punctures, cracks or indentations to the tank bottom as demonstrated on the design drawing.
- 9. BP will construct and operate the BGT to prevent surface water run-on by using both earthen

berms and leaving a portion of the BGT above the original grade as demonstrated on the design drawing.

- 10. BP will construct and operate the BGT to prevent overflow and overfilling of the BGT. Overflow will be prevented by use of an electronic high fluid level detector that will automatically engage an electronic shut-off valve when a 1 foot freeboard is reached. The Hi-level automatic alarm notifies well optimizers when liquid level has reached within a preset distance to the top of the BGT. The Hi Hi alarm will trigger the Hi-level automatic shutdown valve which will close in the well until the liquid level can be lowered.
- 11. BP will construct and install a double-walled tank design per Subparagraph (b) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC with a two (2) inch diameter leak detection port. The floor supports located in the annular space of the tank bottom will be channeled to allow outward movement of liquid between the walls. Leak detection will be monitored per BP's Operating and Maintenance Plan. The walls of the BGT will be constructed of carbon steel that meets the ASTM A36 standard. BP's BGT design will insure containment of tank contents and protect underlying groundwater. The production equipment line drain is an automated drain that allows water level in production equipment (generally the separator) to be maintained within the equipment's operating parameters. The environmental drain is a manually operated drain that is used to drain liquids off of equipment. The tank drain is a manually operated drain, typically in the closed position that is used to rid the condensate tank of any water accumulation. The vent drain is a manually operated drain off the discharge of production equipment (usually the separator) and is used to blowdown the wellsite. The swab drain line is a manually operated drain originating between the wellhead and separator and is used during well workovers when large amounts of liquid are removed from the well and sent straight to the BGT.
- 12. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that do not meet all the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC and are not included in Paragraph (6) of Subsection I of 19.15.17.11 NMAC are not required to equip or be retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as the BGT demonstrates integrity. If the existing BP BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.
- 13. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that are single walled and where any portion of the tank side wall is below ground surface and not visible shall be retrofit or replaced to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or shall be closed within 5 years of June 16, 2008. If the existing BP owned and operated BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.
- 14. The general specifications for the design and construction of the BGT have been provided in the attached BP design and construction schematic.



#### 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, BP America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following requirements. Deviations from this plan will be addressed with a submittal to the New Mexico Oil Conservation Division's (NMOCD) using form C-144 at the time of the BGT permit or modification to an existing permitted BGT application.

#### **Operating and Maintenance Plan**

- 1. BP's BGTs will be operated and maintained to contain liquids and solids and promptly identify a release or potential release. BP's BGTs will be operated and maintained to prevent contamination to freshwater and protect public health and the environment. BP will use automated high fluid level alarms and automated shut-off valves to insure that liquids are contained within the vessel and that the vessel does not overflow. These alarms and shut-off valves will be consistent with those demonstrated in the design plan. BP will perform and document inspections of the BGTs on a monthly basis to confirm the integrity of the vessel.
- 2. BP will not knowingly discharge or store any hazardous waste into a BGT
- 3. If a BGT develops a leak, or a release occurs due to mechanical failure or vandalism, or if a penetration of the BGT occurs below the liquid's surface, BP shall: 1) evacuate liquids from the BGT to a level below the damage or leak line within 48 hours; and 2) notify the NMOCD's District III office within 48 hours of the discovery. BP will review #4 of the BP Operating and Maintenance plan prior to any repair or replacement to determine if the BGT and location will require closure. If appropriate BP shall repair or replace the BGT with the BP NMOCD approved design. If a release from the BGT occurs BP shall follow the release reporting procedures of 19.15.29 NMAC. If closure of the BGT is required, BP shall implement the approved closure plan for the BGT.
- 4. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC does not demonstrate integrity or if the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, BP shall close the existing BGT pursuant to the closure requirements of 19.15.17.13 NMAC and will install a BGT that complies with BP NMOCD approved BGT design attached to the Design and Construction Plan.
- 5. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is equipped or retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, BP shall visually inspect the area beneath the BGT during the retrofit and shall document any areas that are wet, discolored or showing other evidence of a release on Form C-141. BP shall demonstrate to the division whether evidence of contamination indicates that an imminent threat to fresh water, public health, safety or the environment exists. If the division

