38

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, 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 Alter	mative Method Permit or Closure Pla	n Application			
Type of action: Below Permit Closure Modifie Closure	grade tank registration of a pit or proposed alternative method of a pit, below-grade tank, or proposed alternative cation to an existing permit/or registration e plan only submitted for an existing permitted or no	n-permitted pit, below-grade tank,			
or proposed alternative meth	bd				
Please be advised that approval of this request does not environment. Nor does approval relieve the operator o	e application (Form C-144) per individual pit, below-grading relieve the operator of liability should operations result in point fits responsibility to comply with any other applicable govern	de tank or alternative request Ilution of surface water, ground water or the mental authority's rules, regulations or ordinances.			
Operator: <u>Dugan Production Corp.</u>	OGRID #: (006515			
Address: PO Box 420, Farmington, NM 87499	-0420				
Facility or well name: Target #1					
API Number: <u>30-045-28537</u>	OCD Permit Number:				
U/L or Qtr/Qtr F Section2	 DTownship 24N Range 10W Co	ounty: San Juan			
Center of Proposed Design: Latitude _36.300533	13Longitude <u>-107.9212494</u> NAD83	(1980' FNL & 1980' FWL)			
Surface Owner: 🛛 Federal 🗔 State 🗖 Private [Tribal Trust or Indian Allotment				
2.					
<u>Pit</u> : Subsection F, G or J of 19.15.17.11 NR	MAC				
Temporary: 🗋 Drilling 🗋 Workover					
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no					
Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other					
String-Reinforced					
Liner Seams: 🗌 Welded 🗍 Factory 🗋 Other	Volume:bbl I	Dimensions: L x W x D			
3.					
Below-grade tank: Subsection I of 19.15.1	7.11 NMAC				
Volume: <u>80</u> bbl Type of	of fluid: <u>produced water</u>				
Tank Construction material: _ <u>Fiberglass</u>	· · · · · · · · · · · · · · · · · · ·				
Secondary containment with leak detection [☐ Visible sidewalls, liner, 6-inch lift and automatic over	flow shut-off			
Visible sidewalls and liner 🛛 Visible sidew	valis only 🔲 Other				
Liner type: Thickness	HDPE PVC Other				
₹ <u>4.</u>					
Alternative Method:					
Submittal of an exception request is required. Ex	ceptions must be submitted to the Santa Fe Environmenta	Bureau office for consideration of approval.			
5.					
Fencing: Subsection D of 19.15.17.11 NMAC (A	(pplies to permanent pits, temporary pits, and below-grad	e tanks)			
Chain link, six feet in height, two strands of ba	arbed wire at top (Required if located within 1000 feet of a	permanent residence, school, hospital,			
\square Four foot height, four strands of barbed wire evenly spaced between one and four feet					
Alternate. Please specify $4' = 3'$ hog wire + t	Alternate. Please specify $4' = 3'$ hog wire + top rail				
Form C-144	Oil Conservation Division	Page Lof6			

<u>Netting</u>: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other_

6.

7.

8.

9.

Monthly inspections (If netting or screening is not physically feasible)

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

Variances 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:

□ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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. Siting criteria does not apply to drying pads or above-grade tanks.

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ⊠ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells	□ Yes ⊠ No □ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
 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. (Does not apply to below grade tanks) Written confirmation or verification from the municipality; Written approval obtained from the municipality 	🗌 Yes 🗌 No
 Within the area overlying a subsurface mine. (Does not apply to below grade tanks) Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	🗌 Yes 🗌 No
 Within an unstable area. (Does not apply to below grade tanks) 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. (Does not apply to below grade tanks) FEMA map 	🗌 Yes 🗌 No
Below Grade Tanks	
 Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🛛 No
 Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗌 Yes 🛛 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
 Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
 Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	🗌 Yes 🗌 No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search: Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No

f38			
age 3 o	Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	□ Yes □ N	10
4	Temporary Pit Non-low chloride drilling fluid		
	Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sink or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	khole,	Jo
	 Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 		No
	Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	k □ Yes □ N	٩٩
	Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 N	٩٩
	Permanent Pit or Multi-Well Fluid Management Pit		
	Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or pla lake (measured from the ordinary high-water mark).	aya	
	- Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🗋 N	lo
	Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	🗋 Yes 🗌 N	٩
	 Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	f	٩٩
	Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes 🗋 N	٩٥
	Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NI Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NI 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 Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:	MAC MAC 15.17.9 NMAC Cof 19.15.17.9 NMAC	۰ •
	11. <u>Multi-Well Fluid Management Pit Checklist</u> : Subsection B of 19.15.17.9 NMAC <i>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that attached.</i>	the documents are	
24 2:43:39 PM	 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 A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection 0 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: 	C of 19.15.17.9 NMAC	2
Received by OCD: 1/12/202	Form C-144 Oil Conservation Division Page	3 of 6	

