NM1 - ___35____

Part 36

MAJOR MODIFICATION Application

1 of 5

July 30, 2019

Permit Application

FOR MODIFICATION

Lea Land Landfill
OCD Facility Permit No.: NM-1-0035
Lea County, New Mexico

VOLUME I:
PERMIT APPLICATION TEXT

Submitted To:

New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
505.476.3440

Prepared For:

Lea Land LLC
1300 W. Main St.
Oklahoma City, OK 73106
405.236.4257

Prepared By:

Gordon Environmental/PSC
333 Rio Rancho Blvd, Suite 400
Rio Rancho, NM 87124
505.867.6990

June 2019

Gordon/PSC Project #: 01041618.00

GORDON ENVIRONMENTAL PSC

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

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

For State Use Only:

Form C-137
Revised August 1, 2011

Submit 1 Copy to Santa Fe Office

APPLICATION FOR SURFACE WASTE MANAGEMENT FACILITY

A meeting should be scheduled with the Division's Santa Fe office Environmental Bureau prior to pursuing an application for a surface waste management facility in order to determine if the proposed location is capable of satisfying the siting requirements of Subsections A and B of 19.15.36.13 NMAC for consideration of an application submittal.

1 Application: ☐ New ☒ Modification ☐ Renewal

2. Type: ☒ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfill ☐ Landfarm ☒ Other

3. Facility Status: ☒ Commercial ☐ Centralized

4. Operator: Lea Land LLC

Address: 1300 W. Main St., Oklahoma City, OK 73106

Contact Person: Ms. Stephanie Grantham Phone: 405-236-4257

5. Location: _____ 1/2 _____ Section 32 Township 20 South Range 32 East

6. Is this an existing facility? ☒ Yes ☐ No If yes, provide permit number NM-1-0035

7. Attach the names and addresses of the applicant and principal officers and owners of 25 percent or more of the applicant. Specify the office held by each officer and identify the individual(s) primary responsible for overseeing management of the facility. (***SEE ATTACHED***)

8. Attach a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one mile of the site's perimeter.

9. Attach the names and addresses of the surface owners of the real property on which the surface waste management facility is sited and surface owners of the real property within one mile of the site's perimeter.

10. Attach a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.

11. Attach engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments.

12. Attach a plan for management of approved oil field wastes that complies with the applicable requirements contained in 19.15.36.13, 19.15.36.14, 19.15.36.15 and 19.15.36.17 NMAC.

13. Attach an inspection and maintenance plan that complies with the requirements contained in Subsection L of 19.15.36.13 NMAC.

14. Attach a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.3.118 NMAC that apply to surface waste management facilities.

15. Attach a closure and post closure plan, including a responsible third party contractor's cost estimate, sufficient to close the surface waste management facility in a manner that will protect fresh water, public health, safety and the environment (the closure and post closure plan shall comply with the requirements contained in Subsection D of 19.15.36.18 NMAC).

16 Attach a contingency plan that complies with the requirements of Subsection N of 19.15.36.13 NMAC and with NMSA 1978, Sections 12-12-1 through 12-12-30, as amended (the Emergency Management Act).

17. Attach a plan to control run-on water onto the site and run-off water from the site that complies with the requirements of Subsection M of 19.15.36.13 NMAC.

18. In the case of an application to permit a new or expanded landfill, attach a leachate management plan that describes the anticipated amount of leachate that will be generated and the leachate's handling, storage, treatment and disposal, including final post closure options.

19. In the case of an application to permit a new or expanded landfill, attach a gas safety management plan that complies with the requirements of Subsection O of 19.15.36.13 NMAC

20. Attach a best management practice plan to ensure protection of fresh water, public health, safety and the environment.

21. Attach a demonstration of compliance with the siting requirements of Subsections A and B of 19.15.36.13 NMAC.

22. Attach geological/hydrological data including:

(a) a map showing names and location of streams, springs or other watercourses, and water wells within one mile of the site;

(b) laboratory analyses, performed by an independent commercial laboratory, for major cations and anions; benzene, toluene, ethyl benzene and xylenes (BTEX); RCRA metals; and total dissolved solids (TDS) of ground water samples of the shallowest fresh water aquifer beneath the proposed site;

(c) depth to, formation name, type and thickness of the shallowest fresh water aquifer;

(d) soil types beneath the proposed surface waste management facility, including a lithologic description of soil and rock members from ground surface down to the top of the shallowest fresh water aquifer;

(e) geologic cross-sections;

(f) potentiometric maps for the shallowest fresh water aquifer; and

(g) porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed.

23. In the case of an existing surface waste management facility applying for a minor modification, describe the proposed change and identify information that has changed from the last C-137 filing.

24. The division may require additional information to demonstrate that the surface waste management facility's operation will not adversely impact fresh water, public health, safety or the environment and that the surface waste management facility will comply with division rules and orders

25. 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: Ms. Stephanie Grantham Title: Project Director

Signature: Stephanie Grantham Date: June 7, 2019

E-mail Address: Lealand.sgrantham@gmail.com

Attachment to Form C-137

Question 7:

a. Names/Addresses/Positions of all Applicant, Lea Land LLC officers:

Ms. Stephanie Grantham
Manager, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

Ms. Saralyn Hall
Manager, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

Ms. Shelley Denton
Manager, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

b. Names/Addresses of all owners of 25% or more of Applicant, Lea Land LLC:

Ms. Stephanie Grantham
Member, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

Ms. Saralyn Hall
Member, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

Ms. Shelley Denton
Member, Lea Land, LLC
1300 W. Main Street
Oklahoma City, OK 73106

c. Name of individual responsible for overseeing management of the proposed facility:

Ms. Stephanie Grantham
Project Director, Lea Land LLC
1300 W. Main Street
Oklahoma City, OK 73106

STATE OF NEW MEXICO
DIRECTOR OF OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION	**§**
FOR PERMIT MODIFICATION FOR THE	**§**
LEA LAND LLC SURFACE WASTE	**§**
MANAGEMENT FACILITY (PERMIT NO.	**§**
NM-1-0035)	**§**

STATEMENT OF APPLICATION

The Permit Application Modification submitted for the Lea Land LLC Surface Waste Management Facility located in Lea County, New Mexico, was prepared by us and technical staff under our direct supervision. We provided input and review to each of the specialized consultants responsible for the preparation of the other technical reports. It is our opinion as licensed professional engineers in good standing with the State of New Mexico, that to the best of our knowledge and belief, the information contained in this Permit Application complies with the current New Mexico Oil and Gas Rules (19.15.36 NMAC).

CHARLES WALTER FIEDLER NEW MEXICO 19731 PROFESSIONAL ENGINEER 6/12/19

Charles W. Fiedler, P.E.
New Mexico P.E. No. 19731
Senior Associate

I. KEITH GORDON NEW MEXICO 10984 REGISTERED PROFESSIONAL ENGINEER 06/12/19

I. Keith Gordon, P.E.
New Mexico P.E. No. 10984
Corporate Consultant

Environmental Consultant to and Representative of Applicant:
Gordon Environmental/PSC
333 Rio Rancho Blvd., Suite 400
Rio Rancho, New Mexico 87124
505.867.6990

Applicant:
Lea Land LLC
1300 W. Main St.
Oklahoma City, Oklahoma 73106
405.236.4257

Stephanie Grantham

Ms. Stephanie Grantham
Project Director

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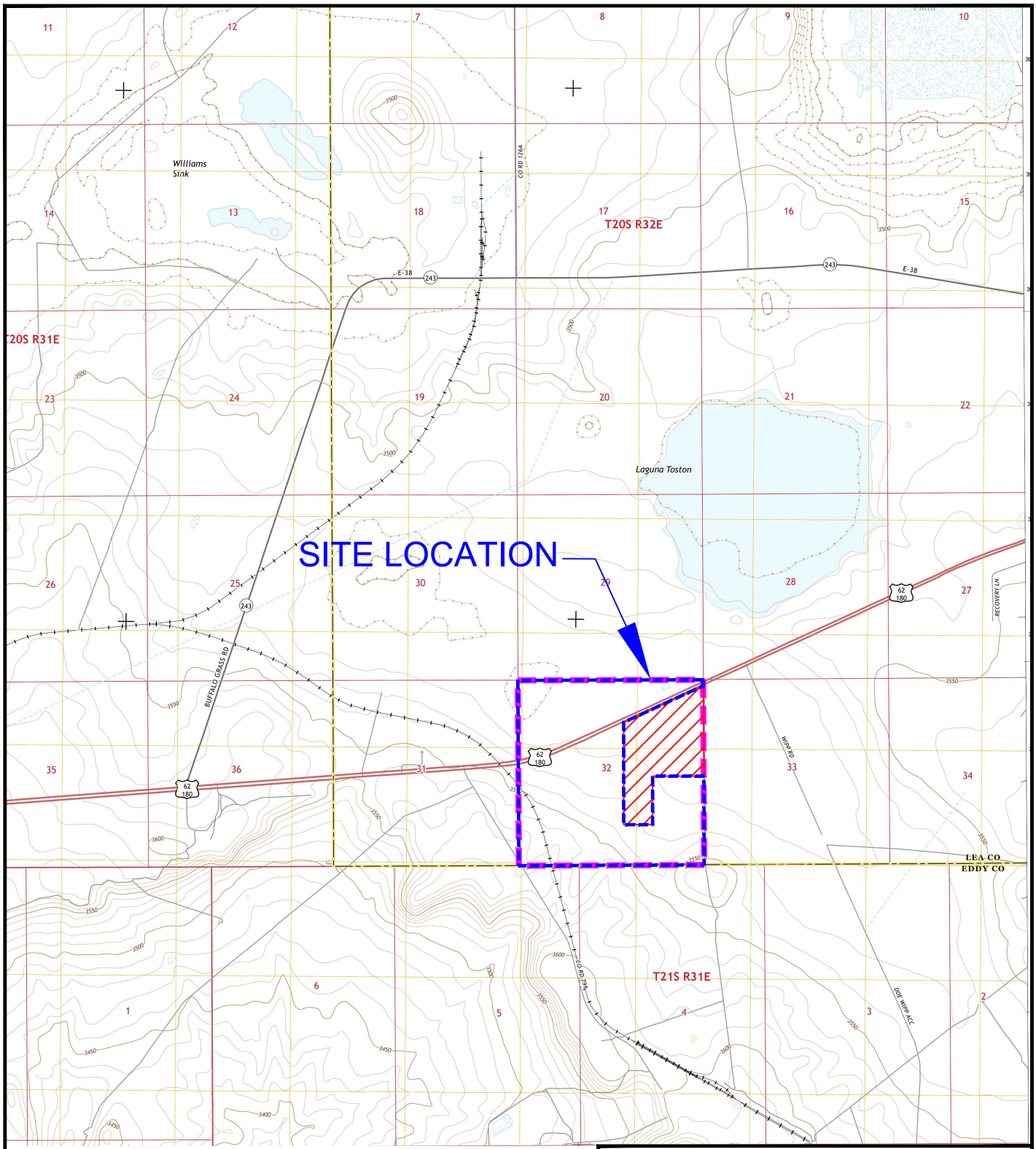
1.0 INTRODUCTION

Lea Land LLC (the Facility) is an existing Surface Waste Management Facility (SWMF) providing oil field waste solids (OFWS) disposal services. The existing Lea Land SWMF is subject to regulation under the New Mexico Oil and Gas Rules, specifically 19.15.9.711 and 19.15.36 NMAC, administered by the Oil Conservation Division (OCD) of the NM Energy, Minerals, and Natural Resources Department (NMEMNRD). This document is a component of the "Application for Permit Modification" that proposes continued operations of the existing approved waste disposal unit; lateral and vertical expansion of the landfill via the construction of new double-lined cells; and the addition of waste processing capabilities. The proposed Facility is designed in compliance with 19.15.36 NMAC, and will be constructed and operated in compliance with a Surface Waste Management Facility Permit issued by the OCD. The Facility is owned by, and will be constructed and operated by, Lea Land LLC.

Lea Land LLC herein submits this Application for Permit (Application) for the proposed modifications to the existing Lea Land SWMF. This Application has been developed in order to address the specific standards of 19.15.36 NMAC. As a Surface Waste Management Facility per 19.15.2.7.S.11 NMAC, Lea Land will meet the siting, design, and operating requirements of 19.15.36 NMAC, as detailed in this Application. More specifically, the Lea Land SWMF is a *"commercial facility"* as defined in Section 19.15.36.7.A(2) NMAC: *"… a surface waste management facility that is not a centralized facility"*, more specifically landfill and processing areas.

The existing Lea Land Landfill is equipped with a composite liner design with an inclined leachate collection geopipe system and extraction point in the northeast corner. Liner Installation Records and Engineering Certification/CQA Reports document that the liner segments were constructed in compliance with current industry and engineering standards. Routine attempts to monitor and collect leachate flow from "Unit I" have demonstrated that oil field waste solids do not generate fluids, as no free liquids are allowed, and does not produce water.



LEGEND

- PROPERTY BOUNDARY
- LEA LAND LLC FACILITY BOUNDARY
- INDUSTRIAL SOLID WASTE MANAGEMENT FACILITY

NORTH

0 2000' 4000'

NOTES:

1. GEOGRAPHIC CENTER 32° 31'46.77 -103° 47' 18.25 MAP REFERENCE: WILLIAMS SINK, NM. 2017 USGS 7.5 MIN QUAD

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\RAI1\SITE LOCATION.dwg
Date/Time:May. 31, 2019-06:20:24 ; LAYOUT: A (P)

SITE LOCATION

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON ENVIRONMENTAL PSC
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 03/11/2019	CAD: SITE LOCATION.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	FIGURE I.1
APPROVED BY: CWF	www.team-psc.com	

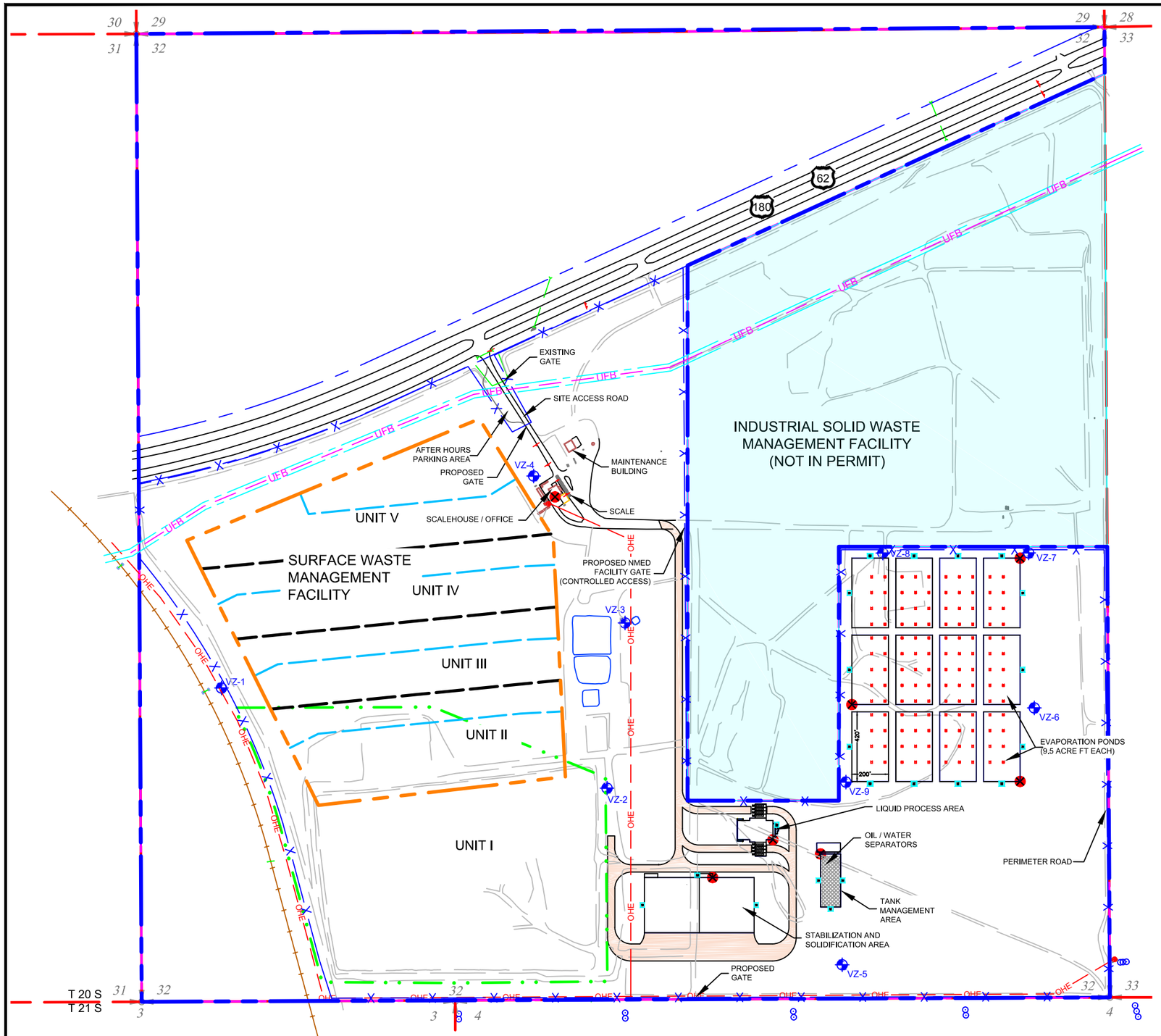
1.1 Site Location

The Lea Land site is located approximately 27 miles northeast of Carlsbad, straddling US Highway 62-180 (Highway 62) in Lea County, NM. The Lea Land site is comprised of a 642-acre ± tract of land encompassing Section 32, Township 20 South, Range 32 East, Lea County, NM (**Figure I.1**). Site access is currently provided on the south side of US Highway 62. The coordinates for the approximate center of the Lea Land site are Latitude 32°31'46.77" and Longitude -103°47'18.25".

1.2 Facility Description

The Lea Land SWMF comprises approximately 463 acres ± of the 642-acre ± site, and will include two main components: an oil field waste Processing Area (i.e., oil treating plant, evaporation/storage/treatment ponds) and an oil field waste solids Landfill, as well as related infrastructure (i.e., access, waste receiving, stormwater management, etc.). Oil field wastes are delivered to the Lea Land SWMF from oil and gas exploration and production operations in southeastern NM and west Texas. The Site Plan provided as **Figure I.2** identify the locations of the Processing Area and Land Disposal facilities, and **Table I.1** provides a description of site acreages. Perimeter setbacks are provided for surface water management and site access, as well as a buffer zone to adjacent properties. Setbacks to the Land Disposal footprint are established at 200 feet (ft) to the south; and to the north along US Highway 62. The minimum setback from waste management activities to adjacent properties is similarly 200 ft on the east and west perimeters.

The Lea Land surface waste management facility has been specifically designed to address potential aesthetic, environmental, and public health and safety concerns. These design features include a 10 ft - 20 ft perimeter screening berm along the north landfill boundary to be constructed as part of northern most landfill cell to shield activities from public view (particularly along US Highway 62) and inhibit propagation of dust, odors, diesel fumes, etc. Potential odors and environmental impacts are also limited by the waste types, operational techniques, wind direction and strategic screening. The wind blows primarily from the south/southeast (see Wind Rose, **Figure I.3**) and land uses downwind of the Lea Land SWMF are limited to petroleum exploration support activities and cattle grazing. In addition, overspray from the evaporators in the evaporation basins is contained by a lined berm that runs the length of the proposed basin configuration from north to south.



LEGEND

- SECTION BOUNDARY
- PROPERTY BOUNDARY
- SURFACE WASTE MANAGEMENT BOUNDARY
- EXISTING OCD PERMIT BOUNDARY
- PROPOSED SURFACE WASTE MANAGEMENT BOUNDARY
- INDUSTRIAL SOLID WASTE FACILITY BOUNDARY
- CELL BOUNDARY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING RAILROAD
- PROPOSED UNDERGROUND FIBER OPTIC
- PROPOSED OVERHEAD POWER LINE
- EXISTING CULVERT
- PROPOSED UNPAVED ROAD (GRAVEL)
- NOT IN OCD PERMIT
- EXISTING TRANSMISSION LINE
- H_2S MONITORING LOCATION
- PROPOSED VADOSE ZONE MONITORING WELL
- PPE AND EMERGENCY EQUIPMENT

NORTH

0 300' 600'

SITE PLAN

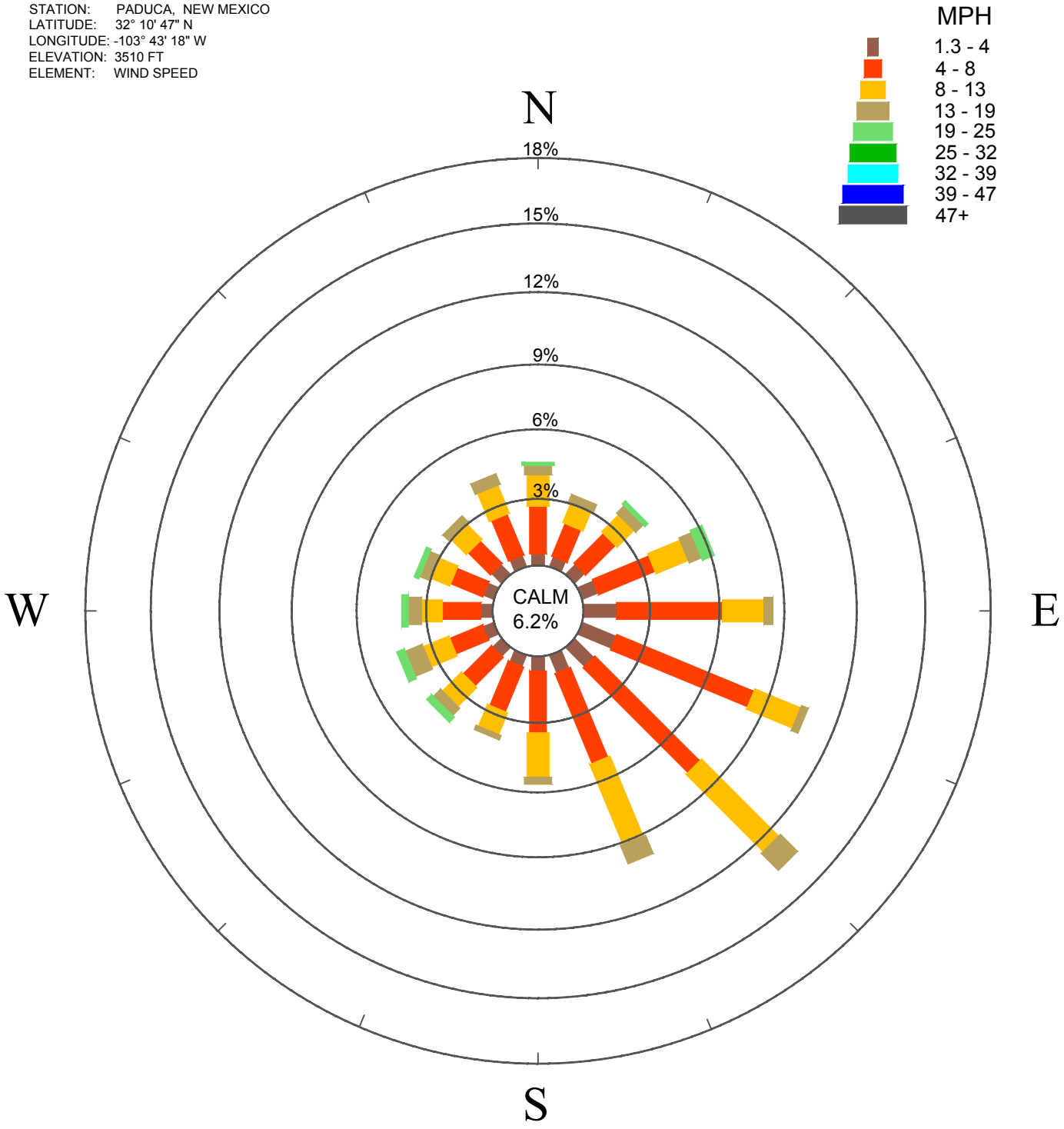
LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON ENVIRONMENTAL PSC
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 03/27/2019	CAD: SITE PLAN.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	FIGURE I.2
APPROVED BY: CWF	www.team-psc.com	

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\RAI1\SITE PLAN.dwg
Date/Time:Jun. 27, 2019-09:16:51 ; LAYOUT: B (LS)

STATION: PADUCA, NEW MEXICO
LATITUDE: 32° 10' 47" N
LONGITUDE: -103° 43' 18" W
ELEVATION: 3510 FT
ELEMENT: WIND SPEED



START DATE: DEC. 1, 2008
END DATE: DEC.31 2018
OF DAYS: 3683 OF 3683
OBS: Poss: 87196 of 88392
WESTERN REGIONAL CLIMATE CENTER

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\WINDROSE.dwg
Date/Time:Mar. 21, 2019-13:42:47 ; LAYOUT: A (P)

WIND ROSE

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON ENVIRONMENTAL PSC
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 03/14/2019	CAD: WINDROSE.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	FIGURE I.3
APPROVED BY: CWF	www.team-psc.com	

TABLE I.1 - Site Acreages

Description	Acres (±)
Lea Land Site: Total Tract	642.10
Municipal Solid Waste (MSW) Facility Footprint (Total)	134.73
Lea Land, LLC Tract Size	**507.37**
Right-of-Way – US Highway 62/BNSF Rail Road	44
Surface Waste Management Facility Footprint (Total)	**463.37**
SWMF Landfill: Disposal Footprint	100
Processing Area: Operations Footprint (SE corner)	82
Infrastructure (Section 32 exclusive of MSW unit)	118
Additional Open Land	163.37

A Site Plan which identifies the layout of the existing and proposed Lea Land Facilities is provided as **Figure I.2**. Proposed new operations at the Lea Land SWMF will be constructed in phases over a period of several years, as dictated by demand. The current and estimated potential Facility operational rates are presented in **Table I.2**, and the phased development sequence is described in Section 1.3 and **Table I.3**.

