



# New Mexico Energy, Minerals and Natural Resources Department

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Division Director  
Oil Conservation Division



**JUNE 9, 2010**

**CERTIFIED MAIL**  
**RETURN RECEIPT NO: 3341 0321**

Mr. Michael K. Lane  
Williams Operating Company, LLC  
P.O. Box 660  
Aztec, New Mexico 87410

**RE: Williams Production Co., LLC – OGRID 120782**  
**OCD Review of Williams' April 20, 2010 Permit Application**  
**Rosa Unit SWD No. 2, 30-039-30812**  
**Unit Letter F, Section 25, Township 31 North, Range 5 West, NMPM**  
**San Juan County, New Mexico**

Mr. Lane:

Williams Operating Company, LLC (Williams) filed a permit application with the Aztec District Office of the Oil Conservation Division (OCD) on April 20, 2010, requesting approval to construct and use a closed-loop system for the Rosa Unit SWD No. 2 well and a temporary drilling pit for disposal of oil field waste 10 miles away at another well site (the Rosa Unit 634B). Williams is the operator of record for the Rosa Unit SWD No. 2.

## **REASONS FOR DENIAL**

OCD denies Williams' permit application because it is inadequate. The permit application is incomplete; Williams inappropriately proposes to dispose of oil field waste off-site; and, parts of Williams' permit application are either unclear or deficient or contain proposals that may require Williams to submit a request for administrative approval for an alternative or an exception to a requirement of the Pit Rule. Please note that OCD did not review Williams' permit application as an application for an alternative or an exception to a requirement of the Pit Rule because Williams did not identify it as such.

## **INCOMPLETE STATUS OF WILLIAMS PERMIT APPLICATION**

As noted above, OCD denies Williams permit application because, among other reasons, it is incomplete. Specifically, Williams' permit application does not contain a design plan for the closed-loop system as required by 19.15.17.9B(3) NMAC, does not contain a design plan for the



temporary pit as required by 19.15.17.9B(2) NMAC, and does not contain a C-102 for the temporary pit as required by 19.15.17.9(D)2 NMAC.

Williams indicated in Box 12 of its form C-144 that it was including a design plan for a closed-loop system. However, Williams did not include a design plan for a closed-loop system in its permit application as required by 19.15.17.9B(3) NMAC. Williams did include a *Location of Closed-loop System Map* on Page 11 of its permit application which depicts a reserve pit and blow pit at the Rosa Unit SWD No. 2 location that Williams does not discuss in its permit application.

Williams indicated in Box 11 of its form C-144 that it was including a design plan for a temporary pit. However, Williams did not provide a design plan of the proposed temporary pit in its permit application as required by 19.15.17.9B(2) NMAC.

Paragraph (2) of 19.15.17.9D NMAC states, "If the operator plans to use a temporary pit, the operator shall provide the proposed pit location on form C-102." Williams did not submit the required form C-102 in its permit application.

#### **OFF-SITE DISPOSAL**

As discussed below, OCD has determined that Williams' permit application must also be denied because Williams proposes to dispose of oil field waste generated during drilling operations at the Rosa Unit SWD No. 2 off-site at a temporary pit located at the Rosa Unit 634B, located off-site, approximately 10 miles away.

The second paragraph of the Williams introduction to its permit application provides a brief explanation of Williams' proposal to utilize a closed-loop and temporary pit system. Williams clearly states that the closed-loop system will be "located immediately adjacent to the drilling/completion rig." Williams states that the temporary pit "will be needed to provide additional fluids storage for pressure control, hole stability and solids management" and that it "will be located ... within 10 miles west of the SWD #2 wellsite." Williams has not explained how a temporary pit located approximately 10 miles away from the Rosa Unit SWD No. 2 well being drilled with a closed-loop system can possibly be used for "pressure control, hole stability and solids management." If problems with the well were to occur, the location of the temporary pit, approximately 10 miles away (20 miles round trip) means that Williams would be unable to use the pit during an emergency response. It also demonstrates that the closed-loop system that Williams is proposing is not properly designed to handle or contain the anticipated liquids and solids generated from the drilling of Rosa Unit SWD No. 2, as required by 19.15.17.11A NMAC. OCD has determined that the proposed temporary pit would be only used for off-site disposal of oil field waste. The disposal of oil field waste at an off-site location is only allowable with a permit in compliance with the surface waste management facility provisions of 19.15.36 NMAC. Since 2008, OCD has consistently addressed the off-site issue in its *Frequently Asked Questions* guidance for the Pit Rule.