12. <u>Permanent Pits Permit Applicat</u> Instructions: Each of the followi attached.	tion Checklist: Subsection B of 19.15.17.9 NMAC in the second sec	locuments are
Hydrogeologic Report - bas Siting Criteria Compliance Climatological Factors Asso	sed upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC essment	
Certified Engineering Desig Dike Protection and Structu	gn Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ral Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC sed upon the appropriate requirements of 19.15.17.11 NMAC	
Liner Specifications and Co	ompatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC surance Construction and Installation Plan	
Operating and Maintenance	Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC	
Nuisance or Hazardous Odo Emergency Response Plan	ors, including H ₂ S, Prevention Plan	
Oil Field Waste Stream Cha	aracterization Plan	
Closure Plan - based upon t	the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
13. Proposed Closure: 19.15.17.13 N	NMAC	
Type: Drilling Workover	E applicable boxes, Boxes 14 inrough 18, in regards to the proposed closure plan.	uid Management Pit
Alternative Proposed Closure Method: 🛛 W	Vaste Excavation and Removal	0
	/aste Removal (Closed-loop systems only) n-site <u>Clo</u> sure Method (Only for temporary pits and closed-loop systems)	
	In-place Burial On-site Trench Burial Iternative Closure Method	
 Commation Sampling Pla Disposal Facility Name and Soil Backfill and Cover Des Re-vegetation Plan - based Site Reclamation Plan - based 	I (If applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC I Permit Number (for liquids, drilling fluids and drill cuttings) sign Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ied upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
15. Siting Criteria (regarding on-sit Instructions: Each siting criteria provided below. Requests regard 19.15.17.10 NMAC for guidance.	e closure methods only): 19.15.17.10 NMAC a requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour ling changes to certain siting criteria require justifications and/or demonstrations of equivalency. P	ce material are lease refer to
Ground water is less than 25 feet t - NM Office of the State Er	below the bottom of the buried waste. ngineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No NA
Ground water is between 25-50 fe - NM Office of the State Er	et below the bottom of the buried waste ngineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Ground water is more than 100 fee - NM Office of the State Er	et below the bottom of the buried waste. ngineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Within 100 feet of a continuously lake (measured from the ordinary - Topographic map; Visual	flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa high-water mark). inspection (certification) of the proposed site	🗌 Yes 🗌 No
Within 300 feet from a permanent - Visual inspection (certific	residence, school, hospital, institution, or church in existence at the time of initial application. ation) of the proposed site; Aerial photo; Satellite image	🗌 Yes 🗌 No
Within 300 horizontal feet of a pri at the time of initial application.	ivate, domestic fresh water well or spring used for domestic or stock watering purposes, in existence	🗌 Yes 🗌 No
Written confirmation or verification	on from the municipality; Written approval obtained from the municipality	🗌 Yes 🗍 No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Ide	entification map; Topographic map; Visual inspection (certification) of the proposed site	
Within incorporated municipal bo	undaries or within a defined municipal fresh water well field covered under a municipal ordinance	
Form C-144	Oil Conservation Division Page 4 of 6	5

1 38 38		
adopted pursuant to NMSA 1978, Section 3-27-3, - Written confirmation or verification from t	as amended. he municipality; Written approval obtained from the	municipality 🗌 Yes 🗌 No
 Within the area overlying a subsurface mine. Written confirmation or verification or mage 	p from the NM EMNRD-Mining and Mineral Divisio	n 🗌 Yes 🗌 No
Within an unstable area. - Engineering measures incorporated into the Society: Tonographic man	e design; NM Bureau of Geology & Mineral Resourc	es; USGS; NM Geological
Within a 100-year floodplain.		🗌 Yes 🗌 No
- FEMA map		□ Yes □ No
On-Site Closure Plan Checklist: (19.15.17.13 NI by a check mark in the box, that the documents at □ Siting Criteria Compliance Demonstrations □ Proof of Surface Owner Notice - based upon □ Construction/Design Plan of Burial Trench □ Construction/Design Plan of Burial Trench □ Construction/Design Plan of Temporary Pit □ Protocols and Procedures - based upon the a □ Confirmation Sampling Plan (if applicable) □ Waste Material Sampling Plan - based upon □ Disposal Facility Name and Permit Number □ Soil Cover Design - based upon the appropri □ Re-vegetation Plan - based upon the appropri □ Site Reclamation Plan - based upon the appropri	MAC) Instructions: Each of the following items mure attached. - based upon the appropriate requirements of 19.15.17 a the appropriate requirements of Subsection E of 19. (if applicable) based upon the appropriate requirement (for in-place burial of a drying pad) - based upon the ppropriate requirements of 19.15.17.13 NMAC - based upon the appropriate requirements of 19.15.17.13 NMAC (for liquids, drilling fluids and drill cuttings or in cass iate requirements of Subsection H of 19.15.17.13 NM riate requirements of Subsection H of 19.15.17.13 NM opriate requirements of Subsection H of 19.15.17.13 NM	As the attached to the closure plan. Please indicate, 7.10 NMAC 15.17.13 NMAC hts of Subsection K of 19.15.17.11 NMAC appropriate requirements of 19.15.17.11 NMAC 7.13 NMAC e on-site closure standards cannot be achieved) IAC IAC IAC
17. Operator Application Certification: I hereby certify that the information submitted wit Name (Print): <u>Kevin Smaka, PE</u> Signature: <u>KDM</u> Small	h this application is true, accurate and complete to the Title: <u>Regulatory Engineer</u> Date: <u>1</u>	e best of my knowledge and belief. -10 - 24
e-mail address: <u>Kevin.Smaka@duganproduction.c</u>	om Telephone: 505-325-1821 x1049	
OCD Representative Signature:		Approval Date:
Title:	OCD Permit Numb	er:
19. <u>Closure Report (required within 60 days of clos</u> Instructions: Operators are required to obtain an The closure report is required to be submitted to t section of the form until an approved closure plan	ure completion): 19.15.17.13 NMAC approved closure plan prior to implementing any c he division within 60 days of the completion of the c has been obtained and the closure activities have b Closure Comp	losure activities and submitting the closure report. losure activities. Please do not complete this een completed. letion Date:
20. Closure Method: Waste Excavation and Removal On-Site If different from approved plan, please explain	Closure Method Alternative Closure Method	Waste Removal (Closed-loop systems only)
21. Closure Report Attachment Checklist: Instruct mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and Proof of Deed Notice (required for on-site cl Plot Plan (for on-site closures and temporary Confirmation Sampling Analytical Results (Waste Material Sampling Analytical Results Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seedin	<i>ions: Each of the following items must be attached</i> division) losure for private land only) / pits) if applicable) g (required for on-site closure) g Technique	to the closure report. Please indicate, by a check
On-site Closure Location: Latitude	Longitude	NAD: 1927 1983
	Oil Conservation Division	Page 5 of 6

Page 6 of 38	 22. Operator Closure Certification: I hereby certify that the information and attachments submitted belief. I also certify that the closure complies with all applicable 	with this closure repor e closure requirements	rt is true, accurate and complete to the best of my knowledge and s and conditions specified in the approved closure plan.
	Name (Print):	Title:	
	Signature:		Date:
	e-mail address:	Telephone:	

Released to Imaging: 1/23/2024 11:49:27 AM

Below Grade Tank Closure Plan

Dugan Production Corp.

