

NM1 - _____63_____

**PERMITS,
RENEWALS,
& MODS**

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

David R. Catanach
Director, Oil Conservation Division



August 17, 2017

Roger Johnson
OWL Landfill Services, LLC
8214 Westchester Drive, Suite 850
Dallas, Texas 75225

RE: Commercial Surface Waste Management Facility Permit NM1-63. Section 23, Township 24 South, Range 33 East NMPM, Lea County, New Mexico

Mr. Johnson,

Pursuant to applicable parts of the Oil Conservation Commission regulations 19.15.36 NMAC, the Oil Conservation Division (OCD) has completed its review of your application for a commercial waste management facility at the location described above. OCD hereby approves permit NM1-63 with conditions. Attached are the general and specific conditions.

If you have any questions, please contact Jim Griswold of my staff at (505) 476-3465 or by email at jim.griswold@state.nm.us. On behalf of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this permit review.

Respectfully,

David R. Catanach
Director

DC/jg

Attachment – NM1-63 Permit Conditions

**SURFACE WASTE MANAGEMENT FACILITY PERMIT CONDITIONS
NM1-63**

**OWL Landfill Services, LLC
Section 23, Township 24 South, Range 33 East NMPM**

August 17, 2017

Upon confirmation OWL Landfill Services, LLC of 8214 Westchester Drive, Suite 850 Dallas, Texas 75225 (the operator) has provided financial assurance required under Section 1.H of this permit, the operator is permitted to construct and operate a surface waste management facility as described in the Application filed by the operator and in accordance with (a) the terms of this Permit, (b) the rules governing solid waste management facilities 19.15.36 NMAC, and (c) all other applicable provisions of the Oil and Gas Act and the rules promulgated under the Act. The operator is responsible for insuring any oil and gas operations located within the overall facility area do not interfere with the proper operation of the facility as described in the Application and authorized by this Permit. Any change to the operations proposed or any change to the area covered will require a modification to the Permit including any necessary changes to the amount of financial assurance. The Oil Conservation Division (OCD) of the Energy, Minerals, and Natural Resources Department will determine if any Permit changes constitute a "major modification" under 19.15.36 NMAC.

1. GENERAL PROVISIONS

A. Permittee and Permitted Facility. OCD issues surface oil field waste management permit NM1-63 to OWL Landfill Services, LLC (operator), 8214 Westchester Drive, Suite 850 Dallas, Texas 75225 for the construction, operation, and eventual closure of a commercial facility to be located upon a 560 acre tract in an unincorporated portion of Lea County, New Mexico approximately 21 miles northwest of Jal.

The waste management facility is intended for the permanent disposal of exempt and non-exempt/non-hazardous oil field waste and will include a processing area on 81 acres and a landfill on 224 acres. The remaining 255 acres incorporates associated infrastructure and buffer areas. The landfill will have a waste capacity of approximately 38 million cubic yards.

B. Scope of Permit. OCD regulates the disposition of water produced or used in connection with the exploration and production of oil and gas and to direct disposal of that water in a manner which will afford reasonable protection against contamination of fresh water supplies pursuant to authority granted in the Oil & Gas Act (Chapter 70, Article 2 NMSA 1978). Under that Act, OCD also regulates the disposition of nondomestic wastes resulting from exploration, production, or storage of crude oil and natural gas to protect public health and the environment. Similarly, OCD regulates the disposition of nondomestic wastes resulting from the oil field service industry, the transportation of crude oil and natural gas, the treatment of natural gas, and the refinement of crude oil to protect public health and the environment pursuant to jurisdiction and authority granted by the same Act.

This permit does not convey any property rights of any sort or any exclusive privilege to the operator and does not authorize any injury to property or persons, any invasion of other private rights, or any infringement of state, federal, or local laws, rules, or regulations.

C. Owner/Operator Commitments. The operator must ensure all operations are consistent with the terms and conditions of this permit and in conformance with all pertinent rules and regulations under the Oil & Gas Act. Furthermore, the operator shall abide by the approval conditions contained herein, along with all commitments submitted in its permit application of October 13, 2016 including any attachments and/or amendments all of which are incorporated into this Permit by reference.

D. Modifications. The operator must notify the OCD in advance of any increase in the land area the facility occupies, any change in the design capacity, any change in the nature of the oil field waste streams,

or addition of a new treatment process. As a result, the OCD Director may require a modification in the permit conditions.

