INTERLOCAL CONTRACT COOPERATIVE AGREEMENT BETWEEN PUBLIC AGENCIES

NEVADA DIVISION OF MINERALS
(400 West King Street, Suite 106, Carson City, Nevada 89703)

AND

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
(901 South Stewart Street, Suite 4001, Carson City, Nevada 89701)

WHEREAS, Nevada Revised Statute (NRS) 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform,

WHEREAS, this document supersedes all prior Interlocal Contract Cooperative Agreements between the State of Nevada, Division of Minerals (NDOM) and the State of Nevada, Division of Environmental Protection (NDEP),

WHEREAS, Senate Bill No. 390, as approved in the 77th (2013) Nevada Legislative Session, requires that NDOM and NDEP jointly, develop a hydraulic fracturing program,

WHEREAS, NDOM and NDEP each have specific statutory and regulatory responsibilities concerning the injection of spent geothermal fluids after they are used for a variety of activities, including, but not limited to, power generation, aquaculture, food processing and space heating; and concerning the protection of the quality of water of the state,

WHEREAS, NRS 445A.415 reads as follows: “Waters of the State” means all waters situated wholly or partly within or bordering upon this State, including but not limited to:
1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and
2. All bodies or accumulations of water, surface and underground, natural or artificial,

WHEREAS, NRS 445A.465 provides that injection of fluids through a well or discharge of pollutant into a water of the State without a permit is prohibited,

WHEREAS, the U.S. Environmental Protection Agency has delegated primary enforcement authority of the Underground Injection Control (UIC) and Clean Water Act Programs to NDEP,

WHEREAS, NDOM currently regulates certain aspects of Class II and certain Class V injection wells,

WHEREAS, NDEP has the responsibility of ensuring all Class II, Class III, Class V injection wells are properly constructed to ensure integrity and maintain integrity during its life to prevent degradation of the Waters of the State,
WHEREAS, the purpose of this agreement is to establish procedures that
1. Reduce duplication of effort,
2. Ensure efficient regulatory oversight,
3. Ensure a flow of communication and promote interagency cooperation, and
4. Allow both agencies to fulfill their legal responsibilities,

WHEREAS, NDEP relies on NDOM knowledge of well construction to ensure the proper construction of wells to protect Waters of the State,

NOW, THEREFORE, to consolidate and simplify the permitting process the agencies mutually agree as follows:

1. NDOM
   a. NDOM has the authority under NRS 522 to issue oil and gas drilling permits.
   b. NDOM oil and gas drilling permits are issued in accordance with requirements defined within NAC 522.
   c. NDOM has the authority under NRS 534A to issue geothermal drilling permits.
   d. NDOM drilling permits shall be issued in accordance with requirements within NAC 534A.

2. NDEP
   a. In accordance with NRS 445A, NDEP is responsible for the issuance of permits to prevent the degradation of Waters of the State.
   b. NDEP UIC, groundwater and surface water discharge permits are issued in accordance with requirements defined within NAC 445A.

3. General Coordination Responsibilities
   a. Each agency is responsible for the enforcement of its own statutes, regulations, permits, and permit conditions.
   b. NDOM and NDEP will inform permit applicants of the requirement to obtain a permit from the other agency in applicable cases, including referring all applicants to NDEP that propose to or have potential to discharge to surface waters, groundwater or injection.
   c. During NDOM review of an application for permit to drill an oil or gas well, if it is determined that a well may be used as an injection well:
      i. Both NDOM and NDEP will review the well design prior to the drilling permit being issued and NDOM shall direct the applicant to NDEP's UIC Completion Report and Injection Well Requirements at http://ndep.nv.gov/bwpc/index.htm.
ii. NDOM will provide a current copy of NDEP's UIC Completion Report and Injection Well Requirements to the permit applicant or well driller prior to spudding the well. Questions and concerns shall be referred to NDEP.

iii. NDOM will ensure the operator is informed of the UIC pressure testing criteria.

iv. NDOM and NDEP will provide each other with all written authorizations pertaining to injection wells and will work cooperatively in the technical review of all new and renewal permit applications, as applicable.

v. Provided that NDEP determines that the temperature of injection is unlikely to conflict with the intent of NRS 445A.305, NDEP will not include temperature of injection as a condition of a UIC permit for injection related to a geothermal operation.

d. At the request of NDOM, technical assistance for evaluating the required pre- and post-hydraulic fracturing well water analyses will be provided by NDEP.

e. NDOM and NDEP will work together to evaluate any potential contamination of groundwater that might occur from oil, gas and geothermal drilling and production.

f. For any non-UIC permitted well to undergo conversion to injection well, NDOM will send a copy of the operator's Sundry Notice to NDEP for review to ensure no additional UIC requirements are necessary. For all workovers on existing UIC permitted wells, NDOM will inform the operator that they must submit an operational plan directly to the UIC Program. Questions and concerns regarding discharge water quality shall be referred to NDEP.

