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# **NOTICE**

# REQUEST FOR PUBLIC COMMENT ON DRAFT PERMIT TEMPLATE FOR UIC PRODUCED WATER DISPOSAL WELLS

# **JUNE 3, 2020**

OCD proposes to adopt a new Underground Injection Control ("UIC") Class II permit template for the approval of injection authority in disposal wells. The template applies only to new approvals for produced water disposal wells, and will not be used for other Class II wells, such as enhanced recovery and acid gas injection wells.

The template consolidates federal and state UIC requirements and clarifies the responsibilities of the permittee and the role of the agency. It will be accompanied by an order that includes the factual findings supporting issuance of the permit and the "SWD Number" to facilitate electronic tracking. OCD will use the template to approve produced water disposal wells in both the administrative review and hearing processes.

A new template is important for several reasons. OCD's existing template lacks basic terms and conditions, such as testing, recordkeeping, monitoring, reporting, inspections, and corrective action, that are required to ensure compliance with federal or state requirements, and to prevent waste and protect correlative rights, public health, and the environment.

The new template achieves the following benefits:

- 1. Improve the efficiency of the permit review and approval process.
- 2. Ensures compliance with federal requirements for the UIC program.
- 3. Establishes standard terms and conditions that prevent waste and protect correlative rights, public health, and the environment.
- 4. Establishes enforceable permit requirements, including provisions to address emergencies, such as induced seismicity and the contamination of drinking water supplies.

- 5. Provides clarity to OCD inspectors and permittees regarding enforceable requirements.
- 6. Facilitates the review and issuance of UIC permits, allowing OCD to focus on special issues related to a particular application.
- 7. Reduces OCD's drafting burden and potential errors and inconsistencies between permits.
- 8. Allows better tracking of compliance issues.
- 9. Simplifies the identification of compliance issues that must be reported to EPA.
- 10. Establishes a single template that can be used for applications reviewed in the administrative and hearing processes.

The template is reproduced below. OCD invites interested persons to submit public comments on the template by electronic mail to <a href="https://occ.nc.nc.us">OCD.Engineer@state.nm.us</a> no later than the close of business on Tuesday, June 24, 2020. The electronic mail must identify the subject as "Public Comment on Draft UIC Permit Template".

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

### UIC CLASS II PERMIT SWD-\_\_\_\_

| Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 et seq., ("Act") and its                   |
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| implementing regulations, 19.15.1 et seq. NMAC, ("Rules") and the federal Safe Drinking Wate    |
| Act, 42 U.S.C. 300f et seq., and its implementing regulations, 40 CFR 144 et seq., the Oi       |
| Conservation Division ("OCD") issues this Permit to ("Permittee") to                            |
| authorize the construction and operation of a well to inject produced water at the location and |
| under the terms and conditions specified in this Permit and Appendix A.                         |

#### I. GENERAL CONDITIONS

### A. AUTHORIZATION

- **1. Scope of Permit.** This Permit authorizes the injection of produced water into the well described on Appendix A ("Well"). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the "operator" of the Well as defined in 19.15.2.7(O)(5) NMAC.
  - a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water ("USDW") if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]
  - b. The wellhead injection pressure and daily injection volume for the Well shall not exceed the values identified in Appendix A.
  - c. Permittee shall not commence to drill the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill ("APD") pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]
  - d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.
  - e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.
  - f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

- **2. Notice of Commencement**. Permittee shall provide written notice on Form C-103 to OCD Engineering Bureau no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]
- 3. **Termination.** Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.
  - a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.
  - b. One year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

# B. DUTIES AND REQUIREMENTS

- 1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]
- 2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]
- **3. Duty to Mitigate Adverse Effects.** Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

- **4. Duty to Operate and Maintain Well and Facilities.** Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]
- **5. Duty to Provide Information.** In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]
- **6. Private Property.** This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]
- **7. Inspection and Entry.** Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:
  - a. Inspect the Well and associated facilities;
  - b. Have access to and copy any record required by this Permit;
  - c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
  - d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]
- **8.** Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]
  - **9. Financial Assurance.** Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

#### C. PRIOR TO COMMENCING INJECTION

#### 1. Construction Requirements.

a. Permittee shall construct the Well as described in the Application and as required by the Special Conditions.

