**EPA Region 8 Underground Injection Control (UIC) Program**
**Response to Public Comments**

**Class II Permit ND22351-11264**

**Liberty 200-14 SWD**

**Salt Water Disposal Well**

**Issued to:**

**EOG Resources, Inc.**

**600 17th Street, Suite 1000N**

**Denver, CO 80202**

Final Permit issuance: April 5, 2019

## Background:

The Liberty 200-14 SWD UIC Class II Permit (Permit) is for a new disposal well on the Fort Berthold Indian Reservation (FBIR). The draft Permit for this well was issued on October 15, 2018, with a 30-day public comment period. A public notice of the comment period was published in the New Town News and the Mountrail County Record. It was also posted on the EPA's Region 8 website. The Final Permit authorizes disposal of oil-produced fluids through injection.

The EPA received a written comment by email from the MHA Nation Energy Department staff. However, the EPA also received verbal comments from the MHA Nation through the tribal consultation process. All comments are included in the administrative record for the EPA's Final Permit decision.

## Changes to the Final Permit:

Pursuant to the UIC permitting regulations at 40 CFR § 124.17, the Response to Comment must specify which provisions of the draft Permit have been changed in the final permit decision and provide a reason for the change.

The following section has been added to the Final Permit under Part II. Specific Permit Conditions:

Section F. MEASURES FOR PROTECTION OF ENDANGERED SPECIES

In accordance with section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2), the Permittee must implement the following measures:

1. If any of the following species are sighted within one mile of the well site or associated facilities during construction or operation, the Permittee shall cease all work within one mile of the species' location and contact the EPA and the USFWS immediately: ***the whooping crane, the interior least tern, the rufa red knot, or the piping plover***. In coordination with the USFWS, work may resume after the terrestrial species leave the area.
2. If construction is planned during the migratory bird nesting and breeding season, a qualified biologist must conduct pre-construction surveys for migratory birds and their nests within five days prior to the initiation of all construction activities.
3. Spills or leaks of chemicals and other pollutants at the injection well site shall be reported to the EPA and other appropriate regulatory agencies. The procedures of the surface management agency must be followed to contain leaks or spills.

**Reason for change:**

Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2), requires federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally-listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. As noted in the Statement of Basis to the draft Permit, the EPA determined that issuance of this Class II Permit for authorization of injection well operations constitutes an action that is subject to the Endangered Species Act and its implementing regulations (50 CFR part 402) and acknowledged that the consultation process would be complete prior to issuance of a final decision. Accordingly, the EPA, after receiving concurrence from the U.S. Fish and Wildlife Service on its findings of effects on such species and/or their habitat related to this action, is incorporating the above measures into the Final Permit. These measures will ensure that any such effects on any federally-listed endangered or threatened species or their designated critical habitat will be avoided, minimized, or mitigated by the Permittee.

## Response to Comments

In accordance with 40 CFR § 124.17, this section briefly describes and responds to all significant comments on the draft Permit. The EPA Region 8 only received comments from two commenters, the MHA Nation Tribal Government and MHA Nation Energy Department staff.

**Comment 1:**

**Geology is widely recognized and accepted as the critical component in determining the location of an UIC well. It also should be the fundamental starting point with regard to analyzing UIC permits and for determining the location and the number of SWDs on FBIR. It provides a clean and strong basis for decision-making based on sandstone thickness and is a process where the EPA and the Tribe could potentially be in agreement. The challenge is to convince the EPA that a**

**more focused and detailed look at the injection zone sandstone structure, in the area of a proposed UIC well, is fundamental and critical.**

**The commenter suggested that Inyan Kara injection wells that do not have adequate injectivity should not be permitted. Of the three wells that R8 EPA recently public noticed (Liberty, Howie and Big Bend) the commenter believes that the insufficient clean sandstone for the Howie and Big Bend projects would result in poor injection wells. The commenter stated that these two wells, Slawson wells, should not be drilled as they have the greatest potential for injected produced water, a known hazardous substance, to travel the largest areal extent with limited control. The Liberty, however has adequate thickness and would perform well. The commenter proposed setting a minimum sandstone thickness that must exist in the Inyan Kara before injection wells would be permitted.**

*Response 1:*

The primary goal of the UIC program is the protection of USDWs. Toward that end, the EPA evaluates the geologic setting of every proposed UIC well to determine: 1) the geologic suitability of the area; and 2) whether USDWs may be endangered. For Class II wells, the regulations include a list of information that the EPA must consider when making permitting decisions. See 40 CFR § 146.24.

