Form C-144 Revised August 1, 2011

<u>District I</u> 1625 N French Dr , Hobbs, NM 88240 District II 811 S. First St., 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

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.

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# Pit Closed-Loon System Relow-Grade Tank or

~ &6	$P_{r_{\ell}}$		ernative Meth	•				eation	
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									
Instruc	ctions: Please si	abmit one applica	ation (Form C-144) p	er individ	ual pit, close	d-loop syste	em, below-grade	tank or alternati	ve request
environment. No	that approval of t	this request does not have the operator	of its responsibility to	of liability comply wi	should opera	tions result i applicable go	n pollution of surf overnmental autho	ace water, ground rity's rules, regula	water or the tions or ordinances.
ı. Operator: <u>Wi</u>	lliams Four Corn	iers, LLC				OGRII	O#:		
Address: 188	County Road 49	900, Bloomfield,	NIM 07412						
Facility or well	name: Rosa U	nit No. 045							
API Number:	30-039-23013				OCD Per	rmit Numbe	er: Not Applic	cable	
	M		Township						
			36.9093				7.3730	NAD: 🔲 192	7 🛛 1983
Surface Owner	☐ Federal	State [	Private Trib	al Trust or	Indian Allot	ment			
Temporary:	] Drilling □ Wo □ Emergency [	Cavitation [	P&A	ı DDE 🗆	uppe 🗆	ova 🗖 o		RCVD JUL ( OIL CONS. DIST.	DIV. 3
		ype: Thickness_	mil 🔲 L	LDPE 📋	HDPE [] I	yvc □ Ot	her	<del></del>	
String-Rein									
Liner Scams: [	_ Welded L F	actory U Other			Volume:	bbl	Dimensions: L	x W	x D
Type of Operatintent)  Drying Pad  Lined U	ion: P&A P  Above Gro	ound Steel Tanks	well	Other _					
4.									
⊠ Below-grac	le tank: Subsec	ction I of 19.15.1	7.11 NMAC					•	
Volume:  Tank Construct	30 ion Material S	_ bbl Type o	of fluid: Condensat	tc/Produce	d Water				
☐ Secondary	containment with	n leak detection	☐ Visible sidewalls	, liner, 6-i	nch lift and a	utomatic ov	erflow shut-off		
☐ Visible side	ewalls and liner	☐ Visible sidev	valls only 🛛 Other	100%	Buried				
Liner type: Th	ickness	m	il 🗌 HDPE 🗌 PV	C Otl	her				
5. Alternative	Method:								

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fc 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)	hospital,	
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 19.15.16.8 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 consideration of approval.	office for	
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 accep		
material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a		
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryi		
above-grade tanks associated with a closed-loop system.	☐ Yes ☐ No	
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		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	☐ Yes ☐ No	
- Topographic map; Visual inspection (certification) of the proposed site	_	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks)	☐ Yes ☐ No ☐ NA	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<b></b>	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Ycs ☐ No ☐ NA	
<ul> <li>(Applies to permanent pits)</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>		
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	☐ Yes ☐ No	
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		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No	
adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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.	☐ Yes ☐ No	
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map		
Within a 100-year floodplain FEMA map		

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)	
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 naturached.    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   Climer 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 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	
4. 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)	
5.	
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 Instructions: Please indentify the facility or facilities for the disposal of liquids, 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 of Yes (If yes, please provide the information below) No	occur on or in areas that will not be used for future serv	vice and operations?
Required for impacted areas which will not be used for future service and operation Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	te requirements of Subsection H of 19.15.17.13 NMAC a Lof 19.15.17.13 NMAC	C
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 required 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	ire administrative approval from the appropriate dist al 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; Da	ta 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; Da	ta obtained from nearby wells	☐ Ycs ☐ 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; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other si lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or churc - Visual inspection (certification) of the proposed site; Aerial photo; Satelli		☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that le watering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application.	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh wa adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written appro	•	☐ Ycs ☐ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Vist	ual 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-Minin	g and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map</li> </ul>	gy & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Within a 100-year floodplain FEMA map		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection	quirements of 19.15.17.10 NMAC of Subsection F of 19.15.17.13 NMAC appropriate requirements of 19.15.17.11 NMAC appad) - based upon the appropriate requirements of 19. 5.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC f Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standards cann H of 19.15.17.13 NMAC	15.17.11 NMAC

