

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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

16458

- Type of action: Below grade tank registration
 Permit of a pit or proposed alternative method
 Closure of a pit, below-grade tank, or proposed alternative method
 Modification to an existing permit/or registration
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

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

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

1.
Operator: Advanced Wireless Communications, LLC OGRID #: 371710
Address: 5691 US 64, Farmington, NM 87401
Facility or well name: Mims State Com #2
API Number: 30-045-20587 OCD Permit Number: _____
U/L or Qtr/Qtr NW4 Section 16 Township T29N Range R9W County: San Juan
Center of Proposed Design: Latitude 36.7296829 Longitude -107.7869492 NAD83
Surface Owner: Federal State Private Tribal Tr _____

DENIED

* Administrative Incomplete
References old Rates.

2.
 Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation P&A Multi-well fluid management
 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 _____

BY: Cory Smith

DATE: 9/11 (505) 334-6178 Ext. 115

LOW Chloride Drilling Fluid yes no

3.
 Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: Produced Water
Tank Construction material: Metal
 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
 Visible sidewalls and liner Visible sidewalls only Other _____
Liner type: Thickness 45mil mil HDPE PVC Other reinforced LLDPE

4.
 Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
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, hospital, institution or church)
 Four foot height, four strands of barbed wire evenly spaced between one and four feet
 Alternate. Please specify 4 foot hog wire fencing topped with one strand of barbed wire

NMOCD

AUG 29 2018

DISTRICT III

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6.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- Screen Netting Other Expanded Metal
- Monthly inspections (If netting or screening is not physically feasible)

7.

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

8.

Variations 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.

9.

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 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

Within 100 feet of a wetland.
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes No

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, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site Yes No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes 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 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

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 playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site Yes No

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 No

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 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

10.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- 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 19.15.17.11 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 and 19.15.17.13 NMAC
- Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.
Multi-Well Fluid Management Pit 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.

- 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 C of 19.15.17.9 NMAC 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: _____

12.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

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 Multi-well Fluid Management Pit
 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

14.

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 C 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 H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

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 source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

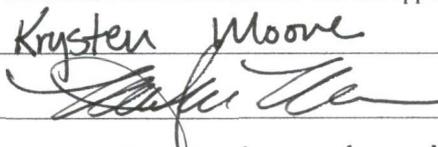
- | | |
|---|---|
| Ground water is less than 25 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> 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 | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet of a wetland.
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance | <input type="checkbox"/> Yes <input type="checkbox"/> No |

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

16.
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.*

- 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 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- 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 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 cannot be achieved)
- 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

17.
Operator Application Certification:
 I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Krysten Moore Title: VP, member
 Signature:  Date: 8/27/18
 e-mail address: Krysten@advancedwirelessllc.com Telephone: 505-486-0045

18.
OCD Approval: Perm Plan (only) OCD Conditions (see attachment)
OCD Representative Sign DENIED Approval Date: _____
Title: _____ OCD Permit Number: _____

19.
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 submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

Closure Completion Date: _____

20.
Closure Method:
 Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
 If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check 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 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)

On-site Closure Location: Latitude _____ Longitude _____ NAD: 1927 1983

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: _____

Mims State Com #002

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well "Mims State Com #002", which is located at 36.7296829, -107.7869492. This location is located on the Blanco NE USGS topographic quadrangle. This location is in section 16 of Township 29 North Range 9 West. This location is located in San Juan County, New Mexico. The nearest town is Blanco, NM located 3 miles to the west; and the nearest large town with a population greater than 10,000 is Farmington located 33 miles to the west. The nearest highway is US Highway 64, located 0.15 miles to the north. This location is on Private land, NM State Leases B1-0870, E0-0397, E0-1203, E-5314. This location is in the Upper San Juan basin. This location is located 7228 feet above sea level and receives 14.2 inches of rain each year. The vegetation on this location is classified as Colorado Plateau Pinyon-Juniper Woodland as per the Southwest Regional Gas Analysis Program, information attached.