TABLE I.2 - Estimated Operational Rates[1]

Average Daily Liquid Operational Rate	10,000 bbl/day[2]
Maximum Daily Liquid Operational Rate	12,000 bbl/day[2]
Liquid Receiving and Storage Capacity	949,400 bbl[2]
Average Daily OFWS Acceptance Rate	500 cy/day[3]
Maximum Daily OFWS Acceptance Rate	1,500 cy/day[3]

Notes:
[1]Subject to change. The estimated operational rates are based on familiarity with local oil and gas industry operations; therefore this list may be modified in response to changes in waste streams, market conditions, technology, etc.
[2]bbl = barrels of oil
[3]cy = cubic yards

The proposed improvements identified in **Table I.4** are discussed in detail in this Application and identified on the Site Plan provided as **Figure I.2**. In addition, various support facilities, include: an office, scale(s), waste acceptance/security. Infrastructure, an equipment maintenance building, roads, an emergency shower & eyewash station, and stormwater detention basins are proposed modifications to the existing Facility (see **Engineering Design, Volume III.1**).

TABLE I.3 - Lea Land LLC Site Development Sequence[1]
(projected)

Description	Summary	Year No.[2]
Phase I - Continued Operations		
• Existing Landfill ~30.8 acres	Continued operation of the existing landfill as development of additional infrastructure is completed.	1
Phase II - Landfill Cell & Liquids/Solids Processing Operation.		
• New Landfill Cell (Unit II - 5 acre Cell IIA out of a total of 70 acre Unit) • Liquids load-out points (4) with Jet-Outs for handling basic sediment and water (BS&W), tank bottoms, liquid drilling muds and tank wash-outs • The Liquids Process Area • Tank farm berm (complete) • Boiler (75 HP) running heat transfer fluid tank farm • Oil/Water Separation Unit (Gun Barrel) • Produced Water Receiving Tanks (3), 1,000 bbl capacity[3] • Settling Tanks (16), 1,000 bbl capacity • Crude Oil Recovery Tank (1), 1,000 bbl capacity • Oil Sale Tank (1), 1,000 bbl capacity • Evaporation Ponds (4) capable of evaporating 4,000 bbl of liquid per day • Install Stabilization and Solidification (Drying Pad) Area	**Construction of a 5-acre cell (Cell IIA) in Unit II of the Landfill. Installation of four liquids load-out points with jet-out capabilities. Installation of the Liquids Processing Area. Installation of the Solidification and Stabilization Area**. Liquids recovered from the Liquids Processing Operations will be pumped through the Oil/Water Separator (Gun-Barrel) with oil discharged to the heated Crude Oil Recovery Tank for further processing before being pumped to the Oil Sale Tank. The oil recovered from the Liquids Processing Operations is anticipated to be 6 bbl per day. Solids recovered from the Liquids Process will be tested for liquids and if they pass the Paint Filter Test, will be transferred to the landfill for disposal. If they do not pass the Paint Filter Test, they will be delivered to the Stabilization and Solidification Area for processing prior to landfilling. Solids received in roll-off containers that do not pass the Paint Filter Test will be deposited at the Drying Pad where they will be mixed with dry soil until they are dry enough to pass the Paint Filter Test allowing them to be transferred to the landfill for disposal.	2
Phase III - Expanded Liquids/Solids Processing Operation.		
• Liquids load-out points (4) • Additional Oil/Water Separation Units (2 Gun Barrels) • Additional Produced Water Receiving Tanks (3), 1,000 bbl capacity • Additional Settling Tanks (16), 1,000 bbl capacity • Additional Crude Oil Recovery Tanks (3), 1,000 bbl capacity • Additional Oil Sales Tanks (2), 1,000 bbl capacity • Additional evaporation ponds (4) capable of evaporating an additional 4,000 bbl per day of liquid	The additional oil recovered from the expanded Produced Water Processing Operation process, anticipated to be 6 bbl per day (for a total of 12 bbls per day), will pumped to the Crude Oil Recovery tanks for further processing.	3
Phase VI - Ultimate Produced Water Processing Facility.		
• Additional Oil/Water Separation Unit (1 Gun Barrel) • Additional Produced Water Receiving Tank (3), 1,000 bbl capacity • Additional Settling Tanks (16), 1,000 bbl capacity • Additional Oil Sales Tanks (1), 1,000 bbl capacity • Additional evaporation ponds (4) capable of evaporating an additional 4,000 bbl per day of liquid	The additional oil recovered from the ultimate Produced Water Processing Facility will be pumped to the Crude Oil Recovery Tank for further processing.	4

Notes:

[1] The Lea Land LLC site development sequence is subject to change. Differing combinations of these improvements may be constructed at any time. OCD will be notified in advance of construction.

[2] Estimated number of years following OCD Surface Waste Management Facility Permit issuance.

[3] bbl = barrels of oil

TABLE I.4 – Existing & Proposed Facilities[1]

Description	No.
Existing OFWS disposal landfill	1
New SWMF disposal landfill	1
New Produced water load-out points	8
New Produced water receiving tanks	12
New Produced water settling tanks	48
New oil/water separation units (Gun Barrels)	4
New Evaporation ponds	12
Stabilization and Solidification Area (Drying Pad)	1
Oil treatment plant (Liquids Processing)	1
Crude oil recovery tanks	5
Oil sales tanks	5
Customer jet wash – bays & jet out pit	8
75 horsepower boiler	1
Centrifuge	1

Note:
[1]Subject to change. The proposed facilities are based on projected waste types and volumes; therefore this list may be modified in response to changes in waste streams, market conditions, technology innovations, etc. OCD will be routinely updated on changes.

1.3 Development Sequence

The development sequence for the Lea Land SWMF modifications are proposed to be conducted in four primary phases (**Table I.3**). This phased Processing Area sequence is estimated to take place over a period of approximately four years, depending on the demand for the services provided by the Facility. However, different combinations of these improvements may be constructed at any time. The phased development is projected as follows:

Phase I - Continued OFWS. This Phase will include continued operations in the existing 30.8-acre cell (**Figure I.2**) of the Land Disposal Area where landfilling of OFWS will be conducted. Future Landfill Cells and sub-cells (i.e., Unit II-V) will be constructed in advance of need based on engineering construction plans and specifications submitted to OCD.

Phase II – Landfill Cell and Liquids Processing Operation. This Phase of the operation will include installation of:

- Liquids Load-Out points
- The Liquids Process Area
- The complete tank farm berm
- A mechanical oil/water separation unit
- The 75 horsepower (HP) boiler
- Produced Water Settling Tanks
- A Crude Oil Recovery Tank
- An Oil Sale Tank
- Four Evaporation Ponds with a capacity of 9.5 acre-feet each
- The Stabilization and Solidification area (Drying Pad)

It is estimated that this Phase may be completed within approximately two years of receipt of OCD approval.

Phase III - Expanded Produced Water Processing Operation. This Phase will include the installation of an additional four Liquid Load-Out points, four additional 1,000 bbl heated Produced Water Receiving Tanks, sixteen additional 1,000 bbl Produced Water Settling Tanks, three additional Crude Oil Recovery Tanks, an additional oil/water separator unit and four additional 9.5 acre-foot ponds capable of evaporating an additional 4,000 bbl per day of liquid. It is estimated that this Phase may be completed within approximately three years of receipt of OCD approval.

Phase IV- Ultimate Produced Water Processing Facility. This Phase will include the installation of four additional 10,000 bbl heated Produced Water Receiving Tanks, sixteen additional 1,000 bbl Produced Water Settling Tanks, an additional oil/water separator unit, and four additional Evaporation Ponds capable of evaporating an additional 4,000 bbl per day of liquid. It is estimated that this Phase may be completed within approximately four years of receipt of OCD approval.

1.4 Permit Application Format

For ease of review and reference, this Application for Permit has been organized into a four-volume set, in the same order and format as the current Rules for Surface Waste Management Facilities (19.15.36 NMAC). OCD Form C-137 (*Application for Surface Waste Management Facilities*) is provided as a preface to this **Volume**. The Permit Application Text provided in **Volume I** addresses the applicable requirements of 19.15.36 NMAC, by restating each requirement (**in bold**) followed by the appropriate response (*in italics*).

The Facility Management Plans provided in **Volume II** address the development, operation and closure of storage tanks, evaporation ponds, solid waste landfill and supporting infrastructure (i.e., stormwater management). Design data and supporting calculations in accordance with the applicable sections of 19.15.36 NMAC are presented in **Volume III**. **Volume IV** of this Application provides the results of focused environmental site characterization studies and hydrogeological investigations for the entire 642 acre ± site.

In many cases, the technical response to a particular item is so sufficiently detailed or complex that a separate graphic, table, report, plan, or calculation has been prepared. The applicable technical documents in this Application are cross-referenced in the narrative responses to each of the individual regulatory requirements as delineated in **Volume I**. Each section of **Volumes I-IV** also includes, as applicable:

- Table of Contents
- List of Figures
- List of Tables
- List of Attachments

The Table of Contents for the entire four-volume (I-IV) Application is also included in each volume in order to assist in cross-referencing, along with the List of **Permit Plans** (**Table I.5**). The four-volume Application is provided in binders, and electronic format as directed by OCD. Each binder is divided by tabs which identify the Volume and Section as referenced in the master Table of Contents. **Table I.6** is a “List of Acronyms and Definitions” pertinent to the terminology used in this Application.

TABLE I.5 - List of Permit Plans

Sheet No.	Title (ordered completely numerically)
G-001	Cover Sheet and Index
C-101	Site Plan - Existing Conditions
C-102	Site Development Plan
C-103	Existing Permit - Completion Grading Plan
C-104	Landfill Base Grading Plan
C-105	Landfill Final Grading Plan
C-106	Landfill Completion Drainage Plan
C-107	Process Area Layout
C-108	Evaporation Pond Layout
C-109	Liquid Process Area Equipment Layout
C-301	Landfill Cross-Sections
C-501	Landfill Liner System and Final Cover Details
C-502	Leachate Collection System Details
C-503	Evaporation Ponds Details
C-504	Tank Management Area Cross-Sections & Drying Pad Leak Detection Details

TABLE I.6 - List of Acronyms and Definitions
(1 of 3)

ASTM	***American Society for Testing and Materials***
BBL	***Barrels;*** 42 gallons (oil)
BLM	***Bureau of Land Management***
Bgs	***Below ground surface***
BS&W	***Basic Sediments and Water***
BTEX	***Benzene, Toluene, Ethylbenzene, and Xylenes***
C/PC	***Closure/Post-Closure:*** C/PC refers to two independent steps following completion of facility operations: • Closure typically refers to capping the landfill and regrading the surface and repositioning of infrastructure to accommodate the post-closure care period. • Post-closure care refers to maintenance and monitoring after completion of closure.
cm/sec	***Centimeters per second***
CQA	***Construction Quality Assurance:*** CQA is the process of applying field and laboratory testing, and construction observation to confirm that environmental control systems (e.g., liners and covers) are installed according to the design, regulatory requirements, and current industry standards.
DAF	***Diffused Air Flotation***
DO	***Dissolved Oxygen***
FEMA	***Federal Emergency Management Agency,*** which administers the Flood Insurance Rate Map (FIRM) program.
FML	***Flexible Membrane Liner (or geomembrane):*** Geosynthetic plastic liners are the standard design for the primary (upper) containment layer of the composite liner system, which in a RCRA Subtitle D (solid waste) Landfill is underlain by a compacted clay liner (CCL) or a geosynthetic clay liner (GCL).
GCL	***Geosynthetic Clay Liner:*** These are composite materials with geotextiles (fabrics) used in conjunction with dense bentonite clays, and are commonly used as the secondary (lower) liner in the landfill liner system.
Geosynthetics	The family of man-made tools available to the design engineer for waste containment facilities, including geomembranes (FML's), geosynthetic clay liners (GCL's), geotextile (filters and cushions), geonets (drainage and cushions), geopipes, etc.

TABLE I.6 - List of Acronyms and Definitions
(2 of 3)

HDPE	***High Density Polyethylene:*** This geomembrane (plastic) is the preferred material for FML landfill liners, and is typically installed in 40 – 100 mil thicknesses. HDPE is also used for leachate collection system piping and landfill gas management systems.
H_2S	***Hydrogen Sulfide***
Lea Land	***Lea Land LLC Surface Waste Management Facility***
LEL	***Lower Explosive Limit*** is the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 77 degrees Fahrenheit and atmospheric pressure.
mcf	***Thousand Cubic Feet***
mg/l	***Milligrams Per Liter***
MSW	***Municipal Solid Waste***
Mud Management	***Stabilization and Solidification Process Area***
NMAC	***New Mexico Administrative Code***
NMDOT	***New Mexico Department of Transportation:*** The NMDOT is committed to providing safe and reliable transportation systems to the state of New Mexico. NMDOT also works closely with other state agencies on transportation related issues.
NMPM	***New Mexico Principal Meridian***
NOI	***Notice of Intent:*** Application to USEPA for stormwater discharges associated with industrial activity under the NPDES program. ***Notice of Inspection:*** The written record of a compliance inspection by a regulatory agency.
NORM	***Naturally Occurring Radioactive Material***
NPDES	***National Pollutant Discharge Elimination System:*** The federal permit program which requires point sources discharging pollutants to waters of the United States to obtain a permit.
NRCS	***Natural Resources Conservation Service:*** The federal agency with local offices that provide guidance on seeding of the final cover.
OCD	***Oil Conservation Division;*** a division of the New Mexico Energy, Minerals, and Natural Resources Department
OFWS	***Oil Field Waste Solids***

TABLE I.6 - List of Acronyms and Definitions
(3 of 3)

OSE	***Office of the State Engineer***
PE	***Licensed Professional Engineer***
PER	***Preliminary Engineering Report***
PSL	***Protective Soil Layer:*** Liners typically shall have a protective cover of at least two feet of granular soil. This protective cover shall, in addition to providing physical protection for the liner, facilitate the collection of leachate in the leachate collection system.
PVC	***Polyvinyl Chloride***
RAI	***Request for Additional Information;*** typically issued by a regulatory agency to an Applicant in response to an Application.
RCRA	***Resource Conservation and Recovery Act;*** the program administered by USEPA that sets national standards for solid waste management and disposal.
SLO	***State Land Office***
SWMF	***Surface Waste Management Facility***
SWPPP	***Stormwater Pollution Prevention Plan:*** Sites subject to the federal National Pollutant Discharge Elimination System (NPDES) regulations must prepare and implement a SWPPP. The Plan identifies potential pollutant sources and plans to mitigate/eliminate these sources.
TDS	***Total Dissolved Solids;*** a measure of water quality
TPH	***Total Petroleum Hydrocarbons***
USEPA	***United States Environmental Protection Agency:*** The federal entity responsible for administering the RCRA program. USEPA also sets national standards for air quality (NSPS) and stormwater quality (NPDES) protection.
USGS	***United State Geological Survey***
µm	***Micrometers***
UV	***Ultra-violet light;*** one component of sunlight
WQCC	***Water Quality Control Commission (NMWQCC);*** responsible for the protection of groundwater and surface water in New Mexico.

19.15.36.8 SURFACE WASTE MANAGEMENT FACILITY PERMITS AND APPLICATION REQUIREMENTS:

A. Permit required. No person shall operate a surface waste management facility (other than a small landfarm registered pursuant to Paragraph (1) of Subsection A of 19.15.36.16 NMAC) except pursuant to and in accordance with the terms and conditions of a division-issued surface waste management facility permit. The applicant for a permit or permit modification, renewal or transfer shall be the operator of the surface waste management facility. The operator is responsible for the actions of the operator's officers, employees, consultants, contractors and subcontractors as they relate to the operation of the surface waste management facility. Any person who is involved in a surface waste management facility's operation shall comply with 19.15.36 NMAC and the permit.

Lea Land proposes to continue operating their existing Surface Waste Management Facility including improvements proposed herein, pursuant to and in accordance with the terms and conditions of a Surface Waste Management Facility Permit issued by the Oil Conservation Division (OCD) of the New Mexico Energy, Minerals and Natural Resources Department. Lea Land, LLC, as the operator, is responsible for the actions of the operator's officers, employees, consultants, contractors and subcontractors as they relate to the operation of the surface waste management facility.

B. Permitting requirements. Except for small landfarms registered pursuant to Paragraph (1) of Subsection A of 19.15.36.16 NMAC, new commercial or centralized facilities prior to commencement of construction, and existing commercial or centralized facilities prior to modification or permit renewal, shall be permitted by the division in accordance with the applicable requirements of Subsection C of 19.15.36.8 NMAC and 19.15.36.11 NMAC.

Lea Land is requesting a modification to their existing commercial Surface Waste Management Facility Permit in accordance with the applicable requirements of 19.15.36.8.C NMAC and 19.15.36.11 NMAC. The purpose of this Application is to detail the modified Facility design, capacity, and operational practices in accordance with the Rules. For ease of regulatory review, this Application provides the information required in applicable sections of 19.15.36 NMAC as delineated in this ***Volume****.*

C. Application requirements for new facilities, major modifications and permit renewals. An applicant or operator shall file an application, form C-137, for a permit for a new surface waste management facility, to modify an existing surface waste management facility or for permit renewal with the environmental bureau in the division's Santa Fe office. The application shall include:

(1) the names and addresses of the applicant and principal officers and owners of twenty-five percent or more of the applicant;

The purpose of this Application is to request a Permit Modification for this existing surface waste management facility, and to document Facility design, capacity, and proposed updated operational activities. The completed form C-137, provided for informational purposes, is located as the preface to this ***Volume****. The names and addresses of the Applicant and principal officers and owners of 25 percent or more of Lea Land LLC are listed on C-137.*

(2) a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one-half mile of the site's perimeter based upon the records of the applicable county clerk or clerk's office;

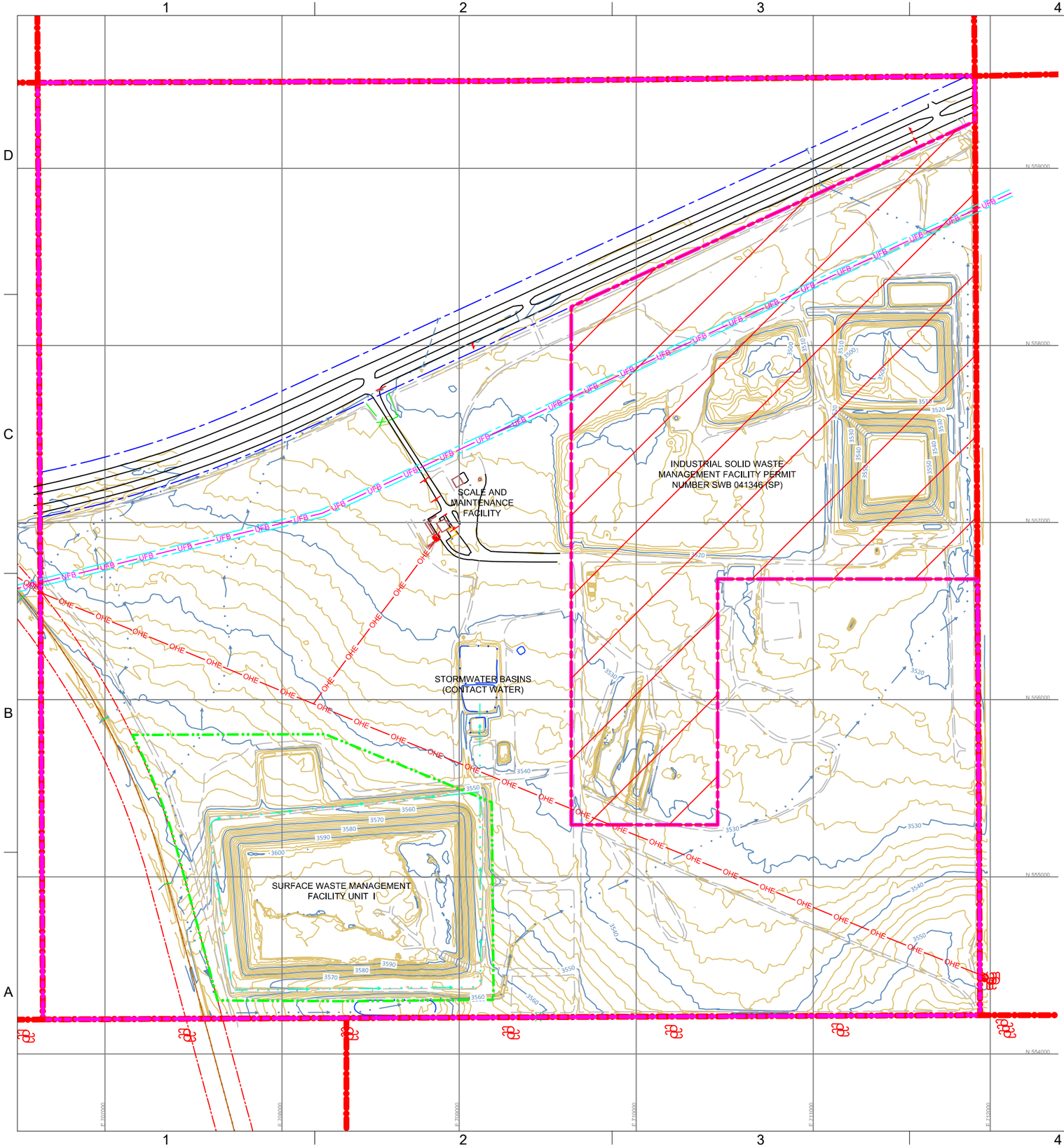
The Site Location Map that shows the Lea Land SWMF plotted on the most current United States Geological Survey (USGS) Quadrangle map is provided as ***Figure I.1****. The Site Location Map shows the Facility and the surrounding area, and* ***Figure I.4*** *is a detailed Site Topography. There are no watercourses; fresh water sources, including wells and springs; or inhabited buildings within one-half mile of the site's perimeter. A more detailed discussion of site characteristics and land use is provided in* ***Volume IV.1*** *(Siting Criteria). A Survey Plat of the Lea Land site is provided as* ***Attachment I.C****, and the Permit Plans (****Volume III.1****) provide more detailed topographic data at the 1 ft contour level.*

(3) the names and addresses of the surface owners of the real property on which the surface waste management facility is sited and surface owners of the real property within one mile of the site's perimeter;

The owner of the real property on which the Surface Waste Management Facility will be re-platted is:

Lea Land LLC
1300 W. Main St.
Oklahoma City, OK 73106

Enviro-American, Inc., and Lea Land, Inc., are companies with common ownership, are deeding lands to Lea Land LLC for use as a Surface Waste Management Facility, and the owners of Lea Land LLC are listed on Form C-137 prefacing the Application. ***Attachment I.A*** *(Public Notification) includes a list of the names and addresses of surface owners of the real property within one mile of the site's perimeter based on the most recent data available from the Lea and Eddy County Assessor's Offices.*



LEGEND

- SECTION BOUNDARY
- PROPERTY BOUNDARY
- EXISTING OCD PERMIT BOUNDARY
- EXISTING HIGHWAY RIGHT-OF-WAY
- EXISTING RAILWAY RIGHT-OF-WAY
- EXISTING TELECOM EASEMENT
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING UNDERGROUND FIBER-OPTIC LINE
- EXISTING EDGE OF PAVED ROADWAY
- EXISTING EDGE OF UNPAVED ROADWAY
- EXISTING CENTERLINE OF RAILWAY
- EXISTING DRAINAGE RUN-ON FLOW PATH
- EXISTING DRAINAGE RUNOFF FLOW PATH
- EXISTING GRADE ELEVATION CONTOUR - INDEX (10')
- EXISTING GRADE ELEVATION CONTOUR - INTERMEDIATE (2')
- POWER POLE
- SITE GRID (N 5580000 / E 7080000)

GORDON ENVIRONMENTAL PSC

CHARLES WALTER FIEDLER NEW MEXICO 19731 06/26/2019 PROFESSIONAL ENGINEER

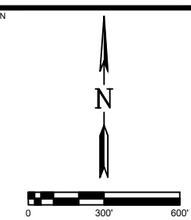
C. W. Fiedler, P.E.

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY

PERMIT APPLICATION

LEA COUNTY, NEW MEXICO

KEY PLAN



NO	DATE	DESCRIPTION
1	06/03/2019	REVISIONS PER OCD REVIEW
-	04/10/19	OCD PERMIT APPLICATION REVIEW

ISSUING OFFICE: RIO RANCHO PROJECT NO: 0416.18

SITE TOPOGRAPHY

FIGURE I.4

FILE NAME: X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\RA11\SITE TOPOGRAPHY.dwg LAYOUT NAME: C-101 PRINTED: Tuesday, July 16, 2019 - 1:28pm USER: dmill

(4) a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas;

Volume III.1 *(Engineering Design) includes a set of* ***Permit Plans*** *which are listed on* ***Table I.5****. The* ***Permit Plans****, Site Development Plan, indicates the location of existing and proposed roads, pipeline crossings, fences and gates. The* ***Permit Plans****, Engineering Details, provides construction and installation details on the landfill liner, and Leachate Collection System Details provides these details for the leachate collection system. Layout details for the processing area, which includes the produced water loadout tank farm, ponds, tanks, jet out pit and stabilization/solidification area is depicted on the* ***Permit Plans****, Solids + Liquids Unloading & Processing Layout (Processing & Stabilization Area). The* ***Permit Plans****, Liquids Basin Details (Evaporation Ponds) provides construction and installation details for the evaporation ponds including the mechanical evaporator locations. The* ***Permit Plans****, Solids Unloading, provides additional details on the construction and installation of the Jet-Out Facility.*

(5) engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments;

The ***Permit Plans*** *included in* ***Volume III.1*** *are provided at a reduced scale and establish the engineering design criteria for the Facility. The same drawings are submitted to the OCD with this Application as a full-size (24 x 36-inch) plan set. The List of* ***Permit Plans*** *is provided with the master Table of Contents and included as* ***Table I.5****. These* ***Permit Plans****, and the Certification Statement that prefaces this volume, have been signed and sealed by a Professional Engineer (PE) registered in the State of New Mexico. That engineer, who is a specialist in environmental engineering and waste containment design, is identified as follows:*

Charles W. Fiedler, P.E.
New Mexico Professional Engineer #19731
Senior Associate/Senior Practice Leader
Gordon Environmental/PSC
333 Rio Rancho Blvd., Suite 400
Rio Rancho, NM 87124
505.867.6990 Phone
505.867.6991 Fax

These designs will be supplemented by "Construction Plans and Specifications" sealed by a qualified NM PE prior to installation of the improvements.