As directed by NMAC 19.15.17 the following plan/procedure has been prepared for closure of the below grade tank identified on the associated C-144.

- 1. Dugan will provide notice via-email to the NMOCD 72 hours prior to commencing closure activities. Dugan will also notify the appropriate surface owner by e-mail if possible or by certified letter.
- Dugan will close the pit, drying pad or below-grade tank by first removing all contents and, if applicable, synthetic liners and transferring those materials to a division approved facility. In this case Dugan will haul solid waste to Envirotech (Permit # NM-01-0011). Liquid waste will be hauled to Dugan's Sanchez O'Brien SWD #1 (Permit # SWD-694). If needed the pit liner will be disposed of at Waste Management's Crouch Mesa facility.
- 3. Dugan will take a composite 5-point soil sample underneath the BGT liner, grabbing stained and wet soils. The samples will be taken to a local lab and analyzed for BTEX, TPH and Chlorides. If the sample results do not exceed the limits in the applicable portion of table 1, found in NMAC 19.15.17, Dugan will continue with closure by backfilling the BGT vault and commencing reclamation activities. In the event the sampling results exceed the limits in table 1 Dugan will further delineate and remediate the soils in the BGT vault until samples are in the limits established in Table 1.

		TABLE I	
Depth Below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 9056	600 mg/kg
	ТРН	Method 418.1	100 mg/kg
	BTEX	Method 8021B	50 mg/kg
<u><</u> 50 Feet	Benzene	Method 8021B	10 mg/kg
	Chloride	EPA 9056	10,000 mg/kg
	ТРН	Method 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B	50 mg/kg
51 feet - 100 feet	Benzene	Method 8021B	10 mg/kg
	Chloride	EPA 9056	20,000 mg/kg
	ТРН	EPA 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B	50 mg/kg
> 100 feet	Benzene	Method 8021B	10 mg/kg

- 4. All areas disturbed by the closure of pits and below-grade tanks, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.
- 5. Topsoil and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of a pit, drying pad associated with a closed-loop system or below-grade tank.

- 6. Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.
- 7. Other regulatory requirements. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of any operator subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.
- 8. The operator shall notify the division when reclamation and re-vegetation are complete.
- 9. Concerning soil cover designs for closures after site contouring, where the operator has removed the below-grade tank or drying pad contents and liner, and if necessary remediated the soil beneath the below-grade tank or drying pad liner to chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, shall consist of the background thickness of topsoil or one foot of suitable material, whichever is greater.
- 10. The BGT is located at a plugged well site. Once the site is backfilled Dugan will contour and reclaim the site according to the surface management agency's standards.

List of Attachments

- 1. A topographic map of the area surrounding the BGT that identifies all nearby water courses as directed in section 9 of the C-144
- 2. The NMOSE iWaters database report for domestic water wells near the facility. None were found in the section the BGT is located in.
- 3. A depth to groundwater determination. This was done by gathering data from the NMOSE GIS database for all water PODs within 5 miles of the BGT. Based on the data presented, the average depth to the water is >100 feet. The standards for closure will be the least stringent listed in Table I of NMAC 19.15.17. A copy of the standard is provided here:



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

Basin/County Search:

Basin: San Juan

PLSS Search:

Section(s): 20

Township: 24N

Range: 10W

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.

displayName	depth_well	depth_water	distance_to_center	utm_easting	utm_northir
SJ 01714	442	284	4.88	244334	4017107
SJ 02223 POD1	null	null	3.576	242802.1	4023932
SJ 01713	373	8 null	2.899	239936	4017203
SJ 03141	640	595	0.836	237520	4019956
SD 05187	null	null	2.364	235533.9	4024427
SJ 04008 POD1	1000) null	4.953	230590.3	4017664
SJ 04008 POD2	540	100) 4.655	230608.7	4018845
	Average Depth to Water	326.3333333	3		



Received by OCD: 1/12/2024 2:43:39 PM



January 10, 2024

NM Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Dugan Production Corp. previously submitted C-144's not in NMOCD database Target #1 (30-045-28537)

To Whom It May Concern,

Dugan Production Corp. (DPC) is submitting a Closure Plan for the referenced well and would like to also submit the C-144 Closure Plan that was submitted on 9/28/2008, (for Kurt Fagrelius). This document was not scanned into the NMOCD records and DPC is submitting now to reflect that it had been submitted in a timely manner as required by NMOCD rules.

