EPA Region 8 Underground Injection Control (UIC) Program
Response to Public Comments
Class II Permit No. ND22389-11621
McKenzie Federal 35-1
Saltwater Disposal Well

Issued to:

Mann Oil Company, LLC
109 North 4th Street; Suite 200
Bismarck, North Dakota 58501

Final Permit issuance: June 1, 2020

Background:

The McKenzie Federal 35-1 Permit (Permit) is for disposal of oil produced fluids into a Class II injection well on the Fort Berthold Indian Reservation (FBIR). This well was drilled as a production well in 1997 and commenced injection in 2006. Injection continued until March 2019 when the Mann Oil Company (Mann) ceased injection after being notified by the Environmental Protection Agency (EPA) that an EPA-issued UIC permit was needed. The Draft Permit for this well was issued on November 13, 2019 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 Region 8 website

The McKenzie Federal 35-1 injection well is tied to the nearby Zahnow Federal 42-35 production well (Zahnow well), also owned by Mann. The Zahnow well is the only source of produced water that has been disposed of into the McKenzie Federal 35-1 well. The injection well has not received fluids from any other well or operator. The Zahnow Federal 42-35 production well is a low oil producer, and as such it only produces minimal volumes of brine on an intermittent basis.

The EPA received one set of written comments on the Draft Permit during the comment period, from the Mandan, Hidatsa, and Arikara (MHA) Nation. 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 Comments 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 changes have been made to the Final Permit:

1. **Appendix C. Operating Requirements**

Draft Permit Language: "There is no limitation on the fluid volume permitted to be injected into this well."

Final Permit Language: "The Permittee, upon being granted authorization to inject, may dispose of up to 3,082,922 barrels of produced fluids as described in the Permit."

Reason for change: The Final Permit includes a volume limitation based on modeling results and analysis and limiting injection fluid movement to a 950-foot radius around the well bore. This volume limitation is designed to prevent injected fluid from migrating into ground water underlying trust lands, which lies 950 feet away from the well bore. This well has been injecting highly saline production fluids intermittently without an EPA permit since 2006, and the pre-injection quality of the Inyan Kara aquifer (i.e., the injection zone) is unknown. There

are also no reliable ground water quality data for this aquifer as there has been relatively little oil and gas production activity in the area of the FBIR where this well is located. Because the EPA is not able to obtain this data, and given that pre-injection ground water quality data cannot be obtained from this well due to past unauthorized injection, the EPA presumes that the Inyan Kara is a USDW at this location. This includes ground water within this aquifer underlying trust lands. Therefore, Mann will not be authorized to resume injection upon the Final Permit becoming effective until an aquifer exemption (see 40 CFR § 146.4) for a radial distance 950 feet from this well has been requested by Mann and approved by the EPA after public notice and comment. Should the EPA approve an exemption, injection may resume with this existing volume limit in place to ensure injected fluid does not migrate into ground water underlying trust lands.

Response to Comments

Comment 1:

MHA Nation approval is mandatory prior to issuance of any permit. MHA Nation laws governing waste disposal within the Reservation require that Mann Oil obtain approval from the MHA Nation. Mann Oil has not contacted the MHA Nation for this approval. Approval is needed to comply with MHA Nation laws, to prevent the contamination of trust lands, and ensure the protection of the health and welfare of MHA Nation members, residents of the Reservation, and the Reservation itself.

The MHA Nation's regulatory authority over waste disposal wells stems from its federally approved Constitution and Bylaws of the Three Affiliated Tribes of the Fort Berthold Reservation ("MHA Nation Constitution"). The MHA Nation drafted its constitution under to the Indian Reorganization Act of 1934, 25 U.S.C.§§ 461 et seq. (IRA). Then, pursuant to authority delegated by Congress, the Secretary of the Interior reviewed and approved the MHA Nation Constitution in 1936. See MHA Nation Constitution at 12. The MHA Nation utilized the authority provided in its Constitution to pass its laws regulation waste disposal facilities within its Reservation.