E. Definitions. Terms not specifically defined in the permit shall have the same meanings as those in the Oil & Gas Act or the rules adopted pursuant to the Act, as the context requires.

F. General Performance Standards. The operator must operate in accordance with the permit conditions, comply with the Oil & Gas Act and rules issued pursuant to the Act, protect public health and the environment, prevent the waste of oil and gas, and prevent the contamination of fresh waters.

G. Effective Date, Expiration, Renewal, and Penalties for Operating Without a Permit. This permit is effective as of August 17, 2017 and will expire ten years hereafter on August 17, 2027. If it so desires, the owner/operator may submit an application for renewal to OCD no later than 120 calendar days before the expiration date. If the operator submits such a renewal application before the required date and is in compliance with the existing permit, then that existing permit will not expire until the OCD approves or denies the renewal application. Operating with an expired permit will subject the owner/operator to civil and/or criminal penalties (see Section 70-2-31 NMSA 1978).

H. Financial Assurance. The operator has provided financial assurance in a form acceptable to OCD for the waste management facility's estimated closure and post-closure cost. The estimated amount currently required is \$1,807,314.00 which includes the cost of closure construction and post-closure operations for Phase I described in the application. On an annual basis, or should unforeseen conditions arise, the operator will update the closure/post-closure estimate and thus the amount of financial assurance.

2. GENERAL FACILITY OPERATIONS

A. Labeling. The operator must clearly label all tanks, drums, and other containers to identify the contents along with other emergency notification information. The operator may use a tank coding system if it is incorporated into their emergency response planning.

B. Inspections and Maintenance of Secondary Containment Systems. The operator must inspect all secondary containment systems and sumps at least monthly to ensure proper operation and to prevent over filling or system failure. The operator must empty all secondary containment systems of any fluids within 48 hours of discovery, notify the OCD, and initiate corrective actions. The operator must keep written records of its inspections and of any fluid analyses. The operator shall maintain and make the documentation available for OCD inspection.

C. Release Reporting and Corrective Action for Releases. The operator must comply with the spill reporting and corrective action provisions of the Oil & Gas Regulations (19.15.29 and 19.15.30 NMAC) as may be amended from time to time.

D. Annual Report. The operator must submit an annual report to the OCD by September 1st of each year providing the following information for the preceding year: 1) all inspection forms including those for leak detection systems along with analytical results, 2) hydrogen sulfide monitoring results, 3) process piping integrity test results, 4) training records, 5) complaint logs and resolutions, and 6) a summary of the nature and amount of any reportable releases.

3. MATERIAL STORAGE

A. Process, Maintenance, and Material Storage Areas. The operator must pave and curb all process, maintenance, and material storage areas at the facility excluding evaporation ponds, below-grade tanks, and sumps, or incorporate another appropriate spill collection device for these areas approved by the OCD.

B. Above Ground Tanks. The operator must place above ground tanks on impermeable pads and surround the tanks with lined berms or other impermeable secondary containment system having a capacity of at least one and one-third times the capacity of the largest tank, or the combined volume of any interconnected tanks. This does not apply to tanks containing fresh water.

4. WASTE MANAGEMENT

A. Waste Streams. This permit authorizes the operator to handle the RCRA exempt streams. OCD approval must be obtained to receive any waste stream not specified in its application prior to collection, storage, treatment, or disposal.

B. Waste Storage. The operator must store wastes at the facility only in clearly marked storage areas that have been specified in the application except any waste that may be generated during emergency response operations. However, such emergency waste may be stored elsewhere for no more than 72 hours. OCD may approve additional storage on a case-by-case basis.

The operator must not store non-oil field waste generated at the facility by the operator for more than 180 calendar days from the date any container is filled without OCD approval.

C. Class V Wells. Leach fields and other wastewater disposal systems at OCD-regulated facilities which inject non-hazardous fluids into or above an underground source of drinking water are Underground Injection Control Class V wells pursuant to 20.6.2.5002 NMAC. This permit does not authorize the use of a Class V injection well for the disposal of industrial waste at the facility. Other Class V wells, including wells used only for the injection of domestic wastes, must be permitted by the New Mexico Environment Department.

5. BELOW GRADE TANKS AND SUMPS

Below grade tanks and sumps must have secondary containment systems with leak detection and meet construction and operating requirements of 19.15.17 NMAC.