Sincerely,

Kevin Smaka, PE Regulatory Engineer

District
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.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action:

n: X 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

I Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,

below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Dugan Production Corp. OGRID #: 006515
Address: 709 East Murray Drive, Farmington, New Mexico 87401
Facility or well name: Target #1
API Number: 30-045-28537 OCD Permit Number:
U/L or Qtr/Qtr F Section 20 Township 24N Range 10W County: San Juan
Center of Proposed Design: Latitude 36.30061 North Longitude 107.92061 West NAD: X1927 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 HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: 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 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.
Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: 80 bbl Type of fluid: Producer H20
Tank Construction material: Fiberglass (See Closure Plan #3)
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
\Box Visible sidewalls and lines ∇ Visible sidewalls and \Box Other
Liner type: Thicknessmil HDPE PVC Other
Liner type: Thicknessmil DPE PVC Other
S. Alternative Method:

Received by OCD: 1/12/2024 2:43:39 PM

6. 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						
X Alternate. Please specify 4'=3' Hog wire + Top rail						
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)						
Monthly inspections (If netting or screening is not physically feasible)						
8.						
Signs: Subsection C of 19.15.17.11 NMAC						
X 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.						
Laception(s). Requests must be submitted to the Santa Pe 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 accept material are provided below. Requests regarding changes to cartain siting criteria may require administrative approach from the approximation of accept material are provided below.	ptable source					
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a	priale aistrici pproval.					
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	ing pads or					
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	Yes X No					
- 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.	Yes X No					
 <i>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)</i> Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 						
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes No					
(Applies to permanent pits)	X NA					
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	Yes X 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						
adopted pursuant to NMSA 1978, Section 3-27-3, as amended.						
- Written confirmation or verification from the municipality; Written approval obtained from the municipality						
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗶 No					
Within the area overlying a subsurface mine.	🗌 Yes 🗶 No					
Within an unstable area						
 Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	L] Yes 🗶 No					
Within a 100-year floodplain.	🗌 Yes 🗶 No					
- i bina iliap						

Received by OCD: 1/12/2024 2:43:39 PM

I. Cemporary 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 nttached. X 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 X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC X Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC X Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC X Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC Previously Approved Design (attach copy of design) AP1 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)
Barmanent 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 intached. 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 Leak Detection and Structural Integrity 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 19.15.17.11 NMAC Husance or Hazardous Odors, including H ₂ S, Prevention Plan Emergency Response Plan Oli Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration) Image: Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
 Is. 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 Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Page 16 of 38

^{16.} Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13. Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if n	NMAC) nore than two					
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 occur on or in areas that <i>will not</i> be used for future server Yes (If yes, please provide the information below) No	rice and operations?					
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	2					
^{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. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate distu considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justig demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	ce material are rict office or may be fications and/or					
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA					
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ 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 nearby wells 	□ Yes □ No □ NA					
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						
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image						
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	🗋 Yes 🛄 No					
 Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality; Written approval obtained from the municipality 	🗌 Yes 🗌 No					
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No					
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	🗋 Yes 🗌 No					
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	🗋 Yes 🗌 No					
Within a 100-year floodplain. - FEMA map	🗋 Yes 🗌 No					
18. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.						

Released to Imaging: 1/23/2024 11:49:27 AM

^{19.} Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accur	ate and complete to the best of my knowledge and belief.
Name (Print):Kurt_Fagrelius	Title: Vice President, Exploration
Signature: KurtFEgntin	Date: September 28, 2008
e-mailaddress:kfagrelius@duganproduction.com	Telephone: 505-325-1821(0), 505-320-8248(C)
20. OCD Approval: Permit Application (including closure plan) Closure P	lan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date:
Title:	OCD Permit Number:
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of a section of the form until an approved closure plan has been obtained and the c	K of 19.15.17.13 NMAC to implementing any closure activities and submitting the closure report. he completion of the closure activities. Please do not complete this osure activities have been completed.
	Closure Completion Date:
22. Closure Method: Waste Excavation and Removal On-Site Closure Method Altern If different from approved plan, please explain.	ative Closure Method 🔲 Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, dri two facilities were utilized.	That Utilize Above Ground Steel Tanks or Haul-off Bins Only: lling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Required for impacted areas which will not be used for future service and operat Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ions:
24. Closure Report Attachment Checklist: Instructions: Each of the following is mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	tude NAD: 1927 1983
25. <u>Operator Closure Certification</u> : I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requires	report is true, accurate and complete to the best of my knowledge and nents and conditions specified in the approved closure plan.
Name (Print): Kurt Fagrelius	Title: Vice President, Exploration
Signature:	Date: September 28, 2008

Page 18 of 38

Released to Imaging: 1/23/2024 11:49:27 AM

Target #1 Hydrogeologic Report

The Target #1 is located on Federal land on the Chaco Slope area of the San Juan Basin, in San Juan County, New Mexico. The area is characterized by an arid, westward sloping, gentle hilly terrain covered with sage, grass and isolated stands of pinon and juniper. It is well drained by numerous arroyos that carry water during seasonal periods (rainstorms and snowmelt) to the west.

A records search of the NM Office of the State Engineer –iWATERS database was conducted on a three square mile area centered on the Target #1 location (Exhibit 2). One water well was located 5,700 feet to the west was of below grade tank. The water well was drilled to a total depth of 640 feet and reported a depth to water of 595 feet. The results of the search are shown on Exhibit 1.

The main source of stock water in the region is encountered in valley-fill deposits in existing arroyos at shallow depths of approximately 15-50 feet below the surface and stock tanks constructed on surface shale in the upper reaches and confluences of arroyos. The below grade tank is not located in an arroyo. The closest arroyo is located 150 feet north and east of the proposed below grade tank (Exhibit 2) (See Visual Inspection Certification).

The Nacimiento Formation extends from the surface down to approximately 330 feet. From surface down to 330 feet, the interval consists primarily of mudstone / shale with a trace of siltstone. The Nacimiento is a source of ground water for livestock purposes and more rarely domestic use in some areas near the outcrop. With depth and distance from the outcrop, water quality decreases quickly and may be useful for livestock only. Due to the high silt content in the sands, poor reservoir quality and unpredictable nature of sand occurrence, the Nacimiento is not expected to contain significant quantities of ground water in the area of the proposed below grade tank.

The underlying Ojo Alamo Sandstone ranges from approximately 330 feet down to a depth of approximately 420 feet and is comprised of a coarse grained alluvial sandstone inter-bedded with lenses of mudstone and occasional conglomeratic sandstone. The Ojo could provide a greater volume of poor quality groundwater.