The MHA Nation's regulation of waste disposal pursuant to its authority under its Congressionally authorized and federally approved Constitution is similar to tribal authority exercised under the Clean Water Act. For example, in Montana v. EPA, 137 F.3d 1135, 1141 (9th Cir. 1998), the Court upheld EPA's approval of tribal regulation of reservation water resources pursuant to the Clean Water Act even when that regulation affects non-Indians-such as Mann Oil in this case. The Court's affirmation of tribal authority was based in part on EPA' s "generalized finding that due to the mobile nature of pollutants in surface water it would in practice be very difficult to separate the effects of water quality impairment on non-Indian fee land from impairment on the tribal portions of the reservation ...." Id.

The MHA Nation also has inherent authority over non-Indian activities on fee lands within the Reservation. While it is not necessary for the EPA to reach this issue, given the Federal government's affirmation of the MHA Nation's authority in the MHA Nation Constitution, the MHA Nation's inherent authority provides for the regulation of all waste disposal facilities within the Reservation including facilities operated by non-Indians on fee lands.

EPA Response 1:

The EPA cannot condition or deny permit applications based on the Tribe’s laws. The 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 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 respectfully acknowledges the MHA Nation's arguments regarding its authority to regulate oil and gas operations on the Fort Berthold Indian Reservation. However, the issue of Tribal authority is not before the EPA and is outside the scope of this permitting action. The EPA directly implements the UIC program throughout Indian country in North Dakota under authority from the SDWA. See 40 CFR § 147.1752. Accordingly, this Permit is being issued under the EPA's authority.

Comment 2:

EPA regulations implementing the SDWA recognizes tribal authority over waste disposal wells. Consistent with the EPA's treaty and trust responsibility to Indian tribes and its Tribal Policy, the regulations implementing the SDWA affirm that EPA should consider tribal authorities and interests in overseeing and permitting Class II wells in Indian Country like the McKenzie Federal 35-1 disposal well under consideration here. EPA regulations provide that the Administrator "may promulgate an alternate UIC Program for Class II wells on any Indian reservation or Indian lands." 40 C.F.R. § 144.2. In its oversight and permitting, EPA is further directed to consider "[t]he interest and preferences of the tribal government having responsibility for the given reservation or Indian lands." 40 C.F.R. § 144.2 (a).

In this case, EPA should promulgate an alternative UIC Program to manage the large number of disposal wells proposed for the Reservation and prevent impacts to tribal trust lands and waters, including the well relating to the Draft Permit. This alternative UIC program should be developed in consultation to include the "interest and preferences" of the MHA Nation. As set out in Resolution No. 11-75-VJB, EPA's alternative UIC program for the Reservation should include coordination with and the approval of the MHA Nation.

McKenzie Federal 35-1 is within the Reservation and within Indian Country as defined by EPA. As a result, McKenzie Federal 35-1 is subject to EPA's requirements in 40 C.F.R. § 144.2 for the consideration of the MHA Nation's "interests and preferences." The MHA Nation expressed its interests and preferences in Resolution No. 11-75-VJB, and EPA should abide by this clear expression of the MHA Nation's interests and preferences.

EPA Response 2:

The UIC regulations do acknowledge two roles for tribes under the UIC program; these roles are detailed at 40 CFR § 144.2 and 40 CFR § 145.52. However, neither of these regulations apply in this permitting action. The MHA Nation specifically commented that 40 CFR § 144.2 allows the EPA Administrator to promulgate an alternate UIC Program for Class II wells on any Indian reservation or Indian lands. It urged the EPA to promulgate such an alternative program and consider the interests and preferences of the Tribal government, as directed by the regulation. While it is possible to promulgate an alternate Class II UIC program to the one outlined in the federal regulations, such a promulgation must be done through notice and comment rulemaking, not through a specific permitting action. Therefore, this is outside the scope of this UIC permitting action. The current applicable program on the Fort Berthold Indian Reservation is codified at 40 CFR § 147.1752, is EPA-administered, and includes the requirements of 40 CFR parts 124, 144, 146, and 148.

The MHA Nation also cited to 40 CFR § 144.2 to support an argument that the EPA is directed to consider the Tribal Government's interest and preference in oversight and permitting. As explained above, 40 CFR § 144.2

allows the EPA to promulgate an alternate UIC Class II program for an Indian reservation; it does not contain any requirements with regard to specific permitting actions. Therefore, this provision does not provide authority for the EPA to condition or deny a permit based on the Tribe's resolution.

