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

Form C-144 Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

## Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:  Below grade tank registration Permit of a pit or proposed alternative Closure of a pit, below-grade tank, or p Modification to an existing permit/or re BGT 1  Below grade tank registration Permit of a pit or proposed alternative Closure plan only submitted for an exist	roposed alternative method
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per in	
Please be advised that approval of this request does not relieve the operator of liability shoul environment. Nor does approval relieve the operator of its responsibility to comply with any	d operations result in pollution of surface water, ground water or the
1.	other approache governmental authority's rules, regulations, or ordinances.
Operator:M&G Drilling CO INC	OGRID #:141852
Address:P.O. Box 5940 Farmington, NM 87499	
Facility or well name:Hammond #041R	
API Number:30-045-22577	OCD Permit Number:
U/L or Qtr/QtrGSection25 Township27N	Range08W County:San Juan
Center of Proposed Design: Latitude36.5474434Lo	
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment	
2.	
<u>Pit</u> : Subsection F, G or J of 19.15.17.11 NMAC	
Temporary:  Drilling  Workover	
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Manager	nent Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDF	
☐ String-Reinforced	
Liner Seams:  Welded Factory Other Volum	ne: bbl Dimensions: L x W x D
3.	
Volume:100bbl Type of fluid:Produced Water_	
Tank Construction material:Steel	
Secondary containment with leak detection  Visible sidewalls, liner, 6-inch li	ft and automatic availage shot a ff
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other	
Liner type: Thickness mil  HDPE PVC Other	
Ellief type: Tilleknessilli	
4.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Si	anta Fe Environmental Bureau office for consideration of approval.
Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary	anta Fe Environmental Bureau office for consideration of approval.
Chain link, six feet in height, two strands of barbed wire at top (Required if located institution or church)	l within 1000 feet of a permanent residence, school, hospital,
Four foot height, four strands of barbed wire evenly spaced between one and four	eet
☐ Alternate. Please specify_ Four Foot height with mesh T-Post	
	pits, and below-grade tanks)  I within 1000 feet of a permanent residence, school, hospital,  eet
Form C 144 Oil Consequention Div	

6.		
	lies to permanent pits and permanent open top tanks)	
Screen ☐ Netting ☐ Other	nes to permanent pus una permanent open top tunto)	
☐ Monthly inspections (If netting or screening is no	ot physically feasible)	
7.		
Signs: Subsection C of 19.15.17.11 NMAC		
12"x 24", 2" lettering, providing Operator's nam	ne, site location, and emergency telephone numbers	
Signed in compliance with 19.15.16.8 NMAC		
Please check a box if one or more of the following  Variance(s): Requests must be submitted to	are required. Please refer to 19.15.17 NMAC for guidance. <i>is requested, if not leave blank:</i> the appropriate division district for consideration of approval. to the Santa Fe Environmental Bureau office for consideration of approval.	
9. <u>Siting Criteria (regarding permitting)</u> : 19.15.17. <i>Instructions: The applicant must demonstrate commaterial are provided below.</i> Siting criteria does not seem to the command of the	upliance for each siting criteria below in the application. Recommendations of ac	ceptable source
General siting		
- NM Office of the State Engineer - iWAT	m of a low chloride temporary pit or below-grade tank. □ TERS database search; □ USGS; □ Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is less than 50 feet below the botto NM Office of the State Engineer - iWATERS database	m of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. ase search; USGS; Data obtained from nearby wells	Yes No
adopted pursuant to NMSA 1978, Section 3-27-3, as	a defined municipal fresh water well field covered under a municipal ordinance s amended. (Does not apply to below grade tanks) are municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does - Written confirmation or verification or map	not apply to below grade tanks) from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below a Engineering measures incorporated into the Society; Topographic map	grade tanks) design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to be FEMA map	elow grade tanks)	☐ Yes ☐ No
Below Grade Tanks		
Within 100 feet of a continuously flowing watercour from the ordinary high-water mark).  - Topographic map; Visual inspection (certification)	rse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured cation) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh wat  - NM Office of the State Engineer - iWATER	er well used for public or livestock consumption;.  S database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride I	Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercount or playa lake (measured from the ordinary high-water and the continuously flowing watercount or playa lake (measured from the ordinary high-water and the continuously flowing the continuously flowing the continuously flowing the continuously flowing watercount or playa flowing waterco		Yes No
application.	ce, school, hospital, institution, or church in existence at the time of initial	Yes No Yes No Yes No
- Visual inspection (certification) of the propo	osed site; Aerial photo; Satellite image	
watering purposes, or 300 feet of any other fresh wat	omestic fresh water well used by less than five households for domestic or stock for well or spring, in existence at the time of the initial application.  ase search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Form C-144	Oil Concervation Division Page 2 o	0.6

