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

## State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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.

<u>Pit, Closed-L</u>	<u>oop System, Belo</u>	<u>ow-Grade Tank, or</u>
Proposed Alternative	Method Permit o	or Closure Plan Application

Proposed Alternative Method Permit or Closure Plan Application		
Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method		
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request		
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.		
1.           Operator:Williams Production Co, LLC OGRID #:120782		
Address:PO Box 640/721 So. Main, Aztec, NM 87410		
Facility or well name: Rosa Unit #100E		
API Number:30-039-25135 OCD Permit Number:		
U/L or Qtr/Qtr   Section21 Township31 N Range06W County:Rio Arriba		
Center of Proposed Design: Latitude36.88217 Longitude107.46179 NAD: ☐1927 ☒ 1983		
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment		
2.         □ Pit:       Subsection F or G of 19.15.17.11 NMAC         Temporary:       □ Drilling       □ Workover         □ Permanent       □ Emergency       □ Cavitation       □ P&A         □ Lined       □ Unlined Liner type:       Thickness      mil       □ LLDPE       □ PVC       □ Other         □ String-Reinforced         Liner Seams:       □ Welded       □ Factory       □ Other       bbl       Dimensions:       L x W x D		
3.		
Closed-loop System: Subsection H of 19.15.17.11 NMAC		
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)		
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other		
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other		
Liner Seams:  Welded Factory Other		
4.		
Volume:120bbl Type of fluid:Produced Water		
Tank Construction material:Steel Subgrade		
Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off		
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other		
Liner type: Thickness40mil		

**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 ton (Required if located within 1000 feet of a permanent residence school	hospital	
☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet		
Alternate. Please specify		
7.  Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)		
Screen Netting Other		
Monthly inspections (If netting or screening is not physically feasible)		
8. Signs: Subsection C of 19.15.17.11 NMAC		
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers		
☐ Signed in compliance with 19.15.3.103 NMAC		
9.		
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.		
Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau	office for	
consideration of approval.	office for	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
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 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)	☐ Yes ☐ No ☐ NA	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	□ Vas □ Na	
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	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	
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No	
Within a 100-year floodplain FEMA map	☐ Yes ☐ No	

11. Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 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:
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC   Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.   Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC   Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   Climatological Factors Assessment   Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC   Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC   Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC   Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   Glosure Plan - based upon the appropriate requirements of 19.15.17.19 NMAC   Closure Plan - based upon the appropriate requirements of 19.15.17.19 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 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 Steel Tanks or Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids an		
facilities are required.  Dienocal Facility Name:  Dienocal Facility	y Permit Number:	
	y Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in area		
Yes (If yes, please provide the information below) No		•
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.	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 closure plan. Reprovided below. Requests regarding changes to certain siting criteria may require administrative considered an exception which must be submitted to the Santa Fe Environmental Bureau office fedemonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	approval from the appropriate disti	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 r	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 r	nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from r	nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercoulake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	arse or lakebed, sinkhole, or playa	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	he time of initial application.	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five housel watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the state of the state Engineer - iWATERS database; Visual inspection (certification) of the state of the sta	ce at the time of initial application.	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field cove adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from	-	☐ Yes ☐ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (cer	tification) 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 Div	vision	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Reso.  Society; Topographic map	ources; 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 following items by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15 Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate require Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon 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 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.	15.17.10 NMAC 19.15.17.13 NMAC ements of 19.15.17.11 NMAC the appropriate requirements of 19. esection F of 19.15.17.13 NMAC 19.15.17.13 NMAC a case on-site closure standards cann NMAC NMAC	15.17.11 NMAC