19.	
Operator Application Certification:	
I hereby certify that the information submitted with this application is true, a	accurate and complete to the best of my knowledge and belief.
Name (Print): Matt Webre	Title: Environmental Specialist
Signature: The	Date: 7/23/12
email address: matt.webre@williams.com	Telephone: (505) 632-4442
OCD Approval: Permit Application (including closure plan) Significant	ura Plan (only)
	Approval Date: 7/3//2017
Title: Complance Office	OCD Permit Number:
21.	
Closure Report (required within 60 days of closure completion): Subset Instructions: Operators are required to obtain an approved closure plan p The closure report is required to be submitted to the division within 60 day section of the form until an approved closure plan has been obtained and t	rior to implementing any closure activities and submitting the closure report. s of the completion of the closure activities. Please do not complete this
	☐ Closure Completion Date:
22.  Closure Method:  Waste Excavation and Removal On-Site Closure Method A  If different from approved plan, please explain.	Iternative Closure Method   Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop Sys Instructions: Please indentify the facility or facilities for where the liquids two facilities were utilized.	stems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: s, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	
Were the closed-loop system operations and associated activities performed  Yes (If yes, please demonstrate compliance to the items below)	on or in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and op  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	perations:
24.	
Closure Report Attachment Checklist: Instructions: Each of the following 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)	ing items must be attached to the closure report. Please indicate, by a check
On-site Closure Location: Latitude L	ongitude NAD:
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closurelief. I also certify that the closure complies with all applicable closure required.	
Name (Print):	Title:
Signature:	Datc:
e-mail address:	Telephone:



#### Williams Four Corners, LLC

#### Closure Plan for Below Grade Tanks

#### San Juan Basin - New Mexico

## Background

Following promulgation of 19.15.17 NMAC also known as the Pit Rule, Williams has developed this Closure Plan to comply with requirements related to the retirement of certain below grade tanks (BGTs). The plan will be used when closing BGT locations near term, and for all BGTs which are required to be closed by June 15, 2013. This plan shall also be used when closing any other BGT operated by Williams.

Certain below grade tanks targeted under this closure plan were, in some cases, installed subsequent to earthen pit closures and were constructed in conformance with NMOCD approved criteria. All BGTs have been operating in general compliance with NMOCD regulations developed prior to the new Pit Rule of June 2008.

## Applicability

This plan shall be implemented when any BGT is retired or removed from service due to operational considerations or when tank integrity is compromised beyond repair. Closure shall commence within 60 days of cessation of use or sooner if directed by NMOCD.

The plan shall also be used if any leaking BGT is not retrofitted or modified to comply with applicable design criteria defined in the Pit Rule or when it is determined that continued operation of the BGT represents an imminent danger to fresh water, human health or the environment. All BGTs with or without completely visible sidewalls, and that do not meet current design standards, shall be closed prior to sale, transfer, or change of Operator or be retrofitted to meet current design standards. In any event, all single walled tanks without completely visible sidewalls shall be closed by June 15, 2013 in accordance with the provisions herein.

If there are conditions at a BGT location which prevent or limit adherence to this plan, a separate site specific plan will be developed. Such a plan will be prepared and submitted to the NMOCD for approval and serve as a new, site specific closure plan.

#### Description of Work

Prior to initiating BGT closure work, notification will be made to the NMOCD Aztec Office 3-7 days before work is scheduled. In addition, the landowner of record (obtained through county tax records) will be notified in advance by certified mail with return receipt. Notifications will provide operator identity, and legal location of the BGT, and the well name / number and API number if the BGT is associated with a well. Notification to NMOCD will be made via email or by phone. If prudent, and contingent upon work schedules and manpower assignments, more than one location may be included in a single communication.

Discharge to the BGT will be eliminated and all piping removed or re-routed as appropriate. The liquid contents in the tank will be removed and shipped for disposal at an NMOCD approved and permitted facility. Williams may utilize other facilities which may be approved by the NMOCD in the future. As such, the selected disposal site will be identified on the closure form (C-144) prepared for each discrete closure action.