The estimated depth to ground water at this point is 93 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website. Groundwater data available from the NM State Engineer's iWaters Database for this area is attached. The nearest stream is 5 miles to the east and is listed as USGS 09356400 MANZANARES CANYON NEAR TURLEY, NM. The nearest river is located 2 miles to the west and is listed as USGS 09356500 SAN JUAN R NR BLANCO, NM. The nearest water body is 16 miles to the north east and is listed as USGS 09355100 NAVAJO RESERVOIR NR ARCHULETA, NM, and 24.38 square miles in size. This information was determined from the USGS website, maps attached. The surface geology at this location is Nacimiento Formation. The soil at this location is silty clay loam, 5 percent slopes and is well drained; medium to high runoff; moderately slow permeability as taken from the Nacimiento soil series by the USDA. The nearest mine is 47 miles to the west and the nearest mill is 25 miles west as indicated by the Registered Mines in New Mexico map from EMNRD, attached.

Regional Hydrogeological context:

The Nacimiento Formation is a sedimentary rock formation found in the San Juan Basin of western New Mexico. It is a heterogeneous nonmarine formation composed of shale, siltstone, and sandstone, deposited in floodplain, fluvial and lacustrine settings, and made up of sediment shed from the San Juan uplift to the north and the Brazos-Sangre de Cristo uplift to the east. This unit interbeds with the underlying Ojo Alamo Formation but is separated by an unconformity from the overlying San Jose Formation.

Lucas, S.G.; Ingersoll, R.V. (1981). "Cenozoic continental deposits of New Mexico: an overview". Geological Society of America Bulletin. 92 (12): I 917–I 932, II 1807–II 1981.



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q Q Q				Sec	Tws	Rng	X	Y	DepthWell	Water	
				64	16	4	4							Depth	Water Column
SJ_02883	SJM2	SJ	SJ	3	3	2	16	29N	09W	251496	4068078*	123	87	36	
SJ_03185	SJM2	SJ	SJ	4	4	3	16	29N	09W	251290	4067283*	220	100	120	

Average Depth to Water: **93 feet**
 Minimum Depth: **87 feet**
 Maximum Depth: **100 feet**

Record Count: 2

Basin/County Search:

Basin: San Juan

County: San Juan

PLSS Search:

Section(s): 16

Township: 29N

Range: 09W

*UTM location was derived from PLSS - see Help

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.

8/15/18 10:13 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

PRODUCT DESCRIPTION

DURA♦SKRIM® N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene. Exceptional toughness, high tensile and puncture strength is achieved with the combination of premium high strength LLDPE and dense scrim reinforcement. A highly stabilized formulation consisting of antioxidants, UV stabilizers and carbon black provide excellent protection for long-term exposed or barrier applications. DURA♦SKRIM® N-Series geomembranes are produced in the color black as standard, and are available in other custom manufactured colors with minimum order quantity requirements.

PRODUCT USE

DURA♦SKRIM® N45B is used in applications that require exceptional outdoor life requiring up to 20 years of exposure depending upon the geographical location. Applications requiring high tear properties, exceptional tensile strength and puncture resistance utilize N45B to meet these demands. DURA♦SKRIM® N-Series is manufactured from a chemical-resistant, linear-low-density polyethylene with excellent cold crack performance and resistance to thermal expansion.

DURA♦SKRIM® N45B meets the physical property values as stated in GRI test method GM25, and is certified under the NSF/ANSI Standard 61, Drinking Water System Components – Health Effects.

SIZE & PACKAGING

DURA♦SKRIM® N45B is available in a variety of widths and lengths to meet the project requirements. Large diameter mill rolls are available to assure an efficient seaming process. Factory welded panels are produced in a controlled environment and are accordion folded and tightly rolled on a heavy-duty core for ease of handling and time saving installation.