The second role for tribes described in the UIC regulations can be found at 40 CFR § 145.52-.58. Under these regulations, a tribe can apply for primary enforcement responsibility to administer the UIC program. These regulations detail a process to transfer administration of the UIC program from the EPA to an Indian tribe. This process is also outside the scope of this permitting action. The EPA is currently responsible for implementing the UIC program on the Fort Berthold Indian Reservation, as the MHA Nation has not applied for and been approved to do so. The EPA must implement the program in accordance with the applicable program as set out in 40 CFR § 147.1752.

Comment 3:

The EPA must assess impacts to trust lands and waters from waste disposal wells. McKenzie Federal 35-1 must also be assessed for its likely impact to tribal trust lands and waters. As a result of disastrous federal allotment policies in the late l 800's and early 1900's the MHA Nation's Reservation is a checkerboard of fee, allottee and trust lands. Oil and gas activities on any of these lands will have an impact on neighboring lands McKenzie Federal 35-1 and any other disposal well within or near the Reservation must be assessed for its impacts on trust lands and waters. This is one of the obvious reasons why the MHA Nation's authority and EPA's SDWA authority cover the entire Reservation or Indian Country and not specific types of parcels.

The EPA should obtain and include in its assessment of Red Murphy SDW No. 1 [sic] and other UIC wells, an August 15, 2017 analysis by Bureau of Land Management's (BLM) Branch of Fluid Minerals in the Montana/Dakotas State Office entitled "Reconnaissance Study of the Potential Area and Radius of Influence from Saltwater Disposal Wells Within and Near the Fort Berthold Indian Reservation, North Dakota." This analysis shows that a number of disposal wells on the Reservation, whether on fee or allottee lands, are already impacting neighboring tribal trust lands.

Using BLM's overly conservative assumptions regarding substrate pore space and despite BLM's lack of site-specific geological analysis, BLM's results show that many disposal wells within the Reservation are being injected with waste at a rate and volume that is already resulting in migration of waste on to trust lands. In addition, a recent review of the wells assessed by BLM in this analysis shows that current disposal volumes, less than a year later, can be as high as eight times (8x) the amounts assessed by BLM. EPA must consider these impacts in assessing McKenzie Federal 35-1 as well as the potential for waste, injected at high volumes and pressures to fracture or breakthrough the well and impact the MHA Nation's groundwater and drinking water resources. Even a brief geologic analysis shows that the Draft Permit proposes drilling McKenzie Federal 35-1 in one of the poorest sandstone intervals on the Reservation. This means that the disposed waste will migrate far from the injection site and contaminate MHA Nation trust lands only a stone's throw away.

EPA Response 3:

The MHA Nation's comments on the lateral migration of injected fluid raises two different issues. The first issue is that fluids could migrate laterally within the injection zone and affect pore space underlying trust lands. The second issue is that fluids could migrate laterally within the injection zone and affect ground water quality underlying trust lands. We discuss each issue separately. In addition, while these comments imply that the McKenzie Federal 35-1 well has not been drilled, this well was drilled and constructed as a production well in 1997 (as noted above in the Background section).

Pore Space – The issue of "subsurface trespass" into pore space underlying an 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.

Migration of injected fluid into waters underlying trust lands –The Tribe asserts that the EPA must assess the impact of underground injection into the McKenzie Federal 35-1 well on groundwater underlying trust lands, as it is likely for oil and gas activities on the Reservation to affect groundwater underlying trust lands due to its checkerboarded nature.

The EPA is aware of the Tribe's concerns about impacts to groundwater underlying trust lands and has assessed potential impacts to them. The EPA is also aware of, and had previously obtained a copy of, the BLM report and reviewed it. In light of the Tribe's comments, the EPA re-reviewed the BLM's August 15, 2017, analysis by BLM's Branch of Fluid Minerals in the Montana/Dakotas State Office entitled "Reconnaissance Study of the Potential Area and Radius of Influence from Saltwater Disposal Wells Within and Near the Fort Berthold Indian Reservation, North Dakota," which includes analysis of Mann's McKenzie Federal 35-1 well.