Based on electric open hole logs, the iWATERS database, literature reviewed, poor quality groundwater might be found at a depth of 330- 420 feet from the Ojo Alamo Sandstone.

The excessive drilling depth to reservoirs with unpredictable variations in reservoir quality and water quality has discouraged the drilling of water wells in the area.

This Hydrogeologic Report was prepared by Mr. Kurt Fagrelius, Geologist for Dugan Production. Mr. Fagrelius has been employed as a geologist for Dugan for the past 31-years, received a MS in Geology from NMIMT in Socorro, NM and a BS in Geology from FLC in Durango, CO.

- Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.
- Brown, D.R., and Stone, W.J., 1979, Hydrogeology of Aztec quadrangle, San Juan County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrogeologic Sheet 1.
- Levings, G.W., Craigg, S.D., Dam, W.L. Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S. Geological Survey, Atlas HA-720-A, Sheet 1 and 2.
- Thorn, C.R., Levings, G.W., Craigg, S.D., Dam, W.L., and Kernodle, J.M., 1990, Hydrogeology of the Ojo Alamo Sandstone in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S.G.S, Atlas HA-720-B, Sheet 1 and 2.

	POD Rej	ports and Downloads	eer	
Township: 24M	Range: 10W	Sections: 16,17,18,19,	20,21,28,29,30	
NAD27 X:	Y:	Zone:	Search Radius:	
County: B	asin:	Numb	er: S	uffix:
Owner Name: (First)	(Last)	Ν	lon-Domestic	Domestic All
POD / Surface Data Re	port Av	g Depth to Water Report	Water (Column Report
	Clear Form	iWATERS Menu	Help	

WATER COLUMN REPORT 09/29/2008

	(quarter	s are	1=NW	2=1	NE 3	3=SW 4=SE)						
	(quarter	s are	bigg	est	to	smallest)			Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec g	q	P	Zone	х	Y	Well	Water	Column	
SJ 03141	24N	10W 3	29 1	2 3	3				640	595	45	

Record Count: 1

Page 20 of 38

Siting Criteria for the Target #1 Below Grade Tank

- 1. Ground water is not less than 50-feet below the bottom of the below grade tank. Ground water is greater than 100-feet below the bottom of the below grade tank (See Hydrogeologic Report).
- 2. The below grade tank is not within 300-feet of a continuously flowing water course but is within 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from ordinary high water mark). There is an arroyo 150 feet to the north and east. See the attached Topographic map (Exhibit 2) and Visual Inspection Certification of the location and area around the subject below grade tank.
- 3. The below grade tank is not within 300-feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. See the attached Satellite Image (Exhibit 3) and Visual Inspection certification of the location and area around the subject below grade tank.
- 4. The below grade tank is not within 500-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. See the attached NM Office of the State Engineer iWATERS database search (Exhibit 4) and Visual Inspection certification of the location and area around the subject below grade tank.
- 5. The below grade tank is not located within the 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. See the attached Topographic map of the location and area around the subject below grade tank.
- 6. The below grade tank is not located within 500-feet of a wetland. See the attached Topographic map and Visual Inspection Certification of the location and area around the subject below grade tank.
- The below grade tank is not located within the area overlying a subsurface mine. See the attached Mine, Mills and Quarry Map of New Mexico (New Mexico, EMND 2008) (Exhibit 5) showing the location and area around the subject pit.
- 8. The below grade tank is not located within an unstable area. See the attached Topographic map of the location and area around the subject below grade tank.
- 9. The below grade tank is not located within a 100-year floodplain area. See the attached FEMA map (Exhibit 6) of the 100 year floodplain showing the location and area around the subject pit.

Target #1 Below Grade Tank Visual Inspection Certification

I, Kurt Fagrelius, Vice President of Exploration for Dugan Production Corp. 709 East Murray Drive, Farmington, New Mexico hereby certify that I or persons under my direct supervision, prepared the attached exhibits and conducted a Visual Inspection of the location and area around the Target #1 below grade tank (July 28, 2008).

The location of the Target #1 below grade tank is not in full compliance with all siting criteria and standards for below grade tanks established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.10 NMAC. There is an arroyo within 200 feet of the below grade tank (150 feet north and east).

Although this below grade tank does not meet the siting criteria in 19.15.17.10 NMAC, it is an existing below grade tank (inexistence prior to June 16, 2008) that will be closed and replaced with one that meets the design and construction requirements in 10.15.17.11 NMAC (Exhibit 7).

Kurt Fegnicia Kurt Fagrelius

November 5, 2008 Date

October 16, 2008

Pit Rule (Part 17)

FAQ: Does the Siting Criteria in 19.15.17.10 NMAC Apply to Existing Below-Grade Tanks?

A: 19.15.17.17.D NMAC requires operators of existing below-grade tanks to apply for a permit within 90 days after June 16, 2008. Existing below-grade tanks do not have to be relocated to meet the siting criteria in 19.15.17.10 NMAC, but must meet the design and construction requirements in 19.15.17.11 NMAC. The operator must still supply the information required in 19.15.17.9 NMAC. The siting criteria apply to below-grade tanks located after June 16, 2008.

Please contact Wayne Price 505-476-3490 <u>wayne.price@state.nm.us</u> or Brad Jones 505-476-3487 <u>brad.a.jones@state.nm.us</u>.



Released to Imaging: 1/23/2024 11:49:27 AM





		New Mexico O POD Rep	ffice of the State	<i>e Engineer</i> loads			
	Township: 24M	Range: 10W	Sections: 20				
	NAD27 X:	Y:	Zone:	Search	Radius:		
County:	B	asin:	10	Number:	Suff	ix:	
Owner Nar	me: (First)	(Last)		Non-Do	mestic I	Domestic	All
PO	D / Surface Data Re	port Av	g Depth to Water I	Report	Water Col	umn Repor	t
		Clear Form	iWATERS Mer	nu Help			
		WATER CC	LUMN REPORT 0	9/29/2008			
POD Number	(quarters ar (quarters ar Tws Rng	e 1=NW 2=NE 3=S e biggest to sm Sec q q q Zo	W 4=SE) Callest) Dne X	Dept Y Well	h Depth Water	Water Column	(in feet)
No Records for	und, try again						

09/29/2008

Released to Imaging: 1/23/2024 11:49:27 AM



Mine, Mills and Quarry Map of New Mexico

Dugan Production Corp.