The commenter specifically states that it is important to review the sandstone thickness in the injection zone but does not express how it affects USDWs in this case or otherwise discuss concerns about any permit conditions relative to this issue. The commenter also states that this well is not likely to provide adequate clean sandstones for injection but does not provide an adequate scientific basis supporting this statement. The net sand thickness of an injection zone affects the well's injectivity (how efficiently the well performs), but it is not a factor in determining USDW protection.

Through the permitting process, the EPA ensures that injection wells are properly designed and constructed, imposes operating requirements, periodic monitoring, inspections and reporting requirements, and requires that operators follow appropriate logging and testing programs to protect USDWs. The Permit includes a maximum allowable injection pressure (MAIP), as required by the regulations, to assure fractures are not initiated or propagated into the confining zone that may provide a pathway into USDWs. In addition, limiting injection to the MAIP can ensure that injected fluids do not migrate into USDWs or that injection fluids are not displaced into any USDW.

Adequate injectivity (i.e., injection rate) does not factor in the final permit decision to ensure protection of USDWs and would be limited to the volume of fluids that can be injected while maintaining the permitted pressure (i.e., MAIP).

Finally, this well has yet to be drilled, constructed, or tested. The Permit includes a number of testing requirements, the results of which must be submitted to the EPA for review and approval before injection is authorized to commence. Authorization to inject will only be granted if these results demonstrate that this injection well can be operated in a way that protects USDWs.

**Comment 2:**

**The commenter expressed concerns that EPA considers the entire Inyan Kara thickness rather than just the clean sands that would accept fluids when calculating the distance away from the**

**well impacted by injection activities. He cited concerns about the areal impact (fluid movement) and pressure build up in wells with insufficient clean sands for injection. The commenter stated that there were two trespass issues; one is the "physical" trespass of contaminated fluids and the second is a "financial" trespass, where the landowners would not be compensated for the pore space occupied by injected fluids. The tribe would like to place a moratorium on UIC wells.**

*Response 2:*

While the commenter does not clearly articulate this link, the EPA believes the commenter is concerned about the EPA's consideration of the sand thickness because the impact of injection activities could constitute a trespass on nearby landowners. However, the commenter does not provide specifics as to how this comment might relate to this Permit and does not allege that a trespass may occur nor specifies who it may affect. Even if the commenter were to make specific allegations about trespass of fluid onto specific lands, the issue of subsurface trespass into pore space underlying a surface owner's land is a property rights issue that is expressly outside the scope of the UIC program. Consistent with 40 CFR § 144.35(b) and (c), the Permit specifies that "[i]ssuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other federal, state or local law or regulations." Therefore, the EPA has no authority to consider this issue in this UIC permitting decision.

For volumetric calculations, the EPA currently applies the net sand thickness for volumetric calculations to assess the lateral extent that may be affected by the injection process. However, the EPA's assessment relates to the potential to endanger USDWs, not to potential trespass, or property rights concerns.

**Comment 3:**

**While the MHA Nation did not expressly raise this issue during the written comment period or during the 11/27/18 tribal consultation on this Permit, the Tribe has made clear to the EPA Region 8 during previous general consultation meetings that it believes the EPA should withhold or deny UIC permits on the Fort Berthold Indian Reservation until the company complies with MHA Nation law, which requires MHA Nation approval prior to issuance of the Permit. In support of this, the Tribe points to its Resolution No. 11-75-VJB governing the disposal of waste associated with the exploration and development of oil and gas on the Reservation. The Resolution requires that the MHA Nation's Tribal Council approve any waste disposal facility.**

**In the tribal consultation meetings, the Tribe asked the EPA to find that the following legal authorities and principles provide authority to condition or deny UIC permits based on the tribal resolution: the Indian Reorganization Act (IRA), the federal trust responsibility to federally recognized Indian tribes, the "mild and equitable regulation" language under the 1825 Trade and Intercourse Treaties, the 1851 Fort Laramie Treaty, and principles of cooperative federalism.**