- b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.
- **2. Tests and Reports**. Permittee shall complete the following actions prior to commencing injection in the Well.
  - a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.
  - b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the appropriate OCD district office and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of three hundred (300) feet above the next higher casing shoe.
  - c. If a liner is approved for the construction of the Well, Permittee shall run and submit to the appropriate OCD district office a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.
  - d. Permittee shall submit to the appropriate OCD district office the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau and obtain written approval prior to commencing injection into the Well.
  - e. Permittee shall obtain and submit to the appropriate OCD district office on a Form C-103 a bottom-hole pressure measurement representative of the completion in the approved injection interval.
  - f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD district office. [19.15.26.11(A) NMAC]
  - g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

#### D. OPERATION

### 1. Operation and Maintenance.

- a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]
- b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]
- c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.
- d. If OCD has reason to believe that operation of the Well is associated with an induced seismic event, Permittee shall, upon OCD's written request:
  - Take immediate corrective action including testing and evaluation of the injection interval and confining layers; suspend or reduce the approved maximum daily rate of injection and maximum surface injection pressure; and provide increased monitoring of the Well's operation; and
  - ii. Submit an application to modify the Permit to incorporate the corrective action, plug back the injection interval, and any related modification required by OCD.
- e. OCD may issue an emergency order or temporary cessation order as it deems necessary.

# 2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

- b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.
- **3. Mechanical Integrity.** Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.
  - a. MITs shall be conducted in accordance with 19.15.26 NMAC.
  - b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.
  - c. Permittee shall report the result of a MIT no later than two (2) business days after the test.
  - d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:
    - i. The Well fails a MIT; or
    - ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.
  - e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.
  - f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.
- **4. Additional Tests.** Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

#### 5. Records.

- a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]
- b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

- i. Date, place, and time of sample or measurement;
- ii. Person who took the sample or measurement;
- iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;
- iv. Description of method;
- v. Description of handling and custody procedures; and
- vi. Result of the analysis.

#### E. PLUGGING AND ABANDONMENT

- 1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.
- **2.** If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.
- 3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.
- **4**. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

## F. REPORTING

- 1. Monthly Reports. Permittee shall submit a report using Form C-115 on the 15<sup>th</sup> day of each month that for the previous month identifies the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC.]
- **2. Corrections.** Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

#### G. CORRECTIVE ACTION

**1. Releases**. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

- **2. Failures and Noncompliance.** Permittee shall report the following incidents to appropriate OCD district office verbally and by e-mail no later than 24 hours after such incident:
  - a. any mechanical integrity failures identified in Section I. D. 3. d;
  - b. the migration of injection fluid from the injection interval [19.15.26.10 NMAC]; and
  - c. a malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]
- **3. Corrective Action**. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.
- **4. Restriction or Shut-In.** OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

#### H. PERMIT CHANGES

- 1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well.
- **2. Insolvency.** Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

### 3. OCD Authority to Modify Permit and Issue Orders

- a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:
  - i. the Permit contains a material mistake;

- ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;
- iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;
- iv. the Well's operation may affect the water quality of fresh water;
- v. injected fluid is escaping from the approved injection interval;
  - vi. injection may cause or contribute to seismic activity;
  - vii. injection has caused or contributed to seismic activity
- viii. injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.
- b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.
- c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated.
- **4. Permittee Request to Modify Permit.** Permittee may apply to modify the terms of this Permit.
  - a. **Minor Modifications**. OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:
    - i. Non-substantive changes such as correction of typographical errors;
    - ii. Requirements for more frequent monitoring or reporting;
    - iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;

- iv. Amendments to the plugging and abandonment plan;
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]
- b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

# II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

**ATTACHMENT:** Well Completion Diagram as Provided in the Application