Target #1

Taken from the New Mexico Energy, Minerals and Natural Resources Department. Mining and Minerals Division.



Released to Imaging: 1/23/2024 11:49:27 AM

Target #1 Below Grade Tank Design and Construction Plan

The Target #1 below grade tank will be designed and constructed in accordance with the following requirements:

- 1. Below grade tank will be designed and constructed to contain liquids and solids, prevent contamination of fresh water and protect the public health and environment (Exhibit 7).
- 2. Stockpile topsoil prior to digging below grade tank vault, keep separate from subsoil and use as final cover and fill when closing below grade tank vault.
- 3. Sign-12" by 24" with operator name, lease name, well #, location (unit letter, qtr/qtr, Sect., Twp., and Rge.) and emergency phone #'s will be posted on location. Sign will be posted in a location where it can be easily read.
- 4. Fencing around the Target #1 below grade tank will be constructed and operated in a manner that prevents unauthorized access and shall be maintained in good condition to protect the public and wildlife. Fencing will include a 4-foot hog wire fencing with two strands of barbed wire or top rail of re-bar or pipe on top. See the attached request for Administrative Approval. If the Target #1 below grade tank were located within 1000 feet of a house, school, hospital or church, a chain link fence at least six feet in height with at least two strands of bared wire on top would be constructed.
- 5. The Target #1 below grade tank will be covered with steel, expanded metal or chicken wire for screening or netting on top of the tank.
- 6. Target #1 below grade tank will be designed and constructed to ensure the confinement of liquids and prevent unauthorized releases. Pit will be constructed with a firm, level foundation and interior slopes, smooth and free of rocks or sharp edges to prevent punctures, cracks or indentations of the liner or tank bottom. Slope walls of the below grade tank vault will be constructed with a 3'vertical x 1' horizontal slope to prevent collapse of the walls. Dependent on soil conditions, 2"x12" pre-treated lumber will be used as needed to insure integrity of vault walls. Properly operating, high level shut off valve and manual control valves will be installed (valve will close when fluid reaches 12 inches from top of tank) to prevent overflow of tank. Berms (24 inches in height) will be constructed around the perimeter of the below grade tank vault to prevent overflow of the tank vault in the event the high level shut off valve fails and the below grade tank overflows and also prevent the collection and entrapment of surface water.
- 7. Target #1 below grade tank will be constructed of materials resistant to the tank's particular contents and resistant to damage from sunlight. Tank will be API rated and constructed of carbon steel with a wall thickness of ¹/₄".
- 8. Liner will be 30-mil flexible PVC or 60-mil HDPE, string reinforced, impervious material, resistant to UV light, hydrocarbons, salt, acidic or basic liquids. The liner will have a hydraulic conductivity less than 1 x 10-9 cm/sec. Liner compatibility will comply with EPA SW-846 Method 9090A. A specification sheet on properties of liner material to be used will be provided to the NMOCD prior to installation.



Released to Imaging: 1/23/2024 11:49:27 AM-

Page 30 of 38

- 9. The Target #1 below grade tank will be constructed with single walled sides and bottom, which will be open for visual inspection for leaks. The below grade tank will be elevated a minimum of 6-inches above the underlying ground surface and set back at least 24" from walls of vault. The below grade tank will be underlain with a geo-membrane liner designed to divert any leaked fluid to a visual inspection point. Liner may be covered with gravel.
- 10. The Target #1 below grade tank will be equipped with a properly operating automatic highlevel shut-off control device (valve will close when fluid reaches 12 inches from top of tank) and manual controls to prevent overflows.
- 11. Diversionary berms, ditches or sloping will be constructed as necessary to prevent overflow and the collection of surface water entrapment.
- 12. A walkway/bridge with steps and handrail, will be constructed of 2"x1/8" angle iron and perforated walk-way material to provide personnel access to the top of below grade tank.

8

Target #1 Below Grade Tank Maintenance and Operation Plan

The Target #1 below grade tank will be maintained and operated in accordance with the following requirements:

- 1. The Target #1 below grade tank will be operated and maintained to contain liquids and solids and maintain the integrity of the tank / liner system or secondary containment system to prevent contamination of fresh water and protect public health and environment. Design features which include containment berms and high level shut off valves and manual shut off valves will be constructed to insure containment of liquids and solids (Exhibit 7). Steel tank will be set level, with a minimum of 6 inches of lift underlain by a liner (sloped to one corner) on top of a firm, smooth foundation bottom (vault floor) will be constructed providing visual leak detection to insure tank integrity.
- 2. All fluids collected in the below grade tank and below grade tank vault will be recycled, reused, reclaimed or disposed of in a manner approved by NMOCD rules.
- 3. Do not dispose of solid waste, trash, debris or hazardous material into the below grade tank or the below grade tank vault.
- 4. If the Target #1 below grade tank develops a leak or if a penetration occurs below the liquids surface, all liquid will be removed above the damage or leak line within 48-hours. The NMOCD office will be notified within 48-hours of the discovery. The below grade tank / liner system or secondary containment system will then be either modified, retrofitted or replaced in accordance with Subsection I of 19.15.17.11 NMAC. If applicable, the replacement or retrofit below grade tank / liner system or secondary containment system will meet the design and construction requirements of rule 19.15.17.11 NMAC.