**In addition to those authorities, the Tribe requested that we look into two situations where other federal agencies defer to tribal law, including the Department of Energy (DOE) and the Bureau of Land Management (BLM). At an Indian Country Energy and Infrastructure Working Group meeting, DOE Deputy Secretary of Energy Dan Brouillette gave a speech in which he said: "And let me be clear: it is not Administration Policy to dictate terms to tribes, but to consult, respecting tribal sovereignty by affording all tribes the opportunity to decide whether and how energy is developed on their lands, and to negotiate the benefits they reap from development….Moreover,**

**the Administration is committed to the principle of Indian Energy Sovereignty…the concept that tribal governments, not feds, should decide which regulatory, tax, environmental, historic preservation, and sacred sites laws apply on Indian lands and govern Indian energy development." A recent BLM final rule defers to tribal law by including a regulation that allows oil and gas operators to vent or flare oil-well gas royalty free when the venting or flaring is done in compliance with applicable rules, regulations, or orders of the State regulatory agency (for Federal gas) or tribe (for Indian gas). 83 FR 49184 (Sept. 28, 2018).**

*Response 3:*

As noted above, the MHA Nation did not expressly raise this issue during the comment period or during the tribal consultation meeting on 11/27/2018 on this Permit. However, as a matter of good faith, the EPA is including verbal comments made during general consultation meetings on UIC permits in the record for the Permit. For any future permits, the EPA will look for the Tribe to raise any comments it wishes the EPA to consider during the comment period or during the tribal consultation process for each specific permit.

The EPA cannot condition or deny permit applications based on the Tribe's laws. The Safe Drinking Water Act (SDWA) and its implementing regulations establish the only criteria under which the EPA may condition, approve, or deny permit applications for underground injection, and the regulations generally are limited to the protection of underground sources of drinking water (USDWs). These regulations do not provide authority to make permitting decisions based on another entity's laws; those laws are outside the scope of the UIC program. However, issuance of a UIC permit by the EPA does not shield a Permittee from compliance with other applicable laws. Consistent with 40 CFR § 144.35(b) and (c), the Permit specifies that "[i]ssuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other federal, state or local law or regulations." Therefore, it is the Permittee's responsibility to comply with any other applicable laws which are outside the scope of the EPA's program.

The EPA reviewed the legal authorities and principles cited by the MHA Nation, including the IRA, the federal trust responsibility to federally recognized Indian tribes, the "mild and equitable regulation" language under the 1825 Trade and Intercourse Treaties, the 1851 Fort Laramie Treaty, and principles of cooperative federalism. None of these legal authorities or principles alter the EPA's authority under the SDWA or provide the EPA authority to deny or condition UIC permits based on the MHA Nation's tribal resolution. The EPA provided a letter to the MHA Nation on December 28, 2017, summarizing its analysis on each of these authorities and principles. We are attaching a copy of the letter to this Response to Comments. (Attachment 1).

Finally, the DOE's and the BLM's purported ability to defer to tribal law does not affect the EPA's legal authority in this EPA UIC permitting action. The EPA reviewed the speech cited by the MHA Nation, given by DOE Deputy Secretary of Energy Dan Brouillette at an Indian Country Energy and Infrastructure Working Group meeting. The speech referenced DOE policies and principles of deferring to tribal law. However, the MHA Nation does not reference any legal authority that would require or allow the EPA to implement these policies and principles consistent with the SDWA. The DOE policies and principles of deferring to tribal law do not authorize the EPA to deny or condition UIC permit applications based on Resolution No. 11-75-VJB. Similarly, the BLM final rule regarding venting and

flaring of oil and gas operations does not affect the EPA's legal authority in this EPA UIC permitting action. According to the BLM, its legal authority for the rule is based on the Mineral Leasing Act and related statutes. 83 Fed. Reg. 49184, 49188 (September 28, 2018). The BLM's legal authorities do not apply to the EPA, do not provide the EPA any additional legal authority, and are outside the scope of the EPA UIC program.