Bio Cell Liner

PRODUCT

PART

DURA♦SKRIM N45B

APPLICATIONS

- | | |
|-------------------------|-------------------------|
| Waste Lagoon Liners | Landfill Caps |
| Floating Covers | Erosion Control Covers |
| Daily Landfill Covers | Canal Liners |
| Modular Tank Liners | Disposal Pit Liner |
| Tunnel Liners | Water Containment Ponds |
| Remediation Liners | Heap Leach Liner |
| Earthen Liners | Secondary Containment |
| Interim Landfill Covers | Remediation Covers |

DURA♦SKRIM® N45B

SCRIM REINFORCED POLYETHYLENE – NSF/ANSI STANDARD 61 CERTIFIED

		DURA♦SKRIM® N45B			
		IMPERIAL		METRIC	
PROPERTIES	TEST METHOD	MINIMUM	TYPICAL	MINIMUM	TYPICAL
APPEARANCE		Black		Black	
CORE THICKNESS	ASTM D5199	40 mil	45 mil	1.02 mm	1.14 mm
WEIGHT	ASTM D751	189 lbf/msf	213 lbf/msf	923 g/m ²	1040 g/m ²
CONSTRUCTION		9x9-1000 Denier PET scrim reinforced polyethylene			
TONGUE TEAR STRENGTH	ASTM D5884	100 lbf	135 lbf	445 N	601 N
GRAB TENSILE AT BREAK	ASTM D7004	275 lbf	350 lbf	1223 N	1557 N
TENSILE ELONGATION AT BREAK	ASTM D7004	22 %	30 %	22 %	30 %
PUNCTURE RESISTANCE	ASTM D4833	108 lbf	125 lbf	480 N	556 N
STANDARD OIT OR HIGH PRESSURE HPOIT	ASTM D3895 ASTM D5885	100 min 400 min	150 min 2400 min	100 min 400 min	150 min 2400 min
HYDRAULIC CONDUCTIVITY		1.47 x 10 ⁻¹⁰ cm/sec			
MAXIMUM STATIC USE TEMPERATURE		180° F		82° C	
MINIMUM STATIC USE TEMPERATURE		-70° F		-57° C	

PRO-FORMA DATA SHEET

PRO-FORMA SHEET CONTENTS: The data listed in the Pro-Forma data sheet is representative of initial production runs. These values may be revised at anytime without notice as additional test data becomes available.

DURA♦SKRIM®

DURA♦SKRIM® N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene. Exceptional toughness, high tensile and puncture strength is achieved with the combination of premium high strength LLDPE and dense scrim reinforcement. A highly stabilized formulation consisting of antioxidants, UV stabilizers and carbon black provide excellent protection for long-term exposed or barrier applications.



Scan QR Code to download technical data sheets.

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.ravenefd.com

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021618 EFD 1355

Southwest Regional GAP Analysis Project - Land Cover Descriptions

S039 Colorado Plateau Pinyon-Juniper Woodland

NLCD Class Evergreen Forest **Spatial Scale / Pattern** Matrix

Concept Summary This ecological system occurs in dry mountains and foothills of the Colorado Plateau region including the Western Slope of Colorado to the Wasatch Range, south to the Mogollon Rim and east into the northwestern corner of New Mexico. It is typically found at lower elevations ranging from 1500-2440 m. These woodlands occur on warm, dry sites on mountain slopes, mesas, plateaus, and ridges. Severe climatic events occurring during the growing season, such as frosts and drought, are thought to limit the distribution of pinyon-juniper woodlands to relatively narrow altitudinal belts on mountainsides. Soils supporting this system vary in texture ranging from stony, cobbly, gravelly sandy loams to clay loam or clay. *Pinus edulis* and/or *Juniperus osteosperma* dominate the tree canopy. In the southern portion of the Colorado Plateau in northern Arizona and northwestern New Mexico, *Juniperus monosperma* and hybrids of *Juniperus* spp may dominate or codominate the tree canopy. *Juniperus scopulorum* may codominate or replace *Juniperus osteosperma* at higher elevations. Understory layers are variable and may be dominated by shrubs, graminoids, or be absent. Associated species include *Arctostaphylos patula*, *Artemisia tridentata*, *Cercocarpus intricatus*, *Cercocarpus montanus*, *Coleogyne ramosissima*, *Purshia stansburiana*, *Purshia tridentata*, *Quercus gambelii*, *Bouteloua gracilis*, *Pleuraphis jamesii*, or *Poa fendleriana*. This system occurs at higher elevations than Great Basin Pinyon-Juniper Woodland (CES304.773) and Colorado Plateau shrubland systems where sympatric.