In the event a spill or undesirable event occurs, the provisions of rule 19.15.3.116 NMAC may apply. If considered a "Major Release" (any fluid greater than 25-bbls; any volume which results in fire, or will reach a water course, or may endanger public health, or results in substantial property or environmental damage; any gas greater than 500-mcf; any volume detrimental to water or exceeding established standards) verbal notice will be provided to the NMOCD Santa Fe Environmental Bureau Chief (Wayne Price at 505-476-3490) and Aztec District OCD (Brandon Powell at 505-334-6178) offices within 24-hours of discovery of leak, plus written notice will be provided to the NMOCD Aztec and Santa Fe Environmental Bureau within 15-days after discovery, using C-141. If considered a "Minor Release" (any fluid greater than 5-bbls but less than or equal to 25-bbls or any gas greater than 50-mcf but less than 500-mcf, written notice using Form C-141 will be provided to the NMOCD Santa Fe Environmental Bureau Chief in Santa Fe and the Aztec District OCD office. The Bureau of Land Management will be notified in accordance with the provisions of BLM NTL-3A.

- 5. Below grade tank will be constructed and operated in a manner that prevents the tank from over flow and prevents surface water from entering the pit. Diversion berms will be constructed around the sides of pit and an automatic high level shut-off will be installed.
- 6. Any measurable oil will be continuously removed from the Target #1 below grade tank to prevent a significant accumulation of oil overtime.

7. The Target #1 below grade tank will be inspected at least monthly and records of each inspection will be maintained for five years. The below grade monitoring report to be used, is shown below. Integrity inspections of fencing, berms, below grade tank, screening, below grade tank, vault slopes and leak detection will be made and recorded. Any solid waste, trash, debris or hazardous material in the below grade tank or below grade tank vault will be noted and removed. High level shut off valve and manual shut off valve will be tested to insure valves are operating properly. Freeboard and fluid levels in the below grade tank will be recorded, monitored and removed (See #2, Maintenance and Operation Plan) as needed. Records wills be used to assist in scheduling frequency of future fluid removal.

		Chec	k and F	Record Inte	egrity		Trash	Note a	nd Pick-Up	Check for P	oper Operation	Freeboard	Fluid Level	Signature
Date	Fence	Berms	Tank	Tank	Vault	Leak	Tank	Vault	Location	High Level	Manual	Minimum 12"		
	1			Screen	Slopes	Detect.				Shut off valve	Shut off valve	Top - Down	Bottom - Up	
Mo/Y	/	G = G	A hoo	= Fair P	= Poor	1	Y	= Yes.	$N = N_0$	G = Goo	I. B = Bad	Feet &	& Inches	Monitor

8. Adequate freeboard will be maintained to prevent overtopping of the Target #1 below grade tank. High level shut off valves will close when fluid reaches 12 inches from top of tank.

Target #1 Below Grade Tank Closure Plan-Methods, Procedures and Protocols

1. Comply with deadlines for closure of a pit or below grade tank established by the State of New Mexico, Energy Minerals and Natural Resources Department 19.15.17.13 NMAC, or an earlier date if required by the NMOCD in the case of imminent danger to fresh water, public health or the environment.

Existing	Permit Applc. Submittal or	File Closure Plan By	Stop Use By	Close By
On June 16, 2008	Modification Request			
Temporary Pit - Unlined	Not Permtd under 19.15.17	7/16/2008	Upon drlg rig release	9/16/2008
Permanent Pit - Unlined or Lined	Not permitted with NMOCD	7/16/2008	6-16-2008	12/16/2008
Permanent Pit - Unlined	Permitted with NMOCD	12-16-2008	6-16-2010	6-16-2011
BGT-Aprvd. Design	Not Permtd under 19.15.17	12/16/2008	failed integrity replc	
	Applc. by 9-16-2008		w/apprvd design	
	P 1			
BGT-Not Aprvd Design Nor Retrofit	Not Permtd under 19.15.17	12/31/2008	<mark>6/16/2013</mark>	<mark>6-16-2013</mark>
to Comply w/19.15.17	Mod. Rqust by 9-16-2008			
BGT-Not Aprvd Design Nor Retrofit	NA	12/16/2008	6/16/2013	6/16/2013
to comply w/19.15.17				
Permanent Pit-Design and Constr	Mod. Rqust by 12-16-2008	12/16/2008	failed integrity replc	60-days after cessation
Does not comply w/19.15.17	Comply w/in 18-mos of aprvl	submit w/mod request	w/apprvd design	
permitted and lined				
Permanent Pit-Design and Constr	Permit Applc by 12-16-2008	12/16/2008		60-days after cessation
Does not comply w/19.15.17	Comply w/in 18-mos of aprvi	submit w/permit Applc		
Registered and Lined				
Permanent Pit	Permitted under 19.15.17	60-Days prior to close		
Temporary Pit	Permitted under 19.15.17	Prior to closure	Upon drlg rig release	6-mos after rig release
· · · · · · · · · · · · · · · · · · ·				
BGT	Permitted under 19.15.17	12/16/2013	failed integrity replc	60-days after cessation
		or prior to closure	w/apprvd design	

- 2. Provide the NMOCD district office at least 72-hours notice but no greater than 1 week prior to any closure operations. Notice will include operator name, well name and number, API number, and location (unit letter, section, township and range).
- 3. The Target #1 below grade tank is not an approved design under rule 19.15.17. Upon approval of this application, the existing below grade tank will be closed and a new below grade tank that complies with the design requirements of rule 19.15.17 as illustrated in the design plan (Exhibit 7) will be constructed.