(6) a plan for management of approved oil field wastes that complies with the applicable requirements contained in 19.15.36.13 NMAC, 19.15.36.14 NMAC, 19.15.36.15 NMAC and 19.15.36.17 NMAC;

*The Oil Field Waste Management Plan included as **Volume II.2** provides the applicable information required in 19.15.36.13.A through H, 19.15.36.14, 19.15.35.15, and 19.15.36.17 NMAC.*

(7) an inspection and maintenance plan that complies with the requirements contained in Subsection L of 19.15.36.13 NMAC;

*The Operations, Inspection, and Maintenance Plan included as **Volume II.1** provides the applicable information required in 19.15.36.13.L.*

(8) a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.11 NMAC that apply to surface waste management facilities;

*The Hydrogen Sulfide Prevention and Contingency Plan included as **Volume II.3** provides information to ensure that the regulatory thresholds in 19.15.11 NMAC are not exceeded. In addition, the Contingency Plan provided as **Volume II.5** addresses the requirements of 19.15.36.13.N NMAC outlining methods to respond to potential issues in order to minimize hazards to fresh water, public health, safety or the environment.*

(9) a closure and post closure plan, including a responsible third party contractor's cost estimate, sufficient to close the surface waste management facility in a manner that will protect fresh water, public health, and the environment, and to comply with the closure and post closure requirements contained in Subsections A through F of 19.15.36.18 NMAC);

*The Closure/Post-closure (C/PC) Plan is provided as **Volume II.4**. The C/PC Plan addresses the information required in this section as well as 19.15.36.18.A through F NMAC; and provides the estimated third-party C/PC cost estimate (**Attachment II.4.A**) to address the requirements in this section.*

(10) a contingency plan that complies with the requirements of Subsection N of 19.15.36.13 NMAC and with NMSA 1978, Sections 12-12-1 through 12-12-30, as amended;

*The Lea Land Contingency Plan prepared in compliance with 19.15.36.13.N NMAC and the NMSA 1978 as referenced, is provided as **Volume II.5**.*

(11) a plan to control run-on water onto the site and run-off water from the site that complies with the requirements of Subsection M of 19.15.36.13 NMAC;

***Volume III.1** provides the design for berms, conveyance channels, and detention ponds to control run-on/run-off during the peak discharge from a 25-year, 24-hour storm; and **Volume III.3** provides the supporting calculations. Lea Land is designed as a "zero-discharge" stormwater management configuration, in that any run-off from active landfill and processing areas is contained on-site for the design storm event. The applicability of the National Pollutant Discharge Elimination System (NPDES) and Oil Pollution Prevention regulations for potential stormwater discharges from the site is discussed in **Volume IV.1**.*

(12) in the case of an application to permit a new or expanded landfill, a leachate management plan that describes the anticipated amount of leachate that will be generated and the leachate's handling, storage, treatment and disposal, including final post closure options;

*The Leachate Management Plan included as **Volume II.8** provides details including the anticipated volume of leachate that will be generated; and the leachate management, storage, treatment and disposal technologies that will be employed during operations and following closure. Leachate management details are also described in **Volume II.1** as well as the **Permit Plans**.*

(13) in the case of an application to permit a new or expanded landfill, a gas safety management plan that complies with the requirements of Subsection O of 19.15.36.13 NMAC;

*In compliance with 19.15.36.13.O NMAC, landfill gas safety management is addressed in Section 6.6 of **Volume II.1**. The Hydrogen Sulfide (H2S) Prevention and Contingency Plan is provided as **Volume II.3**.*

(14) a best management practice plan to ensure protection of fresh water, public health and the environment;

*Best management practices to ensure the protection of fresh water, public health and the environment, are described in detail in the Operations, Inspection, and Maintenance Plan (**Volume II.1**) as well as on the **Permit Plans**.*

(15) geological/hydrological data including:

The Lea Land site is located in a hydrogeologic setting that is ideally selected for waste processing and disposal. The absence of shallow groundwater (i.e., > 170 feet (ft) below ground surface) and the presence of laterally and vertically extensive aquitard (i.e., the red bed formation consisting of the Dewey Lake Redbeds) beneath the site minimize the potential for groundwater contamination. Regional and site-specific hydrogeologic data were compiled and are presented in ***Volume IV.2*** *(Hydrogeology). Detailed on-site hydrogeologic site investigations have been conducted on the property since 1993. Results of these investigations are described in* ***Volume IV.2****.*

(a) a map showing names and location of streams, springs or other watercourses, and water wells within one mile of the site;

As described in ***Volume IV.2****, the map provided as* ***Figure IV.2.12*** *shows terrain, wells and drainages for the region within a one-mile radius of the Lea Land property. No streams, springs or other watercourses are present within one mile of the Facility. There are no water wells within one mile of the Facility. Locations of monitoring wells in the vicinity of the Lea Land site are shown in* ***Figure IV.2.6;*** *a summary of vicinity wells is also included in* ***Table IV.2.1.***

(b) laboratory analyses, performed by an independent commercial laboratory, for major cations and anions; BTEX; RCRA metals; and TDS of ground water samples of the shallowest fresh water aquifer beneath the proposed site;

As described in ***Volume IV.2****, groundwater samples were collected from monitoring wells associated with the NMED permitted facility adjacent to this facility, completed in the Dewey Lake Redbeds at depths ranging from 203 ft to 220 ft below ground surface at the Lea Land site on March 19, 2010 and June 13, 2018. Laboratory analyses for analytes set forth in 19.15.36.8.C.15(b) are described in detail in* ***Volume IV.2****. Analytical data from these tests are included in* ***Table IV.2.2****. Copies of laboratory reports for tests listed in* ***Table IV.2.2*** *are included in* ***Attachment IV.2.F****.*

(c) depth to, formation name, type and thickness of the shallowest fresh water aquifer;

The Dewey Lake Redbeds contain the shallowest fresh water-bearing zones at the Facility ranging in depths from 172 ft to 188 ft below ground surface. A detailed description of these water-bearing zones, including depth and thickness, is provided in ***Volume IV.2****.*

(d) soil types beneath the proposed surface waste management facility, including a lithologic description of soil and rock members from ground surface down to the top of the shallowest fresh water aquifer;

*A summary of the soil data obtained during various site investigations is provided in **Table IV.2.3**. This table summarizes the standard engineering index properties (i.e., USCS soil classification; grain size distribution; natural dry density, Atterberg limits; and gravimetric moisture content) for selected soil samples obtained during the drilling program at the Facility. **Table IV.2.3** also summarizes lab test results for Standard Proctor density and permeability. Additionally, **Table IV.2.3** contains hydraulic conductance values obtained from tests wells completed in the Dewey Lakes Redbeds at the site and in the vicinity. The soils laboratory testing was conducted in accordance with guidance provided by OCD and industry standards. The site geology is described in detail in **Volume IV.2** including lithologic descriptions of the soil borings installed at the site.*

(e) geologic cross-sections;

*As detailed in **Volume IV.2**, a hydrogeologic cross section depicting stratigraphy and geometry of the Dewey Lake Redbeds water-bearing zones and potentiometric surface is included as **Figure IV.2.7**.*

(f) potentiometric maps for the shallowest fresh water aquifer; and

*As described in **Volume IV.2**, a potentiometric surface map was prepared using water level data from vicinity wells that penetrate shallow water-bearing zones in the alluvium and the Dewey Lake Redbeds and is included in **Figure IV.2.10**.*

(g) porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed;

*A detailed description of porosity, permeability, conductivity, compaction ratios, and swelling characteristics is provided in **Volume IV.2**. The calculated porosities and permeabilities are summarized in **Table IV.2.3**. **Table IV.2.3** also summarizes the standard proctor densities and optimum moistures.*

(16) certification by the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge, after reasonable inquiry; and

*The certification is located in the preface to this **Volume** of the Application (i.e., Form C-137).*

(17) other information that the division may require to demonstrate that the surface waste management facility's operation will not adversely impact fresh water, public health or the environment and that the surface waste management facility will comply with division rules and orders.

Lea Land will provide other applicable information reasonably requested by the OCD in order to demonstrate that the surface waste management facility's operation will not adversely impact fresh water, public health or the environment. In addition, Lea Land will comply with applicable Rules and Orders issued by OCD.

D. Application requirements for minor modifications. Before making a minor modification, the operator of an existing surface waste management facility shall file a form C-137A with the environmental bureau in the division's Santa Fe office describing the proposed change. Minor modifications are not subject to Subsection C of 19.15.36.8 NMAC. If the division denies the application for a minor modification, the operator may request a hearing pursuant to Subsection B of 19.15.36.10 NMAC.

At this time, Lea Land is not seeking a minor modification. Lea Land will comply with this requirement

19.15.36.9 APPLICATION PROCESS AND NOTICE REQUIREMENTS FOR NEW SURFACE WASTE MANAGEMENT FACILITIES, MAJOR MODIFICATIONS OR RENEWALS AND ISSUANCE OF A FINAL DECISION:

A. Submittal of application. The applicant shall submit three copies (two paper copies and one electronic copy) of the application to the division's Santa Fe office for consideration of approval. Upon receipt of an application for a new surface waste management facility, or a renewal or major modification of an existing permit, the division shall post a notice on the division's website that lists the type of facility, type of application, county or municipality where the facility is located and name of the applicant, and provides information on where the application can be viewed and whom to contact to be placed on a mailing list for notice regarding a proposed decision.

*Draft Public Notification language is provided in **Attachment I.A**. The Draft Public Notification was prepared in accordance with 19.15.36.9.D(1) through (7) NMAC. Following OCD approval of the language, Public Notification will be provided in compliance with 19.15.36.9.A NMAC, to the surface owners of record located within one-half mile of the Facility. Owners of record, as determined by the Lea and Eddy County Assessor's Offices, are listed in **Attachment I.A**, and include the State Land Office (SLO) and Bureau of Land Management (BLM). Additionally, the Public Notification will be provided to the Lea and Eddy County Commissions. The Facility is not located within one-half mile of any city limit, and no additional federal, tribal or pueblo governmental agencies are affected.*

B. Division review: Within 90 days after the receipt of an application, the division shall review the application and determine if the application is approvable, approval with conditions or not approvable.

(1) Upon completion of the division's review, if the division determines the application is approvable, the division shall, within 30 days following such determination, prepare a proposed decision, which may include conditions, and mail notice of the proposed approval, together with a copy of the proposed decision, by certified mail, return receipt requested, to the applicant. The division shall post the proposed decision on the division's website.

(2) Upon completion of the division's review, if the division determines the application is not approvable, the division shall, within 60 days of such determination, mail a deficiency letter by certified mail, return receipt requested, to the applicant. The deficiency letter shall identify and address all of the division's concerns regarding the application in specific detail allowing the applicant the opportunity to correct the deficiencies by submitting a revised application.

(3) If the division issues a deficiency letter, the applicant shall have 60 days from the division's issuance of the deficiency letter to submit a revised application. The applicant may request, in writing, additional time to submit a revised application. The division shall grant additional time for good cause. The applicant may notify the division that it will not submit a revised application. Within 10 days of receipt of the notification the division shall deny the application without prejudice. If the applicant fails to timely submit a revised application or notify the division that it will not submit a revised application, the division shall deny the application without prejudice within 10 days after the 60 day time limit for the applicant to respond to the deficiency letter has expired.

(4) If the applicant timely submits a revised application, within 90 days of the receipt of the revised application the division shall review the revised application and determine if the revised application is approvable, approvable with conditions or not approvable. The division shall mail notice of denial or the proposed approval with or without conditions, together with a copy of the decision to deny or the proposed decision to approve with or without conditions, by certified mail, return receipt requested, to the applicant. A denial letter shall identify and address all of the division's reasons for denial of the revised application. The division shall post the decision to deny the application or the proposed decision to approve the application with or without conditions on the division's website.

(5) The process provided in Subsection B of 19.15.36.9 NMAC is not intended to limit informal informational exchanges during the application review period or prior to submission of an application. The process also does not prohibit an applicant from withdrawing an application and submitting a new application under Subsection A of 19.15.36.9 NMAC.

No response required.

C. Upon receipt of a proposed decision to approve an application with or without conditions, the applicant shall provide a division-approved notice of the proposed approval by:

(1) giving written notice, by certified mail, return receipt requested, of the division's proposed decision to approve the application with or without conditions to the surface owners within one-half mile of the surface waste facility;
(2) publishing in a newspaper of general circulation in the county or counties where the surface waste management facility is or will be located;
(3) mailing notice by first class mail or e-mail to persons, as identified to the applicant by the division, who have requested notification of applications generally, or of the particular application, and who have provided a legible return address or e-mail address; and
(4) mailing notice by first class or e-mail to affected local, state, federal or tribal governmental agencies, as determined and identified to the applicant by the division.

Lea Land will, upon receiving OCD's proposed decision, comply with the notification requirements identified in 19.15.39.9.C NMAC by completing the following:

- *Give written notice, by certified mail, return receipt requested, of the division's proposed decision to approve the application (with or without conditions) to the surface owners within one-half mile of the surface waste facility*
- *Publish the notice in the Carlsbad Current Argus, and the Hobbs News-Sun, all of which are newspapers in general circulation in the State of New Mexico, and Eddy and Lea Counties specifically.*
- *Mail the notice by first class mail or e-mail to persons identified to the applicant by the division, who have requested notification of applications generally, or of the particular application, and who have provided a legible return address or e-mail address.*
- *Mail the notice by first class or e-mail to affected local, state, federal or tribal governmental agencies, as determined and identified to the applicant by the division.*

D. This notice issued pursuant to Subsection C of 19.15.36.9 NMAC shall include:
(1) the applicant's name and address;
(2) the surface waste management facility's location, including a street address if available, and sufficient information to locate the surface waste management facility with reference to surrounding roads and landmarks;
(3) a brief description including the type of facility (i.e. landfarm, landfill, treating plant, etc.) of the proposed surface waste management facility;
(4) the depth to, and TDS concentration of, the ground water in the shallowest aquifer beneath the surface waste management facility site;
(5) a statement that the division's proposed decision to approve the application with or without conditions is available on the division's website, or, upon request, from the division clerk, including the division clerk's name, address and telephone number;
(6) a division-approved description of alternatives, exceptions or waivers that may be under consideration in accordance with Subsection F of 19.15.36.18 NMAC or 19.15.36.19 NMAC; and
(7) a statement of the procedures for requesting a hearing on the application pursuant to 19.15.4 NMAC.

No response required

E. The applicant shall mail notice that is required to be mailed on or before publication of the notice that is published in a newspaper of general circulation in the county or counties where the surface waste management facility is or will be located.

Lea Land will, upon receiving OCD's proposed notice, comply with the notification requirements identified in 19.15.39.9.E NMAC ***(Attachment I.A)****.*

F. The applicant shall provide the division with proof that the public notice requirements of Subsections C and D of 19.15.36.9 NMAC have been met prior to the division scheduling a hearing pursuant to 19.15.36.10 NMAC or issuing the permit.

Lea Land will provide the division with proof that the public notice requirements of Subsections C and D of 19.15.36.9 NMAC have been met ***(Attachment I.A)****.*

G. If after the applicant provides notice as required herein, no requests for hearing are timely filed with the division as provided by 19.15.36.10 NMAC, or any such requests for hearing are filed by persons the division determines lack standing, and the division does not otherwise schedule a hearing pursuant to 19.15.36.10 NMAC, the division's proposed decision to approve the application with or without conditions shall become final and the division shall issue the permit upon the applicant providing financial assurance as provided in 19.15.36.10 NMAC.

No response required

19.15.36.10 COMMENTS AND HEARING ON APPLICATION:

A. A person who wishes to comment or request a hearing shall file comments or request a hearing on the proposed approval of an application with the division clerk within 90 days after the date of the newspaper publication provided in Subsection C of 19.15.36.9 NMAC. A request for a hearing shall be in writing and shall state specifically the reasons why a hearing should be held. The director may deny a request for hearing if the director determines the person requesting the hearing lacks standing.

B. If the division denies an application pursuant to Paragraphs (3) or (4) of Subsection B of 19.15.39.9 NMAC, the applicant may request a hearing within 30 days of the receipt of the notice of denial and the division shall schedule a hearing.

C. In addition to the requests for hearing provided in Subsections A and B of 19.15.36.10 NMAC, the division shall schedule a hearing on the application if:

(1) the division's proposed decision to approve the application includes conditions not expressly required by rule, and the applicant requests a hearing within 90 days of receipt of the notice of proposed approval;

(2) the director determines that there is significant public interest in the application;

(3) the director determines that comments have raised objections that have probable technical merit; or

(4) approval of the application requires that the division make a finding, pursuant to Paragraph (3) of Subsection F of 19.15.2.7 NMAC, whether a water source has a present or reasonably foreseeable beneficial use that contamination would impair.

D. If the division schedules a hearing on an application, the hearing shall be conducted according to 19.15.4 NMAC.

No response required.

19.15.36.11 FINANCIAL ASSURANCE REQUIREMENTS:

A. Centralized facilities. Upon notification by the division that it has approved a permit but prior to the division issuing the permit, an applicant for a new centralized facility permit shall submit acceptable financial assurance in the amount of $25,000 per centralized facility, or a statewide "blanket" financial assurance in the amount of $50,000 to cover all of that applicant's centralized facilities, unless such applicant has previously posted a blanket financial assurance for centralized facilities.

No response required, as Lea Land is an existing "Commercial Facility" per 19.15.36.7.A(2) NMAC with current financial assurance under their existing Permit No. NM-1-0035.

B. New commercial facilities or major modifications of existing commercial facilities. Upon notification by the division that it has approved a permit for a new commercial facility or a major modification of an existing commercial facility but prior to the division issuing the permit, the applicant shall submit acceptable financial assurance in the amount of the commercial facility's estimated closure and post closure cost, or $25,000, whichever is greater. The commercial facility's estimated closure and post closure cost shall be the amount provided in the closure and post closure plan the applicant submitted pursuant to Paragraph (9) of Subsection C of 19.15.36.8 NMAC unless the division determines that such estimate does not reflect a reasonable and probable closure and post closure cost to implement the closure and post closure plan, in which event, the division shall determine the estimated closure and post closure cost and shall include such determination in its proposed decision. If the applicant disagrees with the division's determination of estimated closure and post closure cost, the applicant may request a hearing as provided in 19.15.36.10 NMAC. If the applicant so requests, and no other person files a request for a hearing regarding the proposed decision, the hearing shall be limited to determination of estimated closure and post closure cost.

*Once OCD has approved the Lea Land Application for Permit Modification, Lea Land will submit updated financial assurance for $1,385,673 as detailed in the C/PC Cost Estimate Tables provided as **Attachment II.4.A**. The updated C/PC Cost Estimate will be reviewed prior to issuance of the Permit, and also prior to each new Phase of site development (see **Table I.3**). This amount represents the closure costs and post-closure care requirements that will be required for the existing operations and Phase I of the proposed development.*

C. Terms of financial assurance. The financial assurance shall be on division-prescribed forms, or forms otherwise acceptable to the division, payable to the energy, minerals and natural resources department, oil conservation division and conditioned upon the surface waste management facility's proper operation, site closure and post closure operations in compliance with state of New Mexico statutes, division rules, applicable division orders and the surface waste management facility permit terms. The division may require proof that the individual signing for an entity on a financial assurance document or any amendment thereto has the authority to obligate that entity.

Lea Land will comply with this requirement.

D. Forfeiture of financial assurance. The division shall give the operator 20 days' notice and an opportunity for a hearing prior to forfeiting financial assurance. All forfeitures the division demands pursuant to 19.15.36 NMAC shall be made payable to the energy, minerals and natural resources department, oil conservation division upon demand by the division.

No response required.

E. Forms of financial assurance. The division may accept the following forms of financial assurance.

(1) Surety bonds. A surety bond shall be executed and notarized by the applicant and by a corporate surety licensed by the superintendent of insurance to do business in the state. All surety bonds shall be non-cancelable and payable to the energy, minerals and natural resources department, oil conservation division within 45 days after demand is made by the division. All surety bonds shall be governed by the laws of the state of New Mexico.

(2) Letters of credit. A letter of credit shall be issued by a national or state-chartered banking association, shall be irrevocable for a term of not less than five years and shall provide for automatic renewal for successive, like terms upon expiration, unless the issuer has notified the division in writing of non-renewal at least 120 days before its expiration date. All letters of credit shall be governed by the laws of the state of New Mexico. If a letter of credit is not replaced by an approved financial assurance within 30 days of notice of non-renewal provided to the division, the division may demand and collect a letter of credit.

(3) Cash accounts. An operator may provide financial assurance in the form of a federally insured or equivalently protected cash account or accounts in a financial institution, provided that the operator and the financial institution shall execute as to each such account a collateral assignment of the account to the division, which shall provide that only the division may authorize withdrawals from the account. In the event of forfeiture pursuant to 19.15.36 NMAC, the division may, at any time and from time to time, direct payment of all or part of the balance of such account (excluding interest accrued on the account) to itself or its designee for the surface waste management facility's closure and post closure. Any assignment of cash collateral shall be governed by the laws of the state of New Mexico and shall be on division-prescribed forms.

Once the Permit is approved and prior to issuance, Lea Land will elect a financial assurance mechanism pursuant to 19.15.36.11.E NMAC. Documentation will be included in ***Attachment I.B*** *following OCD approval of the Application for Permit. The amount of the mechanism will represent the closure costs and post-closure care requirements that will be required for the existing operations and Phase I of the proposed development, as identified in the C/PC Cost Estimate Summary provided as* ***Attachment II.4.D****. The C/PC Cost Estimate will be reviewed prior to issuance of the Permit, and also prior to each new Phase of site development (see* ***Table I.3****).*

F. Replacement of financial assurance.

(1) The division may allow an operator to replace existing forms of financial assurance with other forms of financial assurance that provide equivalent coverage.

(2) The division shall not release existing financial assurance until the operator has submitted, and the division has approved, an acceptable replacement.

(3) Any time an operator changes the corporate surety, financial institution or amount of financial assurance, the operator shall file updated financial assurance documents on division-prescribed forms within 30 days. Notwithstanding the foregoing, if an operator makes other changes to its financial assurance documents, the division may require the operator to file updated financial assurance documents on division-prescribed forms within 45 days after notice to the operator from the division.

Lea Land will comply with this requirement.

G. Review of adequacy of financial assurance. The division may at any time not less than five years after initial acceptance of financial assurance for a commercial facility, or whenever the operator applies for a major modification of the commercial facility's permit, and at least once during every successive five-year period, initiate a review of such financial assurance's adequacy. Additionally, whenever the division determines that a landfarm operator has not achieved the closure standards specified in Paragraph (3) of Subsection G of 19.15.36.15 NMAC, the division may review the adequacy of the landfarm operator's financial assurance, without regard to the date of its last review. Upon determination, after notice to the operator and an opportunity for a hearing, that the financial assurance is not adequate to cover the reasonable and probable cost of a commercial facility's closure and post closure operations, the division may require the operator to furnish additional financial assurance sufficient to cover such reasonable and probable cost.

Lea Land will comply with this requirement.

H. Duty to report. Any operator who files for bankruptcy shall provide notice to the division, through the process provided for under the rules of the United States bankruptcy court, and the New Mexico attorney general.

Lea Land will comply with this requirement.

19.15.36.12 PERMIT APPROVAL, DENIAL, REVOCATION, SUSPENSION, MODIFICATION OR TRANSFER:

A. Granting of permit.

(1) The division may issue a permit for an new surface waste management facility or major modification upon finding that an acceptable application has been filed, that the conditions of 19.15.36.9 NMAC and 19.15.36.11 NMAC have been met and that the surface waste management facility or modification can be constructed and operated in compliance with applicable statutes and rules and without endangering fresh water, public health or the environment.

Lea Land will comply with the public notice requirements of 19.15.36.9 NMAC and the financial assurance requirements of 19.15.36.11 NMAC, as necessary to achieve Permit approval. The Facility has an established track record of maintaining operations that protect fresh water, public health and the environment. ***Attachment I.A*** *includes the current list of property owners within one-half mile of the Facility, which will be updated prior to formal notice. Following OCD review and approval of the Application, Lea Land will distribute the public notice in accordance with 19.15.36.9 NMAC.* ***Attachment I.B*** *provides the proposed C/PC Cost Estimate that will be the basis for the financial assurance mechanism to be put into place in accordance with 19.15.36.11 NMAC upon approval of the Permit. This Application provides the required plans and engineering calculations to construct and operate the Facility going forward in compliance with applicable statutes and Rules that ensure fresh water, public health or the environment will be protected.*

(2) Each permit the division issues for a new surface waste management facility shall remain in effect for 10 years from the date of its issuance. If the division grants a permit for a major modification of a surface waste management facility, the permit for that surface waste management facility shall remain in effect for 10 years from the date the division approves the major modification.

This Application requests a Permit in accordance with 19.15.36.8 NMAC. A new Application for Permit Renewal will be submittal to OCD at least 120 days prior to the expiration of the Permit granted in response to this Application (i.e., 10 years from the date of issuance).