Based on our review, the EPA determined that the distance to Tribal pore space is approximately 950 feet from the injection well. The EPA also determined that over approximately the last 2.5 years (October 2016 to March 2019) since the BLM evaluated fluid migration, an additional 43,000 barrels of oil produced fluids were injected into the McKenzie 35-1 (based on records obtained from the North Dakota Industrial Commission (NDIC)). Using BLM's calculations, the radial distance of the injected fluid consequently increased from 109 feet to 122 feet from the injection well during these 2.5 years. Based on the NDIC's records of injection activity (including disposal volumes), and using the BLM's model, the EPA has concluded that disposed fluids from re-commencement of injection would take approximately 167 years to reach ground water within the Inyan Kara Formation underlying trust lands located 950 feet from the injection well. A technical memorandum further documenting the EPA's analysis and conclusions has been included as part of the administrative record.

Given the results of the EPA's and BLM's analyses, the EPA has concluded that if injection into the McKenzie Federal 35-1 continues at the rate it has historically, it is unlikely that injected fluids would ever reach ground water underlying trust lands based on the expected operational life of a Class II injection well such as the McKenzie Federal 35-1 well. However, to ensure protection of this ground water, and as noted above in the Changes to the Final Permit section, the EPA has limited the volume of injected fluid in the Permit.

Comment 4:

EPA must consider the continued permitting of SWD wells in and around the Reservation. The EPA continues to permit wells at quickened pace. The EPA must verify that its permitting pace, including McKenzie Federal 35-1, is sufficient to protect the lands and waters of the MHA Nation.

EPA Response 4:

The issue of the permitting of other wells, whether on or off the Reservation, is outside the scope of this individual permitting action. With regard to the pace of permitting the McKenzie Federal 35-1 well, the EPA has taken the appropriate amount of time to review the information and ensure that USDWs can be protected from the injection activity through compliance with the Permit's conditions.

Comment 5:

The Draft Permit violates the EPA's trust responsibility to the MHA Nation. In administering the UIC program under the Safe Drinking Water Act, the EPA retains its fiduciary obligation to "safeguard Indian interests in land." *HRI Inc. v. Environmental Protection Agency*, 198 F.3d 1224, 1245 (10th Cir. 2000) (citing *Drummond v. United States,* 324 U.S. 316, 318 (1945)). Therefore, when overseeing and permitting underground injection wells located in Indian country, or otherwise having a potential impact on Indian lands, the EPA's duties extend beyond ensuring that drinking water sources remain untainted. The EPA, as trustee for the MHA Nation and its members, must also protect against other adverse impacts on Indian lands.

EPA Response 5:

The Tribe asserts that the federal trust responsibility for federally recognized Indian tribes in this instance extends beyond the protection of drinking water sources and requires the EPA to protect Indian lands. The federal general trust responsibility does not create an independent, enforceable mandate or specific trust requirement beyond the EPA's obligation to comply with the legal requirements generally applicable to this situation under federal law – in this case the SDWA. While the EPA does not have authority under the SDWA to consider impacts to surface or subsurface property interests, the Final Permit complies with the SDWA by including adequate permit conditions to protect USDWs under tribal lands. As explained in Response 1, the UIC program is limited in scope, and the UIC regulations establish the only criteria under which the EPA can approve, deny or condition permits. There are no UIC regulations authorizing the EPA to consider property interests or well siting, unless the siting concerns are related to geologic suitability relative to endangerment of USDWs. Issues regarding property interests (either surface or subsurface) are outside the scope of the UIC program, and the EPA has no authority or discretion to condition or deny permits based on these considerations.

The EPA is committed to maintaining its long-standing work with federally recognized Indian tribes on a government-to-government basis. Indeed, one of the key principles of the EPA Policy for the Administration of Environmental Programs on Indian Reservations (1984) is that the Agency, in keeping with the federal trust responsibility, will assure that tribal concerns and interests are considered whenever the EPA's actions and/or decisions may affect reservation environments. Consistent with the federal trust responsibility, the EPA has consulted and coordinated with the MHA Nation on UIC permitting issues on the Fort Berthold Indian Reservation. As we expressed in the EPA's December 28, 2017 letter to John Fredericks (see Attachment 1), the Tribe's attorney, the EPA considers tribal interests in decision-making where we have discretion or authority to do so, consistent with the federal general trust responsibility. However, that trust responsibility does not grant the Agency additional authorities beyond those granted to us by Congress under the SDWA. Therefore, where we do not have authority or discretion to pursue a course of action, the general trust responsibility does not provide us any additional authority to do so.