Range Occurs on dry mountains and foothills of the Colorado Plateau region from the Western Slope of Colorado to the Wasatch Range, south to the Mogollon Rim. It is typically found at lower elevations ranging from 1500-2440 m.

Additional Information Southwest ReGAP Analysis Project Land Cover Datasets: <http://earth.gis.usu.edu/swgap/>
 NatureServe Explorer (for Ecological System and Alliance information): <http://www.natureserve.org/explorer/>
 USDA Natural Resources Conservation Service Plants Database: <http://plants.usda.gov/>

Field Photos



PhotoID : UT050803MD24_1.JPG



PhotoID : UT050803MD22_1.JPG



PhotoID : UT062603MD06_1.JPG

Southwest Regional GAP Analysis Project - Landcover Descriptions

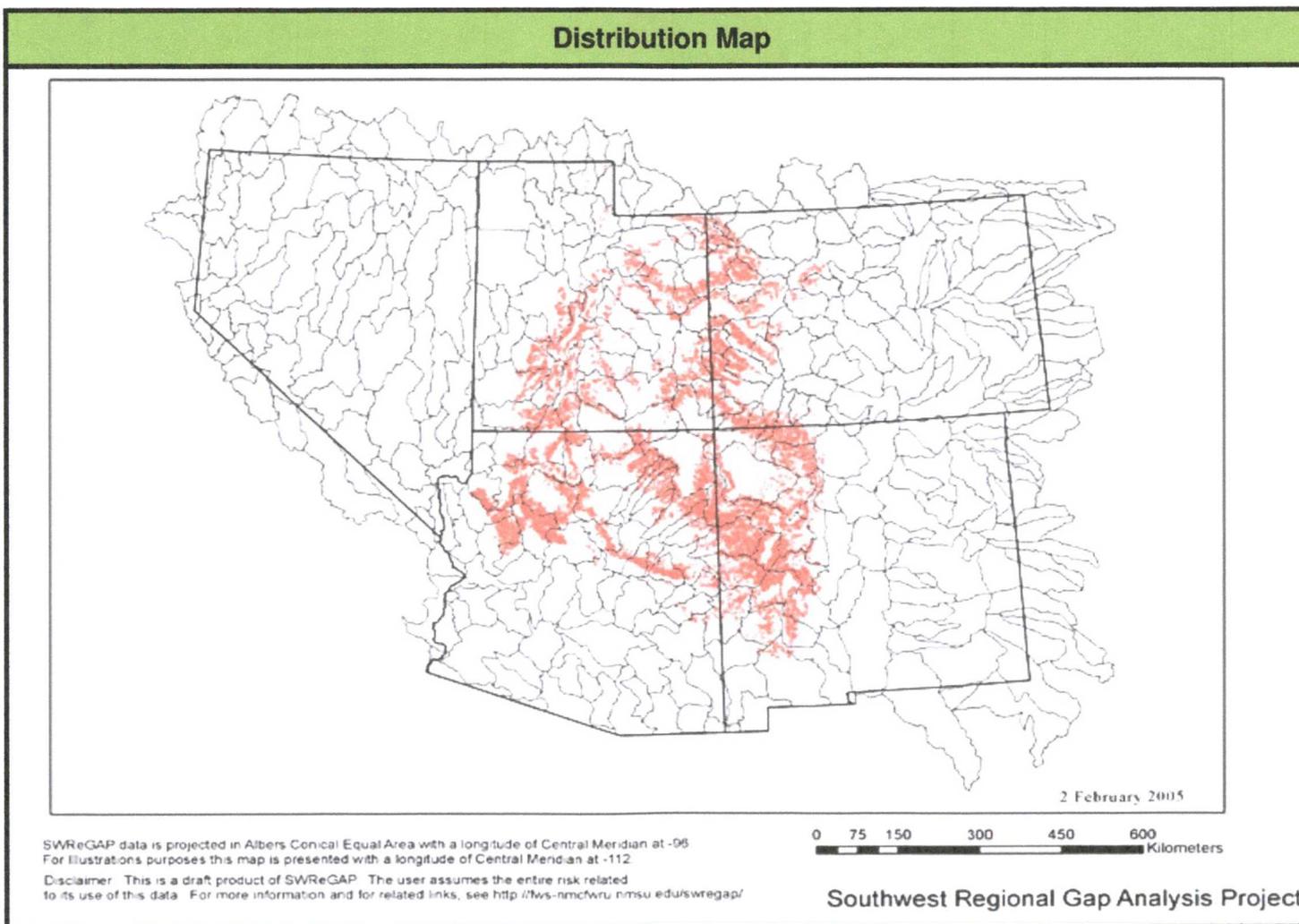
S039 Colorado Plateau Pinyon-Juniper Woodland

