

State of New Mexico
Energy, Minerals and Natural Resources Department

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David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1616
February 8, 2016

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Mescalero Energy, LLC (the "operator") seeks an administrative order to authorize the McCasland SWD No. 1 with a location 877 feet from the South line and 2412 feet from the East line, Unit letter O of Section 6, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, for the commercial disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8(B) NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified. One objection was received, but was resolved through negotiation. The agreed resolution of the objection have been incorporated in this order as conditions for approval. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Mescalero Energy, LLC (OGRID 370198), is hereby authorized to utilize its McCasland SWD No. 1 (API No. 30-025-Pending) with a location 877 feet from the South line and 2412 feet from the East line, Unit letter O of Section 6, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, for commercial disposal of oil field produced water (UIC Class II only) through an open-hole interval within the San Andres formation from 4206 feet to 4956 feet below surface. Injection shall occur through 4½-inch or smaller, internally-coated tubing and a packer set a maximum of 100 feet above the base of the casing shoe at the top of the open hole.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application, and, if necessary, as determined by the District Supervisor.

Hydrocarbon Potential Assessment: The operator shall complete a geophysical log suite over the permitted disposal interval that includes open-hole logs (at a minimum, gamma ray and compensated neutron logs) along with a mudlog. The operator shall prepare a written evaluation

report that includes the following information:

- (a) a summary of drilling conditions noting any hydrocarbon shows in the permitted disposal interval and any well testing (including results of any formation water analysis) performed to assess the hydrocarbon shows;
- (b) a summary of any present and historical production in the same formation within two-mile radius of the well;
- (c) an appraisal of the economic viability of any hydrocarbon occurrences encountered during drilling in the permitted disposal interval;
- (d) copies of all geophysical logs and mudlogs obtained during the drilling of the subject well; and
- (e) the report shall include an estimated insitu water salinity based on open-hole logs.

The report shall be submitted for review to the Bureau of Land Management (BLM), Carlsbad Field Office, and a copy provided to the Engineering Bureau, Santa Fe. Injection shall not commence until the Engineering Bureau, Santa Fe, has received written approval from a representative of the BLM accepting the conclusions of the operator's evaluation report.

If significant hydrocarbon shows occur while drilling or if there is sufficient evidence in the geophysical logs to demonstrate the presences of hydrocarbon in the injection interval, the operator shall conduct a swab test that shall last 24 hours and includes a formation water sample that is to be tested for hydrocarbon content. The operator will notify the Division's District Office I and the BLM of any plan to conduct such a test at least 48 hours in advance of commencing the test.

Final Approval of Well Construction: The operator shall provide a final well construction plan and diagram that includes modifications for casing and cement stipulated by the Bureau of Land Management as part of the Application for Permit to Drill.

The operator shall complete the listed corrective action for the following well within the Area of Review prior to commencing injection:

Mae F Curry Well No. 5 (API 30-025-35855)

Corrective Action: The operator shall emplace sufficient cement in the annulus of 4½-inch production casing to tie with the 5½-inch intermediate casing and circulate to surface. If the cement cannot be circulated to surface, then the operator shall run a cement bond log (CBL) for the 5½-inch casing showing the depth of the new top of cement. A copy of the CBL shall be submitted to the Santa Fe Bureau office and the District I office for review prior to commencing injection. All remedial work procedures shall be reviewed and approved by the District Supervisor.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11(A) NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 841 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. At the discretion of the supervisor of the Division's District I office, the operator shall install and maintain a chart recorder showing casing and tubing pressures during disposal operations.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this Order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this Order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the

requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



DAVID R. CATANACH
Director

DRC/prg

cc: Oil Conservation Division – Hobbs District Office
Bureau of Land Management – Carlsbad Field Office