(a) A surface waste management facility permit may be renewed for successive 10-year terms. If the holder of a surface waste management facility permit submits an application for permit renewal at least 120 days before the surface waste management facility permit expires, and the operator is not in violation of the surface waste management facility permit on the date of its expiration, then the existing surface waste management facility permit for the same activity shall not expire until the

division has approved or denied an application for renewal. If the division has not notified the operator of a violation, if the operator is diligently pursuing procedures to contest a violation or if the operator and the division have signed an agreed compliance order providing for remedying the violation, then the surface waste management facility permit shall continue in effect as above provided notwithstanding the surface waste management facility permit violation's existence. A surface waste management facility permit continued under this provision remains fully effective and enforceable.

Lea Land LLC will continue to operate its existing surface waste management facility in compliance with Permit No. NM-1-0035. This Application requests a Permit Modification in accordance with 19.15.36.8 NMAC, and Lea Land plans to submit an Application for Permit Renewal at least 120 days before the new surface waste management facility expires.

(b) An application for permit renewal shall include and adequately address the information necessary for evaluation of a new surface waste management facility permit as provided in Subsection C of 19.15.36.8 NMAC. Previously submitted materials may be included by reference provided they are current, readily available to the division and sufficiently identified so that the division may retrieve them.

This Application requests a Permit in accordance with 19.15.36.8 NMAC.

(c) Upon receipt of a proposed decision to approve a renewal application, the operator shall give public notice in the manner prescribed by 19.15.36.9 NMAC. The division shall grant an application for renewal if the division finds that an acceptable application has been filed, that the conditions of 19.15.36.9 NMAC and 19.15.36.11 NMAC have been met and that the surface waste management facility can be operated in compliance with applicable statutes and rules and without endangering fresh water, public health or the environment.

Lea Land will continue to comply with the public notice requirements of 19.15.36.9 NMAC and the financial assurance requirements of 19.15.36.11 NMAC, as necessary to achieve Permit renewal. This Application provides the required plans and engineering calculations to continue operations of the Facility in compliance with applicable statutes and Rules that ensure fresh water, public health and the environment will be protected.

(3) The division shall review each surface waste management facility permit at least once during the 10-year term, and shall review surface waste management facility permits to which Paragraph (2) of Subsection A of 19.15.36.12 NMAC does not apply at least every five years. The review shall address the operation, compliance history, financial assurance and technical requirements for the

surface waste management facility. The division, after notice to the operator and an opportunity for a hearing, may require appropriate modifications of the surface waste management facility permit, including modifications necessary to make the surface waste management facility permit terms and conditions consistent with statutes, rules or judicial decisions.

Lea Land will make available necessary operational, compliance, financial assurance and other technical documentation to OCD at any time during the 10-year permit period for the completion of a mid-term review. Lea Land will respond to OCD requests for updates to address changes in regulatory standards.

B. Denial of permit. The division may deny an application for a surface waste management facility permit or modification of a surface waste management facility permit if it finds that the proposed surface waste management facility or modification may be detrimental to fresh water, public health or the environment. The division may also deny an application for a surface waste management facility permit if the applicant, an owner of twenty-five percent or greater interest in the applicant or an affiliate of the applicant has a history of failure to comply with division rules and orders or state or federal environmental laws; is subject to a division or commission order, issued after notice and hearing, finding such entity to be in violation of an order requiring corrective action; or has a penalty assessment for violation of division or commission rules or orders that is unpaid more than 70 days after issuance of the order assessing the penalty. An affiliate of an applicant, for purposes of Subsection B of 19.15.36.12 NMAC, shall be a person who controls, is controlled by or under is common control with the applicant or a twenty-five percent or greater owner of the applicant.

No response required.

C. Additional requirements. The division may impose conditions or requirements, in addition to the operational requirements set forth in 19.15.36 NMAC, that it determines are necessary and proper for the protection of fresh water, public health or the environment. The division shall incorporate such additional conditions or requirements into the surface waste management facility permit.

Lea Land will comply with any reasonable additional requirements or conditions imposed by OCD intended to ensure protection of fresh water, public health or the environment, and comply with any applicable permit conditions.

D. Revocation, suspension or modification of a permit. The division may revoke, suspend or impose additional operating conditions or limitations on a surface waste management facility permit at any time, for good cause, after notice to the operator and an opportunity for a hearing. The division may suspend a surface waste management facility permit or impose additional conditions or limitations in an emergency to forestall an imminent threat to fresh water, public health or the environment, subject to the provisions of NMSA 1978, Section 70-2-23, as amended. If the division initiates a major modification it shall provide notice in accordance with 19.15.36.9 NMAC.

Suspension of a surface waste management facility permit may be for a fixed period of time or until the operator remedies the violation or potential violation. If the division suspends a surface waste management facility's permit, the surface waste management facility shall not accept oil field waste during the suspension period.

No response required.

E. Transfer of a permit. The operator shall not transfer a permit without the division's prior written approval. A request for transfer of a permit shall identify officers, directors and owners of twenty-five percent or greater in the transferee. Unless the director otherwise orders, public notice or hearing are not required for the transfer request's approval. If the division denies the transfer request, it shall notify the operator and the proposed transferee of the denial by certified mail, return receipt requested, and either the operator or the proposed transferee may request a hearing with 10 days after receipt of the notice. Until the division approves the transfer and the required financial assurance is in place, the division shall not release the transferor's financial assurance.

Lea Land will comply with this requirement.

19.15.36.13 SITING AND OPERATIONAL REQUIREMENTS APPLICABLE TO ALL PERMITTED SURFACE WASTE MANAGEMENT FACILITIES: EXCEPT AS OTHERWISE PROVIDED IN 19.15.36 NMAC.

*Siting documentation is detailed in **Volume IV.1** to demonstrate that the continued operation of the Lea Land SWMF will protect public health and the environment. This section confirms the remote location, the presence of only two "company houses" within one-half mile of the Lea Land SWMF boundary, and absence of churches, schools, parks or other potentially affected land uses in the area. With open pasture and oil field production support facilities surrounding the Lea Land SWMF, the location is ideally suited for continued operation as a surface waste management facility.*

A. Depth to ground water.

(1) No landfill shall be located where ground water is less than 100 feet below the lowest elevation of the design depth at which the operator will place oil field waste.

*Groundwater is demonstrated to be more than 100 ft below the lowest elevation of the design depth of the landfill where oil field waste will be placed. Extensive detail is provided in **Volume IV.1** (Siting) and in **Volume IV.2** (Hydrogeology).*

(2) No landfarm that accepts soil or drill cuttings with a chloride concentration that exceeds 500 mg/kg shall be located where ground water is less than 100 feet

below the lowest elevation at which the operator will place oil field waste. See Subsection A of 19.15.36.15 NMAC for oil field waste acceptance criteria.

Not Applicable. Lea Land does not propose to operate a landfarm permitted under 19.15.36.15 NMAC.

(3) No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Not Applicable. Lea Land does not propose to operate a landfarm permitted under 19.15.36.15 NMAC.

(4) No small landfarm shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Not Applicable.

(5) No other surface waste management facility shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Groundwater is not located less than 50 ft below the lowest elevation of the processing area where oil field waste will be placed. Extensive detail is provided in ***Volume IV.1*** *(Siting) and in* ***Volume IV.2*** *(Hydrogeology).*

B. No surface waste management facility shall be located:
(1) within 200 feet of a watercourse, lakebed, sinkhole or playa lake;

The Facility ***is not located within 200 feet of a watercourse, lakebed, sinkhole or playa lake****. Documentation regarding the locations of watercourses, lakebeds, sinkholes and playa lakes with respect to the Lea Land site is provided in* ***Volume IV.1,*** *including on-site reconnaissance by qualified experts.*

(2) within an existing wellhead protection area or 100-year floodplain;

The Facility is ***not located within an existing wellhead protection area or 100-year floodplain****. Documentation regarding wellhead protection areas and 100-year floodplains is provided in* ***Volume IV.1***.

(3) within, or within 500 feet of, a wetland;

*The Facility is **not located within, or within 500 ft of a wetland**. Documentation regarding wetlands in the vicinity of the Lea Land site is provided in **Volume IV.1**.*

(4) within the area overlying a subsurface mine;

*The Facility **is not located in an area overlying an existing subsurface mine.** The Intrepid Potash mine located to the east and south of this facility does lease subsurface mineral rights from the Bureau of Land Management under a portion of the Lea Land site, where potential mineral resources are situated over 1,200 feet below ground surface. Documentation of mines, mills, and quarries is provided in **Volume IV.1**, along with a discussion of the impacts of the proposed Intrepid Mine subsurface lease rights.*

(5) within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or

*The Facility **is not located within 500 ft of the nearest permanent residence, school, hospital, institution, or church.** Land use setback documentation is provided in **Volume IV.1**.*

(6) within an unstable area, unless the operator demonstrates that engineering measures have been incorporated into the surface waste management facility design to ensure that the surface waste management facility's integrity will not be compromised.

*As documented in **Volume IV.1**, the Lea Land SWMF is not located in an unstable area.*

C. No surface waste management facility shall exceed 500 acres.

*Although the total acreage for the Lea Land site is 642 acres ±, the Lea Land SWMF does not exceed 500 acres within the surface waste management facility footprint (463 acres ±). The Lea Land SWMF will include two main components; a liquid oil field waste Processing Area (82 acres ±) containing evaporation, storage and treatment ponds, and an oil field waste Landfill (100 acres ±); as well as other site infrastructure (roads, drainage, etc.). A copy of the Survey Plat for the Lea Land site is provided in **Attachment I.C**, and **Table I.1** provides details regarding site components and acreages.*

D. The operator shall not accept oil field wastes transported by motor vehicle at the surface waste management facility unless the transporter has a form C-133, authorization to move liquid waste, approved by the division.

*Lea Land will comply with this requirement. The Oil Field Waste Management Plan provided as **Volume II.2** requires that, prior to acceptance of any liquid waste, the transporter must provide the Facility with a Division-approved Form C-133.*

E. The operator shall not place oil field waste containing free liquids in a landfill or landfarm cell. The operator shall use the paint filter test, as prescribed by the EPA (EPA SW-846, method 9095) to determine conformance of the oil field waste to this criterion.

*Lea Land will continue to comply with this requirement, as the OFWS Landfill currently accepts only oil field waste solids. The Oil Field Waste Management Plan (**Volume II.2**) requires that, prior to acceptance of any oil field waste in the landfill portion of the Facility, the material will pass the paint filter test. Solidification, if necessary, will be accomplished in the Mixing/Solidification Area as described in Operation, Inspection, and Maintenance Plan (**Volume II.1**) and detailed in the **Permit Plans** (**Volume III.1**).*

F. Surface waste management facilities shall accept only exempt or non-hazardous waste, except as provided in Paragraph (3) of Subsection F of 19.15.36.13 NMAC. The operator shall not accept hazardous waste at a surface waste management facility. The operator shall not accept wastes containing NORM at a surface waste management facility except as provided in 19.15.35 NMAC. The operator shall require the following documentation for accepting oil field wastes, and both the operator and the generator shall maintain and make the documentation available for division inspection.

*Lea Land will continue to comply with this requirement. The Oil Field Waste Management Plan (**Volume II.2**) provides a detailed description of oil field waste acceptance protocol. Included in this Plan are Form C-138 certification, certification frequency; and naturally occurring radioactive materials (NORM) acceptance requirements per 19.15.35 NMAC. Lea Land will maintain and make documentation of these data available for OCD inspection.*

(1) Exempt oil field wastes. The operator shall require a certification on form C-138, signed by the generator or the generator's authorized agent, that represents and warrants that the oil field wastes are generated from oil and gas exploration and production operations, are exempt waste and are not mixed with non-exempt waste. The operator shall have the option to accept such certifications on a monthly, weekly or per load basis. The operator shall maintain and shall make the certificates available for the division's inspection.

*Lea Land will continue to comply with this requirement. The Oil Field Waste Management Plan (**Volume II.2**) provides a detailed description of oil field waste acceptance protocol. Included in this*

Plan is the Form C-138 certification and additional documentation that the oil field waste is Resource Conservation and Recovery Act (RCRA) exempt.

(2) Non-exempt, non-hazardous, oil field wastes. The operator shall require a form C-138, oil field waste document, signed by the generator or its authorized agent. This form shall be accompanied by acceptable documentation to determine that the oil field waste is non-hazardous.

*Lea Land will continue to comply with this requirement. The Oil Field Waste Management Plan (**Volume II.2**) provides a detailed description of oil field waste acceptance protocol. Included in this Plan is the Form C-138 certification and format for additional documentation that non-exempt oil field waste is non-hazardous.*

(3) Emergency non-oil field wastes. The operator may accept non-hazardous, non-oil field wastes in an emergency if ordered by the department of public safety. The operator shall complete a form C-138, oil field waste document, describing the waste, and maintain the same, accompanied by the department of public safety order, subject to division inspection.

Lea Land will comply with this requirement, including completion and archiving of Form C-138.

G. The operator of a commercial facility shall maintain records reflecting the generator, the location of origin, the location of disposal within the commercial facility, the volume and type of oil field waste, the date of disposal and the hauling company for each load or category of oil field waste accepted at the commercial facility. The operator shall maintain such records for a period of not less than five years after the commercial facility's closure, subject to division inspection.

*Lea Land will continue to comply with this requirement. The Oil Field Waste Management Plan (**Volume II.2**) provides a detailed description of oil field waste acceptance recordkeeping forms. The forms in this Plan include the information required in this subsection and will be maintained and retained for a period of not less than five years following Facility closure. Lea Land will make these records available for OCD inspection upon request.*

H. Disposal at a commercial facility shall occur only when an attendant is on duty unless loads can be monitored or otherwise isolated for inspection before disposal. The surface waste management facility shall be secured to prevent unauthorized disposal.

Disposal operations at Lea Land will only be conducted when an attendant is on duty. Lea Land plans to conduct Facility operations up to 24 hours a day, 7 days a week if market conditions warrant. The Facility will be secured with barbed wire fencing, and locking gates to prevent any unauthorized

*access or disposal when an attendant is not on duty. A vehicle with an acceptable load of oil field waste that may arrive while the Lea Land SWMF is not operating may park in a designated area until a qualified inspection can be conducted by the Attendant (**Figure I.2**). In this case, the temporarily parked load will be inspected for any leakage and will be required to have any valves or access ports secured and locked to prevent spillage or tampering.*

I. To protect migratory birds, tanks exceeding eight feet in diameter, and exposed pits and ponds shall be screened, netted or covered. Upon the operator's written application, the division may grant an exception to screening, netting or covering upon the operator's showing that an alternative method will protect migratory birds or that the surface waste management facility is not hazardous to migratory birds. Surface waste management facilities shall be fenced in a manner approved by the division.

*Lea Land herein requests an exception to 19.15.36.13.I NMAC. The Migratory Bird Protection Plan presented as **Volume II.6** describes an alternate methodology to the screening requirement of the storage ponds. This Plan describes visual inspections and migratory bird retrieval and clean-up procedures should bird(s) require decontamination. In addition, the Engineering Design (**Volume III.1**) provides a process design for produced waters and other liquids that will remove the oils present in these materials prior to discharge through the evaporation ponds. Solid oil field wastes to be disposed of in the landfill are not an attractant to water fowl, and there is no history of migratory bird landings.*

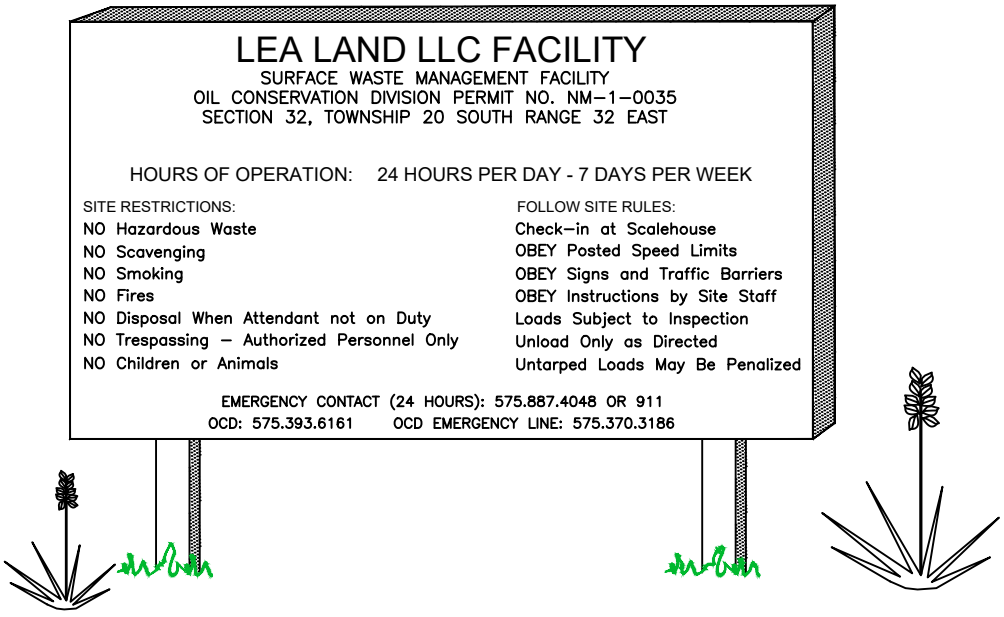
J. Surface waste management facilities shall have a sign, readable from a distance of 50 feet and containing the operator's name; surface waste management facility permit or order number; surface waste management facility location by unit letter, section, township and range; and emergency telephone numbers.

*A template for the proposed Site Entrance Sign is provided as **Figure I.5**. The sign is designed in compliance with the requirements of 19.15.36.13.J NMAC. A 4-ft by 8-ft sign with 3-inch lettering will identify the Facility operator as Lea Land, LLC, and will include the Facility permit number, location and emergency phone numbers.*

K. The operators shall comply with the spill reporting and corrective action provisions of 19.15.30 NMAC or 19.15.29 NMAC.

EXISTING SIGNAGE

PROPOSED SIGN



SITE ENTRANCE SIGN (TYPICAL)

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON PSC ENVIRONMENTAL
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 03/11/2019	CAD: ENTRANCE SIGN.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CWF	FIGURE I.5
APPROVED BY: CWF	www.team-psc.com	

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\ENTRANCE SIGN.dwg
Date/Time:Apr. 01, 2019-13:07:10

*The Lea Land SWMF is specifically located and designed to prevent pollutants from entering surface and groundwater, as demonstrated through the Facility Management Plans (**Volume II**), the Engineering Design and Calculations (**Volume III**), and the **Permit Plans** (**Volume III.1**) presented in this Application. Successful implementation of the engineering design and operational programs will ensure compliance with 19.15.30 NMAC. The Lea Land Contingency Plan (**Volume II.5**) is designed to comply with the notification and corrective action provisions as required in 19.15.29 NMAC.*

L. Each operator shall have an inspection and maintenance plan that includes the following:
- **(1) monthly inspection of leak detection sumps including sampling if fluids are present with analyses of fluid samples furnished to the division; and maintenance of records of inspection dates, the inspector and the leak detection system's status;**
- **(2) semi-annual inspection and sampling of monitoring wells as required, with analyses of ground water furnished to the division; and maintenance of records of inspection dates, the inspector and ground water monitoring wells' status; and**
- **(3) inspections of the berms and the outside walls of pond levees quarterly and after a major rainfall or windstorm, and maintenance of berms in such a manner as to prevent erosion.**

*The Operations, Inspection, and Maintenance Plan for the Lea Land SWMF is provided as **Volume II.1.** The Plan describes in detail the methods and frequency for inspections, sampling, recordkeeping, and maintenance for the leak detection sumps, and containment berms. The Vadose Zone Monitoring Plan provided as **Volume II.9** specifies the inspection, sampling, testing, reporting, and recordkeeping protocols for the groundwater.*

M. Each operator shall have a plan to control run-on water onto the site and run-off water from the site, such that:
- **(1) the run-on and run-off control system shall prevent flow onto the surface waste management facility's active portion during the peak discharge from a 25-year storm; and**
- **(2) run-off from the surface waste management facility's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards.**

***Volume III** (Engineering Design and Calculations) provides the design for berms, conveyance channels, and detention capacity to control run-on/run-off for at least the peak discharge from a 25-year 24-hour storm. Lea Land will prevent discharge of pollutants to the waters of the State or United States in compliance with state water quality standards through adherence to the Operations, Inspection, and Maintenance Plan (**Volume II.1**), and future construction of the detention ponds*

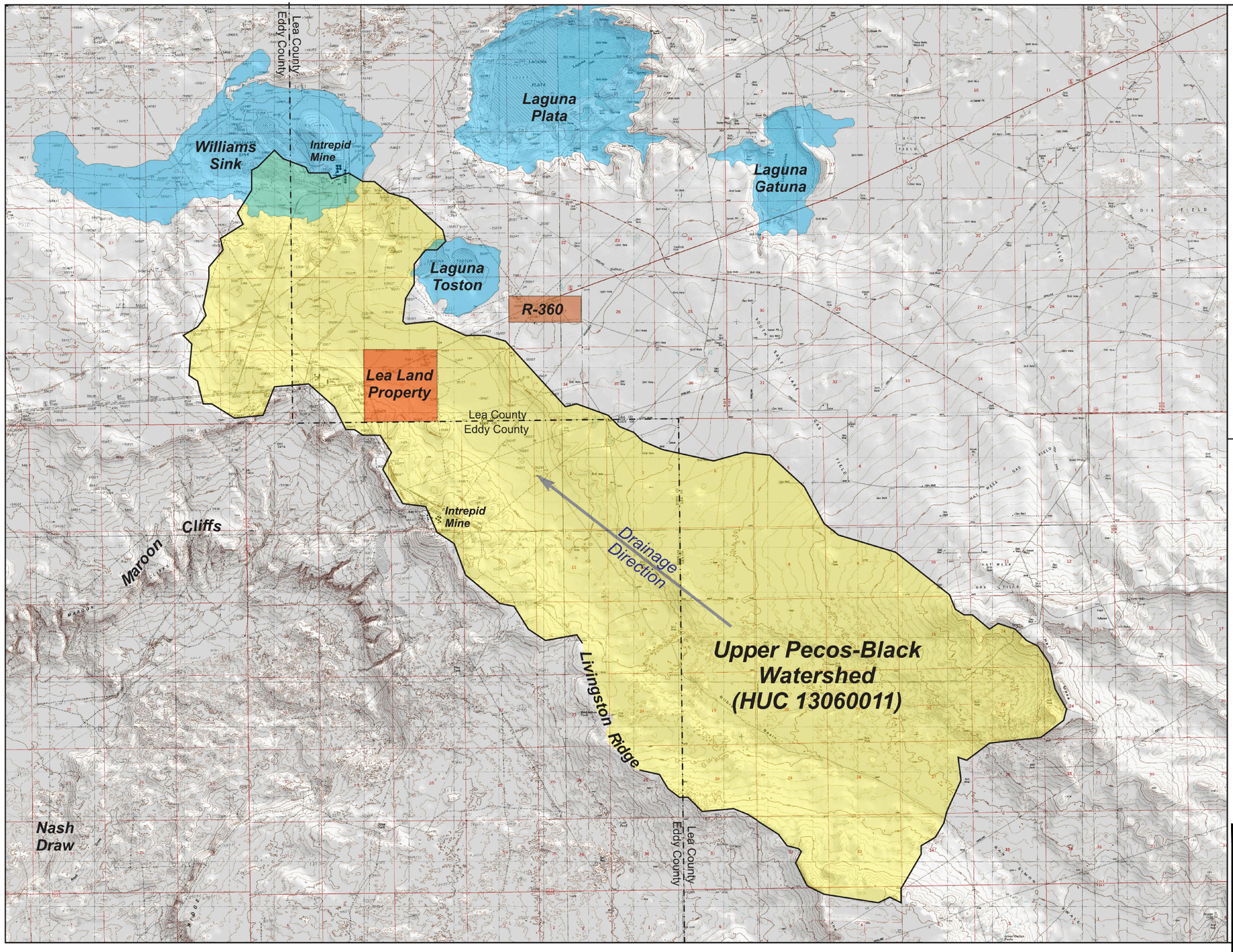
described in this Application. Lea Land is designed as a "zero discharge" stormwater configuration to capture runoff from active landfill and processing areas for the design storm; and run-on is routed around the perimeter. The applicability of the National Pollutant Discharge Elimination System (NPDES) and Oil Pollution Prevention regulations for potential stormwater discharges from the site is discussed in ***Volume IV.1****.*

The June 4, 2015 United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) regulations authorize stormwater discharges from certain industrial facilities (including landfills) to "waters of the United States" (WOTUS). Facilities that have the potential for stormwater discharges to WOTUS are required to obtain coverage under the 2015 MSGP through submission of a Notice of Intent (NOI) and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). In accordance with the Oil Pollution Prevention regulation at 40 CFR Part 112, the USEPA requires non-transportation-related facilities (including landfills) to develop and implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan if the facility "could reasonably be expected to discharge oil in quantities that may be harmful into navigable WOTUS".

An evaluation of the potential to discharge to WOTUS has been performed to determine the applicability of both MSGP and SPCC regulations for the Lea Land SWMF. The evaluation presented below shows that MSGP coverage is not required for the Lea Land SWMF; and the SPCC regulations do not apply to the site.

As shown on ***Figure I.6****, the Lea Land SWMF is located within a catchment encompassing approximately 45 square miles (115.65 km^2) of the Upper Pecos-Black Watershed (Hydrologic Unit Code (HUC) 13060011). The direction of local surface drainage in the vicinity of the Facility is to the north-northwest (NNW) toward the Williams Sink (Assessment Unit (AU) ID NM9000.B_109). The Williams Sink, located within the catchment approximately 3 miles NNW of the site, is a natural subsidence feature, and is the closest "receiving water" to the Facility.*

The most recent USEPA Watershed Report (i.e., 2016) provided as part of ***Volume IV.1*** *(obtained through USEPA's online WATERS GeoViewer watershed delineation tool) for the area surrounding the Facility specifies that the 45-mi^2 catchment is a "sink catchment with no outflow, and that its*



EXPLANATION

- Limits of EPA delineated Upper Pecos-Black Watershed
- Limits of closed depression
- Lea Land property boundary
- R-360 property boundary

NORTH

Scale, miles
0 1/2 1.0 2.0

SURFACE WATER FEATURES

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

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Rio Rancho, NM 87124
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DATE: 03/11/2019	CAD: WINDROSE.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CWF	FIGURE I.6
APPROVED BY: CWF	www.team-psc.com	

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catchment and watershed are the same". The Watershed Report characterizes the surficial lithology within the catchment and watershed as consisting of eolian and coarse-textured (sand dunes) soils with a mean permeability of 19.59 cm/hr (i.e., 5.4 X 10^{-3} cm/s). Potential sheet flows from the site would need to traverse approximately 3 miles of relatively flat terrain (~0.5 %) consisting of these highly pervious soils prior to reaching the Williams Sink.