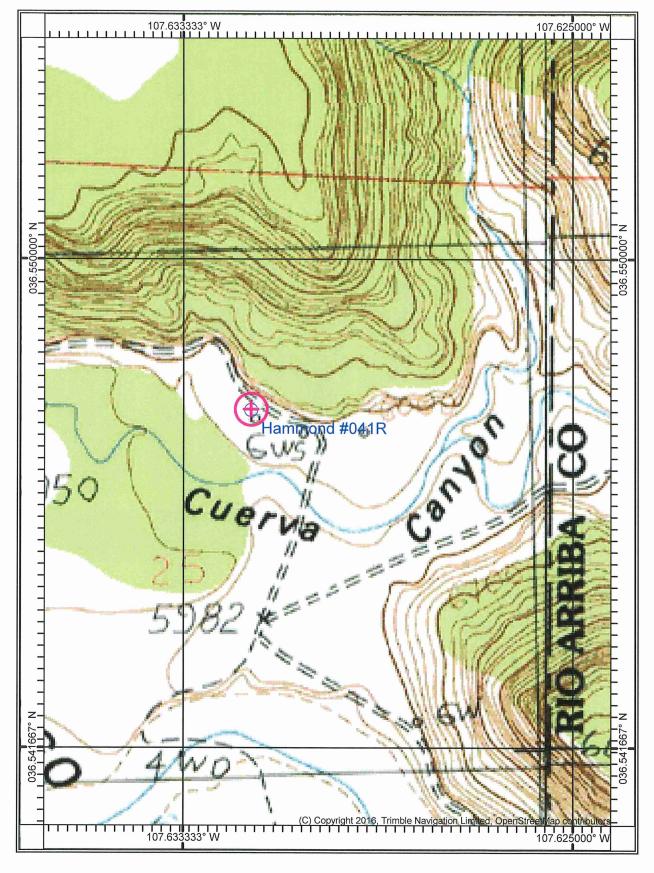
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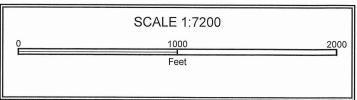
<u></u>			
Permanent Pits Permit Application Checklist: Instructions: Each of the following items must be attached.	Subsection B of 19.15.17.9 NMAC eattached to the application. Please indicate, by a check mark in the box, that the	documents are	
☐ Hydrogeologic Report - based upon the required Siting Criteria Compliance Demonstrations ☐ Climatological Factors Assessment	rirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC - based upon the appropriate requirements of 19.15.17.10 NMAC upon the appropriate requirements of 19.15.17.11 NMAC		
☐ Dike Protection and Structural Integrity Des☐ Leak Detection Design - based upon the app☐ Liner Specifications and Compatibility Asse☐ Quality Control/Quality Assurance Construction	ign - based upon the appropriate requirements of 19.15.17.11 NMAC propriate requirements of 19.15.17.11 NMAC passes assument - based upon the appropriate requirements of 19.15.17.11 NMAC passes and Installation Plan		
Operating and Maintenance Plan - based upon Freeboard and Overtopping Prevention Plan Nuisance or Hazardous Odors, including Hain Emergency Response Plan Oil Field Waste Stream Characterization	on the appropriate requirements of 19.15.17.12 NMAC - based upon the appropriate requirements of 19.15.17.11 NMAC S, Prevention Plan		
<ul><li>☐ Monitoring and Inspection Plan</li><li>☐ Erosion Control Plan</li></ul>	equirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC		
13. Proposed Closure: 19.15.17.13 NMAC			
	es, Boxes 14 through 18, in regards to the proposed closure plan.		
☐ Alternative Proposed Closure Method: ☐ Waste Excavation		Fluid Management Pit	
☐ Disposal Facility Name and Permit Number☐ Soil Backfill and Cover Design Specification☐ Re-vegetation Plan - based upon the appropri	- based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC		
Siting Criteria (regarding on-site closure method Instructions: Each siting criteria requires a demonstruction of the siting criteria requires a demonstruction of the situation	ds only): 19.15.17.10 NMAC onstration of compliance in the closure plan. Recommendations of acceptable sou ertain siting criteria require justifications and/or demonstrations of equivalency.	rce material are Please refer to	
Ground water is less than 25 feet below the bottom - NM Office of the State Engineer - iWATE	of the buried waste. RS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA	
Ground water is between 25-50 feet below the botte - NM Office of the State Engineer - iWATE.	om of the buried waste RS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA	
	RS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA	
Within 100 feet of a continuously flowing watercould lake (measured from the ordinary high-water mark)  - Topographic map; Visual inspection (certification)		☐ Yes ☐ No	
Within 300 feet from a permanent residence, schoo - Visual inspection (certification) of the prop	l, hospital, institution, or church in existence at the time of initial application. oosed site; Aerial photo; Satellite image	☐ Yes ☐ No	
Within 300 horizontal feet of a private, domestic from at the time of initial application.	esh water well or spring used for domestic or stock watering purposes, in existence RS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No         NA         ☐ Yes ☐ No         ☐ Yes ☐ No         ☐ Yes ☐ No         ☐ Yes ☐ No	
Written confirmation or verification from the munic	cipality; Written approval obtained from the municipality	☐ Yes ☐ No	
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map;	Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No	
Within incorporated municipal boundaries or within	n a defined municipal fresh water well field covered under a municipal ordinance		
Form C-144	Oil Conservation Division Page 4 c		