#### **DEFICIENCIES IN WILLIAMS' PERMIT APPLICATION**



Parts of Williams permit application include proposals that OCD considers to be unclear or deficient or which contain proposals that may require Williams to submit a request for administrative approval for an alternative or an exception to a requirement of the Pit Rule. The Pit Rule (19.15.17.11F(2) NMAC) states, "The operator shall construct a temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The appropriate division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the temporary pit in a safe manner to prevent contamination of fresh water and protect public health and the environment." Williams' proposal states that "where steeper slopes are required due to surface owner and right-of-way restriction, an engineer's certification of stability will be provided." If Williams wishes to propose using slopes steeper than the 2H:1V requirement, then Williams must submit a new design drawing, provide a demonstration that Williams can construct and operate the temporary pit in a safe manner to prevent contamination of fresh water and protect public health and the environment, and submit a request for consideration of administrative approval from the appropriate division district office. Williams' proposal incorrectly presumes that OCD will approve its request without Williams going through the administrative process of 19.15.17 NMAC.

The Pit Rule (19.15.17.11F(3) NMAC) states, "The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light." Williams' permit application states, "The temporary pit will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-86 method 9090A requirements." It is unclear if Williams intends to comply with all of the provisions of 19.15.17.11F(3) NMAC or is requesting an exception to this requirement. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

The Pit Rule (19.15.17.11F(4) NMAC) states, "The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory welded seams where possible. Prior to field seaming, the operator shall overlap liners four to six inches and orient seams parallel to the line of maximum slope, *i.e.*, oriented along, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. Qualified personnel shall perform field seaming. The operator shall weld field liner seams." Williams' permit application states, "Field seams will be overlapped per manufacturer's specifications." However, Williams did not indicate that it will overlap the liners by four to six inches, nor did it specify that qualified personnel would perform any field seaming. Williams' permit application is unclear whether Williams intends to comply with all of the requirements of 19.15.17.11F(4) NMAC or is requesting an exception to this requirement. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

The Pit Rule (19.15.17.12B(4) NMAC) states, "The operator shall remove all free liquids from a temporary pit within 30 days from the date that the operator releases the drilling or workover rig. The operator shall note the date of the drilling or workover rig's release on form C-105 or C-103 upon well or workover completion. The appropriate division district office may grant an extension of up to three months." Williams' permit application does not specify that it will note



the date of the drilling or workover rig's release on form C-105 or C-103 upon well or workover completion. It is unclear if Williams intends to comply with 19.15.17.12.B(4) or is requesting an exception to this requirement. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

The Pit Rule (19.15.17.12A(5) NMAC) states, "If a pit, below-grade tank, closed-loop system or sump develops a leak, or if any penetration of the pit liner, below-grade tank, closed-loop system or sump occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line within 48 hours, notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the pit liner, below-grade tank, closed-loop system or sump." Williams' permit application does not specify that Williams will remove all liquids above the damage or leak line of the closed-loop system within 48 hours of discovery. It is unclear whether Williams intends to comply with 19.15.17.12A(5) NMAC or is requesting an exception to this requirement. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