Received by OCD: 1/12/2024 2:43:39 PM

- 4. Below grade tank will be closed within 60-days after cessation of use or by 6-16-2013 whichever comes first.
- 5. Closure notice will be provided by certified mail to surface owner prior to closing the below grade tank. Proof of notice will be provided to the Environmental Bureau in the NMOCD Santa Fe office and attached to the final closure report.
- 6. Remove all liquid from below grade tank prior to closure and dispose of at the Dugan Production operated Sanchez O'Brien SWD #1 salt water disposal well (permit SWD-694) located 1650 feet from the South line and 990 feet from the West line (Unit L) of Section 6, Township 24 North, Range 9 West.
- 7. All solids from the below grade tank and all solids removed from the below grade tank vault will be excavated, hauled to and disposed of at either the Envirotech facility (permit #NM-01-0011) facility located in Section 6, Township 26 North, Range 10 West or the IEI facility (permit NM-01-0010B) located in Section 2, Township 29 North, Range 12 West.
- 8. Remove below grade tank and obtain prior approval from the NMOCD to dispose (in an approved NMOCD facility), recycle, reuse or reclaim the tank. Documentation of the final disposition of the tank will be provided to the NMOCD in the final closure report.
- 9. Remove pit liner system, if applicable and dispose of only the pit liner material at an NMOCD approved, solid waste facility (Waste Management's Crouch Mesa facility, San Juan County, New Mexico) in accordance with subparagraph (m) of Paragraph (1) of Subsection D of 19.15.9.712.
- 10. On site equipment associated with the below grade tank will be removed unless it is needed for some other purpose.
- 11. Collect at a minimum, a five point, composite sample; also, collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for Benzene, BTEX, TPH, GRO/DRO and chlorides to demonstrate that Benzene, BTEX, TPH, GRO/DRO and chlorides do not exceed the standards as specified in 19.15.17.13.E or the background chloride concentration, whichever is greater.

Components	Test Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
GRO/DRO	EPA SW-846 8015M	NS
Chlorides	EPA 300.1	250 or Background

- 12. The NMOCD will be notified of the testing results on form C-141.
- 13. If it is determined that a release has occurred, rule 19.15.3.116 NMAC and 19.15.1.19 NMAC will be complied with as required.

Received by OCD: 1/12/2024 2:43:39 PM

n f

- 14. If the sampling results demonstrate that a release has not occurred, or that any release does not exceed the concentrations specified above or background concentrations, the below grade tank vault will be backfilled with compacted, non-waste containing, earthen material.
- 15. Stockpiled sub-surface soil will be used to backfill below grade tank vault and re-contour (to a final or intermediate cover that blends with the surrounding topography). A minimum of four feet of compacted, non-waste containing, earthen material will be used as backfill.
- 16. Stockpiled surface soil will be used as a cover over the backfilled below grade tank vault and disturbed area no longer needed for production operations. The soil cover will include either the background thickness of top soil or one foot of suitable material to establish vegetation at the site whichever is greater. The soil cover will be constructed to the site's existing grade and prevent water collection or ponding and erosion of the cover material.
- 17. Disturbed areas will be seeded the first growing season after the below grade tank is closed. Seeding will be accomplished by drilling on contour whenever possible or by other division approved methods. BLM stipulated seed mixes will be used on all Federal lands and NMOCD approved seed mixes (administratively approved if required) will be used on all State or private lands. 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 maintain that cover through two successive growing seasons. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Seeding or planting will be continued until successful vegetative growth occurs.
- 18. The NMOCD will be notified within 60-days of closure of the below grade tank. The closure report will be filed on form C-144 and will include the following:
 - a. Proof of Closure Notice (surface owner and division)
 - b. Confirmation Sampling Analytical Results (if applicable)
 - c. Disposal Facility Name and Permit Number
 - d. Soil Backfilling and Cover Installation
 - e. Re-vegetation Application Rates and Seeding Technique
 - f. Site Reclamation (Photo Documentation)
- 19. The NMOCD will be notified once successful re-vegetation has been achieved.

Target #1 Below Grade Tank Request for Administrative Approval

Administrative approval is hereby requested for an alternative to the fencing design for the Target #1 below grade tank.

The request for administrative approval cited above is needed to help minimize environmental impact and increase safety and protect wildlife and public health. The alternative proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.11 NMAC.

<u>The proposed alternative fencing design</u> will include T-posts spaced 10-feet apart. Hog wire / field fence 4-feet in height will be strung tightly and anchored to the top and bottom of each T-post. Small holes (3" high X 6" wide) in the hog-wire will be located at ground level with increasing larger holes (up to 7" high X 6" wide) located at the top of the fence. Anchor braces will be put at all four corners to strengthen and tighten the fence. Two strands of barbed wire or a pipe / re-bar top rail will be constructed above the hog wire. This fence design (developed over the last 30-years) has proven to be very effective controlling unauthorized access to below grade tanks.

The existing rule (19.15.17.11.D.3) would require the operator to fence the below grade tank with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between on foot and four feet above the ground level. The proposed fencing alternative would provide better security against unauthorized access to below grade tanks. The smaller holes in hog-wire (3" X 6" up to 7" X 6") is more effective at controlling unauthorized access by the public and wildlife than 4-strands of barbed wire spaced 12" apart.

The proposed fence around the below grade tank will be constructed and operated in a manner that prevents unauthorized access and shall maintain the fence in good condition to protect the public and wildlife.

The request for administrative approval cited above is needed to help minimize environmental impact, increase safety and protect wildlife and public health. The alternatives proposed will protect fresh water, public health, safety and the environment more effectively than the design and construction specifications established by the State of New Mexico, Energy Minerals and Natural Resources Department do in rule 19.15.17.11 NMAC.

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

District IV 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

Operator:	OGRID:
DUGAN PRODUCTION CORP	6515
PO Box 420	Action Number:
Farmington, NM 87499	302235
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By Condition	Condition
Created by Condition	Date
vvenegas None	1/23/2024

Page 38 of 38

Action 302235