The 2018-2020 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report, Appendix A 303(d)/305(b) List identifies one of the uses for the Williams Sink as livestock watering (LW). However, the Integrated Report (provided as part of ***Volume IV.1****) also states that "potash activities have led to hypersaline conditions which likely make livestock watering not attainable or existing". To-date, water quality standards (WQS) for the Williams Sink have not been assessed by NMED Surface Water Quality Bureau, and the US Army Corps of Engineers (USACE) has not rendered either a preliminary or an approved jurisdictional determination (PJD or AJD) for WOTUS applicability.*

N. Contingency plan. Each operator shall have a contingency plan. The operator shall provide the division's environmental bureau with a copy of an amendment to the contingency plan, including amendments required by Paragraph (8) of Subsection N of 19.15.36.13 NMAC; and promptly notify the division's environmental bureau of changes in the emergency coordinator or in the emergency coordinator's contact information. The contingency plan shall be designed to minimize hazards to fresh water, public health or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. The operator shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten fresh water, public health or the environment; provided that the emergency coordinator may deviate from the plan as necessary in an emergency situation. The contingency plan for emergencies shall:

- **(1) describe the actions surface waste management facility personnel shall take in response to fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste containing constituents that could threaten fresh water, public health or the environment;**
- **(2) describe arrangements with local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services;**
- **(3) list the emergency coordinator's name; address; and office, home and mobile phone numbers (where more than one person is listed, one shall be named as the primary emergency coordinator);**
- **(4) include a list, which shall be kept current, of emergency equipment at the surface waste management facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination**

equipment, containing a physical description of each item on the list and a brief outline of its capabilities;

(5) include an evacuation plan for surface waste management facility personnel that describes signals to be used to begin evacuation, evacuation routes and alternate evacuation routes in cases where fire or releases of wastes could block the primary routes;

(6) include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation;

(7) list where copies of the contingency plan will be kept, which shall include the surface waste management facility; local police departments, fire departments and hospitals; and state and local emergency response teams;

(8) indicate when the contingency plan will be amended, which shall be within five working days whenever:

- **(a) the surface waste management facility permit is revised or modified;**
- **(b) the plan fails in an emergency;**
- **(c) the surface waste management facility changes design, construction, operation, maintenance or other circumstances in a way that increases the potential for fires, explosions or releases of oil field waste constituents that could threaten fresh water, public health or the environment or change the response necessary in an emergency;**
- **(d) the list of emergency coordinators or their contact information changes; or**
- **(e) the list of emergency equipment changes;**

(9) describe how the emergency coordinator or the coordinator's designee, whenever there is an imminent or actual emergency situation, will immediately;

- **(a) activate internal surface waste management facility alarms or communication systems, where applicable, to notify surface waste management facility personnel; and**
- **(b) notify appropriate state and local agencies with designated response roles if their assistance is needed;**

(10) describe how the emergency coordinator, whenever there is a release, fire or explosion, will immediately identify the character, exact source, amount and extent of released materials (the emergency coordinator may do this by observation or review of surface waste management facility records or manifests, and, if necessary, by chemical analysis) and describe how the emergency coordinator will concurrently assess possible hazards to fresh water, public health or the environment that may result from the release, fire or explosion (this assessment shall consider both the direct and indirect hazard of the release, fire or explosion);

(11) describe how, if the surface waste management facility stops operations in response to fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes or the equipment, wherever this is appropriate;

(12) describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered oil field waste, or other material that results from a release, fire or explosion at a surface waste management facility;

(13) describe how the emergency coordinator will ensure that no oil field waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete; and

(14) provide that the emergency coordinator may amend the plan during an emergency as necessary to protect fresh water, public health or the environment.

*The Contingency Plan included as **Volume II.5** provides detailed information in response to each required element of 19.15.36.13.N.1 through 14 NMAC.*

O. Gas safety management plan. Each operator of a surface waste management facility that includes a landfill shall have a gas safety management plan that describes in detail procedures and methods that will be used to prevent landfill-generated gases from interfering or conflicting with the landfill's operation and protect fresh water, public health and the environment. The plan shall address anticipated amounts and types of gases that may be generated, an air monitoring plan that includes the vadose zone and measuring, sampling, analyzing, handling, control and processing methods. The plan shall also include final post closure monitoring and control options.

Lea Land does not believe that this Section applies to the Facility. Landfill Gas (LFG) is typically produced when there is a significant supply of readily putrescible organic material, moisture; and a lack of oxygen in the fill. Oil field wastes do not contain significant amounts of putrescible wastes and will not provide a suitable environment for LFG production. Typical oil field wastes will not generate significant quantities of LFG, nor the requisite pressure to promote migration. Conventional LFG monitoring and control systems would not be necessary nor effective; and the waste matrix itself would inhibit migration or collection if it contained primarily soils and <5% degradable organics. There is no evidence that the existing facility is producing gasses; and the active (quarterly) LFG monitoring network has produced zero detections since 2010.

*However, a gas monitoring program consisting of testing incoming vehicles during unloading will be utilized to ensure that hydrogen sulfide (H_2S) gas concentrations do not exceed 10 parts per million (ppm) on-site or at the property boundary. Areas around the landfill disposal cells, treating plant, liquid solidification, and evaporation ponds will utilize monitors that issue a visual and audible signal at a threshold of 10 ppm H_2S to ensure compliance with regulatory alert levels. Monitoring points may be added or replaced as necessary. Gas safety management details are presented in **Volume II.1**, **Volume II.5**, and the H2S Prevention and Contingency Plan (**Volume II.3**).*

P. Training program. Each operator shall conduct an annual training program for key personnel that includes general operations, permit conditions, emergencies proper sampling methods and identification of exempt and non-exempt waste and hazardous waste. The operator shall maintain records of such training, subject to division inspection, for five years.

*Lea Land will comply with this requirement. The Operation, Inspection, and Maintenance Plan (**Volume II.1**) describes in detail the training programs for site personnel. Training records will be maintained by Lea Land for OCD inspection for a period of not less than five years. Site personnel are encouraged to participate in outside training and certification programs as well (i.e., SWANA MOLO).*

19.15.36.14 SPECIFIC REQUIREMENTS APPLICABLE TO LANDFILLS:

A. General operating requirements.

(1) The operator shall confine the landfill's working face to the smallest practical area and compact the oil field waste to the smallest practical volume. The operator shall not use equipment that may damage the integrity of the liner system in direct contact with a geosynthetic liner.

*Lea Land will continue to follow accepted principles of landfill engineering for waste placement, compaction and covering methods. Operations are conducted to maintain a confined working face so that it is sufficiently wide to provide for the safe unloading of trucks, but no greater than necessary. It is estimated that the typical thickness of each daily cell is approximately 8 to 10 ft, with working slopes not greater than 2:1, and an unloading platform width of 50 to 100 ft. In order to compact the waste to the smallest practical volume, the lifts will be spread in layers approximately 2 ft thick and worked by a high ground-pressure bulldozer or equivalent. The Engineering Design (**Volume III.1**) and the Liner Construction Quality Assurance (CQA) Plan (**Volume II.7**) mandate a minimum documented 2 ft thick protective soil layer over the geosynthetic liner. The Operations, Inspection, and Maintenance Plan (**Volume II.1**) addresses daily fill face activities in detail provided to protect the liners during operations.*

(2) The operator shall prevent unauthorized access by the public and entry by large animals to the landfill's active portion through the use of fences, gates, locks or other means that attain equivalent protection.

*The entire Lea Land Processing Area is enclosed with barbed wire fencing, and locking gates, as is the Lea Land Inc. Landfill. This will prevent unauthorized access by the public or entry by large animals (Engineering Design, **Volume III.1**).*

(3) The operator shall prevent and extinguish fires.

*Lea Land provides adequate means to prevent and extinguish fires, and fires have not been an issue in over 20 years of operations. Fire protection measures are described in detail in the Contingency Plan (**Volume II.5**). Measures to prevent and control fires are listed in **Table I.7,** which are augmented by focused employee training.*

TABLE I.7 - Fire Prevention and Control

1. Fire Prevention Measures

- *Routine cleaning of debris from equipment, particularly radiators, and belly pans.*
- *Random inspections of incoming loads at the Facility Scalehouse to prevent acceptance of waste that may present a fire threat.*
- *Training of equipment operators to identify suspect ("hot") loads and measures for mitigation (e.g., covering smoldering waste with stockpiled soil).*
- *Coordination with local fire response professionals for input on fire prevention and control.*
- *Precluding incompatible wastes from contacting each other.*

2. Fire Control Procedures

- *The placement and maintenance of fire extinguishers in all mobile equipment and on-site structures.*
- *Locating cover material or borrow areas near the working face that can be used to smother fires.*
- *Ensuring water availability from the water truck and/or detention basins.*
- *Implementation of a site-wide communication network to optimize mobilization of appropriate response personnel and equipment.*
- *Employee training.*
- *Well established emergency contact and response procedures.*

(4) The operator shall control litter and odors.

*As described in the Operations, Inspection, and Maintenance Plan (**Volume II.1**), Lea Land will continue to be operated using proven disposal practices to minimize and control litter and odor. The waste stream will consist primarily of contaminated soils, which are not prone to wind-blown dispersion. The size of the actual working face will be minimized to facilitate compacting and covering the waste. Much of the operations can be conducted strategically below the grade of the perimeter berms.*

Staff members will closely monitor the area adjacent to the working face for waste and litter. Litter will be removed and disposed of on a regular basis and within 24-hours if the waste has a potential for diversion or being transported by vectors. In order to control litter, mitigate and control potential odors,

*the active working face will periodically be covered as necessary with at least 6 inches of clean and "dry" soil cover, include select material segregated from waste deliveries, or an approved alternative daily cover material (**Volume II.1**), when the solid waste contains significant amounts of waste prone to become windblown. The prevailing wind is from the southeast, and adjacent land uses to the northwest are open pasture/oil production support operations owned by Lea Land.*

*The Lea Land surface waste management facility has been specifically designed to address potential aesthetic, environmental, and health and safety ramifications. These design features include a 10 - 20 foot high perimeter screening berm on the north end of the facility constructed as part of operations to shield activities from public view (particularly along Highway 62) and inhibit the migration of dust, odors, diesel fumes, etc. Potential odors and environmental impacts are limited by the wind direction. The wind blows from the southeast (see Wind Rose, **Figure I.3**) and land uses downwind of the Lea Land SWMF are limited to oilfield production support operations and cattle grazing; and are owned by Lea Land. In addition, overspray from the evaporators in the evaporation basins is contained by a lined downgradient berm that runs the length of the proposed basin configuration. (see Climatology, Section 2.9, **Volume IV.1**)*

(5) The operator shall not excavate a closed cell or allow others to excavate a closed cell except as approved by the division.

Excavation of permanently closed cells is not anticipated; however, if a permanently closed cell needs to be excavated, such excavation will be conducted only after prior approval has been obtained from OCD.

(6) The operator shall provide adequate cover for the landfill's active face as needed to control dust, debris, odors or other nuisances, or as otherwise required by the division.

*Soil cover, or an approved alternate cover such as clean soil deliveries, will be applied to the active face as needed. Approximately 10% of the gross airspace, has been devoted to cover operations. In addition to the activities described in the response to 19.15.36.14.A(4) NMAC above regarding debris, odors, or other nuisances, Lea Land will implement dust control measures as outlined in **Table I.8**.*

TABLE I.8 - Dust Control

A water truck will be available to apply water or approved recycled waters to the access roads and active areas within the Facility, as needed to reduce dust. In addition, the posted speed limit is 15 mph inside the property. Listed below are routine operations that are the most likely sources of dust, along with recommended primary and secondary control measures:

- ***Disposal Operations -***
  - *Primary Control Measure: Pave high-traffic areas, apply water to unpaved roads as necessary, enforce speed limits posted on site.*
  - *Secondary Control Measure: Apply dust surfactant to unpaved portions of the Facility, provide additional pavement.*
- ***Excavations -***
  - *Primary Control Measure: Pre-water areas prior to and during excavation. Water areas of excavation and haul roads during and at the end of each day to form a dust-binding soil crust.*
  - *Secondary Control Measure: Phase work to reduce the amount of disturbed surfaces, apply additional water, work at lower elevations (i.e., below-grade) when wind velocity is high.*
- ***Stockpiles -***
  - *Primary Control Measure: Pre-water areas prior to excavation. Apply water to short-term stockpiles and when transporting soils.*
  - *Secondary Control Measure: Control vehicle access to the area. Apply dust surfactant to long-term stockpiles and apply seed/mulch to prevent erosion.*
- ***Track out extending onto public roadways –***
  - *Primary Control Measure: Pave on-site entrance road, sweep as necessary.*
  - *Secondary Control Measure: Apply recycled asphalt, gravel pads or similar materials at the transition from unpaved to paved roadways.*
- ***Unpaved roadways and parking areas –***
  - *Primary Control Measure: Limit vehicle speed via posting speed limits; apply water, use aggregate or caliche, or repurposed materials.*
  - *Secondary Control Measure: Apply water and surfactants to unpaved roads and parking lots, as needed, provide additional pavement.*

(7) For areas of the landfill that will not receive additional oil field waste for one month or more, but have not reached the final waste elevation, the operator shall provide intermediate cover that shall be:
(a) approved by the division;
(b) stabilized with vegetation; and
(c) inspected and maintained to prevent erosion and manage infiltration or leachate during the oil field waste deposition process.

*Lea Land will place an intermediate cover at least 6-inches thick, in addition to daily cover, over areas of the landfill that will not receive further oil field waste for one month or more, but have not reached final elevation. Adequate volumes of both excavated and delivered soils are dedicated to this purpose (**Table III.2.2**) and intermediate cover materials may be recovered prior to installation of subsequent lifts. Intermediate cover surfaces will be properly sloped to promote clean run-off and minimize*

leachate generation, and may be used for temporary cover stockpiles. When weather conditions are favorable, intermediate cover may be vegetated with temporary grasses such as rye if the area will not be subject to additional landfilling within 12 months. Alternative stabilization methods for intermediate cover may be deployed as described in ***Attachment II.4.A****.*

If long-term revegetation is required, native grass will be applied after consultation with the local Natural Resources Conservation Service (NRCS) representative (see Closure/Post-closure Plan, ***Volume II.4****), or other proven cover stabilization technologies such as erosion control matting or alternative stabilization options (see* ***Attachment II.4.A****). Lea Land is requesting an exception to intermediate cover stabilization requirements as outlined in* ***Attachment II.4.A****. Areas of intermediate cover will be inspected periodically for erosion and settlement, and prompt regrading and maintenance action will be initiated as required. An Intermediate Cover Inspection and Maintenance Plan is provided as* ***Attachment II.1.G****.*

(8) When the operator has filled a landfill cell, the operator shall close it pursuant to the conditions contained in the surface waste management facility permit and the requirements of Paragraph (2) of Subsection C of 19.15.36.18 NMAC. The operator shall notify the division's environmental bureau at least three working days prior to a landfill cell's closure.

Lea Land will close a landfill Cell when it has been filled to final grade in accordance with the conditions established in the Surface Waste Management Permit, 19.15.36.18.C(2) NMAC, and the Closure/Post-closure Plan provided in ***Volume II.4*** *of this Application. Lea Land plans to install an alternative final cover system in accordance with 19.15.36.14.C(8) NMAC (see* ***Permit Plans, Volume III.1****). Lea Land will notify OCD at least three working days prior to the landfill cell closure.*

B. Ground water monitoring program. If fresh ground water exists at a site, the operator shall, unless otherwise approved by the division, establish a ground water monitoring program, approved by the division's environmental bureau, which shall include a ground water monitoring work plan, a sampling and analysis plan, a ground water monitoring system and a plan for reporting ground water monitoring results. The ground water monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield ground water samples from the uppermost aquifer that:

(1) represent the quality of background ground water that leakage from a landfill has not affected; and

(2) represent the quality of ground water passing beneath and down gradient of the surface waste management facility.

*Lea Land presents information in **Volume IV.2** (Hydrogeology) relating to the confirmed absence of groundwater resources beneath the proposed Facility. Justification for monitoring the most appropriate depth at the Dewey Lake Red Beds interface vs. the uppermost water zone, which is unproductive and situated approximately 180 ft below the site, is specifically outlined in **Volume IV.2**. As an alternative to groundwater monitoring, Lea Land is proposing to monitor the vadose zone strategically located at the redbed (aquitard) interface approximately 50 ft below grade surface (bgs). The Vadose Zone Monitoring Plan is presented as **Volume II.9** of this Application. The Plan includes the locations and construction details for four potential vadose zone wells; as well as procedures for routine monitoring, and sampling and analysis, should this be required.*

C. Landfill design specification. New landfill design systems shall include a base layer and a lower geomembrane liner (*e.g.*, composite liner), a leak detection system, an upper geomembrane liner, a leachate collection and removal system, a leachate collection and removal system protective layer, an oil field waste zone and a top landfill cover.

*In general, the prescriptive "landfill design specifications" outlined in Part 36 are outdated (e.g. PVC); and the liner, leachate collection systems, leak detection, and final covers proposed herein represent the most current and proven industry standards. Lea Land will construct a liner designed consistent with the objectives of 19.15.36.14.C NMAC at the proposed Facility. The liner design is described in **Volume III.1** (Engineering Design) and will be installed on a compacted subgrade and employ a geosynthetic clay liner (GCL) with a minimum hydraulic conductivity (k_{sat}) of 3 x 10^{-9} cm/sec below the prescriptive 60-mil high-density polyethylene (HDPE) liner as both the lower and upper components of the double-liner system (see **Permit Plans, Volume III.1**). The leak detection system will consist of a 200-mil thick geonet with a transmissivity of 10 cm/sec installed between the upper and lower geosynthetic liner system that will drain to the sump areas and confirm the integrity of the primary liner system. A geocomposite with a transmissivity of 10 cm/sec is overlain with a 2-ft layer of uncompacted soil with a minimum saturated hydraulic conductivity (k_{sat}) of 2 x 10^{-4} cm/sec (i.e., drainage layer; protective soil layer; PSL) will be installed above the upper geosynthetic liner system to collect leachate for conveyance to the leachate piping system in order to reduce potential for hydrostatic head on the primary liner. The proposed alternative liner system was evaluated with the HELP Model (**Volume III.4**) and confirmed to be equivalent to the prescriptive liner system.*

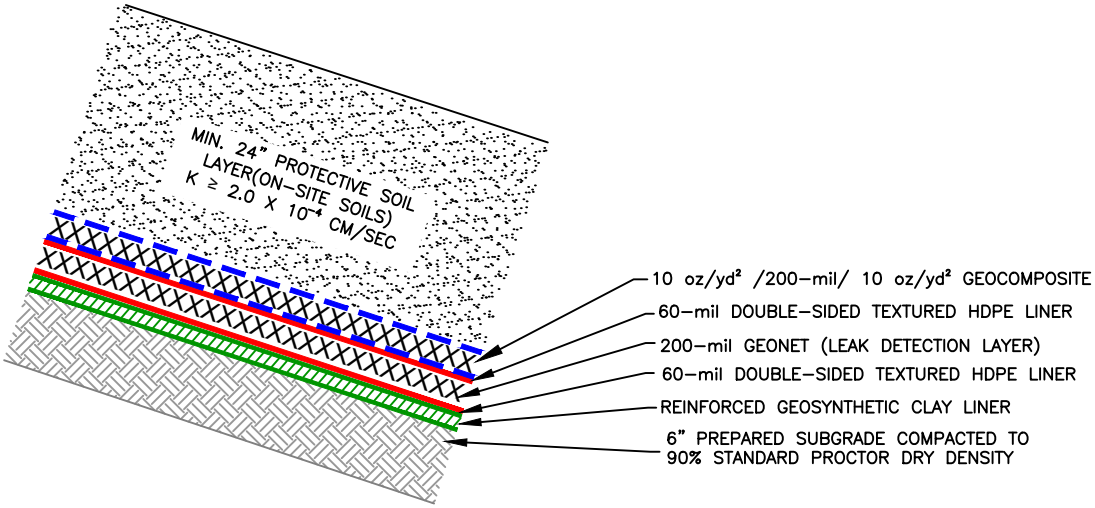
*The liner system is detailed in the **Permit Plans** (**Volume III.1**); and the Liner CQA Plan (**Volume II.7**) provides geosynthetics specifications; and compatibility documentation is demonstrated in **Volume III.6**.*

(1) The base layer shall, at a minimum, consist of two feet of clay soil compacted to a minimum ninety percent standard proctor density (ASTM D-698) (Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. This document is available for public viewing at the New Mexico state records center and archives and may not be reproduced, in full or in part. A copy of this publication may be obtained from ASTM International, www.astm.org.) with a hydraulic conductivity of 1 x 10^{-7} cm/sec or less. In areas where no ground water is present, the operator may propose an alternative base layer design, subject to division approval.

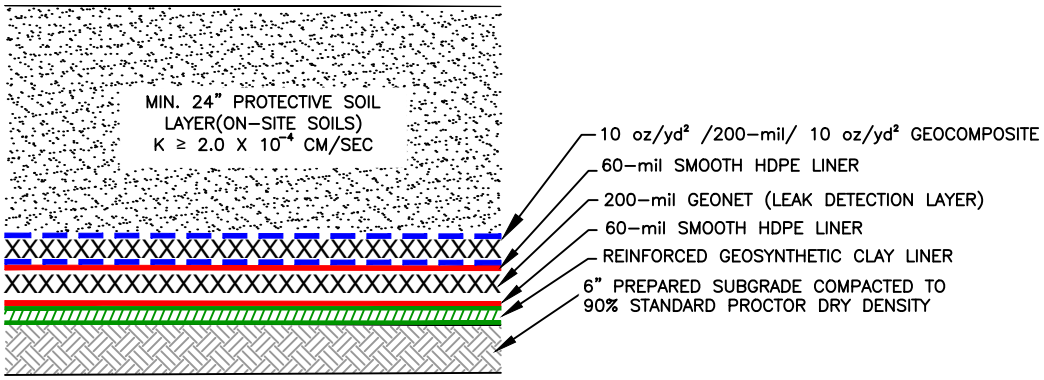
*Lea Land is proposing to install the primary synthetic liner on a 6-inch-thick prepared subgrade, compacted to 90% standard proctor density, followed by a geosynthetic clay liner (GCL) with a hydraulic conductivity of 3 x 10^{-9} centimeters per second (cm/sec) or less as the alternative base layer design. Calculations and technical properties of the compacted subgrade system and GCL are included in **Volume III**. The **Permit Plans** (**Volume III.1**) provide design elements of the subgrade component of the composite liner and the materials balance (**Volume II.1**) demonstrate that there are more than sufficient quantities of suitable soil within the zone of excavation (i.e., 0-40 ft bgs). The proposed alternative liner subgrade was evaluated with the HELP Model (**Volume III.4**) in conjunction with the proposed liner system and confirmed to provide protection equivalent to the prescriptive liner system.*

(2) The lower geomembrane liner shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division.

*The proposed liner design for the Lea Land Landfill will employ the prescriptive 60-mil high-density polyethylene (HDPE) liner as the lower component of the secondary liner system, placed atop the GCL layer. HDPE has proven itself over numerous years to provide vastly superior performance to the 30-mil flexible polyvinylchloride (PVC) material that is also prescribed. The ease of seaming and testing HDPE also enhance its use in this application. The liner system is shown on **Figure I.7** and in the **Permit Plans** (**Volume III.1**). The Liner CQA Plan (**Volume II.7**) provides geosynthetics specifications; and compatibility documentation is demonstrated in **Volume III.6**.*



SIDEWALL LINER SYSTEM



FLOOR LINER SYSTEM

PROPOSED ALTERNATIVE LINER DESIGN

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

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DATE: 06/26/2019	CAD: LINER SCH.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	FIGURE I.7
APPROVED BY: CWF	www.team-psc.com	

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(3) The operator shall place the leak detection system, which shall consist of two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10^{-5} cm/sec or greater, between the lower and upper geomembrane liners. The leak detection system shall consist of a drainage and collection system placed no more than six inches above the lower geomembrane liner in depressions and sloped so as to facilitate the earliest possible leak detection at designated collection points. Drainage piping shall be designed to withstand chemical attack from oil field waste and leachate and structural loading and other stresses and disturbances from overlying oil field waste, cover materials, equipment operation, expansion or contraction, and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the landfill sub-grade and drainage pipes and laterals shall be at least two percent grade; *i.e.,* two feet of vertical drop per 100 horizontal feet. The piping collection network shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. The operator shall seal a solid drainage pipe to convey collected liquids to a corrosion-proof sump or sumps located outside the landfill's perimeter for observation, storage, treatment or disposal. The operator may install alternative designs as approved by the division.