Williams' permit application states "In the event that the criteria are not met (See Table 1) all contents will be handled per 19.15.17.13(B)(1)(a) (*i.e.*; dig and haul to a Division approved facility)." The Pit Rule (19.15.17.13B(1)(a) NMAC) states, "The operator shall close the temporary pit by excavating all contents and, if applicable, synthetic pit liners and transferring those materials to a division-approved facility." The temporary pit closure method for waste excavation and removal requires that all of the applicable provisions, Subparagraphs (a) through (d), be considered and completed by the operator - not just the first provision. Williams did not request or pursue an exception to the provisions identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

The Pit Rule (19.15.17.11D(1) NMAC) states, "The operator shall fence or enclose a pit or below-grade tank in a manner that prevents unauthorized access and shall maintain the fences in good repair. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including the pit or below-grade tank. During drilling or workover operations, the operator is not required to fence the edge of the pit adjacent to the drilling or workover rig." Williams' permit application proposes to remove the "front" side of the fence for the temporary pit during drilling/completion operations. This would require that Williams submit an exception request because the temporary pit is not located adjacent to the drilling or workover rig. In fact, Williams has proposed that the temporary pit will be located 10 miles away from the associated drilling activities. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

The Pit Rule (19.15.17.12A(5) NMAC) states, "If a pit, below-grade tank, closed-loop system or sump develops a leak, or if any penetration of the pit liner, below-grade tank, closed-loop system or sump occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line within 48 hours, notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the pit liner, below-grade tank, closed-loop system or sump." Williams' permit application proposes to report releases in accordance with 19.15.29 NMAC, which, unlike the Pit Rule, considers the volume of the release. The



*Operational Requirements* of the Pit Rule (19.15.17.12A(5) NMAC) requires the operator to report if the pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface. This would be an exception request because Williams is proposing to use a different notification standard than the one required under the Pit Rule. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

Williams' proposes in its permit application to use the sampling requirements for waste removal and excavation in 19.15.17.13B(1)(b) NMAC, sampling beneath the temporary pit, for in-place burial rather than the correct sampling requirements - sampling the pit contents for in-place burial as specified in 19.15.17.13F(2) NMAC. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

Williams' proposed closure limit for chlorides is 1000 mg/kg. Williams' proposal incorrectly states that ground water is greater than "100 feet below the pit bottom." This assertion is not supported by the design dimensions provided in Box 2 of form C-144 and the information provided in the hydrogeologic data and supporting maps. The design information provided in Box 2 of form C-144 indicates that the proposed depth of the temporary pit is 20 feet. The information provided in the hydrogeologic data sheet concludes that the "depth to moisture is between 110 and 300 feet." Williams Siting Criteria Map 1 (Page 16) of the permit application indicates that the depth to moisture is 115 feet below the ground surface for Cathodic Well Rosa 18, which is located 110 feet from the proposed temporary pit. Based upon the proposed design and Williams' determination of the depth to ground water below the ground surface, the separation from the bottom of the proposed temporary pit and ground water is between 90 to 95 feet. The vertical separation between the bottom of the temporary pit and the ground water determines the in-place burial chloride standards. Based on the information provided in the application, the in-place burial standard for chlorides cannot exceed 500 mg/kg or the background concentration, whichever is greater. Williams did not request or pursue an exception to the provision identified above in accordance with the exception requirements of 19.15.17.15 NMAC.

As noted above, OCD did not review Williams' permit application as an application for approval of administrative approvals or an exception to a requirement of the Pit Rule because Williams did not submit the permit application as an administrative approval or exception request. Because some of these proposals could be exceptions to the Pit Rule, Williams must follow the procedures set out in 19.15.17.15 NMAC to apply for an exception if it wishes to seek an exception to any provisions of the Pit Rule. If Williams wishes to seek an alternative to a requirement of 19.15.17 NMAC, subject to an administrative approval, then Williams must identify the provisions in which an administrative approval is requested and provide the demonstrations specified within the provision for OCD's consideration.