The table below provides a list of waste materials and the facility proposed for disposal or recycling:

Table 1

Steel Tank	SJ County Landfill or Steel Recycling
Fiberglass Tank	SJ County or Bondad Landfill * or Re-use
Liner (cleaned - absent soil / sludge)	SJ County or Bondad Landfill
Sludge	Envirotech, IEI, TNT, or Bondad Landfill
Liquids (Water / Hydrocarbons)	Basin Disposal, Key Energy, TNT
Contaminated Soil	Envirotech, IEI, TNT, or Bondad Landfill
Fencing / Miscellaneous	Re-use or scrap

\*the tank must be empty, cut up or shredded and EPA clean

Permit Numbers and additional approved facilities are listed on the attached spreadsheet.

The use of any disposal or recycling facility will be identified on the C-144 form submitted to the NMOCD as part of the closure report. Any and all ancillary equipment related to the tank will also be removed, including any synthetic liner material(s) and fencing. Williams will ensure that liners and liner material will be free of soil and sludge material and disposed of at a NMOCD approved solid waste facility (e.g. San Juan County Landfill or Permitted CO Facility).

Steel or fiberglass tanks will be removed and shipped to a Williams storage yard where the condition of each tank will be evaluated for recycling, reuse, or disposal, subject to NMOCD approval. If the tank is not in a condition allowing reuse, it will either be shipped to a permitted recycling facility (for steel tanks) or it will be disposed of at the San Juan County Landfill (NMED Permit SWM-052426) or other NMOCD approved solid waste disposal site. Specific waste acceptance conditions of the landfill could necessitate further actions as appropriate. Such actions include, but may not be limited to, cutting, shredding, or sizing; emptying or cleaning of tanks or liner material, and otherwise those necessary to conform with permit conditions for Subtitle D disposal and conditions identified in 19.15.35.8 NMAC.

After the tank and equipment have been removed, soils beneath the tank will be tested and evaluated to determine if there is hydrocarbon impact or otherwise if a release event has occurred. Specific sampling protocol will follow the description provided in the Pit Rule which calls for a five point composite sample (see Sampling and Lab Analyses section). Additional grab samples will be collected if there is obvious staining, or when wet or discolored soil exists, or if there is other evidence of soil impact(s). Samples will be shipped to an off-site environmental testing laboratory for proper analyses. Results will be submitted to the NMOCD on form C-141. Further sampling may be required if NMOCD determines additional assessment work is necessary.

If there has been no release to underlying soils as demonstrated by soil analyses (i.e. lab results), or if impacts are below closure limits provided in the table below, then the depression (i.e.excavation) will be backfilled with "non-waste containing" fill material. Depending on site conditions and operating needs, the backfilled area will be reclaimed with prescribed topsoil and reseeded.

If NMOCD or Williams determines a release event has occurred, Williams will comply with 19.15.29 and / or 19.15.30 as appropriate. If analyses of soils excavated in conjunction with the BGT removal should reveal contaminant concentrations at or below specified closure limits (see Table 2 below), then the soil may be returned to the excavation and covered with prescribed soil cover. Sampling of the excavated material is detailed in the Sampling and Laboratory Analyses section later in this plan.

Due to the fact that most of Williams BGTs are located on active well sites, reclamation efforts may be deferred in order to avoid impact to ongoing lease operations. In this event, the area of the retired BGT will be incorporated into the overall well site reclamation effort with Williams documenting surface owner and lease operator approval of the proposed alternative.

The BGT site will nevertheless be prepared to prevent erosion, and protect fresh water, human health, and the environment. Williams will submit this documentation to the NMOCD for approval.

Restoration efforts shall incorporate proper contouring as described in the Pit Rule and shall be constructed in a manner to prevent ponding and erosion, using drainage controls such as water bars and/or silt traps as appropriate. Soil cover (suitable for vegetative growth) will be equivalent to the background thickness of topsoil or minimum one foot depth (or background thickness whichever is greater). The area will be contoured in a manner blending soil into/with the surrounding grade. Reclamation shall target the location of the BGT along with associated access roads (not used for production operations) and be implemented to ensure a safe and stable condition that blends with the surrounding undisturbed area.