The HRI, Inc. v. EPA case, cited by the Tribe, is consistent with the scope of the federal general trust responsibility described above. As referenced by the court, the federal general trust responsibility includes an obligation to protect tribal jurisdiction and tribal sovereignty over its lands, HRI, Inc. v. EPA, 198 F.3d 1224, 1245 (10th Cir. 2000), but does not create an independent, enforceable mandate or specific trust requirement beyond the EPA's obligation to comply with the legal requirements generally applicable under federal law. See, e.g., Morongo Band of Mission Indians v. FAA, 161 F.3d 569, 574 (9th Cir. 1998); Gros Ventre Tribe v. United States, 469 F.3d 801, 809-814 (9th Cir. 2006).

Comment 6:

The MHA Nation reminds the EPA that it must directly coordinate with the MHA Nation and its laws. The EPA's Policy on Consultation and Coordination with Indian Tribes (the "Tribal Policy") issued on May 4, 2011 states that the "EPA recognizes and works directly with federally recognized tribes as sovereign entities with primary authority and responsibility for each tribe's land and members". Denying

or withholding the Draft Permit until approval is obtained from the MHA Nation is required by the policy. The EPA must hold true to its treaty and trust responsibilities and protect the sovereign authority of the MHA Nation.

EPA Response 6:

The EPA acted consistently with its Policy on Consultation and Coordination with Indian Tribes (the "Policy") throughout the permitting process. As stated in the Policy, "EPA's policy is to consult on a government-to-government basis with federally recognized tribal governments when EPA actions and decisions may affect tribal interests." The EPA has engaged in government-to-government consultation with the MHA Nation on UIC permitting issues and sought its input regarding tribal concerns about UIC well permit applications within the Fort Berthold Indian Reservation, including the application for McKenzie Federal 35-1. Specifically, the EPA consulted with the Tribe on September 11, 2018 concerning the UIC permit application for the McKenzie Federal 35-1 well.

The Tribe cites one of the guiding principles of the Policy in support of its position that the EPA should deny the UIC permit application for the McKenzie Federal 35-1 on the basis of the Tribe's resolution – "EPA recognizes and works directly with federally recognized tribes as sovereign entities with primary authority and responsibility for each tribe's land and membership.…" Where we have discretion to do so, the EPA has considered the Tribe's input and sought to address its concerns. The Tribe further states that "[t]his Guiding Principle implements and is required by EPA's treaty and trust responsibility to the MHA Nation," and suggests that the Policy provides the EPA with the authority to deny the UIC permit application. However, the Policy does not create independent legal authorities separate from the SDWA, and as explained in the EPA's December 28, 2017 letter to John Fredericks (see Attachment 1), the MHA Nation's treaties and the federal trust responsibility do not provide the EPA with the authority to deny UIC permit applications on the basis of the Tribe's resolution, and neither does the Policy.

Comment 7:

The Tribe asserts that the EPA and Industry have demonstrated a lack of capacity to conduct and enforce regular inspections of UIC wells. The Tribe cites to a study on reasons for well mechanical integrity test failure done by The Cadmus Group as support and stated that it indicated a lack of capacity to inspect and enforce at a level acceptable to the MHA Nation. It cited to another study to support an assertion that UIC well failure can and lead to contamination of aquifers.

Finally, the Tribe stated the following:

> **Also, the MHA people utilize a unit of "temporal residence" that has a lower limit of 1000 years for occupancy for this region. Failure models for UIC do not account for this expected residency. The predictive value of these models rarely exceeds 50 years, and none exceed 100 years with any degree of reliability. The models for UIC in Oklahoma are useful examples. Few predicted human-induced seismicity and the costs and dangers involved; the ones that did were discounted. When seismicity issues began occurring, industry sought to cast doubt on the underlying science. That is to say that when it comes to long term dangers, industry often fights science and seeks to divorce itself from the long-term consequences of its actions. We have no reason to assume a different response in the future.**

EPA Response 7:

The EPA acknowledges that well failure can lead to the contamination of aquifers. However, the Tribe does not offer any comments that the permit conditions in the Permit are inadequate to address their concern. The Permit includes a provision at Part II Section C.5 that requires the well to be immediately shut in if the well loses

mechanical integrity. This provision further states that the well not be allowed to resume injection until corrective action has been taken and a subsequent test demonstrates that mechanical integrity had been restored.