This distribution map represents the Ecological System as it was mapped by the Southwest ReGAP Analysis Project for the 5-state region. The boundaries represent hydrologic units used for delineating Wildlife Habitat Relationships. Ecological Systems that are rare or have very limited distributions may not be visible on this map. Refer to the list below to identify where this system was mapped.

States where System was mapped by SWReGAP:

AZ,CO,NM,UT

Distribution Map



SELECT A STATE / REGION >

Exploration Tools



Layers

Base Maps

- National Map
- Gray
- Dark Gray
- Imagery
- National Geographic
- Shaded Relief
- Streets
- World Topographic

National Layers



Zoom Level: 16
Map Scale: 1:9,027
Lat: 36.7365, Lon: -107.7913

Step 2: You have zoomed in sufficiently to select a state or regional study area. Your selection will dictate the data used to perform basin delineation and flow statistics calculation.

Click to select a State or Regional Study Area

New Mexico



Search for a place

Close Help

Supported search strings:

- GNIS locations
- USGS Sites
- Zip Codes
- Area Codes
- States
- Lat/Long ('43.9,-72.1' or '43.9N,72.1W')
- Street Address
- Hydrologic Unit

Search provided by USGS Search JavaScript API

IDENTIFY A STUDY AREA

SELECT SCENARIOS

BUILD A REPORT

Sites **Map**

Search

Search by Street Address:

Search by Place Name:

Search by Site Number(s):

Search by State/Territory:

Search by Watershed Region:

- Surface-Water Sites
- Groundwater Sites
- Springs
- Atmospheric Sites
- Other Sites