Re-vegetation efforts will conform with NMOCD approved methods and recommendations including seed type and application rates and shall effect cover equaling 70% of native perennial vegetation. Re-vegetation shall establish at least three native plant species, including at least one grass, but not including any noxious weeds, through two successive growing seasons. Seeding will be accomplished by drilling on the contour whenever practicable or by other NMOCD approved methods.

Seeding efforts will be initiated during the first growing season after closure work is approved and be repeated until re-vegetation is successful. Notification will be made to NMOCD anytime seeding efforts begin and when successful re-vegetation is sustained. Adverse growing conditions (e.g. drought, etc.) may cause delay until conditions are more favorable or necessitate enhanced cultivation techniques (e.g. mulching, irrigating, etc.) as approved by NMOCD.

### Sampling and Laboratory Analyses

A minimum five point composite sample shall be collected from the soils beneath the below grade tank and one or more grab samples from each area that is wet, discolored or showing other evidence of a release. Sampled soil will be placed in clean glass jars and cooled and maintained at 39°F. Samples will be packaged and shipped under USEPA Chain-of-Custody protocol to an approved and certified environmental laboratory.

Soil samples collected from the earthen containment (i.e. BGT excavation) will be analyzed by an approved environmental laboratory by the listed test methods or as may be directed by the NMOCD. The following table lists the contaminants of concern, testing methods, and the closure limits defining action levels:

Ta	bl	е	2
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Contaminant	Test Methods	Closure Limits (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	Method 418.1++	100
Chlorides	EPA SW-846 Method 300.1	250*

<sup>\*</sup> Or background concentration – whichever is greater.

In the event soil is found to have contaminants in excess of the action levels above, requirements of 19.15.29 NMAC and 19.15.30 NMAC shall dictate further actions. Such action would likely include development of a Remedial Action Plan or Abatement Plan as specified under those Rules. ++ Not currently used USEPA Method (Replaced by Method 1664). Method 418.1 is required by NMOCD.

Sampling of any excavated or stockpiled material shall conform with standard environmental sampling protocol. Samples from excavated materials (excavated to facilitate the BGT removal) will be composite samples comprised of at least five discrete samples from the inside and on the surface of the soil pile. A minimum of one composite will be collected from each 25 cubic yards of soil (i.e. one fraction from each cubic yard). Every effort will be made to collect composite fractions from the inside and outside of the soil pile such that a "representative" sample is analyzed.

Stockpile sampling will be facilitated by utilizing a clean soil probe inserted into the soil pile at least three feet or by turning the soil pile with mechanized equipment to expose new soil. The goal is to collect a sample representative of the "whole". These samples will be handled and packaged as described above and be analyzed by the methods listed in Table 2. Soil with contaminant concentrations at or below the Closure Limits may be returned to the BGT excavation prior to initiating reclamation work.

## Records and Documentation

All closure activities will be properly documented and include preparation of Form C-144 which shall be submitted to the NMOCD within 60 days of completing closure tasks. Information to be included in the closure report filing shall include, but not necessarily be limited to, the following:

- Proof of closure notice to division and surface owner(s)
- Confirmation sampling and analytical reports (results)
- Disposal facility name and permit information
- Description of capping and reclamation actions (i.e. revegetation rates)
- Photo documentation of site reclamation
- Other information required to complete applicable sections of C-144

As stated above, should conditions at any location necessitate a change to the approach described herein, separate site specific closure details will be provided as an addendum to this plan.



Environmental Affairs 188 County Road 4900 Bloomfield, NM 87413 505/632-4600 505/632-4781 Fax

July 23, 2012

Mr. Jonathan Kelly New Mexico Oil Conservation Division 1000 Rio Brazos Aztec, NM 87410 RCVD JUL 31'12 OIL CONS. DIV. DIST. 3

RE: Closure Plan Approval, Rosa Unit No. 045, API No. 30-039-23013, Rio Arriba County, New Mexico

Mr. Kelly:

Attached is a C-144 requesting approval of the closure plan for the below grade tank (BGT) operated by Williams Four Corners, LLC (Williams) that is located at Rosa Unit No. 045.

Please contact myself at (505) 632-4442 with any questions regarding this investigation.

Sincerely,

Matt Webre, P.G.

**Environmental Specialist** 

Attachments