#### **REPRESENTATIONS MADE BY WILLIAM'S LEGAL COUNSEL**



Although OCD's denial of the permit application is based solely on the permit application, OCD also reviewed the application in light of the representations that Williams' counsel made at the June 3, 2010 pre-hearing conference in Case No. 14463. Williams' counsel represented:

- 1) that Williams intends to use the pit at the Rosa Unit 634B well site both as a drilling pit for the Rosa Unit 634B well and as a waste disposal pit for the waste generated at the closed-loop system used at the Rosa Unit SWD No. 2 well site;
- 2) that waste generated by the drilling of the two wells will be commingled in the temporary pit located at the Rosa Unit 634B wellsite for disposal; and
- 3) that Williams is not required by the Pit Rule to take any further action to obtain approval to use the pit requested under the April 20, 1010 application as a drilling pit for the Rosa Unit 634B.

OCD's responses to the representations made by Williams' counsel follow:

Williams' intention is to use the pit at the Rosa Unit 634B well site both as a drilling pit for the Rosa Unit 634B well and as a waste disposal pit for the waste generated at the closed-loop system used at the Rosa Unit SWD No. 2 well site is not allowable. Williams may only dispose of oil field waste off-site with a surface waste management facility permit in compliance with the provisions of 19.15.36 NMAC. Since 2008, OCD has consistently addressed the off-site issue in its *Frequently Asked Questions* guidance for the Pit Rule.

Williams' intention is to commingle the waste generated by the drilling of the Rosa Unit SWD Well No. 2 with the waste generated by the drilling of the Rosa Unit 634B in the same pit at the Rosa Unit 634B location. OCD has approved the commingling and disposal of waste generated from the drilling of multiple wells before. However, OCD's past approvals were for sites where the operator was drilling multiple directional wells from the same well pad which utilized one temporary pit for drilling and disposal of waste generated from all the directional wells. This is not the same as Williams' proposal to dispose and commingle waste generated at one location with waste from a well being drilled approximately 10 miles away. This would be off-site disposal, which as discussed above, is only allowable with a surface waste management facility permit in compliance with the provisions of 19.15.36 NMAC.

Williams' representation that it does not need to take any further action to obtain approval to use the pit requested under the April 20, 1010 application, as a drilling pit for the Rosa Unit 634B is not correct. Williams' must obtain a Part 36 permit for off-site disposal of oil field waste and may not commingle drilling waste from two separate wells.

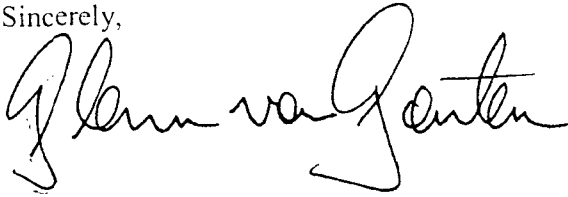
As noted above, OCD's review identified items in Williams' permit application that may require Williams to submit exception request or to seek administrative approval to the requirements of 19.15.17 NMAC as well as certain other deficiencies. If Williams wishes to seek an exception to a requirement of 19.15.17 NMAC, it must follow the procedures set out in 19.15.17.15 NMAC; to apply for an exception. If Williams wishes to seek an administrative approval to a requirement of 19.15.17 NMAC, subject to an administrative approval, then Williams must identify the provisions in which an administrative approval is requested and provide the demonstration justifying its request.



Mr. Lane  
June 9, 2010  
Page 7 of 7

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad Jones at (505) 476-3487 or [brad.a.jones@state.nm.us](mailto:brad.a.jones@state.nm.us).

Sincerely,

A handwritten signature in black ink, reading "Glenn von Gonten". The signature is fluid and cursive, with the first name "Glenn" being the most prominent part.

Glenn von Gonten  
Acting Environmental Bureau Chief

GvG/baj

cc:     OCD District III Office, Aztec  
          Ocean Munds-Dry, Holland & Hart, LLP