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 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
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closury 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 E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.1  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  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards  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 H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	5.17.11 NMAC f 19.15.17.11 NMAC
Departor Application Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and Name (Print):  Vanessa Fields  Title:Regulatory Compliance ManagerAgent/Re	
e-mail address:vanessa@walsheng.net Telephone:505-787-9100	
8.  OCD Approval:  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)	)
OCD Representative Signature: Approval Date: J	uly 19, 2021
Title: Environmental Specialist OCD Permit Number: BGT 1	
9. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitthe closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please desection of the form until an approved closure plan has been obtained and the closure activities have been completed.	itting the closure report o not complete this
Closure Completion Date:	
© Closure Method:  Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method  Waste Removal (Close If different from approved plan, please explain.	ed-loop systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Pleamark 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 for private land only) 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)	se indicate, by a check
On-site Closure Location: Latitude Longitude NAD: 1927 1983	
Form C-144 Oil Conservation Division Page	a 5 a 6 C

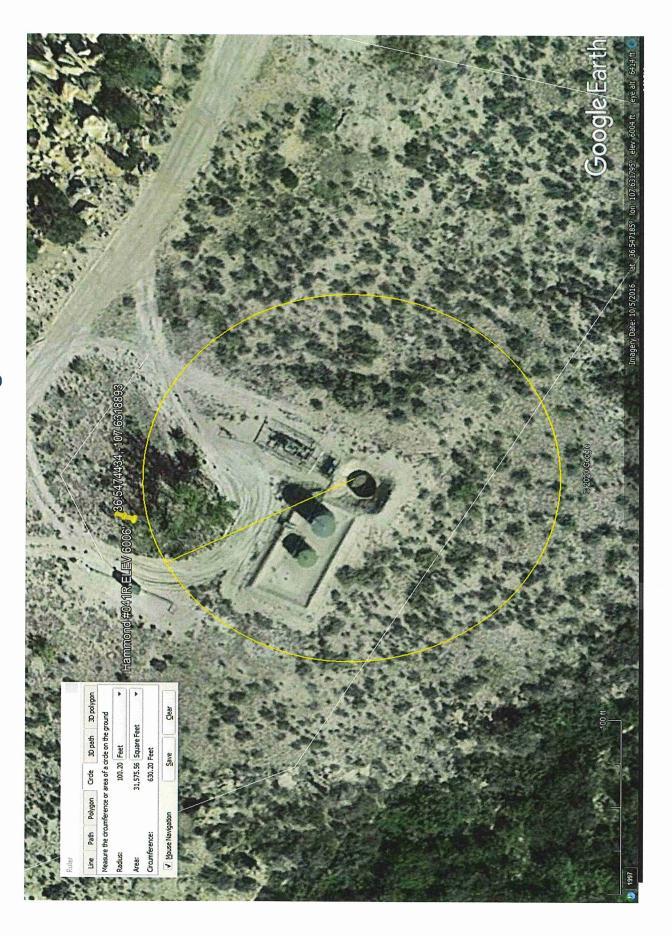
22.			
Operator Closure Certification:			
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.			
Name (Print):	Title:		
Signature:		Date:	
e-mail address:	Telephone:		