- 6. BP will install and construct the BGT following the BP NMOCD approved Design and Construction Plan, and will control surface water run on by the use of a berm or leaving a portion of the tank wall exposed. BP will use high level shot-off devices to insure that the BGT does not overflow.
- 7. The following requirements adhere to Subsection D of 19.15.17.12 NMAC.
  - a. BP will remove any visible or measurable layer of oil from the fluid surface of the BGT.
  - b. BP will inspect the BGT monthly. The monthly inspection will consist of the following:
    - i. Personnel will conduct a walk-around of the BGT to observe any abnormalities or signs of corrosion on the vessel. Personnel will inspect the surface run-on berm. Where applicable, inspection of the BGT's double wall double bottom inspection port, tank flanges and valves for signs of leakage or spills will be conducted. Personnel will record any BGT deficiencies, repair as necessary and report to BP Dispatch Office immediately if an imminent danger to fresh water, public heath, or to the environment is observed. BP will maintain a written record of the monthly inspections on the BP inspection from referred to as the San Juan Lease Inspection Form. BP will maintain these written records for at least five (5) years. A copy of the San Juan Lease Inspection Form is attached.
- 8. BP will maintain sufficient freeboard of one foot in the BGT to prevent overtopping.

Managed  Date:	Form NOP-5878 R Run:	evision 1	San Juan Lease Inspection Custodian: Field Environmental Coordinator  Location: Name of Inspector:						
	21.02	NI/A	•						
Yes	Action	N/A	Required Signs  Does location have Well Sign and emergency phone number?						
			Do compressor engines have Hearing Protection signs?						
			Hydrogen Sulfide Signs (where applicable)						
40 000									
Voc	Action	N/A	Chemical containers and tanks have proper Hazcom label or BP Multi-Product Hazcom numbers?  Location- General						
Yes	Action	IN/A	Housekeeping satisfactory?						
C. LESS CH.	ALTERNATION OF THE PARTY OF THE	200	Tripping or falling hazards are absent? If NO, identify and report to FSC.						
			Rig anchors/Deadmen adequately marked and visible if they present a hazard to drivers?						
			Driving hazards such as risers are marked or flagged?						
1111111		CATES							
	The state of the s	200	Painting meets safety standards?						
	The second second		Cattleguards/gates properly maintained?						
	The second	CL SCA	Tarps in good repair?						
77			Seeps, drips, or leaks are absent?  Is weed control adequate?						
STATE OF THE STATE			Stains on ground are absent? If NO, remediate immediately, identify and report to FEC.						
Vec	Action	NI/A	Are there any open ended valves that are not plugged?  Vessel/Tank						
Yes	ACTION	N/A							
			Adequate fencing around below grade tank?  Are the dike/herm walkever in place, used and stable?						
Correct Co.	All the last		Are the dike/berm walkover in place, used and stable?						
Anna Santa			Are dikes/berms in good condition?						
	-		Is there adequate and safe access to pit for gauging?						
		-	Does the pit have a high level alarm?						
			Are stairways and catwalks properly maintained and in good condition?						
			Toprail, midrail and toeboard in place?						
			Are thief hatches in good condition, seal properly, and in the closed position?						
	-		Is tank vent line equipped with a PV valve? (Enardo)						
	-		Does the tank have a high level alarm?						
ALC: UK		1000	Are open ended load lines and pipes capped?						
-45			Is soil around load lines clean of oil stains?						
			Is tank area free of any evidence of seeps or leaks (including manway cover)?						
			Are there proper seals on sales and drain valves?						
			Are all suspected dump lines well supported?						
			Are above ground dump lines marked with t-posts and plastic covers?						
	A - 41		Have all fiberglass drip pits been removed?						
Yes_	Action	N/A	Treaters/Separators/Compressors/Pump Jacks						
			If there is a block valve upstream of the relief valve, is the block valve secured in the open position?						
			Are relief valve discharge and blow downs piped to a safe area and secured against movement?						
			Has flame arrestor been inspected within the last 5 years?						
			Is flame port closed?						
			Do all lines pass through a super muffler or swirl pot to the pit/tank? If not, are all lines secured?						
			Is starting gas vented to a safe area, at least 10' vertically?						
	3	-	No excessive vibration, knocking or unusual noises anywhere on unit or piping?						
			Are site glasses in operating condition?						
			Are environmental rails piped to a pit in a dedicated line?						
E4150A		4.14	Do all blow downs, relief valve discharges, and risers have rain caps?						
III DO	DUNCTURE OF THE PARTY OF THE PA	1 - [-]	Stuffing box leaks are absent?						
			Are the weight guards and belt guard in place?						
			Are skids in good condition?						
			Are concrete bases / foundations in good condition?						
			Are concrete bases free from erosion or settlement problems?						
ESTERN.	TAKE BOUL	TO LAND	Is secondary containment in place for day tanks?						
Comment	ts:								