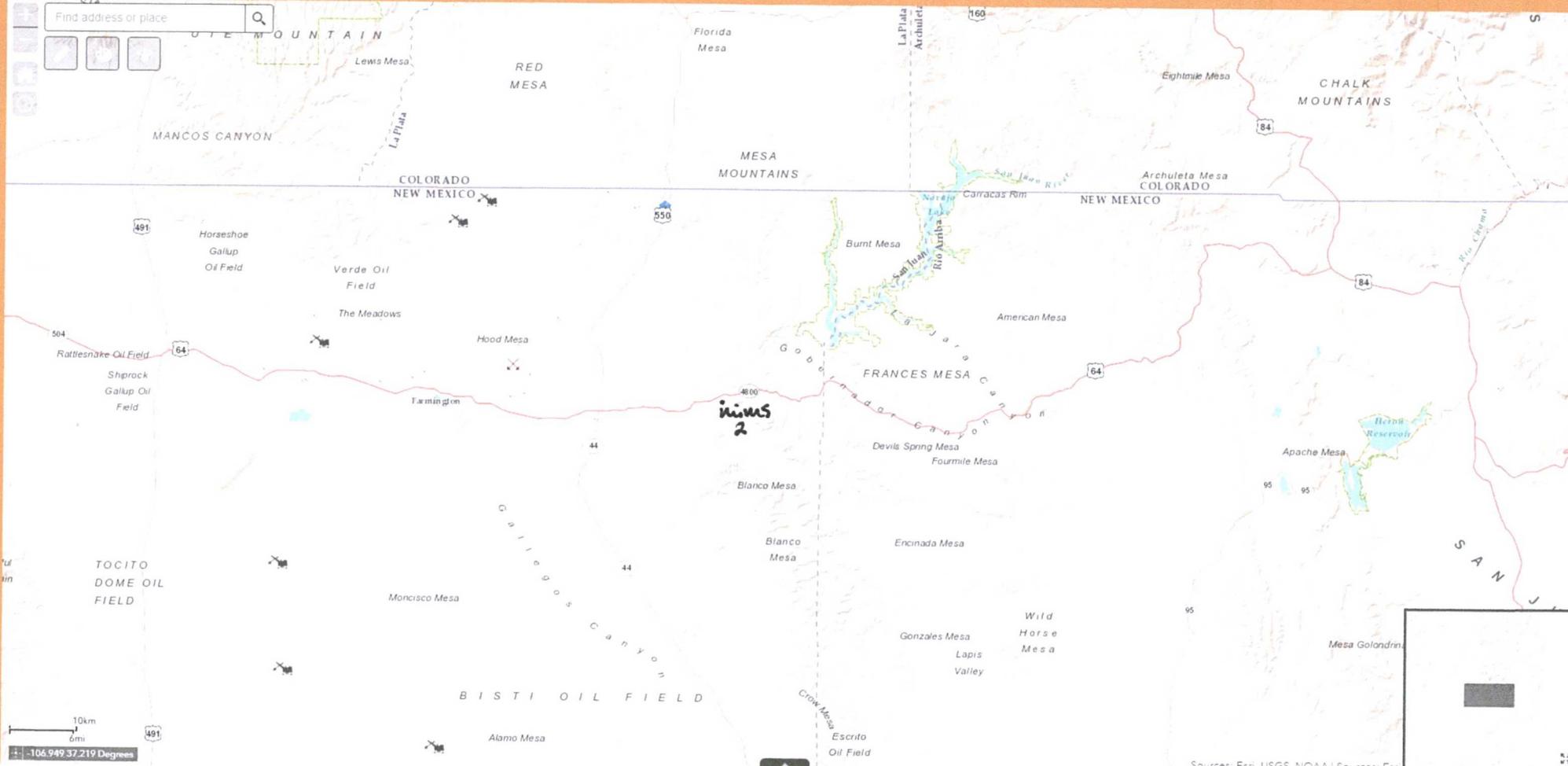


Registered Mines in New Mexico

NM Mining and Minerals Division

EMNRD Home Help

Find address or place



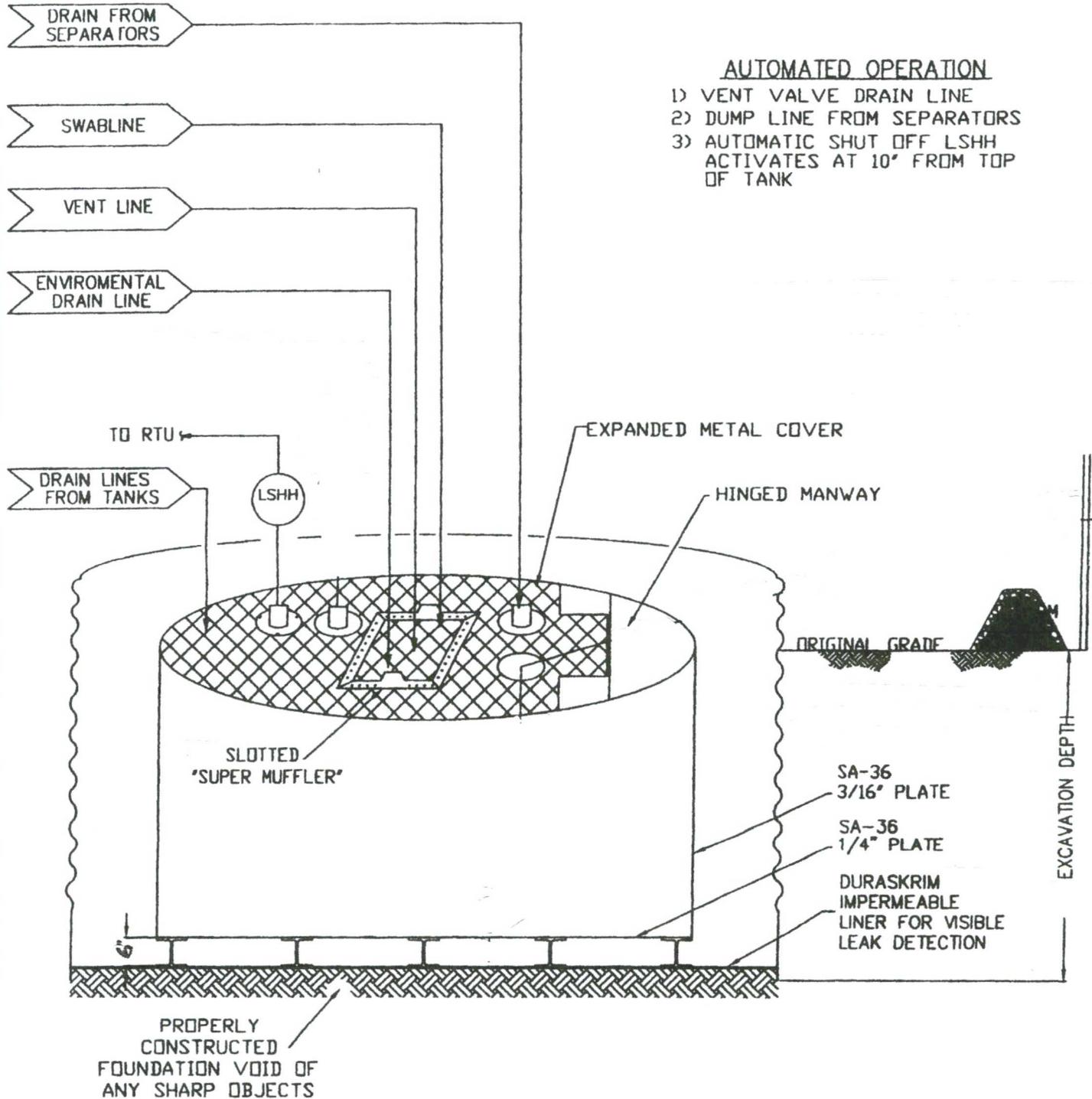
Sources: Esri, USGS, NOAA | Sources: Esri