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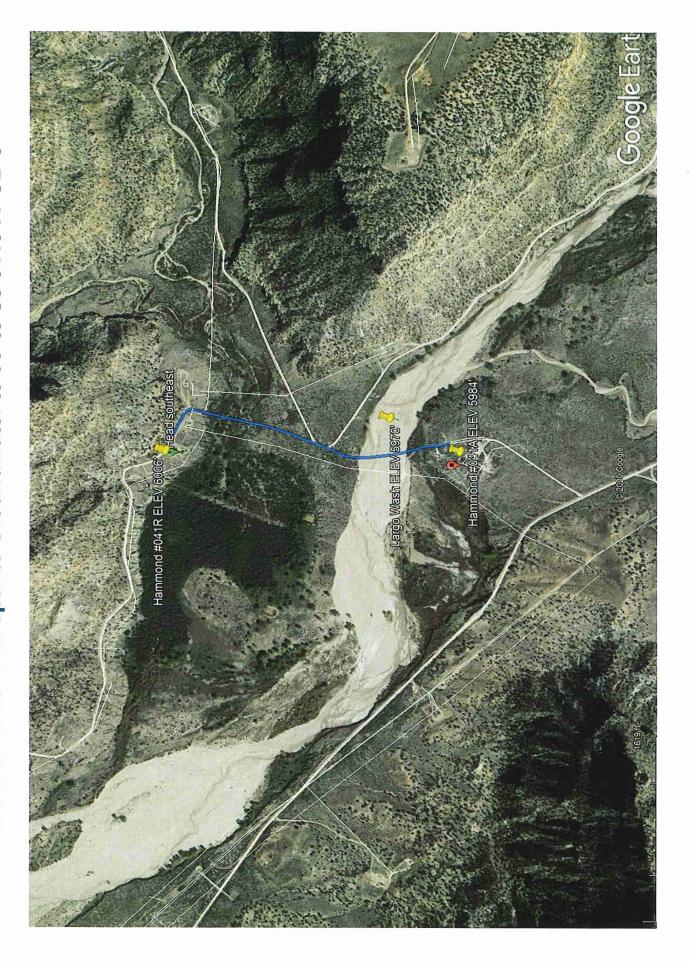




## **HAMMOND #041R Sitting Criteria**



# HAMMOND #041R Depth to Groundwater to 36' to SJ 04194 POD 8





## New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

POD has been replaced water right file.) & no longer serves a POD suffix indicates the (A CLW#### in the closed) (R=POD has been

O=orphaned replaced, C=the file is

(quarters are 1=NW 2=NE 3=SW 4=SE)

(NAD83 UTM in meters)

(In feet)

POD

Sub-00

**POD Number** 

Code

SJ 04194 POD8

(quarters are smallest to largest)

Water

basin County 64 16 4 Sec Tws Rng 27N 08W

264360

4047121

DepthWellDepthWater Column

Average Depth to Water:

14

16

Minimum Depth:

14 feet

14 feet

Maximum Depth: 14 feet

Record Count: 1

PLSS Search:

Section(s): 25

Township: 27N

Range: 08W

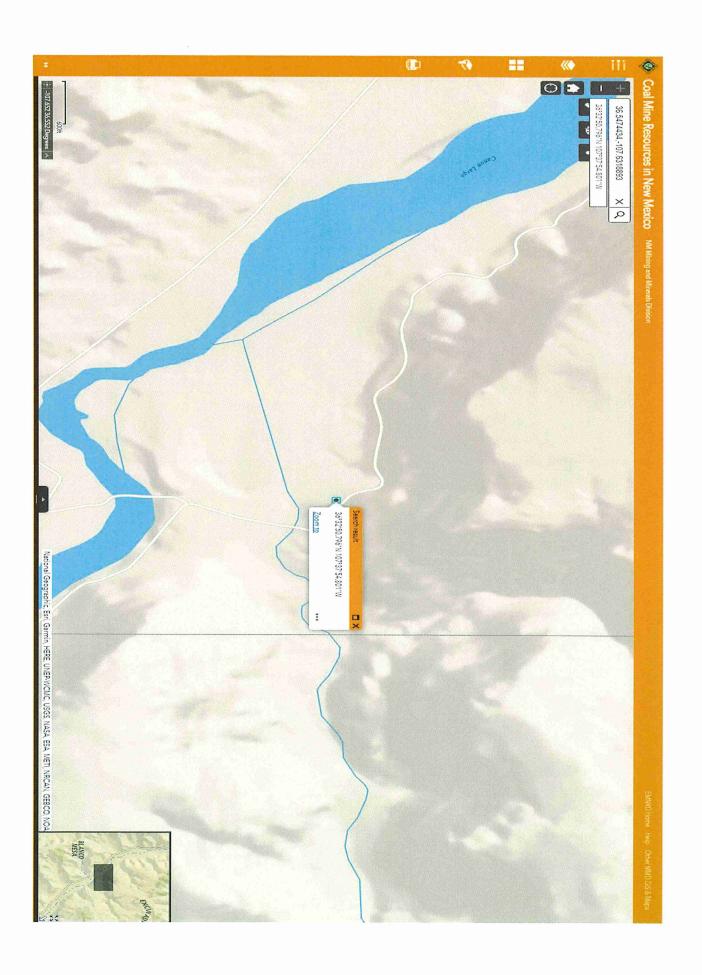
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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WATER WATER COLUMN/ AVERAGE DEPTH TO