Signature of Inspector:

My signature assures that this location is SAFE, is in compliance with the LAW, and exhibits high standards of Pride, Ownership and Excellence.

### BP AMERICA PRODUCTION COMPANY

SAN JUAN BASIN, NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK CLOSURE PLAN

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does 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 years after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the BP NMOCD approve BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT 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.

#### General Closure Plan

- BP shall notify the surface owner by certified mail that it plans to close a BGT.
   Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
- 2. BP shall notify 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 operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
- 3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
  - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
  - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
  - c. Basin Disposal, Permit NM-01-0005 (Liquids)
  - Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
  - e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
  - f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
  - g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
  - BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
  - i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
  - j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
  - k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

- 4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.
- BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.
- 6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect 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 and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method	Release Verification (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 or 4500B	250 or background				

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods 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 shall notify the division District III office of its results on form C-141.
- If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegitate the location. The location will be reclaimed if it is not with in the active process area.
- 10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. 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, re-contour 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.
- 11. 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. The soil

- 12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling 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.
- BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
- Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.
- Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
  - a. proof of closure notification (surface owner and NMOCD)
  - b. sampling analytical reports; information required by 19.15.17 NMAC;
  - c. disposal facility name and permit number
  - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
  - e. site reclamation, photo documentation. Disposal Facility Name and Permit Number
- 16. BP shall 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.

# OCD Aztec District III BP American Production Checklist Below Grade Tank Registration

19.15.17.9 Permit application	
Signed C-144 (Page 5 of C-144)	
Site Specific Hydrogeology	
19.15.17.10 Siting requirements	
Ground water (Aerial overlay Map)	
Proximity to watercourses (Topo map)	
Proximity to Watercourses (Topo Inap)  Proximity to Permanent Structure (Aerial Map)	
Proximity to Vermanent Structure (Aerial Map)	
Proximity to Municipal Boundary (Structure Map)	
Proximity to Wetlands (Aerial Map)	
Proximity to Subsurface Mines Map (Aerial Map)	
Preximity to Flood Plain Map (Aerial Map)	
Figure Citation List	
19.15.17.11 Design Plan Contents	
Below Grade Tank Design and Construction Plan.	
below Grade Tank Design and Construction Flan.	
19.18.17.12 Operating and Maintenance Plan	
Below Grade Tank Operating and Maintenance Plan	
Below Grade Tank Operating and Maintenance Plan	
19.15.17.13 Closure Plan	
Below Grade Tank Closure Plan	
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Registration Date: 2 MAY 20 610	