In addition, a number of other protective measures have and will be taken regarding mechanical integrity of the permitted well. A Part I mechanical integrity test is required prior to re-commencing injection and every five (5) years thereafter to ensure the integrity of the well casing and document that no leaks are present. If necessary, the EPA can also require more frequent monitoring and additional testing. To meet the requirements for Part II mechanical integrity testing to ensure there is no upward fluid migration through vertical channels adjacent to the well bore, the EPA reviewed the cement bond log (CBL) run, and cement volumes pumped, during initial well construction. The EPA found no potential pathways for injected fluids to move upward around the outside of the well casing. Furthermore, there is approximate 3,000 feet of impermeable Pierre Shale above the injection zone, which provides additional protection of overlying aquifers.

The Tribe's assertion that industry lacks the capacity to conduct regular inspections of its injection wells is a suggestion that the operator will not comply with the Permit. Potential future noncompliance is not a factor that the EPA can consider when making permit decisions. The Tribe's assertion that EPA's oversight will be inadequate is also outside the scope of factors that EPA can consider when making permit decisions.

Finally, while it is not entirely clear what the Tribe is asserting with regard to its comment on a 1000 year "temporal residence," it appears that they may be expressing a concern about long term impacts to tribal members. As explained above, the Permit includes several provisions preventing endangerment to USDWs from well mechanical integrity failures. In addition, Part II Section E of the Permit requires that the well be properly plugged and abandoned in a manner that will provide long term ground water protection. Therefore, the EPA does not expect impacts to USDWs from this permitted injection.

Comment 8:

The Draft Permit, as currently written, does not adequately monitor and protect against potential harms to MHA Nation lands and waters, including the infiltration of contaminated waters into tribally owned pore space. Each underground injection well has an associated " injection zone" defined as "a geological 'formation,' group of formations, or part of a formation receiving fluids through a well." 40 C.F.R. § 146.3. The injection zone for the McKenzie Federal 35-1 is a sandstone formation known as the Inyan Kara formation. Because of the sandstone lithology of the Inyan Kara formation, contaminated fluids can percolate through the formation and enter into pore space owned by the MHA Nation. Any such infiltration of contaminated fluids would constitute a trespass on the part of the well operator and a breach of trust on the part of the EPA. The Draft Permit does not contain measures to prevent this harmful phenomenon from occurring.

The Draft Permit must contain adequate mechanisms to monitor the volume of contaminated fluid flowing into portions of the injection zone underlying MHA Nation' s trust lands. The Draft Permit a mechanism that will prevent infiltration into tribally owned pore space. These additional terms must be developed with reliance on empirical studies performed in consultation with the MHA Nation. Such mechanisms should consider the effect of other wells in and around the area and their effect on the formation and migration potential.

EPA Response 8:

While the EPA does not have authority under the SDWA to consider potential harm to tribal land, or pore space, in issuing a UIC permit, the EPA has included an injection volume limit in the Final Permit as noted above to protect the ground water underlying trust lands. In addition, the Permit requires monitoring of injection volumes, both monthly and cumulatively. In Part II(A)(3)(d) *Sampling and Monitoring Devices*, the Permit requires the installation of a non-resettable flow meter that records the cumulative volumes on the injection line.

Part II(D)(2)(b) *Monitoring Methods* requires injected volumes, cumulative injective volumes, and injection rates be recorded. Appendix D - *Monitoring and Reporting Parameters* requires weekly and annual reports on injection rates and volumes. This monitoring includes both injection rates and volumes. These requirements will allow the EPA to evaluate the distance of injected fluid travel over time based on its analysis and conclusions noted above in response to the Tribe's concerns in Comment 3. In addition to these measures that should prevent the contamination of USDWs under trust lands, if the well's injection rates and volumes significantly change (e.g., increase); or if other wells are drilled and completed in the vicinity of the McKenzie Federal 35-1 well, the EPA will consider taking further actions.

Comment 9:

Review of the Draft Permit reflects that the injection zone underlies the MHA Nation's trust lands. The Draft Permit identifies an Area of Review ("AOR"), consisting of lands within a fixed three-quarter mile radius of the proposed McKenzie Federal 35-1 Well lands comprising this AOR include MHA Nation trust lands. Pursuant to federal regulations, the purpose of the AOR is to establish an estimated perimeter within which injected fluids could potentially migrate into drinking water sources. See 40 C.F.R. § 146.6. Thus, the Draft Permit acknowledges the potential for injected fluids to infiltrate portions of the injection zone underlying MHA Nation trust lands yet fails altogether to establish any mechanism to prevent this infiltration.