6. ADDITIONAL FACILITY-SPECIFIC CONDITIONS

A. Prior to construction activities within the facility, the operator shall determine that all abandoned oil wells within the area are properly plugged in accordance with OCD regulations. If any wells are found to be unplugged or improperly plugged, the operator shall take the appropriate corrective actions.

B. Naturally Occurring Radioactive Material (NORM) waste cannot be accepted at the facility unless in compliance with 19.15.35 NMAC.

C. At least 30 days prior to the start of construction of the landfill, evaporation ponds, stabilization and solidification area, or process area the operator shall furnish OCD with a complete set of construction drawings including a major milestone schedule for construction. These construction drawings must substantially comply with the engineering design provided with the application and provide a detailed description of processes and equipment for the process area. The major milestone schedule shall be regularly updated throughout construction activities.

D. If disposal wells are incorporated into facility operations at a later date, those wells must be separately permitted under provisions of the New Mexico Underground Injection Control program.

E. A list of emergency coordinators and their contact information shall be provided to the OCD by the operator before waste can be accepted into the facility.

F. Given the significant depth to the uppermost aquifer beneath the facility along with the interceding presence of low permeability material, a groundwater monitoring program relative to that aquifer (19.15.36.14 B NMAC) is not herein required. However, as provided in the application, the operator shall monitor the vadose zone within a group of wells for the presence and quality of water that might emanate from the facility or otherwise appear as the result of stormwater infiltration. In addition to the five wells described within the application, the operator shall install an additional five vadose zone monitoring wells at locations as follows: one well adjacent to the on-site McCoy water supply well; two wells along the western facility boundary; and two wells in the vicinity of the proposed evaporation ponds. The operator shall install all vadose zone monitoring wells before any waste is accepted into the facility. The actual locations of these wells may be modified based upon conditions encountered during drilling. The operator shall monitor the vadose zone monitoring wells at least semiannually for the presence of liquids along with gaseous hydrogen sulfide and methane. If liquids or gases are found to be present, the operator shall notify the OCD immediately. If liquids are present, the operator shall also gather representative samples. All groundwater samples must also be analyzed by EPA Method 8260 (full list) for volatile organic compounds in addition to those parameters outlined in the application.

G. The operator shall monitor the leak detection sumps for the presence of liquids at least monthly. If liquids are present, the operator shall notify the OCD immediately and shall sample and test the liquid as directed by the OCD.

H. Based upon the nature of the waste material and the lack of internal moisture or oxygen, the operator in its application has stated the production of landfill gas should be negligible and thus no gas control system is required. However, continuous hydrogen sulfide monitors with a 10 ppm alarm threshold will be located where incoming waste is unloaded, around the disposal cells, at the treating plant, around the evaporation ponds, and at the facility boundary. If OCD determines landfill gases are unreasonably problematic, a gas control system/plan will need to be implemented with OCD approval. The hydrogen sulfide contingency plan provided as part of the application does not contain the radius of potential exposure. The operator shall provide this information including the supporting calculations as soon as possible and before facility construction begins.

I. The operator has proposed an alternative landfill design which incorporates:

- a geosynthetic clay liner rather than two feet of clay soil with a hydraulic conductivity of 1×10^{-7} cm/sec as the base layer described in 19.15.36.14 C (1) NMAC
- a geonet in lieu of two feet of compacted soil with a saturated hydraulic conductivity of 1×10^{-5} cm/sec within the leak detection portion described in 19.15.36.14 C (3) NMAC
- a geonet rather than the compacted soil with a hydraulic conductivity of 1×10^{-2} cm/sec within the leachate collection and removal portion described in 19.15.36.14 C (5) NMAC
- and an evapotranspiration layer for the top landfill cover thereby eliminating the barrier layer described in 19.15.36.14 C (8) NMAC.

The OCD hereby approves these alternatives as they are supported by numeric modeling provided within the application as allowed under 19.15.36.14 C (9) NMAC and appear to provide equivalent protection of fresh water, public health and the environment.

J. The operator in its application requested an exception to 19.15.36.13 I NMAC with respect to the protection of migratory birds. That exception is hereby granted. Rather than installing netting over the evaporation ponds, the owner/operator shall remove all oil from the water prior to discharge to the ponds and undertake daily inspections of the ponds for the presence of either oil or birds. Any oil found on the ponds will be removed immediately. If a consistent bird presence is noted, the operator will be required to implement more aggressive protective actions which may include the use of netting or screens.