Lea Land proposes to install a leak detection system consisting of a 200-mil geonet between the lower (primary) and upper (secondary) liners, as the preferred alternative to the prescriptive 2-ft of compacted soil with a saturated hydraulic conductivity (k_{sat}) of 1 x 10^{-5} cm/sec. The geonet will have a minimum hydraulic conductivity (k) of 10 cm/sec. Calculations, compatibility, demonstrations and technical properties of the leak detection system are included in ***Volume III*** *which document superior performance vs. the prescriptive design. The* ***Permit Plans*** *(****Volume III.1****) provide design elements of the leak detection system including:*

- *Minimum design slope on the leachate collection geopipe of 2.5%*
- *Minimum design 2.5% slope on the liner and leak detection system vs. ≥ 2% standard*
- *Sump and riser pipe details*
- *Composite liner (i.e., FML/GCL) beneath the entire double-lined footprint*

*The Engineering Design (****Volume III.1****) and the* ***Permit Plans*** *provide detailed specifications demonstrating that the performance of the materials exceeds the prescriptive standards. This use of the geonet in this alternative liner cross-section was evaluated with the HELP Model (****Volume III.4****) and confirmed to provide superior protection vs. the prescriptive liner system.*

(4) The operator shall place the upper geomembrane liner, which shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division, over the leak detection system.

Lea Land will construct a liner design that will employ the prescriptive 60-mil high-density polyethylene (HDPE) liner as the upper geosynthetic component of the primary liner system. The liner system is shown on ***Figure I.7*** *and the* ***Permit Plans*** *(****Volume III.1****); the Liner CQA Plan (****Volume II.7****) provides geosynthetics specifications; and compatibility documentation is demonstrated in* ***Volume III.6****.*

(5) The operator shall place the leachate collection and removal system, which shall consist of at least two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10^{-2} cm/sec or greater, over the upper geomembrane liner to facilitate drainage. The leachate collection and removal system shall consist of a drainage and collection and removal system placed no more than six inches above the upper geomembrane liner in depressions and sloped so as to facilitate the maximum leachate collection. Piping shall be designed to withstand chemical attack from oil field waste or leachate and structural loading and other stresses and disturbances from overlying oil field waste, cover materials, equipment operation, expansion or contraction and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the upper geomembrane liner and drainage lines and laterals shall be at least two percent grade; *i.e.*, two feet of vertical drop per 100 horizontal feet. The piping collection network shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. The operator shall seal a solid drainage pipe to convey collected fluids outside the landfill's perimeter for storage, treatment and disposal. The operator may install alternative designs as approved by the division.

*This collection zone will consist of a geocomposite drainage layer overlaid with a 2-ft thick uncompacted soil layer consisting of on-site material with a hydraulic conductivity of at least 2 x 10^{-4} cm/sec. This component of the alternative liner cross-section was evaluated with the HELP Model (****Volume III.4****) and confirmed to provide protection and performance superior to the prescriptive liner system. Drainage piping consisting of minimum 6-inch dia. SDR 13.5 HDPE piping will be installed to collect fluids from the liner surface, as opposed to the 4 inch PVC geopipe indicated. Calculations, compatibility, demonstrations and technical properties of the leachate collection and removal system is provided in* ***Volume III****. The* ***Permit Plans*** *(****Volume III.1****) provides design elements of the leachate collection and removal system including:*

- *Geocomposite drainage layer*
- *Minimum 2.5% slope on the primary liner and leak detection system*
- *Solid (risers) and perforated pipe details (min slope 2.5%)*
- *Sump and riser pipe configuration, with no sidewall liner penetrations*
- *Composite liner (i.e., FML/GCL) as the secondary liner containment system*

*The Engineering Design (**Volume III.1**) and the **Permit Plans** provide detailed specifications for the geocomposite and geopipe collection systems demonstrating that the materials exceed the prescriptive standards.*

(6) The operator shall place the leachate collection and removal system protection layer, which shall consist of a soil layer at least one foot thick with a saturated hydraulic conductivity of 1 x 10^{-2} cm/sec or greater, over the leachate collection and removal system.

*Lea Land is proposing to install 2-ft of uncompacted soil with a minimum k_{sat} of 2 x 10^{-4} cm/sec, or greater, as the protection layer over the leachate collection and removal system. This component of the alternative liner cross-section was evaluated with the HELP Model (**Volume III.4**) and confirmed to provide protection and performance superior to the prescriptive liner system. HELP Modeling results indicate the nominal head on the primary liner is 0.062 inches vs. the design standard of ≤ 12 inches.*

(7) The operator shall place oil field waste over the leachate collection and removal system protective layer.

Lea Land proposes to place oil field waste over the PSL component of the leachate collection and removal system. The first lift, up to 5 ft in thickness, will consist of select uncompacted materials visually screened for items that could damage the liner (i.e., pipes, metal, etc.).

(8) The top landfill cover design shall consist of the following layers (top to bottom): a soil erosion layer composed of at least 12 inches of fertile topsoil re-vegetated in accordance with the post closure provisions of Subparagraph (b) of Paragraph (2) of Subsection C of 19.15.36.18 NMAC; a protection or frost protection layer composed of 12 to 30 inches of native soil; a drainage layer composed of at least 12 inches of sand or gravel with a saturated hydraulic conductivity of 1 x 10^{-2} cm/sec or greater and a minimum bottom slope of four percent, a hydraulic barrier-layer-geomembrane (minimum of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division); and a gas vent or foundation layer composed of at least 12 inches of sand or gravel above oil field waste with soils compacted to the minimum eighty percent Standard Proctor Density. The operator shall install the top landfill cover within one year of achieving the final landfill cell waste elevation. The operator shall ensure that the final landfill design elevation of the working face of the oil field waste is achieved in a timely manner with the date recorded in a field construction log. The operator shall also record the date of top landfill cover installation to document the timely installation of top landfill covers. The operator shall provide a minimum of three working days' notice to the division

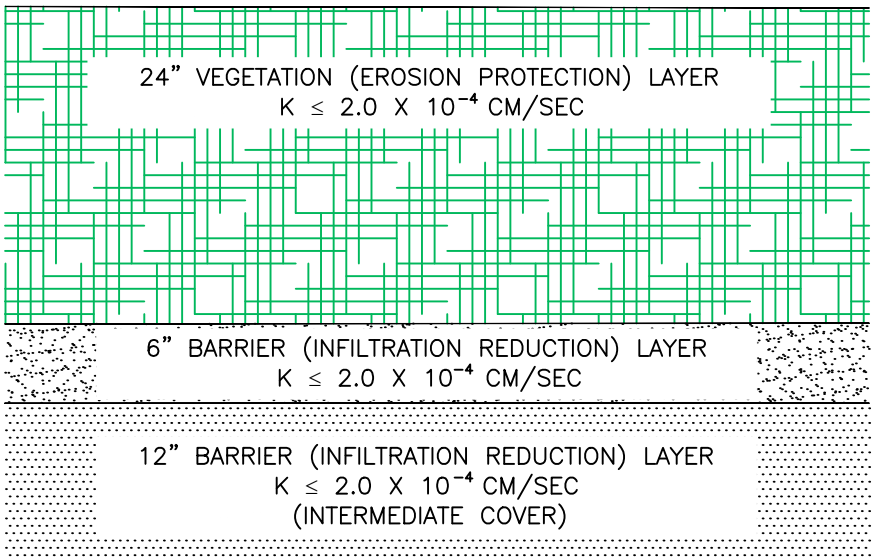
in advance of the top landfill cover's installation to allow the division to witness the top landfill cover's installation.

*Lea Land proposes an alternative final cover system (**Volume III.4**, Section 7.0) as described in 19.15.36.14.C(9) NMAC. The alternative final cover design is an evapotranspiration (ET) cap consisting of on-site soils (**Figure I.8**). This is a more sustainable design than the prescriptive standard as it does not require importation of off-site materials (i.e., HDPE) or extensive maintenance.*

(9) Alternatively, the operator may propose a performance-based landfill design system using geosynthetics or geocomposites, including geogrids, geonets, geosynthetic clay liners, composite liner systems, etc., when supported by EPA's "hydrologic evaluation of landfill performance" (HELP) model or other division-approved model. The operator shall design the landfill to prevent the "bathtub effect". The bathtub effect occurs when a more permeable cover is placed over a less permeable bottom liner or natural subsoil.

*Lea Land has undertaken an evaluation of the materials and climate of the Facility based on the United States Environmental Protection Agency's (USEPA) HELP Model and is proposing an alternative final cover system (**Figure I.8**) based on the ET technology. The "evapotranspiration (ET)" final cap design is ideally suited for the Lea Land site's climatology and soils available within the excavation zone. Additionally, OCD has approved a HELP model approach that evaluated the landfill performance over post-construction; active; closure; and post-closure operational stages utilizing the "Guidance Document for Performance Demonstration for an Alternative Cover Design under Section 502.A.2 of the New Mexico Solid Waste Management Regulations (20 NMAC 9.1) Using HELP Modeling; and Performance Demonstration for an Alternate Liner Design under Section 306.A.2 of the New Mexico Solid Waste Management Regulations (20 NMAC 9.1) Using HELP Modeling", dated April 1, 1998. The proposed final cover will include 24-inches of vegetation (erosion) cover; on top of a 6-inch barrier layer; on top of a 12-inch intermediate cover layer. The alternative ET cover system effectiveness is demonstrated throughout the landfill operational life and post-closure period in **Volume III.4,** Section 7.0.*

(10) External piping, *e.g.*, leachate collection, leak detection and sump removal systems shall be designed for installation of a sidewall riser pipe. Pipes shall not penetrate the liner with the exception of gas vent or collection wells where the operator shall install a flexible clamped pipe riser through the top landfill cover liner that will accommodate oil field waste settling and will prevent tears.



LANDFILL FINAL COVER SECTION

PROPOSED ALTERNATIVE FINAL COVER (ET) PROFILE

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON PSC ENVIRONMENTAL
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 03/11/2019	CAD: FINAL COVER.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	FIGURE I.8
APPROVED BY: CWF	www.team-psc.com	

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\RAI2\FINAL COVER REVISED 7-25-2019.dwg
Date/Time:Jul. 25, 2019-10:18:07

Lea Land proposes to install the necessary piping to transfer liquids collected in the leak detection and leachate collection sumps up the sideslope and through the proposed alternative final cover system on the sideslope. This will allow for the independent measurement and removal of liquids that accumulate in either system. Risers for both systems will be constructed of 12 in dia. HDPE; and there are no pipe penetrations of either the primary or secondary liners.

D. Liner specifications and requirements.

(1) General requirements.

(a) Geomembrane liner specifications. Geomembrane liners shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division. Geomembrane liners shall have a hydraulic conductivity no greater than 1 x 10^{-9} cm/sec. Geomembrane liners shall be composed of impervious, geosynthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. Liners shall also be resistant to ultraviolet light, or the operator shall make provisions to protect the material from sunlight. Liner compatibility shall comply with EPA SW-846 method 9090A.

*Lea Land proposes a landfill liner design that will employ the prescriptive 60-mil HDPE liner as the upper component (i.e., primary) and the lower component (i.e., secondary) of the liner system. The liner system design is shown on the **Permit Plans** (**Volume III.1**); the Liner CQA Plan (**Volume II.7**) provides geosynthetics specifications and installation standards; and compatibility documentation is demonstrated in **Volume III.6**.*

(b) Liners shall be able to withstand projected loading stresses, settling and disturbances from overlying oil field waste, cover materials and equipment operations.

*Liner slopes have been designed to be less than or equal to 25 percent (per 19.15.36.14.D(2)(b) NMAC). Although no further demonstration is necessary, **Volume III** provides the appropriate calculations.*

(c) The operator shall construct liners with a minimum of two percent slope to promote positive drainage and to facilitate leachate collection and leak detection.

*Lea Land will construct the liner with a 2.5% slope to promote positive drainage and to facilitate leachate collection and leak detection. The liner system design is shown on the **Permit Plans** (**Volume III.1**).*

(2) Additional requirements for geomembranes.

(a) Geomembranes shall be compatible with the oil field waste to be disposed. Geomembranes shall be resistant to chemical attack from the oil field waste or leachate. The operator shall demonstrate this by means of the manufacturer's test reports, laboratory analyses or other division-approved method.

*The liner system geosynthetics specifications are provided in the CQA Plan (**Volume II.7**); and compatibility documentation is demonstrated in **Volume III.6**.*

(b) Geosynthetic material the operator installs on a slope greater than twenty-five percent shall be designed to withstand the calculated tensile forces acting upon the material. The design shall consider the maximum friction angle of the geosynthetic with regard to a soil-geosynthetic or geosynthetic-geosynthetic interface and shall ensure that overall slope stability is maintained.

*There are no liner systems designed for slopes greater than 25%. The liner system is demonstrated to be able to withstand calculated forces acting upon the material as demonstrated in the Settlement Calculations (**Volume III.7**).*

(c) The operator shall thermally seal (hot wedge) field seams in geosynthetic material with a double track weld to create an air pocket for non-destructive air channel testing. In areas where double-track welding cannot be achieved, the operator may propose alternative thermal seaming methods. A stabilized air pressure of 35psi, plus or minus one percent, shall be maintained for at least five minutes. The operator shall overlap liners four to six inches before seaming, and shall orient seams parallel to the line of maximum slope; *i.e.*, oriented along, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. The operator shall use factory seams whenever possible. The operator shall not install horizontal seams within five feet of the slope's toe. Qualified personnel shall perform all field seaming.

*The Engineering Design (**Volume III.1**) and Liner CQA Plan (**Volume II.7**) provide detailed specifications for the installation of geosynthetics in compliance with this section, including:*

- *Foundation (i.e., subgrade) preparation*
- *Maximum (4:1) and minimum slopes (2.5%)*
- *Thermal seaming and testing procedures*
- *Field seams that will be oriented parallel to the line of maximum slope.*
- *Minimizing the number of field seams in corners and irregularly shaped areas.*
- *No horizontal seams within 10 ft (minimum) of the toe of slope.*

All liner systems will be installed by qualified contractors with at least 10 million square ft of geosynthetic installation experience under construction observation by a qualified New Mexico Professional Engineer.

E. Requirements for the soil component of composite liners.

(1) The operator shall place and compact the base layer to ninety percent standard proctor density on a prepared sub-grade.

*Lea Land is proposing to place and compact the base layer to 90% Standard Proctor Density on a prepared subgrade of in situ soils per the CQA Plan (**Volume II.7**). Calculations and technical properties of the subgrade are included in **Volume III**, the **Permit Plans** provides design elements of the subgrade component of the composite liner.*

(2) The soil surface upon which the operator installs a geosynthetic shall be free of stones greater than one half inch in any dimension, organic matter, local irregularities, protrusions, loose soil and abrupt changes in grade that could damage the geosynthetic.

*Lea Land will install the geosynthetic liner on a surface that is free of angular stones (maximum ½-inch), organic matter, local irregularities, protrusions, loose soil or abrupt changes in grade that could potentially damage the geosynthetic (**Volume II.7**). Technical properties of the geosynthetic are provided in the CQA Plan, **Volume II.7** and **Permit Plans** (**Volume III.1**) provide installation guidance for the geosynthetic component of the composite liner.*

(3) The operator shall compact a clay soil component of a composite liner to a minimum of ninety percent standard proctor density, which shall have, unless otherwise approved by the division, a plasticity index greater than ten percent, a liquid limit between twenty-five and fifty percent, a portion of material passing the no. 200 sieve (0.074 mm and less fraction) greater than forty percent by weight; and a clay content greater than eighteen percent by weight.

*Lea Land proposes to install a "GCL" below the synthetic liner, which has a hydraulic conductivity of $3x10^{-9}$ cm/sec and is advantageous from a constructability standpoint. The soil subgrade below the GCL will be in situ materials with superior foundation characteristics to the fine-grained soils specified. Calculations and technical properties of the GCL and compacted soil subgrade system are included in **Volume III**. The **Permit Plans** (**Volume III.1**) provide design elements of this component of the composite liner. This component of the alternative liner system was evaluated with the HELP Model (**Volume III.4**) and confirmed to provide protection and performance equivalent or superior to the prescriptive liner system.*

F. The leachate collection and removal system protective layer and the soil component of the leak detection system shall consist of soil materials that shall be free of organic matter, shall have a portion of material passing the no. 200 sieve no greater than five percent by weight and shall have a uniformity coefficient (Cu) less than 6, where Cu is defined as D60/D10. Geosynthetic materials or geocomposites including geonets and geotextiles, if used as components of the leachate collection and removal or leak detection system, shall have a hydraulic conductivity, transmissivity and chemical and physical qualities that oil field waste placement, equipment operation or leachate generation will not adversely affect. These geosynthetics or geocomposites, if used in conjunction with the soil protective cover for liners, shall have a hydraulic conductivity designed to ensure that the liner's hydraulic head never exceeds one foot.

Lea Land proposes to install a leak detection system consisting of a 200-mil geonet between the primary and secondary liners and a geocomposite with a minimum k value of 10 cm/sec as one of the components of the leachate collection and removal system as previously discussed. Calculations, compatibility, demonstrations and technical properties of the leak detection system are included in ***Volume III****. The* ***Permit Plans*** *provide design elements of the leak detection system including:*

- *Minimum 2.5% slope*
- *Sump and riser pipe details*
- *Composite liner (i.e., FML/GCL) under each leak detection sump*

*This component of the alternative liner cross-section was evaluated with the HELP Model (****Volume III.4****) and confirmed to provide superior protection, performance, and possesses constructability advantages.*

G. Landfill gas control systems. If the gas safety management plan or requirements of other federal, state or local agencies require the installation of a gas control system at a landfill, the operator shall submit a plan for division approval, which shall include the following:

(1) the system's design, indicating the location and design of vents, barriers, collection piping and manifolds and other control measures that the operator will install (gas vent or collection wells shall incorporate a clamped and seamed pipe riser design through the top cover liner);

Not Applicable. LFG is generated from the decomposition of readily degradable organic material, such as paper and other organic household and commercial wastes. The primary by-products, typically comprising over 99% of LFG by volume, are methane and carbon dioxide as stated in USEPA's AP-42 "Emission Factor Documentation" (08/19/97):

AP 42 – 2.4 Municipal Solid Waste Landfills
2.4.4 Emissions

Methane (CH_4) and CO_2 are the primary constituents of landfill gas, and are produced by microorganisms within the landfill under anaerobic conditions. Transformations of CH_4 and CO_2 are mediated by microbial populations that are adapted to the cycling of materials in anaerobic environments.

LFG is produced when there is a significant supply of readily putrescible organic material and moisture; plus a lack of oxygen. Oil field wastes do not provide a suitable environment for LFG production, and over 95% of the projected waste types would be subtracted from the decomposition equation used to demonstrate compliance with air quality requirements. Typical oil field wastes will not generate significant quantities of LFG, or the requisite pressure to promote migration. Conventional landfill gas monitoring and control systems are not necessary or effective, and the waste matrix itself would inhibit migration or collection if it contained < 5% degradable organics.

(2) if gas recovery is proposed, the design of the proposed gas recovery system and the system's major on-site components, including storage, transportation, processing, treatment or disposal measures required in the management of generated gases, condensates or other residues;

Lea Land does not propose to conduct gas recovery or processing, as it will not be practical.

(3) if gas processing is proposed, a processing plan designed in a manner that does not interfere or conflict with the activities on the site or required control measures or create or cause danger to persons or property;
(4) if gas disposal is proposed, a disposal plan designed:
(a) in a manner that does not interfere or conflict with the activities on the site or with required control measures;
(b) so as not to create or cause danger to persons or property; and
(c) with active forced ventilation, using vents located at least one foot above the landfill surface at each gas vent's location;
(5) physical and chemical characterization of condensates or residues that are generated and a plan for their disposal;

Not Applicable.

(6) means that the operator will implement to prevent gas' generation and lateral migration such that
(a) the concentration of the gases the landfill generates does not exceed twenty-five percent of the lower explosive limit for gases in surface waste management facility structures (excluding gas control or recovery system components); and
(b) the concentration of gases does not exceed the lower explosive limit for gases at the surface waste management facility boundary; and

Not Applicable. The following factors inhibit the potential generation of other explosive gases (i.e., CH_4):

- *The oil field waste proposed to be accepted by Lea Land is primarily non-putrescible (i.e., < 5%).*
- *The semi-arid climate characteristics of Lea County (low precipitation e.g., 13.47 inches of annual rainfall) (**Volume IV**).*
- *Low potential for moisture contribution from other sources, due to the installation of engineered control systems that divert run-on away from the disposal area.*
- *Waste is encapsulated by multilayered liner and cover systems.*
- *The vadose zone monitoring wells will be tested for the potential presence of gases, as described in Vadose Zone Monitoring Plan (**Volume II.9**). These wells are capable of detecting gas in the flow zone before it reaches the property line.*

(7) a routine gas monitoring program providing for monitoring at least quarterly; the specific type and frequency of monitoring to be determined based on the following:
(a) soil conditions;
(b) the hydrogeologic and hydraulic conditions surrounding the surface waste management facility; and
(c) the location of surface waste management facility structures and property lines.

*Lea Land will implement a routine gas monitoring program for H_2S as outlined in **Volume II.3**; Hydrogen Sulfide Prevention and Contingency Plan and **Volume II.1**; Operations, Inspection, and Maintenance Plan. Vadose Zone Monitoring Plan (**Volume II.9**) describes "LFG" monitoring in the vadose zone wells.*

H. Landfill gas response. If gas levels exceed the limits specified in Paragraph (6) of Subsection G of 19.15.36.14 NMAC, the operator shall:
(1) immediately take all necessary steps to ensure protection of fresh water, public health and the environment and notify the division;
(2) within seven days of detection, record gas levels detected and a description of the steps taken to protect fresh water, public health and the environment;
(3) within 30 days of detection, submit a remediation plan for gas releases that describes the problem's nature and extent and the proposed remedy; and
(4) within 60 days after division approval, implement the remediation plan and notify the division that the plan has been implemented.

*Lea Land will comply with this section in the event that landfill gas is detected in the vadose zone monitoring system; and emergency response to elevated H_2S levels is addressed in **Volume II.3**; Hydrogen Sulfide Prevention and Contingency Plan.*

19.15.36.15 SPECIFIC REQUIREMENTS APPLICABLE TO LANDFARMS:

Not Applicable. Lea Land does not propose to operate an OCD regulated landfarm.

19.15.36.16 SMALL LANDFARMS:

Small landfarms as defined in Paragraph (5) of Subsection A of 19.15.36.7 NMAC are exempt from 19.15.36 NMAC except for the requirements specified in 19.15.36.16 NMAC.

Not Applicable.

19.15.36.17 SPECIFIC REQUIREMENTS APPLICABLE TO EVAPORATION, STORAGE, TREATMENT AND SKIMMER PONDS:

A. Engineering design plan. An applicant for a surface waste management facility permit or modification requesting inclusion of a skimmer pit; an evaporation, storage or treatment pond; or a below-grade tank shall submit with the surface waste management facility permit application a detailed engineering design plan, certified by a registered profession engineer, including operating and maintenance procedures; a closure plan; and a hydrologic report that provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology to enable the division to evaluate the actual and potential effects on soils, surface water and ground water. The plan shall include detailed information on dike protection and structural integrity; leak detection, including an adequate fluid collection and removal system; liner specifications and compatibility; freeboard and overtopping prevention; prevention of nuisance and hazardous odors such as H2S; an emergency response plan, unless the pit is part of a surface waste management facility that has an integrated contingency plan; type of oil field waste stream, including chemical analysis; climatological factors, including freeze-thaw cycles; a monitoring and inspection plan; erosion control; and other pertinent information the division requests.

The existing and proposed Lea Land SWMF includes both a Processing Area (i.e., evaporation, storage and treatment ponds) and a Landfill. The Processing Area design includes (at full build-out) 12 evaporation ponds and treatment process that stabilize and solidify materials for landfill disposal. ***Volume III*** *(Engineering Design and Calculations) and the* ***Permit Plans****, certified by Charles W. Fiedler, P.E., provides the detailed engineering design plan for the proposed surface waste management facility, including:*

Volume II *(Facility Management Plans) describes:*

- *operation and maintenance procedures*
- *Closure/Post-closure Plan*

- *H_2S Prevention and Contingency Plan*
- *emergency response plan*
- *monitoring and inspection plan*
- *oil field waste management plan*
- *Contingency Plan*
- *chemical analysis*

Volume III *(Engineering Design and Calculations) describes:*

- *liner details*
- *calculations detailing dike protection and structural integrity*
- *leak detection system*
- *liner specifications and compatibility documentation*
- *freeboard and overtopping (wave action) analysis*
- *erosion control*
- *fluid collection and removal system*

Volume IV *(Siting and Hydrogeology) describes:*

- *site topography*
- *soils characteristics*
- *geology*
- *surface hydrology*
- *groundwater hydrology*
- *climatology*

B. Construction, standards.

(1) In general. The operator shall ensure each pit, pond and below-grade tank is designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health and the environment.

*The Liner CQA Plan (**Volume II.7**) provides detailed procedures for the proper construction of the berms and liner systems in compliance with the **Permit Plans** (**Volume III.1**). The Processing Area, including pits and ponds, is designed and will be constructed and operated so as to protect fresh water, public health and the environment.*

(2) Liners required. Each pit or pond shall contain, at a minimum, a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions.

Lea Land will comply with this requirement. ***Volume III.1*** *provides the detail for the primary liner, secondary liner, and leak detection system that will be installed for each evaporation pond in compliance with these requirements.*

(3) Liner specifications. Liners shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division. Synthetic (geomembrane) liners shall have a hydraulic conductivity no greater than 1 x 10^{-9} cm/sec. Geomembrane liners shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. Liner materials shall be resistant to ultraviolet light, or the operator shall make provisions to protect the material from sunlight. Liner compatibility shall comply with EPA SW-846 method 9090A.

The liner system design for the Processing Area ponds has been designed consistent with Section 19.15.36.17.B.(3) NMAC. The liner design will employ the prescriptive 60-mil HDPE liner as the upper component and the lower component of the liner system. The leak detection system will consist of a 200-mil HDPE geonet installed between the upper and secondary liner system that will drain to the sump areas. HDPE is the preferred material for waste containment based on over 30 years of successful geotechnical applications.

The liner system is shown on the ***Permit Plans*** *(****Volume III.1****); and the Liner CQA Plan (****Volume II.7****) provides geosynthetics specifications; and compatibility documentation is demonstrated in* ***Volume III.6****.*

(4) Alternative liner media. The division may approve other liner media if the operator demonstrates to the division's satisfaction that the alternative liner protects fresh water, public health and the environment as effectively as the specified media.