EPA Response 9:

The Tribe appears to confuse the concept of the AOR with distance that the injected fluids may travel. The AOR is an area which is reviewed for the purpose of determining whether there are potential pathways of upward migration of formation fluids out of the injection zone due to subsurface pressure effects from injection. These pathways include improperly abandoned or poorly constructed wells, faults, insufficient geologic confinement and other pathways, typically within one-quarter mile of the injection well. As noted in Appendix F of the Permit, the EPA did not identify any such pathways within one-quarter mile or 1,320 feet from this well. In contrast, the EPA's analysis and conclusions in response to Comment 3 concerns the emplacement and migration of injected fluids within the injection zone. As explained in the response to Comment 3, while the EPA's analysis indicates that it is unlikely for injected fluids to migrate under trust lands, the EPA is including an injection volume limitation in the Final Permit.

Comment 10:

EPA Environmental Appeals Board (EAB) decisions do not limit tribal authority and EPA's trust responsibility in issuing UIC permits. The MHA Nation is not aware of any EAB decision that would limit EPA's ability to consider and abide by MHA Nation resolution. None of the cited decisions considered the sovereign authorities of Indian tribes, the EPA's govt-to-govt relationship with Indian tribes, the EPA's ability to implement alternate UIC programs on tribal lands, and EPA's Tribal Policy. The EPA has a trust responsibility to administer its programs in compliance with EPA's Tribal Policy, in which the EPA recognizes tribes as "sovereign entities with primary authority and responsibility for each tribe's land and membership." As this language reflects, the EPA's trust responsibility includes administering its programs in a manner that acknowledges and respects tribes' "primary authority" over their reservation lands.

The SDWA and its regulations also do not circumscribe this trust responsibility in any way. To the contrary, by incorporating Tribe-specific provisions authorizing the EPA to " promulgate an alternate UIC Program for Class II wells on any Indian reservation or Indian lands" and to consider "[t]he interest and preferences of the tribal government having responsibility for the given reservation or Indian lands ," the applicable regulations acknowledge the unique trust relationship between federal agencies and Indian Tribes. 40 C.F.R. § 144.2.

EPA Response 10:

During the tribal consultation process for UIC permit applications, including for McKenzie Federal 35-1, the EPA discussed the limitations on our authority with the MHA Nation, explaining that the SDWA does not authorize the EPA to implement the Tribe's laws in UIC permit decisions by the Agency. As the Tribe notes in its comments, the EPA provided a list of relevant EPA Environmental Appeals Board (EAB) decisions that discuss limitations on the scope of the EPA's UIC permitting authority. These cases speak to the limited scope of the EPA's authority in issuing UIC permits and hold that matters of state or local law and property rights, which include pore space ownership, are outside the scope of the EPA's permitting authority.

The Tribe disputes the effect of these cases in this permitting decision and asserts that the application of the federal trust responsibility to federally recognized Indian tribes would allow the EPA to consider and abide by, and effectively implement, the MHA Nation Resolution No. 11-75-VJB. The Tribe asserts that the EAB has never before considered the following factors in these previous decisions: the sovereign authorities of Indian tribes, the EPA's government-to-government relationship with Indian tribes, the EPA's ability to implement alternate UIC programs on tribal lands, and EPA's Policy on Consultation and Coordination with Indian Tribes. Even if the EAB has not had the opportunity to consider these factors in prior decisions, the EPA Region 8 did consider these factors in the context of this permitting decision. Our analysis of our authorities under the SDWA is informed by EAB decisions. We address the scope of the EPA's SDWA legal authority, including the EPA's lack of authority under the SDWA and its regulations to condition or deny UIC permit applications based upon MHA Nation Resolution No. 11-75-VJB, in Responses 1 and 5. We address tribal sovereign authority in Response 1. We address the federal trust responsibility (i.e. – the government-to-government relationship) in Response 5. We address alternate UIC programs in Response 2. We address the EPA's Policy on Consultation and Coordination with Indian Tribes in Response 6.