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## **M&G Drilling CO INC** San Juan Basin **Below Grade Tank Closure Plan**

Lease Name: Hammond #041R API No.: 30-045-22577

Description: Unit G, Section 25, Township 27N, Range 08W, San Juan County

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on M&G Drilling CO INC locations. This is M&G Drilling CO INC standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

## General Plan

- 1. M&G DRILLING CO INC will obtain approval of this closure plan prior to commencing closure of the below grade tank at this location pursuant to 19.15.17.13.C (1) NMAC
- 2. M&G DRILLING CO INC will notify the surface owner by certified mail, return receipt requested, that the M&G Drilling CO INC plans closure operations at least 72 hours, but no more than one week, prior to any closure operation. Notice will include:
  - a. Well Name
  - b. API#
  - c. Well Location
- Within 60 days of cessation of operations, M&G DRILLING CO INC will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
  - a. Soils, tank bottoms, produced sand, pit sludge and other exempt wastes impacted by petroleum hydrocarbons will be disposed of at: Envirotech: Permit #NM01-0011 and IEI: Permit # NM01-0010B
  - b. Produced Water will be disposed of at: Basin Disposal: Permit #NM01-005 and M&G DRILLING CO INC owned saltwater Disposal Facilities

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- 4. Within six (6) months of cessation of operations, M&G DRILLING CO INC will remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. If there is any equipment associated with a below-grade tank, then the M&G Drilling CO INC shall remove the equipment, unless the equipment is required for some other purpose.
- 5. M&G DRILLING CO INC will collect a closure sample of the soil beneath the location of the below grade tank that is being closed. The closure sample will consist of a five-point composite sample to include any obvious stained or wet soils, or other evidence of contamination. The closure sample will be analyzed for all constituents listed in Table I below, including DRO+GRO, Chlorides, TPH, benzene and BTEX.

		Table I	
	Closure Criteria for	Soils Impacted by a Release	
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

- 6. If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and the M&G Drilling CO INC must receive approval before proceeding with closure. If all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, then the M&G Drilling CO INC can proceed to backfill the pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.
- 7. After closure has occurred, M&G DRILLING CO INC will reclaim the former BGT area, if it is no longer being used for extraction of oil and gas, by substantially restoring the impacted surface area to the condition that existed prior to oil and gas operations. M&G DRILLING CO INC will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover materials. The soil cover shall consist of the background thickness of topsoil, or one foot of suitable materials to establish vegetation at the site, whichever is greater. All areas will be reclaimed as early as practicable, and as close to their original condition or land use as possible. They shall be maintained in a way as to control dust and minimize erosion.
- 8. M&G DRILLING CO INC will complete reclamation of all disturbed areas no longer in use when the ground disturbance activities at the site have been completed. The reseeding shall take place during the first favorable growing season after closure. Reclamation activities will be considered completed when a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of predisturbance levels, and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.
  - \*Re-vegetation and reclamation obligations imposed by other applicable federal, state or tribal agencies on lands managed by those agencies shall supersede the above requirements, provided they provide equal or better protection of fresh water, human health and the environment.
- 9. M&G DRILLING CO INC will notify the Aztec Office of the NMOCD by email when reclamation and closure activities are completed.
- 10. Within 60 days of closure, M&G DRILLING CO INC will submit a closure report to the Aztec office of the NMOCD, filed on Form C-144. The report will include the following:
  - a. Proof of closure notice to NMOCD and surface owner
  - b. Confirmation sampling analytical results
  - c. Soil backfill and cover installation information
  - d. Photo documentation of site reclamation

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 16127

### **CONDITIONS**

Operator:	OGRID:
M & G DRLG CO INC	141852
P.O. Box 5940	Action Number:
Farmington, NM 87499	16127
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

### CONDITIONS

Created By	Condition	Condition Date
cwhitehead	None	7/19/2021