Operator Applicati I hereby certify that	on Certification: the information submitted with this a	pplication is true, ac	ocurate and complete to t	the best of my knowledge and belief.
Name (Print):	Michael K. Lane			•
Signature:	2	Ore	Date:	9/3/08
e-mail address:	myke.lane@williams.com	Telephone:	505-6	34-4219
	Permit Application (including closu	·	e Plan (only) 🔲 OCI	Conditions (see attachment)
OCD Representativ	ve Signature: Bd 8	all_		Approval Date:
Title:	Ensirolspec		OCD Permit Nun	nber:
Instructions: Opera The closure report i		ved closure plan pri sion within 60 days	ior to implementing any of the completion of the	closure activities and submitting the closure report. e closure activities. Please do not complete this e been completed.
	on and Removal	e Method	ernative Closure Method	d ☐ Waste Removal (Closed-loop systems only)
Instructions: Please two facilities were u	e indentify the facility or facilities for	r where the liquids,	drilling fluids and drill	e Ground Steel Tanks or Haul-off Bins Only: cuttings were disposed. Use attachment if more than  Permit Number:
	Disposal Facility Name: Disposal Facility Permit Number:			
Were the closed-loop	·		n or in areas that will no	t be used for future service and operations?
☐ Site Reclamat ☐ Soil Backfilling	ed areas which will not be used for fution (Photo Documentation) ng and Cover Installation n Application Rates and Seeding Tech		erations:	
24.				
mark in the box, the Proof of Clos Proof of Deec Plot Plan (for Confirmation Waste Materi Disposal Faci Soil Backfilli Re-vegetation Site Reclamat	at the documents are attached.  ure Notice (surface owner and divisional Notice (required for on-site closure) on-site closures and temporary pits)  Sampling Analytical Results (if applial Sampling Analytical Results (requially Name and Permit Numbering and Cover Installational Application Rates and Seeding Techtion (Photo Documentation)	n) cable) red for on-site closu nique	re)	ed to the closure report. Please indicate, by a check
On-site Closu	ure Location: Latitude	Lo	ngitude	NAD: 1927 1983
	the information and attachments subr			te and complete to the best of my knowledge and specified in the approved closure plan.
Name (Print):			Title:	
Signature:			Date:	
e-mail address:			Telephone:	

## Williams Production Co., LLC San Juan Basin: New Mexico Assets

## Below-Grade Tank Removal Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all out-of-service BGTs used to store produced liquids during production operations at oil and gas wells operated by WPX. For those closures which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized. All closure activities will include proper documentation and will be submitted to OCD within 60 days of the pit closure on a Closure Report using Division Form C-144. The Report will include the following:

- Plot Plan (Pit Diagram)
- Available Inspection reports

- Sampling Results
- Waste disposal documentation

## General Plan Requirements:

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- 1. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank, ...). The well will be temporarily shutin until the rerouting is completed.
- 2. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed of by injection at one of the Williams Production Rosa Unit Salt Water Disposal wells: Rosa SWD #1 (API: 30-039-27055) I-23-31N-06W Permit SWD-916 or Rosa Unit #94 (API: 30-039-23035) K-16-31N-05W, Permit SWD-758.
- 3. Notice of Closure will be given to the landowner or SMA, and the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
  - a. Operators Name (WPX)
  - b. Well Name and API Number
  - c. Location (USTR)
- 4. The BGT and all associated materials will be removed, and recycled, reused, or disposed of in a Division-approved facility. All materials that can not be recycled or reused will be treated a solid waste and will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).
- 5. Following removal of the tank and any liner material, a five-point composite sample will be taken of the excavation and tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), a release will be reported following Rule 116 and impacted soils will be excavated and hauled to Envirotech Landfarm near Bloomfield, NM (NMOCD Permit NM-01-0011). Approval to haul will be requested of the Aztec District office prior to initiation.

Table 1: Closure Criteria for BGTs

Components	Testing Methods	Glosure Limits (img/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	EPA SW-846 Method 8015 M(Full Range)* or Method 418.1	100
Chlorides	EPA SW-846 Method 300.1	250

<sup>\*</sup> Preferred method

6. Upon completion of the tank removal and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material compacted to native and covered with a minimum of one foot of top soil. The surface will be recontoured to match the native grade.

San Juan Basin: New Mexico Assets

7. For those portions of the former pit area no longer required for production activities, WPX will seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. Note: WPX assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.

8. For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.