MANUAL OPERATION

- 1) PRODUCTION TANKS DRAINLINE
- 2) SWABLINE DRAIN LINE
- 3) ENVIROMENTAL DRAIN LINE FROM COMPRESSOR SKID

AUTOMATED OPERATION

- 1) VENT VALVE DRAIN LINE
- 2) DUMP LINE FROM SEPARATORS
- 3) AUTOMATIC SHUT OFF LSHH ACTIVATES AT 10" FROM TOP OF TANK



PRODUCED WATER PIT TANK
OPEN TOP GRAVITY FLOW TANK

Advanced Wireless Communications, LLC
Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on Advanced Wireless Communications, LLC(AWC) locations. This a procedure for all below grade tanks (BGT). A separate plan will be submitted in the event any BGT does not conform to this plan.

General Plan:

1. AWC will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.
2. AWC signage will comply with 19.15.3.103 NMAC when AWC is the operator.
3. AWC constructs fencing using 4 foot hog wire fencing topped with one strand of barbed wire or with a steel top rail.
4. AWC will construct an expanded metal covering on the top of the BGT.
5. AWC will ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
6. The below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities as shown on the design drawing.
7. AWC shall operate and install the below-grade tank to prevent the collection of surface water run-on. AWC has built in shut off devices that do not allow a below-grade tank to overflow. All berms or containments shall be at a minimum 6" above surrounding ground level to keep surface water run-on from enter the below grade tank or below grade tank containment. AWC shall construct a berm or containment of adequate size and material based on the specific application of each site.
8. AWC will construct and use a below-grade tank that does not have double walls. The below grade tank's side walls will be open for visual inspection for leaks, the below grade tank's bottom will be elevated a minimum of 6" above the underlying ground surface for visual inspection of leaks. The below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. AWC has equipped the below-grade tanks with the ability to detect high liquid level in the tank and provide alarm notification and shut down process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve. This shutdown of the inlet valve prevents any hydrocarbon process streams from entering the below-grade tank once a high level is detected. In addition to the mechanical shut-in, an electronic page is sent out to 1)the designated water hauling company, 2)the designated pumper/MSO for that site, 3)the supervisors of AWC, notifying of the high tank level and indicating that action must be taken to address the alarm.
10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Dura-Skrim as N45B. N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene.
11. Items depicted on the design diagram that will be installed only as applicable to operation of each well site and of a site specific nature: Swab Line, Vent Line, Production tank drain lines, drain line from compressor skid

Advanced Wireless Communications, LLC
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade tanks on locations operated by Advanced Wireless Communications, LLC (AWC). This is standard procedure for all BGT. A separate plan will be submitted in the event any BGT does not conform to this plan.