The liner design will employ the prescriptive 60-mil HDPE liner as the upper component and lower component of the liner system. The alternative leak detection system will consist of a 200-mil geonet installed between the upper and secondary liner system draining towards the sump areas. The proposed GCL is the base layer for the secondary liner and has proven qualities and constructability vs. the 2 ft thick compacted clay liner, when placed on a prepared subgrade.

(5) Each pit or pond shall have a properly constructed foundation or firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities, in order to prevent rupture or tear of the liner and an adequate anchor trench; and shall be constructed so that the inside grade of the levee is no steeper than 2H:1V. Levees shall have an outside grade no steeper than 3H:1V. The levees'

tops shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance. The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory seams where possible. The operator shall ensure field seams in geosynthetic material are thermally seamed (hot wedge) with a double track weld to create an air pocket for non-destructive air channel testing. A stabilized air pressure of 35 psi, plus or minus one percent, shall be maintained for at least five minutes. The operator shall overlap liners four to six inches before seaming, and orient seams parallel to the line of maximum slope, i.e., oriented along, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field seaming.

*The Engineering Design (**Volume III.1**) and Liner CQA Plan (**Volume II.7**) provide detailed specifications for the installation of geosynthetics in compliance with this section, including:*

- *Foundation (i.e., subgrade) preparation*
- *Maximum (3:1) and minimum slopes (2.5%)*
- *Thermal seaming and testing procedures*
- *Field seams that will be oriented parallel to the line of maximum slope*
- *Minimizing the number of field seams in corners and irregularly shaped areas*
- *No horizontal seams within ten ft of the toe of slope*

All liner systems will be installed by qualified contractors with at least 10 million square ft of geosynthetics installation experience.

(6) At a point of discharge into or suction from the lined pit, the liner shall be protected from excessive hydrostatic force or mechanical damage, and external discharge lines shall not penetrate the liner.

*The liner details shown on the **Permit Plans** (**Volume III.1**) indicate the methods used to protect the liner. To address the hydrostatic forces and potential mechanical damage to the primary liner as a result of pumping into or suction out of the lined ponds; an additional sheet of 60-mil HDPE liner will be welded overtop of the primary liner in the areas that these activities are expected to be conducted. The **Permit Plans** shows the location of the additional 60-mil HDPE layer. There are no liner pipe penetrations in the facility design with the exception of the leak detection riser at the top of the slope.*

(7) Primary liners shall be constructed of a synthetic material.

See response to 19.15.36.17.B.(3) NMAC.

(8) A secondary liner may be a synthetic liner or an alternative liner approved by the division. Secondary liners constructed with compacted soil membranes, i.e., natural or processed clay and other soils, shall be at least three feet thick, placed in six-inch lifts and compacted to ninety-five percent of the material's standard proctor density, or equivalent. Compacted soil membranes used in a liner shall undergo permeability testing in conformity with ASTM standards and methods approved by the division before and after construction. Compacted soil membranes shall have a hydraulic conductivity of no greater than 1 x 10^{-8} cm/sec. The operator shall submit results of pre-construction testing to the division for approval prior to construction.

Lea Land is not proposing a secondary alternate liner constructed of a soil component. Lea Land proposes to utilize a secondary liner option consisting of 60-mil HDPE installed above a geosynthetic clay liner (GCL) with a prepared subgrade compacted to 90% Standard Proctor. See response to 19.15.36.17.B(4) NMAC.

(9) The operator shall place a leak detection system between the lower and upper geomembrane liners that consists of two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10^{-5} cm/sec or greater to facilitate drainage. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped so as to facilitate the earliest possible leak detection. Piping used shall be designed to withstand chemical attack from oil field waste or leachate; structural loading from stresses and disturbances from overlying oil field waste, cover materials, equipment operation or expansion or contraction; and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the interior sub-grade and of drainage lines and laterals shall be at least a two percent grade, i.e., two feet vertical drop per 100 horizontal feet. The piping collection system shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. The operator shall seal a solid sidewall riser pipe to convey collected fluids to a collection, observation and disposal system located outside the perimeter of the pit or pond. The operator may install alternative methods as approved by the division.

*Lea Land is proposing to install an alternative leak detection system consisting of a 200-mil geonet between the primary and secondary liners. The geocomposite will have a minimum k value of 10 cm/sec. Calculations, compatibility, demonstrations and technical properties of the leak detection system are included in **Volume III**. The **Permit Plans** (**Volume III.1**) provide design elements of the leak detection system including:*

- *Minimum 2.5% slope on the liner and leak detection system*
- *Sump and riser pipe details*

- *Composite liner (i.e., FML/GCL) under each leak detection sump*

*The Engineering Design and the **Permit Plans** (**Volume III.1**) provide detailed specifications for the piping collection systems demonstrating that the materials exceed the prescriptive standards.*

(10) The operator shall notify the division at least 72 hours prior to the primary liner's installation so that a division representative may inspect the leak detection system before it is covered.

Lea Land will provide a milestone schedule to OCD in advance of liner construction, and notify OCD at least 72 hours prior to geosynthetics installation.

(11) The operator shall construct pits and ponds in a manner that prevents overtopping due to wave action or rainfall, and maintain a three foot freeboard at all times.

*Lea Land will comply with this requirement. **Volume III** provides detailed calculations demonstrating compliance with wave action, rainfall, and freeboard standards.*

(12) The maximum size of an evaporation or storage pond shall not exceed 10 acre-feet.

*Lea Land will comply with this requirement. The proposed ponds are each approximately 9.5 acre-ft in capacity, not including freeboard. **Volume III.1**, Engineering Design provides detailed calculations regarding capacity.*

C. Operating standards.

(1) The operator shall ensure that only produced fluids or non-hazardous waste are discharged into or stored in a pit or pond; and that no measurable or visible oil layer is allowed to accumulate or remain anywhere on a pit's surface except an approved skimmer pit.

*The Oil Field Waste Management Plan (**Volume II.2**) provides detailed procedures to ensure that only produced fluids or non-hazardous waste are placed into or stored in a pit or pond, including load rejection procedures. The Operations, Inspection, and Maintenance Plan (**Volume II.1**, Section 6.2) addresses measurable or visible oil layer.*

(2) The operator shall monitor leak detection systems pursuant to the approved surface waste management facility permit conditions, maintain monitoring records in a form readily accessible for division inspection and report discovery of liquids in the leak detection system to the division within 24 hours.

*Lea Land will comply with this requirement. The Operations, Inspection, and Maintenance Plan (**Volume II.1**) provides a more detailed description of monitoring, recordkeeping and procedures for management of liquids in the leak detection system.*

(3) Fencing and netting. The operator shall fence or enclose pits or ponds to prevent unauthorized access and maintain fences in good repair. Fences are not required if there is an adequate perimeter fence surrounding the surface waste management facility. The operator shall screen, net, cover or otherwise render non-hazardous to migratory birds tanks exceeding eight feet in diameter and exposed pits and ponds. Upon written application, the division may grant an exception to screening, netting or covering requirements upon the operator's showing that an alternative method will adequately protect migratory birds or that the tank or pit is not hazardous to migratory birds.

The perimeter of the Lea Land SWMF (i.e., the Processing Area and the Landfill) is enclosed with competent 4-strand barbed wire fencing and locking gates.

*Lea Land requests an alternate method to the prescriptive migratory bird screening requirement. The Migratory Bird Protection Plan (**Volume II.6**) describes the proposed alternate methodology to the screening requirement of the storage ponds. This Plan describes visual inspections and migratory bird retrieval and clean-up procedures in the unlikely event that birds require decontamination.*

(4) The division may approve spray systems to enhance natural evaporation. The operator shall submit engineering designs for spray systems to the division's environmental bureau for approval prior to installation. The operator shall ensure that spray evaporation systems are operated so that spray-borne suspended or dissolved solids remain within the perimeter of the pond's lined portion.

*Lea Land proposes to install a spray system utilizing mechanical evaporators to enhance natural evaporation in the proposed ponds. The Operations, Inspection, and Maintenance Plan (**Volume II.1**) provides for the design, operation and maintenance of the proposed system. The proposed mechanical evaporation system is designed to prevent spray-borne suspended or dissolved solids from exiting the perimeter of the pond's lined area. In addition, this system will not be operated when wind velocity exceeds twelve miles per hour (sustained) via automatic shut-off mechanisms. There is also a minimum setback between the ponds and the property line of 200 ft. The prevailing wind direction from the southeast would potentially propel mist toward the lined west perimeter berm.*

(5) The operator shall use skimmer pits or tanks to separate oil from produced water prior to water discharge into a pond. The operator shall install a trap device in connected ponds to prevent solids and oils from transferring from one pond to another unless approved in the surface waste management facility permit.

*Lea Land will utilize receiving and settling tanks to process water accepted at the Facility that requires separation of oil from water as described in the Operations, Inspection, and Maintenance Plan (**Volume II.1**). No oil processing is proposed in open pits, and oil residues will be removed from water prior to discharging into the evaporation ponds.*

D. Below-grade tanks and sumps.

(1) The operator shall construct below-grade tanks with secondary containment and leak detection. The operator shall not allow below-grade tanks to overflow. The operator shall install only below-grade tanks of materials resistant to the tank's particular contents and to damage from sunlight.

Lea Land does not propose to construct or operate below-grade tanks at the proposed Facility.

(2) The operator shall test sumps' integrity annually, and shall promptly repair or replace a sump that does not demonstrate integrity. The operator may test sumps that can be removed from their emplacements by visual inspection. The operator shall test other sumps by appropriate mechanical means. The operator shall maintain records of sump inspection and testing and make such records available for division inspection.

The Lea Land SWMF design includes below-grade sumps. The tank farm, landfill and evaporation pond containment will include sumps and leak detection systems which will be monitored in compliance with 19.15.36.17.D(2) NMAC.

E. Closure required. The operator shall properly close pits, ponds and below-grade tanks within six months after cessation of use.

*Lea Land will comply with this requirement. The Closure/Post-closure Plan (**Volume II.4**) describes closure timeframes in detail.*

19.15.36.18 CLOSURE AND POST CLOSURE:

A. Surface waste management facility closure by operator.

(1) The operator shall notify the division's environmental bureau at least 60 days prior to cessation of operations at the surface waste management facility and provide a proposed schedule for closure. Upon receipt of such notice and

proposed schedule, the division shall review the current closure and post closure plan (post closure is not required for oil treating plants) for adequacy and inspect the surface waste management facility.

*Lea Land will comply with this requirement. The Closure/Post-closure Plan (**Volume II.4**) describes closure notification requirements in detail.*

(2) The division shall notify the operator within 60 days after the date of cessation of operations specified in the operator's closure notice of modifications of the closure and post closure plan and proposed schedule or additional requirements that it determines are necessary for the protection of fresh water, public health, or the environment.

No response required.

(3) If the division does not notify the operator of additional closure or post closure requirements within 60 days as provided, the operator may proceed with closure in accordance with the approved closure and post closure plan; provided that the director may, for good cause, extend the time for the division's response for an additional period not to exceed 60 days by written notice to the operator.

Lea Land will comply with this requirement.

(4) The operator shall be entitled to a hearing concerning a modification or additional requirement the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements.

Lea Land will comply with this requirement.

(5) Closure shall proceed in accordance with the approved closure and post closure plan and schedule and modifications or additional requirements the division imposes. During closure operations the operator shall maintain the surface waste management facility to protect fresh water, public health and the environment.

Lea Land will comply with this requirement.

(6) Upon completion of closure, the operator shall re-vegetate the site unless the division has approved an alternative site use plan as provided in Subsection F of 19.15.36.18 NMAC. Re-vegetation, except for landfill cells, shall consist of establishment of a vegetative cover equal to seventy percent of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) or scientifically documented ecological description consisting of at least three native plant species, including at least

one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons.

*Lea Land will comply with this requirement. The Closure/Post-closure Plan (**Volume II.4**) describes in detail revegetation and maintenance plans for the Facility. **Volume II.4** includes Lea Land's request for an exception to the vegetation requirements to allow the option to explore alternative methods of final cover stabilization.*

B. Release of financial assurance.

(1) When the division determines that closure is complete it shall release the financial assurance, except for the amount needed to maintain monitoring wells for the applicable post closure care period, to perform semi-annual analyses of such monitoring wells and to re-vegetate the site. Prior to the partial release of the financial assurance covering the surface waste management facility, the division shall inspect the site to determine that closure is complete.

*The Closure/Post-closure Plan (**Volume II.4**) provides the estimated amount, in current dollars, required for Post-closure care and maintenance.*

(2) After the applicable post closure care period has expired, the division shall release the remainder of the financial assurance if the monitoring wells show no contamination and the re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC is successful. If monitoring wells or other monitoring or leak detection systems reveal contamination during the surface waste management facility's operation or in the applicable post closure care period following the surface waste management facility's closure the division shall not release the financial assurance until the contamination is remediated in accordance with 19.15.30 NMAC and 19.15.29 NMAC, as applicable.

Lea Land will comply with this requirement.

(3) In any event, the division shall not finally release the financial assurance until it determines that the operator has successfully re-vegetated the site in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC, or, if the division has approved an alternative site use plan, until the landowner has obtained the necessary regulatory approvals and begun implementation of the use.

No response required.

C. Surface waste management facility and cell closure and post closure standards. The following minimum standards shall apply to closure and post closure of the installations indicated, whether the entire surface waste management facility is being closed or only a part of the surface waste management facility.

(1) Oil treating plant closure. The operator shall ensure that:

(a) tanks and equipment used for oil treatment are cleaned and oil field waste is disposed of at a division-approved surface waste management facility (the operator shall reuse, recycle or remove tanks and equipment from the site within 90 days of closure);

(b) the site is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, test methods for evaluating solid waste, physical/chemical methods, for TPH, BTEX, major cations and anions and RCRA metals, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved; and

(c) sample results are submitted to the environmental bureau in the division's Santa Fe office.

*Lea Land will implement the Closure/Post-closure Plan (**Volume II.4**) for closure activities in compliance with 19.15.36.18.C NMAC.*

(2) Landfill cell closure.

(a) The operator shall properly close landfill cells, covering the cell with a top cover pursuant to Paragraph (8) of Subsection C of 19.15.36.14 NMAC, with soil contoured to promote drainage of precipitation; side slopes shall not exceed a twenty-five percent grade (four feet horizontal to one foot vertical), such that the final cover of the landfill's top portion has a gradient of two percent to five percent, and the slopes are sufficient to prevent the ponding of water and erosion of the cover material.

(b) The operator shall re-vegetate the area overlying the cell with native grass covering at least seventy percent of the landfill cover and surrounding areas, consisting of at least two grasses and not including noxious weeds or deep-rooted shrubs or trees, and maintain that cover through the post closure period.

*Lea Land will implement the Closure/Post-closure Plan (**Volume II.4**) for the Landfill cells. The **Permit Plans** provides the engineering design for the overall final grading contours for the Landfill. Lea Land proposed to install an alternate final cover per 19.15.36.14.C(9) NMAC, which is an evapotranspiration ("ET") cap design ideally suited for the arid climate and using sustainable and suitable on-site soils. The design sideslopes will be no greater that 25% and the top crown will be constructed to a design grade of 5%. The alternate final cover includes 24-inches of vegetative (erosion layer soils; $k \leq 2 \times 10^{-4}$); over a 6-inch thick barrier (infiltration layer; $k \leq 2 \times 10^{-4}$ cm/sec); and a 12-inch intermediate cover, all graded to drain. The Landfill final cover details are shown in **Figure I.8** and on the **Permit Plans**. The final cover, as well as other disturbed areas of the site, will be seeded with native vegetation, or stabilized with proven alternative technologies. Vegetation on*

the site will be established during the optimum planting period, whenever possible. Examples of seed types have been identified as recommended by the NRCS.

(3) Landfill post closure. Following landfill closure, the post closure care period for a landfill shall be 30 years.

(a) A post closure care and monitoring plan shall include maintenance of cover integrity, maintenance and operation of a leak detection system and leachate collection and removal system and operation of gas and ground water monitoring systems.

(b) The operator or other responsible entity shall sample existing ground water monitoring wells annually and submit reports of monitoring performance and data collected within 45 days after the end of each calendar year. The operator shall report any exceedance of a ground water standard that it discovers during monitoring pursuant to 19.15.29 NMAC.

*Lea Land will implement the Closure/Post-closure Plan, (**Volume II.4**) for the post-closure care and monitoring period of 30 years; or less if stabilization can be demonstrated to OCD.*

(4) Landfarm closure. The operator shall ensure that:

(a) disking and addition of bioremediation enhancing materials continues until soils within the cells are remediated to the standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division;

(b) soils remediated to the foregoing standards and left in place are re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

(c) landfarmed soils that have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC are removed to a division-approved surface waste management facility and the landfarm remediation area is filled in with native soil and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

(d) if treated soils are removed, the cell is filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

(e) berms are removed;

(f) buildings, fences, roads and equipment are removed, the site cleaned-up and tests conducted on the soils for contamination;

(g) annual reports of vadose zone and treatment zone sampling are submitted to the division's environmental bureau until the division has approved the surface waste management facility's final closure; and

(h) for an operator who chooses to use the landfarm methods specified in Subsection H of 19.15.36.15 NMAC, that the soil has an ECs of less than or equal to 4.0 mmhos/cm (dS/m) and a SAR of less than or equal to 13.0.

Not applicable; Lea Land is not proposing landfarm facilities.

D. Pond and pit closure. The operator shall ensure that:

(1) liquids in the ponds or pits are removed and disposed of in a division-approved surface waste management facility;

(2) liners are disposed of in a division-approved surface waste management facility;

(3) equipment associated with the surface waste management facility is removed;

(4) the site is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, test methods for evaluating solid waste, physical/chemical methods for TPH, BTEX, metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved; and

(5) sample results are submitted to the environmental bureau in the division's Santa Fe office.

*Lea Land will comply with this requirement. The Closure/Post-closure Plan (**Volume II.4**) describes in detail facility decommissioning, including liquid, liner and equipment disposal; as well as sampling, testing, and reporting when closure of the Facility is implemented.*

E. Landfarm and pond and pit post closure. The post-closure care period for a landfarm or pond or pit shall be three years if the operator has achieved clean closure. During that period the operator or other responsible entity shall regularly inspect and maintain required revegetation. If there has been a release to the vadose zone or to ground water, then the operator shall comply with the applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC.

No response required.

F. Alternatives to re-vegetation. If the landowner contemplates use of the land where a cell or surface waste management facility is located for purposes inconsistent with re-vegetation, the landowner may, with division approval, implement an alternative surface treatment appropriate for the contemplated use, provided that the alternative treatment will effectively prevent erosion. If the division approves an alternative to re-vegetation, it shall not release the portion of the operator's financial assurance reserved for post-closure until the landowner has obtained necessary regulatory approvals and begun implementation of such alternative use.

Lea Land will comply with this requirement, and may implement alternative surface treatment based on feasibility analyses and OCD approval.

G. Surface waste management facility closure initiated by the division. Forfeiture of financial assurance.

(1) For good cause, the division may, after notice to the operator and an opportunity for a hearing, order immediate cessation of a surface waste management facility's operation when it appears that cessation is necessary to

protect fresh water, public health or the environment, or to assure compliance with statutes or division rules and orders. The division may order closure without first having a hearing in the event of an emergency, subject to Section 70-2-23 NMSA 1978, as amended.

No response required.

(2) If the operator refuses or is unable to conduct operations at a surface waste management facility in a manner that protects fresh water, public health and the environment; refuses or is unable to conduct or complete an approved closure and post closure plan; is in material breach of the terms and conditions of its surface waste management facility permit; or the operator defaults on the conditions under which the division accepted the surface waste management facility's financial assurance; or if disposal operations have ceased and there has been no significant activity at the surface waste management facility for six months the division may take the following actions to forfeit all or part of the financial assurance:

(a) send written notice by certified mail, return receipt requested, to the operator and the surety, if any, informing them of the decision to close the surface waste management facility and to forfeit the financial assurance, including the reasons for the forfeiture and the amount to be forfeited, and notifying the operator and surety that a hearing request or other response shall be made within 20 days of receipt of the notice; and

(b) advise the operator and surety of the conditions under which they may avoid the forfeiture; such conditions may include but are not limited to an agreement by the operator or another party to perform closure and post closure operations in accordance with the surface waste management facility permit conditions, the closure and post closure plan (including modifications or additional requirements imposed by the division) and division rules, and satisfactory demonstration that the operator or other party has the ability to perform such agreement.

Lea Land will collaborate with OCD concerning this requirement and does not foresee any instance in which the Facility will not be operated in compliance with the Permit or Permit Conditions.

(3) The division may allow a surety to perform closure and post closure if the surety can demonstrate an ability to timely complete the closure and post closure in accordance with the approved plan.

No response required.

(4) If the operator and the surety do not respond to a notice of proposed forfeiture within the time provided, or fail to satisfy the specified conditions for non-forfeiture, the division shall proceed, after hearing if the operator or surety has timely requested a hearing, to declare the financial assurance's forfeiture. The division may then proceed to collect the forfeited amount and use the funds to complete the closure and post closure, or, at the division's election, to close the

surface waste management facility and collect the forfeited amount as reimbursement.

(a) The division shall deposit amounts collected as a result of forfeiture of financial assurance in the oil and gas reclamation fund.

(b) In the event the amount forfeited and collected is insufficient for closure and post closure, the operator shall be liable for the deficiency. The division may complete or authorize completion of closure and post closure and may recover from the operator reasonably incurred costs of closure and post closure and forfeiture in excess of the amount collected pursuant to the forfeiture.

(c) In the event the amount collected pursuant to the forfeiture was more than the amount necessary to complete closure and post closure, including remediation costs, and forfeiture costs, the division shall return the excess to the operator or surety, as applicable, reserving such amount as may be reasonably necessary for post closure operations and re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC. The division shall return excess of the amount retained over the actual cost of post closure operations and re-vegetation to the operator or surety at the later of the conclusion of the applicable post closure period or when the site re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC is successful.

No response required. The conditions listed are not anticipated.

(5) If the operator abandons the surface waste management facility or cannot fulfill the conditions and obligations of the surface waste management facility permit or division rules, after notice and an opportunity for hearing, the state of New Mexico, its agencies, officers, employees, agents, contractors and other entities designated by the state shall have all rights of entry into, over and upon the surface waste management facility property, including all necessary and convenient rights of ingress and egress with all materials and equipment to conduct operation, termination and closure of the surface waste management facility, including but not limited to the temporary storage of equipment and materials, the right to borrow or dispose of materials and all other rights necessary for the surface waste management facility's operation, termination and closure in accordance with the surface waste management facility permit and to conduct post closure operations.

No response required. The conditions listed are not required.

19.15.36.19 EXCEPTIONS AND WAIVERS:

A. In a surface waste management facility permit application, the applicant may propose alternatives to requirements of 19.15.36 NMAC, and the division may approve such alternatives if it determines that the proposed alternatives will provide equivalent protection of fresh water, public health and the environment.

Lea Land is requesting alternatives to the requirements consistent with the flexibility provided for:

- *LFG Control requirements per 19.15.36.13.O NMAC (this **Volume**)*
- *Groundwater monitoring per 19.15.36.14.B(1-2) NMAC (**Volumes II.9** and **IV.2**)*
- *Geonet Detection and Drainage Layers per 19.15.36.14.C(3&5) NMAC (**Volume III.4**)*
- *Final Cover per 19.15.36.14.C(8) NMAC (**Volume III.4**)*
- *Bird Control Alternatives per 19.15.36.13.I and 19.15.36.17.C(3) NMAC (**Volume II.6**)*
- *Intermediate cover stabilization per 19.15.36.14.A(7) NMAC (**Attachment II.4.A**)*
- *Final cover stabilization per 19.15.36.18.C(2)(b) NMAC (**Attachment II.4.A**)*
- *Base layer compacted soil per 19.15.36.14.C(1) NMAC (**Volume III.4**)*
- *Chimney drain per 19.15.36.14.C(5&6) NMAC (**Volume III.4**)*

Demonstrations and justifications have been provided in the referenced sections and associated technical documentation.

B. The division may grant exceptions to, or waivers of, or approve alternatives to requirements of 19.15.36 NMAC in an emergency without notice or hearing. The operator requesting an exception or waiver, except in an emergency, shall apply for a surface waste management facility permit modification in accordance with Subsection C of 19.15.36.8 NMAC. If the requested modification is a major modification, the operator shall provide notice of the request in accordance with 19.15.36.9 NMAC.

Lea Land will comply with this requirement.

19.15.36.20 TRANSITIONAL PROVISIONS:

Existing permitted facilities. Surface waste management facilities in operation prior to the effective date of 19.15.36 NMAC pursuant to division permits or orders may continue to operate in accordance with such permits or orders, subject to the following provisions.

A. Existing surface waste management facilities shall comply with the financial assurance, operational, monitoring, waste acceptance and closure and post closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility.

B. The division shall not require financial assurance for a commercial facility permitted prior to the effective date of 19.15.36 NMAC that exceeds $250,000 until such time as:

(1) the division reviews the commercial facility's permit pursuant to Paragraph (3) of Subsection A of 19.15.36.12 NMAC, at which time the division may require the operator to submit a closure and post closure plan; which shall include a responsible third party contractor's cost estimate to complete closure and post closure of the surface waste management facility pursuant to the requirements of Subsections A through F of 19.15.36.18 NMAC:

(a) if the division determines that such estimate does not reflect a reasonable and probable closure and post closure cost, the division shall determine the estimated closure and post closure cost and shall provide its determination of estimated closure and post closure cost to the operator;

(b) if the operator disagrees with the division's determination of estimated closure and post closure cost, the operator may request a hearing, which shall be conducted according to 19.15.4 NMAC; or

(2) the commercial facility applies for a major modification.