g. The following well injection test requests may be approved by NDOM without NDEP involvement:

   i. Injection testing up through seven (7) days with or without rig on-site. For testing exceeding three (7) days, NDEP will establish a general permit.

   ii. Acid stimulation procedures

   iii. Flow tests to drilling sumps

   iv. Tracer testing at non-UIC permitted projects.

h. A well is determined to be completed when the total drilling depth (TD) is reached and the rig is moved off the well.

i. NDOM and NDEP will exchange copies of inspection reports completed for injection wells operating under each agency's jurisdiction.

j. NDOM and NDEP will, to the extent practicable, coordinate field inspections of facilities holding permits from both agencies to minimize duplication.

k. NDOM and NDEP will provide each other with reasonable access to files and other information necessary for program administration.
1. Confidentiality of Well Records: Confidential documents protected through NAC 522.540 and NRS 534A.031 shall be protected by NDEP. Upon a request for a copy of a protected document, NDEP will refer the requestor to NDOM.

m. NDOM and NDEP will exchange information on idle/abandoned injection wells as it is received. NDEP will assist with the technical review of idle/abandoned injection wells, if requested.

n. NDOM will require injection wells to be plugged and abandoned in accordance with all relevant NDOM regulations and the UIC bond requirement as applicable.

4. Collecting Pits and Surface Impoundments

a. A “Collecting Pit” is utilized for the recirculation of drilling fluids and collection of rock cuttings during the drilling and active completion of an oil, gas or geothermal well. Collection Pits may also be referred to as: Sumps, reserve pits or drilling pits.

b. “Surface Impoundments” are utilized to collect and contain fluids such as flow-back and flow testing solutions.

c. Collecting pits are not intended for long-term use in managing fluids or testing wells.

d. During the drilling of an oil, gas or geothermal well, NDOM may approve the use of a Collecting Pit, with no approval from NDEP.

e. NDOM will inform the operator that its approval of the construction of a Collecting Pit may not satisfy NDEP Surface Impoundment construction requirements or discharge criteria.

f. NDEP permits are issued in accordance with requirements defined within NAC 445A.

g. For Surface Impoundments, NDEP may require a permit per NAC 445A.

h. The “Collection Pit / Surface Impoundment Process Table,” below, describes the process and timeline for NDOM or NDEP approval.

i. Surface Impoundments shall meet NDEP’s guidance policy found at http://ndep.nv.gov/bwpc/index.htm.
## Collection Pit / Surface Impoundment Process Table

<table>
<thead>
<tr>
<th>Type of Containment</th>
<th>Description</th>
<th>Type of Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection Pit</td>
<td>During drilling of an oil, gas or geothermal well.</td>
<td>NDOM approval through Permit or Sundry Notice; NDEP no involvement</td>
</tr>
<tr>
<td>Surface Impoundment</td>
<td>To collect and contain fluids such as flow-back and flow testing solutions from completed wells.</td>
<td>NDEP approval through Permit; NDOM no involvement</td>
</tr>
</tbody>
</table>

### 5. Regulatory Definitions

**a. NAC 445A.846.** A Class II well is an injection well for the production and storage of oil and gas and includes a well which injects fluids:

1. Which are brought to the surface in connection with the conventional production of oil or natural gas;
2. For enhanced recovery of oil or natural gas; and
3. For storage of hydrocarbons which are liquid at standard temperature and pressure.

**b. NAC 445A.847.** A Class III well involves a special process which injects fluids for the extraction of minerals or energy, except geothermal energy, and includes:

1. Mining of sulfur by the Frasch process;
2. In situ production of uranium or other metals from bodies of ore which have not been conventionally mined;
3. Solution mining of salts or potash; and
4. In situ recovery of fossil fuel, which includes coal, tar sands, oil shale and any other fossil fuel which can be mined by this process.

**c. NAC 445A.849.** A Class V well is any injection well not included in Classes I, II, III and IV, including, without limitation:

1. Wells used to inject the water for heating or cooling by a heat pump;
2. Cesspools or other devices receiving wastes which have an open bottom and sometimes have perforated sides;
3. Wells used to inject water previously used for cooling;
4. Wells used to drain surface fluid, primarily the runoff from storms, into a subsurface formation;
5. Wells used for the injection of fluids accumulated from dewatering operations;
6. Drywells and wells used for the injection of nonhazardous wastes into a subsurface formation;
7. Wells used to replenish the water in an aquifer;
8. Wells used to inject water into an aquifer of fresh water to prevent the intrusion of water of a lower quality into the fresh water;
9. Wells used to inject a mixture of water and sand, mill tailings or other solids into subsurface mines;
10. Wells used to inject domestic sewage for facilities other than single-family residences and having a volume capacity of more than 3,000 gallons per day which are regulated as on-site sewage disposal systems pursuant to NAC 445A.950 to 445A.9706, inclusive;
11. Wells used to inject fluids into a zone, other than an oil or gas producing zone, to reduce or eliminate subsidence associated with the overdraft of fresh water;
12. Wells used for the storage of hydrocarbons in a gaseous state at standard temperature and pressure;
13. Geothermal injection wells used in contact and noncontact heating and aquaculture, and in the production of energy;
14. Wells used for solution mining of ores or minerals in conventional mines, such as stope leaching;
15. Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;
16. Injection wells used in experimental technologies;
17. Injection wells that are approved under a federal or state cleanup program and used to reinject pumped and treated contaminated groundwater, other than hazardous waste, back into the same formation;
18. Injection wells used to inject fluids for the chemical or microbiological treatment of contaminated groundwater or soil; and
19. Motor vehicle waste disposal wells.