General Plan:

1. AWC will operate and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and to protect public health and environment. AWC will accomplish this by performing an inspection on a monthly basis and installing automatic overflow shutoff devices as seen on the design plan.
2. AWC shall not discharge into or store any hazardous waste into the below grade tank.
3. AWC shall operate and install the below-grade tank to prevent the collection of surface water run-on. AWC has built in shut off devices that do not allow a below grade tank to overflow. AWC constructs berms at least 6" above the surrounding ground level to keep surface water run-on from entering the BGT or containment as shown on the design plan.
4. As per 19.17.15.12 subsection D, Paragraph 3, AWC will inspect the below-grade tank at least monthly reviewing several items which include 1)containment berms adequate and no oil present, 2)tanks had no visible leaks or sign of corrosion, 3)tank valves, flanges and hatches had no visible leaks and 4)no evidence of significant spillage of produced liquids. If any of these are detected upon inspection, AWC shall remove any visible or measurable layer of oil from the fluid surface of the BGT in an effort to prevent significant accumulation of oil over time. The written or digital record of the monthly inspections will include the items listed above and will be maintained for five years.
5. AWC shall require and maintain a 10" adequate freeboard to prevent overtopping of the below-grade tank.
6. If the below grade tank develops a leak, or if any penetration of the pit liner or below grade tank, occurs below the liquid's surface, then AWC shall remove all liquid above the damage or leak line within 48 hours. AWC shall notify the appropriate district office. AWC shall repair or replace the pit liner or below grade tank. If the below grade tank or pit liner does not demonstrate integrity, AWC shall promptly remove and install a below grade tank or pit liner that complies with Subsection I of 19.15.17.11 NMAC. AWC shall notify the appropriate district office of a discovery of leaks less than 25 barrels as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection 8, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.

Advanced Wireless Communications, LLC
Below Grade Tank Closure Plan

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on Advanced Wireless Communications, LLC(AWC) locations hereinafter known as AWC locations. This is standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

General Requirements:

1. AWC shall close a below-grade tank within the time periods provided in Subsection A of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) permitted below-grade tanks within 60 days of cessation of the below-grade tank's operation., or c) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, AWC will file the C144 Closure Report as required. AWC may choose change any pit from BGT to an above grade tank as needed to comply with NMAC or as needed for operation purposes. AWC will file Form C144 as needed for such a change.
2. AWC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The liner after being cleaned well (Subsection-D. Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100 or stored for re-use if liner is in an acceptable condition to do so.
3. AWC will receive prior approval to 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. Documentation of how the below-grade tank was disposed of or recycled will be provided in the closure report.
4. If there is any on-site equipment associated with a below-grade tank, then AWC shall remove the equipment, unless the equipment is required for some other purpose.
5. AWC shall test the soils beneath the below-grade tank to determine whether a release has occurred. AWC shall collect an appropriate composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021 B or 82608 or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021 B or 82608 or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 1 00 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. AWC shall notify the division of its results on form C-141.
6. If AWC or the division determines that a release has occurred, then AWC shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then AWC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site as needed.

8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following: a. Operator's name; b. Location by Unit Letter, Section, Township, and Range. Well name and API number.
9. The surface owner shall be notified of AWC's closing of the below-grade tank prior to closure as per the approved closure plan via certified mail, return receipt requested.
10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
11. AWC shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished by division-approved methods. BLM stipulated seed mixes will be used on federally jurisdicted lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed.
12. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
 - Soil Backfilling and Cover Installation
 - Re-vegetation application rates and seeding techniques
 - Photo documentation of the site reclamation
 - Confirmation Sampling Results
 - Proof of closure notice