C. Major modification of an existing surface waste management facility and a new landfarm cells constructed at an existing surface waste management facility shall comply with the requirements provided in 19.15.36 NMAC.

Lea Land LLC is an existing Surface Waste Management Facility, in operation prior to the effective date of 19.15.36 NMAC that is continuing to operate in accordance with its current permit and the requirements of 19.15.36.20.A. This Application proposes the Modification to expand the Landfill; as well as add oilfield waste processing capabilities. In accordance with 19.15.36.20.B(2) the major modification of this permit addressed by this Application will require a review of the financial assurance provided. This review is provided in the Closure/Post-Closure Plan included as ***Volume II.4****.*

ATTACHMENT I.A
PUBLIC NOTIFICATION

NOTICE OF APPLICATION
LEA LAND LLC (LEA LAND) – SURFACE WASTE MANAGEMENT FACILITY

Pursuant to 19.15.36, Oil Conservation Division Surface Waste Management Facilities regulations, Lea Land LLC (Lea Land) is providing notice that the Oil Conservation Division (OCD) has completed its technical review of the Application for a commercial waste management facility (i.e., Lea Land Facility). OCD has tentatively decided on Permit Approval (with conditions), and will be posting this decision along with the draft Permit on its website [*http://www.emnrd.state.nm.us/OCD/env-draftpublicetc.html*]

1. **Applicant's name and address**: Lea Land LLC, 1300 W. Main St., Oklahoma City, OK, 73106; Telephone: 405.236.4257.

2. **Facility location and address**: The Lea Land Facility is located approximately 27 miles east of Carlsbad, straddling US 62 at milepost marker 32 in Lea County, NM. The Lea Land site is comprised of a 642-acre ± tract of land comprising Section 32, Township 20 South, Range 32 East, in Lea County, NM. The Surface Waste Management Facility footprint will comprise 463 acres ± of the Lea Land site.

3. **Brief description of surface waste management facility**: The Lea Land Facility will include a liquid oil field waste Processing Area (82 acres ±) and an oil field waste Landfill (100 acres ±), and related infrastructure (118 acres±). At full build-out, the Processing Area may include an oil treatment facility consisting of an estimated 8 produced water load-out points, 12 produced water receiving tanks, 48 produced water settling tanks, 12 evaporation ponds, 5 crude oil recovery tanks, and 5 oil sales tanks; as well as 1 stabilization and solidification area; and a customer jet wash (8 bays). The Landfill disposal footprint is 100 acres ± with a waste capacity (gross airspace) of approximately 14.6 million cubic yards. In addition, various support facilities, including: a Scalehouse, waste acceptance/security features, roads, emergency shower and eyewash station, and stormwater detention basins are included with the Lea Land Facility footprint.

4. **Depth and quality of shallowest aquifer**: Based upon information projected from water wells in the region of the Lea Land site, as well as on-site monitoring wells, the shallowest potential subsurface water in the vicinity is within the Dewey Lake Redbeds, the saturated zones for which are approximately 180 feet (ft) below ground surface (bgs) at the Lea Land site. In addition, the Lea Land site characterization boring investigation results demonstrate that no shallow water is present above a depth of 180 ft bgs at any of the boring locations, and is produced in very small quantities (i.e., limited recharge). The on-site monitor wells are completed within the Dewey Lake Redbeds. Chemical analyses from these wells generally indicate a total dissolved solids concentration of approximately 800 milligrams per liter (mg/L) and a sulfate concentration of approximately 400 mg/L.

5. **The Division's Proposed Decision**: (with conditions as appropriate) is made available on the Division's website [*http://www.emnrd.state.nm.us/OCD/announcements.html*]; and can be requested from the Division Clerk at:
   Ms. Adrienne Sandoval
   Oil Conservation Division
   1220 S. St. Francis Drive
   Santa Fe, NM 87505
   505.476.3441
   Interested parties may contact Mr. Jim Griswold, Bureau Chief, Oil Conservation Division at (505) 476-3465 or via email at jim.griswold@state.nm.us for further information.

6. The following list is a description, approved by the Division, of **alternatives, exceptions** or waivers in accordance with 19.15.36.18(E) NMAC *"Closure and Post Closure"* or 19.15.36.19 NMAC *"Exceptions and Waivers"*:
   A. In a surface waste management facility permit application, the applicant may propose alternatives to requirements of 19.15.36 NMAC, and the

division may approve such alternatives if it determines that the proposed alternatives will provide equivalent protection of fresh water, public health and the environment.

Lea Land is requesting alternatives to the requirements consistent with the flexibility provided for:

- *LFG Control requirements per 19.15.36.13.O NMAC (this **Volume**)*
- *Groundwater monitoring per 19.15.36.14.B(1-2) NMAC (**Volumes II.9** and **IV.2**)*
- *Geonet Detection and Drainage Layers per 19.15.36.14.C(3&5) (**Volume III.4**)*
- *Final Cover per 19.15.36.14.C(8) NMAC (**Volume III.4**)*
- *Bird Control Alternatives per 19.15.36.13.I and 19.15.36.17.C(3) NMAC (**Volume II.6**)*
- *Intermediate cover stabilization per 19.15.36.14.A(7) NMAC (**Attachment II.4.A**)*
- *Final cover stabilization per 19.15.36.18.C(2)(b) NMAC (**Attachment II.4.A**)*
- *Base layer compacted soil per 19.15.36.14.C(1) NMAC (**Volume III.4**)*
- *Chimney drain per 19.15.36.14.C(5&6) NMAC (**Volume III.4**)*

Demonstrations and justifications have been provided in the referenced sections and associated technical documentation.

7. The procedures for requesting a hearing on the Application are outlined in 19.15.4 NMAC, as enumerated below:

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 4 ADJUDICATION

19.15.4.1 ISSUING AGENCY: Oil Conservation Commission.
[19.15.4.1 NMAC - Rp, 19.15.14.1 NMAC, 12/1/2008; A, 6/26/2018]

19.15.4.8 INITIATING AN ADJUDICATORY HEARING:

A. The division, attorney general, an operator or producer or other person with standing may file an application with the division for an adjudicatory hearing. The director, upon receiving a division examiner's recommendation, may dismiss an application for an adjudicatory proceeding upon a showing that the applicant does not have standing. The person applying for the hearing or an attorney representing that person shall sign the application requesting an adjudicatory hearing. The application shall include:

(1) the applicant's name;

(2) the applicant's address, or the address of the applicant's attorney, including an e-mail address and fax number if available;

(3) the name or general description of the common source or sources of supply or the area the order sought affects;

(4) briefly, the general nature of the order sought;

(5) a proposed legal notice for publication; and

(6) any other matter division rules or a division order requires.

B. Applicants for adjudicatory hearings shall file written applications with the division clerk at least 30 days before the application's scheduled hearing date.
[19.15.4.8 NMAC - Rp, 19.15.14.1206 NMAC, 12/1/2008]

TABLE I.A - Surface Owners of Record within 1/2-mile of the Site[1,2]

OWNER	UPC	ADDRESS	CITY	STATE	ZIP
Lea Land LLC	--	1300 W. Main St.	Oklahoma City	OK	73106
Lea Land Inc	--	1300 W. Main St.	Oklahoma City	OK	73106
Enviro American Inc	--	1300 W. Main St.	Oklahoma City	OK	73106
County of Eddy	4186120075144	55 Buffalo Grass Road	Loco Hills	NM	88255
BES Properties LLS	4186120281432	502 E. Center Avenue	Carlsbad	NM	88220
Titan Lansing Transloading LLC	4186120363141	PO Box 3860	Lubbock	TX	79452
Intrepid Potash New Mexico LLC	4183121131398	1001 17th Street, Suite 1050	Denver	CO	80202
	4183121264666				
	4183121396398				
Controlled Recovery, Inc;	4000401630001	1235 North Loop West, Suite 205	Houston	TX	77008
Harding & Carbone Inc	4000401630002				
Transwestern Pipeline Co	4000901220001	1900 Dalrock Road	Rowlett	TX	75088
Bureau of Land Management[3]	NA[6]	620 E. Greene St.	Carlsbad	NM	88220
Lea County Commissioners[4]	NA[6]	100 N. Main Avenue, Suite 4	Lovington	NM	88260
Lea County Manager[4]	NA[6]	100 N. Main Avenue, Suite 4	Lovington	NM	88260
Eddy County Manager[5]	NA[6]	101 West Greene Street	Carlsbad	NM	88220
Eddy County Comissioners[5]	NA[6]	101 West Greene Street	Carlsbad	NM	88220
New Mexico State Land Office[5]	NA[6]	P.O. Box 1148	Santa Fe	NM	87504-1148

Notes:

[1] Lea County, NM data obtained from: http://emaps.emapsplus.com/standard/leaconm.html

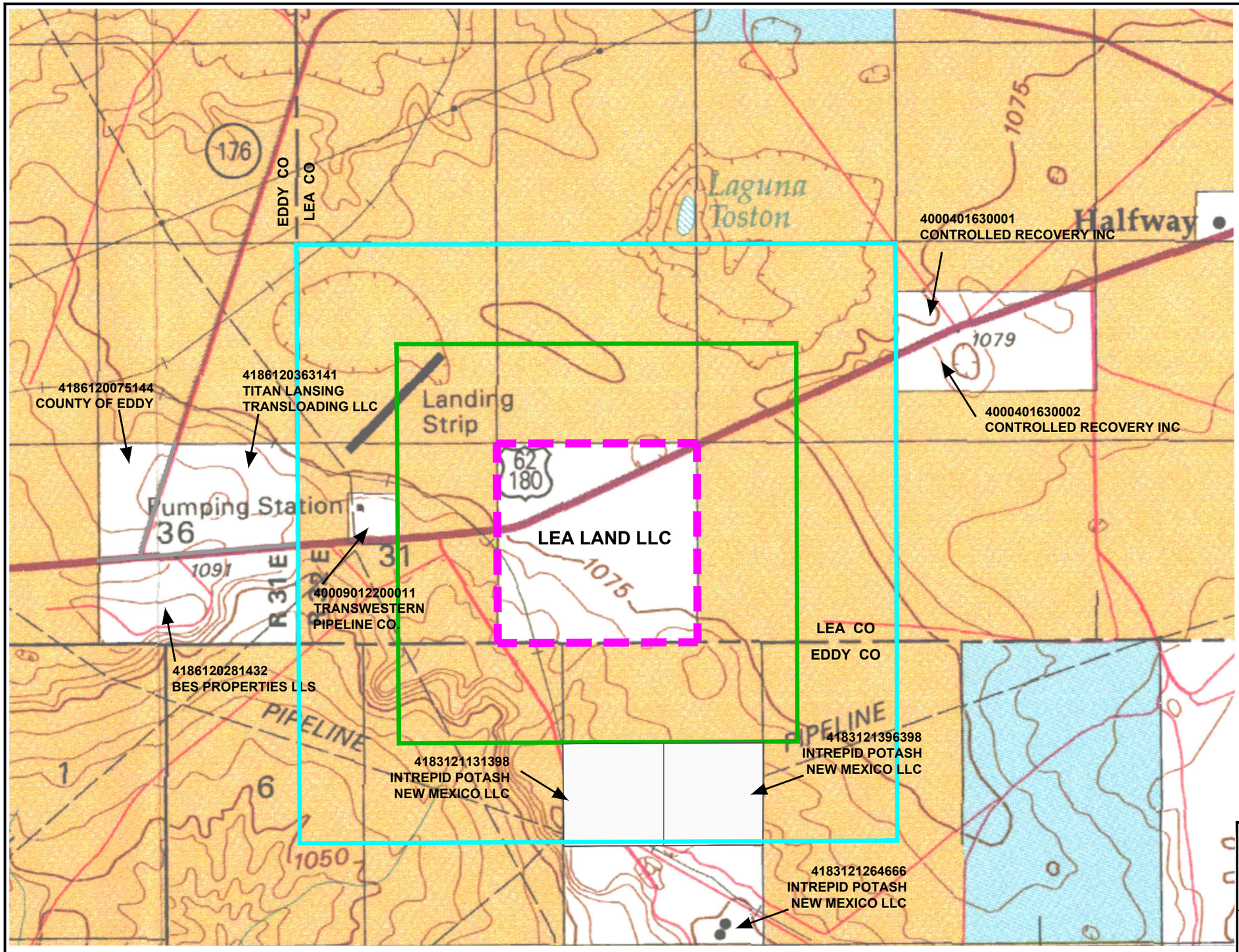
[2] Eddy County, NM data obtained from: https://portico.mygisonline.com/html5/?viewer=eddynm

[3] Surface owner of record within 1/2-mile of Lea Land LLC site.

[4] County Government of the county in which Lea Land LLC is located (Lea County).

[5] Notice sent as courtesy.

[6] NA - Notified party is not associated with a specific Parcel Code (i.e., UPC).



LEGEND

- SITE LOCATION
- PUBLIC LANDS AND MONUMENTS (ADMIN. BY BLM)
- STATE LANDS
- PRIVATE LANDS
- 1/2 MILE RADIUS (PUBLIC NOTICE)
- 1 MILE RADIUS

4000401630001 UPC CODE
COUNTY OF LEA OWNER NAME

NOTES:

1) LAND OWNERSHIP DATA PROVIDED BY THE LEA COUNTY ASSESSORS OFFICE AND IS CURRENT AS OF JANUARY, 2019 (HTTP://EMAPS.EMAPSPLUS.COM/STANDARD/LEACONM.HTML).

2) LAND OWNERSHIP DATA PROVIDED BY THE EDDY COUNTY ASSESSORS OFFICE AND IS CURRENT AS OF JANUARY, 2019. (HTTP://PORTICO.MYGISONLINE.COM)

3) LAND OWNERSHIP MAP DERIVED FROM THE HOBBS BLM EDITION 2001 SURFACE MANAGEMENT STATUS 1:100,000 SCALE.

NORTH

0 .25 MILE .5 MILE

ONE AND 1/2 MILE RADII MAP

LEA LAND LLC SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

GORDON ENVIRONMENTAL PSC
333 Rio Rancho Blvd. NE
Rio Rancho, NM 87124
Phone: 505-867-6990
Fax: 505-867-6991

DATE: 01/08/2019	CAD: HALF MILE.dwg	PROJECT #: 0416.18
DRAWN BY: DMI	REVIEWED BY: CRK	ATTACHMENT I.A.3
APPROVED BY: CWF	www.team-psc.com	

Drawing:X:\2018\0416.18\02_DSGN\02_DWG\050_CIVIL\02_CONTENT\PERMIT FIGURES\HALF MILE RADIUS MAP NEW.dwg
Date/Time:Mar. 29, 2019-07:57:29 ; LAYOUT: B (LS)

ATTACHMENT I.B

FINANCIAL ASSURANCE

(TO BE PROVIDED UPON PERMIT APPROVAL)

ATTACHMENT I.C
SURVEY PLAT – MARCH 2019
BASIN SURVEYS, HOBBS, NM

CLAIM OF EXEMPTION - LEA COUNTY
LEA LAND DIVISION
SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

LEGAL DESCRIPTION TRACT "A"

A TRACT OF LAND LOCATED IN SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE NORTHEAST CORNER OF SAID SECTION 32; THENCE S.00°19'08"E. ALONG THE EAST LINE OF THE NORTHEAST QUARTER, A DISTANCE OF 257.83 FEET; THENCE S.65°22'55"W., 2509.49 FEET; THENCE S.00°03'04"W., 2924.72 FEET; THENCE S.89°56'56"E., 827.04 FEET; THENCE N.00°03'04"E., 1387.67 FEET; THENCE S.89°56'56"E., 1470.16 FEET TO A POINT ON THE EAST LINE OF THE SOUTHEAST QUARTER; THENCE S.00°20'08"E. ALONG THE EAST LINE OF THE SOUTHEAST QUARTER, A DISTANCE OF 2440.28 FEET TO A POINT BEING THE SOUTHEAST CORNER OF SAID SECTION 32; THENCE S.89°44'36"W. ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER, A DISTANCE OF 2645.92 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 32; THENCE S.89°43'51"W. ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER TO A POINT BEING THE SOUTHWEST CORNER OF SAID SECTION 32; THENCE N.00°20'12"W. ALONG THE WEST LINE OF THE SOUTHWEST QUARTER, A DISTANCE OF 2640.82 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 32; THENCE N.00°16'08"W. ALONG THE WEST LINE OF THE NORTHWEST QUARTER, A DISTANCE OF 2648.17 FEET TO A POINT BEING THE NORTHWEST CORNER OF SAID SECTION 32; THENCE N.89°47'52"E. ALONG THE NORTH LINE OF THE NORTHWEST QUARTER, A DISTANCE OF 2643.55 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 32; THENCE N.89°48'52"E. ALONG THE NORTH LINE OF THE NORTHEAST QUARTER, A DISTANCE OF 2646.15 FEET TO THE POINT OF BEGINNING. SAID TRACT OF LAND CONTAINING 507.37 ACRES, MORE OR LESS.

LEGAL DESCRIPTION TRACT "B"

A TRACT OF LAND LOCATED IN SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EAST SECTION LINE WHICH LIES S.00°19'08"E., 257.83 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 32; THENCE S.00°19'08"E. ALONG THE EAST LINE OF THE NORTHEAST QUARTER, A DISTANCE OF 2384.68 FEET TO A POINT BEING THE EAST QUARTER CORNER OF SAID SECTION 32; THENCE S.00°20'08"E. ALONG THE EAST LINE OF THE SOUTHEAST QUARTER, A DISTANCE OF 199.83 FEET; THENCE N.89°56'56"W., 1470.16 FEET; THENCE S.00°03'04"W., 1387.67 FEET; THENCE N.89°56'56"W., 827.04 FEET; THENCE N.00°03'04"E., 2924.72 FEET TO A POINT ON THE SOUTH RIGHT OF WAY OF U.S. HIGHWAY 62/180; THENCE N.65°22'55"E. ALONG THE SOUTH RIGHT OF WAY OF U.S. HIGHWAY 62/180, A DISTANCE OF 2509.49 FEET TO THE POINT OF BEGINNING. SAID TRACT OF LAND CONTAINING 134.73 ACRES, MORE OR LESS.

SAID TRACT BEING DIVIDED WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS THEREOF SURVEYED AND SUBDIVIDED ACCORDING TO THE TRACTS AS THEY APPEAR HEREON.

IN WITNESS WHEREOF, THE UNDERSIGNED OWNERS OF SAID LAND, HAVE SET THEIR HAND THIS ___ DAY OF _____, 2019 AD.

_____
??????????
LEA LAND, INC.

STATE OF NEW MEXICO
COUNTY OF LEA } ss

ON THIS ___ DAY OF _____, 2019, BEFORE ME PERSONALLY APPEARED ?????? KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THAT THEY THE SAME AS THEIR FREE ACT AND DEED.

WITNESS MY HAND AND OFFICIAL SEAL THE DAY AND YEAR LAST ABOVE WRITTEN.

My Commission Expires _____ _____
Notary Public

CERTIFICATE OF APPROVAL OF EXEMPTION TO SUBDIVISION REGULATIONS BY LEA COUNTY

PURSUANT TO LEA COUNTY REGULATIONS, SECTION 7.5 (1997) THE PLAT AND CLAIM OF EXEMPTION MEET THE CRITERIA FOR THE DIVISION OF LAND RESULTING ONLY IN THE ALTERATION OF PARCEL BOUNDARIES WHERE PARCELS ARE ALTERED FOR THE PURPOSE OF INCREASING OR REDUCING THE SIZE OF CONTIGUOUS PARCELS AND WHERE THE NUMBER OF PARCELS IS NOT INCREASED. AND IS APPROVED FOR A CLAIM OF EXEMPTION ON THIS ___ DAY OF _____, 2019 AD.

LEA COUNTY, NEW MEXICO

BY: _____

COREY NEEDHAM, DESIGNEE

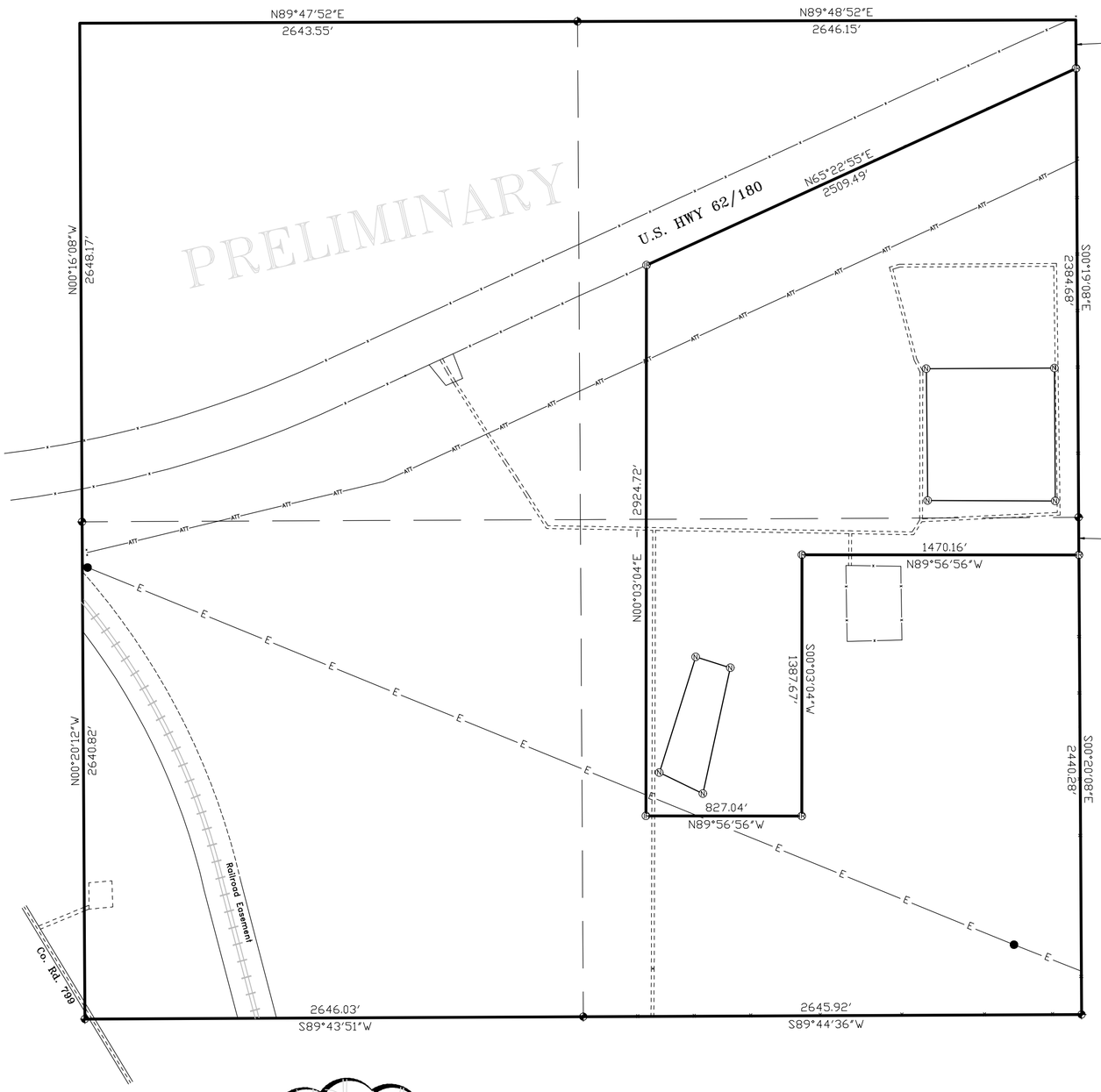
STATE OF NEW MEXICO
COUNTY OF LEA } ss

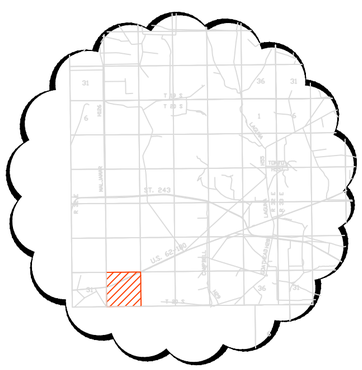
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ___ DAY OF _____ 2019 BY COREY NEEDHAM.

MY COMMISSION EXPIRES _____ _____

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE. THIS SURVEY IS A SUBDIVISION OF LAND AND IS BEING PROCESSED USING COUNTY OF LEA'S "CLAIM OF EXEMPTION" PROCESS.

_____
GARY L. JONES NM PS No. 7977 Dated: 06-12-2018





LEGEND
- ⊕ – FOUND BRASS CAP
- Ⓝ – SET NAIL
- Ⓡ – SET 1/2" REBAR
- ● – UTILITY POLE
- ——X—— – FENCE
- ——E—— – O-H POWER LINE

NOTE:

1)COORDINATES AND BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM (NAD 83), NEW MEXICO SOUTHEAST AND DISTANCES ARE OF SURFACE VALUE. MEASURED BEARINGS SHOWN ARE STATE PLANE.

2)UTILITIES , BURIED AND ABOVE GROUND, MAY EXIST ON THESE TRACTS AND ARE NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE OWNER TO ASCERTAIN THEIR LOCATION. PRIOR TO ANY CONSTRUCTION, "ONE-CALL" MUST BE NOTIFIED. DRAIN PATHS ARE NOT SHOWN ON THIS DRAWING.

3)COUNTY ROAD J-2 (MADERA ROAD) IS A CALICHE ROAD MAINTAINED BY THE COUNTY OF LEA.

500 0 500 1000 FEET
SCALE 1" = 500'

Prepared by:
BASIN SURVEYS
1120 N. West County Rd.
Hobbs, New Mexico 88240
Ph: (575)393-7316 Fax: (575)392-2206

File: KJC - LEA LAND | Date: 04-01-2019

STATE OF NEW MEXICO
COUNTY OF LEA
FILED

_____, 2019

AT_____O'CLOCK_____M

AND RECORDED IN BOOK_____

PAGE_____

KEITH MANES, LEA COUNTY CLERK

BY_____DEPUTY