6. NDOM/NDEP Process Table

a. The NDOM/NDEP process table, below, defines a permittee's requested activity, the time frames required prior the start of the desired start dates, the process the permittee is required to comply with to obtain approval, and the required action by either NDOM or NDEP for approval of the request. The process table can be changed upon mutual written agreement between NDOM and NDEP. The Permittee shall notify the appropriate agency in accordance with the Notification Table below:
<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Frame</th>
<th>Required Action</th>
<th>Approval required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for construction of new, or conversion of existing well to injection well</td>
<td>---</td>
<td>Submit Sundry Notice to Nevada Division of Minerals (NDOM), see NDEP website for any required documentation, or contact NDEP with questions about MIT testing. Provide approved Sundry Notice to NDEP.</td>
<td>NDOM approval contingent upon NDEP issuing UIC Permit</td>
</tr>
<tr>
<td>Request for Initial injection into a well</td>
<td>30 days prior notice to NDEP</td>
<td>UIC Completion Report, including mechanical integrity test, and submit water sample results.</td>
<td>NDEP approval to inject after submission of Completion Report.</td>
</tr>
<tr>
<td>Request for any modification of injection well</td>
<td>Before work-over</td>
<td>Submit Sundry Notice to NDOM, see NDEP website for any required documentation, or contact NDEP with questions about MIT testing.</td>
<td>NDOM approval with copy to NDEP</td>
</tr>
<tr>
<td></td>
<td>Before placing well back into service.</td>
<td>Submit Completion Report to NDEP, water sample if necessary.</td>
<td>NDEP approval</td>
</tr>
<tr>
<td>Request to allow for testing of injection well / MIT's</td>
<td>30 days prior notice</td>
<td>Submit proposal to NDEP and Sundry Notice to NDOM.</td>
<td>NDEP and NDOM approval</td>
</tr>
<tr>
<td>After construction of production well</td>
<td>Within 60 days after completion of work</td>
<td>Submit Completion Report to NDOM.</td>
<td>n/a</td>
</tr>
<tr>
<td>After a major modification of production well</td>
<td>Within 60 days after completion of work</td>
<td>Submit updated Completion Report to NDOM. (examples: deepening, perforate casing, etc.)</td>
<td>n/a</td>
</tr>
<tr>
<td>After a minor modification of production well</td>
<td>---</td>
<td>Summary of work (examples: pump work, casing scraping, etc.) Operator to submit a Sundry Notice report to NDOM</td>
<td>n/a</td>
</tr>
<tr>
<td>Request for Chemical Treatment of water or Tracer tests on UIC wells</td>
<td>30 days prior notice</td>
<td>Submit U240 form with chemical information including product name, amount and concentration to be used, location of use, etc. to NDEP.</td>
<td>NDEP approval</td>
</tr>
<tr>
<td>Request for Well Stimulation/ Acidization</td>
<td>---</td>
<td>Submit Sundry Notice to NDOM</td>
<td>NDOM approval</td>
</tr>
<tr>
<td>To report Chemical or petroleum spills greater than 25 gallons or 3 cu-yds of affected soil or spills greater than Reportable Quantity listed in 40 CFR 302.4</td>
<td>As soon as possible, but no later than the end of one working day</td>
<td>Contact Division of Emergency Management (775-688-2830) and Division of Environmental Protection (888-331-6337)</td>
<td>n/a</td>
</tr>
<tr>
<td>Request to add additional Chemicals that come in contact with, or are added to the injectate</td>
<td>30 days prior notice</td>
<td>Submit U240 form to NDEP</td>
<td>NDEP approval</td>
</tr>
</tbody>
</table>
AGREEMENT TERM: This Agreement shall be effective upon approval by the parties and shall continue in force and effect until terminated by either party.

TERMINATION: The parties agree that this Agreement may be terminated for any reason upon 30 days written notice.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and intend to be legally bound thereby.

Richard Perry
Administrator
Nevada Division of Minerals

Date 9-23-2015

David Emme
Administrator
Nevada Division of Environmental Protection

Date 9-29-2015

Approved as to form by:

Bryan H. On 24 SEP 15
Deputy Attorney General
Nevada Division of Minerals

Approved as to form by:

Kate C. Armstrong On 9/30/15
Deputy Attorney General
Nevada Division of Environmental Protection