EPA Region 8

Underground Injection Control (UIC) Program

Response to Comments

Class V Permits and Aquifer Exemption Decisions

For Jody Field 34-1 (MT52443-12513) and 34-2 (MT52439-12514)

Issued to:

Montalban Oil & Gas Operations, Inc
33 1st Ave SW
Cut Bank, Montana 59427-2937

Contents

INTRODUCTION

The EPA Region 8 Underground Injection Control (UIC) Program is issuing final Safe Drinking Water Act (SDWA) Class V UIC Permits (Permits) to Montalban Oil & Gas Operations, Inc. (MOGO) for injection activities into the Jody Field 34-1 and 34-2 wells.

The Permits will allow for injection of produced fluid from oil and gas related activities and non-hazardous industrial wastewater into the two existing wells. The wastewater is from the Montana Renewables Refinery in Great Falls, MT, and is generated by pretreating renewable feedstocks.[1] In the pretreatment process, water and a weak acid are combined with the feedstocks under high temperature and pressure, then allowed a predetermined contact time before being cooled. The cooled mixture is processed in an electrostatic separator to yield a renewable oil stream for processing into renewable fuels. The remaining water phase, containing primarily phosphorus, nitrogen, and salts, constitutes the non-hazardous industrial wastewater to be injected.[2]

In connection with the Permits, EPA is approving an expansion to the aquifer exemption (AE). This updated approval consolidates and expands previously authorized exemptions for the Madison Formation at these locations by extending the depth from 3,496 feet to approximately 3,700 feet at Jody Field 34-1 and from 3,451 feet to approximately 3,700 feet at Jody Field 34-2 and expanding the lateral subsurface area from a 0.25-mile-radius (an area equal to 0.20 square miles) to an area of 6.6 square miles. The purpose of the expansion is to account for the natural hydraulic gradient of long-term ground water flow and accommodate for migration of injected fluids.

Background

The EPA's UIC Program received Class V permit applications from MOGO for the existing Jody Field 34-1 and 34-2 wells. These wells are on private property owned by Jody Field in Pondera County, approximately eight miles southwest of Valier, Montana, and 6.6 miles south of the Blackfeet Indian Reservation.

The Montana Board of Oil and Gas Commission (MBOGC) originally authorized Jody Field 34-1 as a Class II injection well to inject into the Upper Madison Formation utilizing an AE that the EPA approved on August 15, 2011. MBOGC originally authorized Jody Field 34-2 as a Class II injection well to inject into the Sawtooth and Madison formations utilizing an AE that the EPA approved on March 15, 2010.

In 2022, MOGO applied to EPA for two permits to convert the Class II wells to Class V wells to allow MOGO to also inject non-hazardous industrial wastewater from the Montana Renewables Refinery. The change from Class II wells to Class V wells would be required to include the requested injectate type, as Class II wells are limited to wastewater from oil and gas production. Because Montana does not have primary enforcement authority or "primacy" over Class V injection wells in Montana, the EPA issues Class V injection well permits.

As part of the application, MOGO requested vertical expansions of the AEs associated with these wells because they obtained evidence during well re-work that there was not a confining zone of less permeable layers within the Lower Madison Formation directly beneath the bottom of the original well depth, as previously assumed during evaluation of the 2011 AE. Therefore, fluids injected into the upper portion of the formation are likely to migrate into the lower portion due to the vertical hydraulic connectivity between the layers. In 2023 during the first public comment period, EPA proposed separate vertical AE expansions for the Jody Field 34-1 and 34-2 wells. However, public feedback raised concerns about potential fluid migration beyond the originally proposed 0.25-mile radius. In response, EPA performed additional modeling, incorporating the natural hydraulic gradient

[1] The renewable feedstocks may include, but are not limited to, vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat) distiller's corn oil, and used cooking oil.

[2] Application data - Attachment D - Injection Operation and Monitoring Program, 4. INJECTATE CHARACTERISTICS

and other site-specific factors. Consequently, EPA proposed a single, consolidated AE covering injection activities from both wells. Under this revised exemption, the vertical extent is expanded to approximately 3,700 feet, and the lateral area is increased to 6.6 square miles because the modeling informs that the injected fluids will remain contained in this area for at least 10,000 years. As part of this action, EPA approves the expansion of the existing AEs for the Madison aquifer under 40 CFR § 146.4(a), 146.4(b)(2), and 146.4(b)(3).

EPA's 2023 Public Review Process (1st Public Comment Period)

On December 7, 2023, the UIC program provided a 30-day public notice of the draft Permits for conversion of two existing Class II injection wells to Class V disposal wells (Jody Field wells 34-1 and 34-2) and accompanying aquifer exemptions on EPA's Region 8 UIC website: https://www.epa.gov/uic/underground-injection-control-epa-region-8-co-mt-nd-sd-ut-and-wy#public-notices.

In addition to the public notice on EPA Region 8's UIC Program website, EPA published notice of the draft UIC permits and aquifer exemption expansions actions in the *Cut Bank Pioneer Press, the Shelby Promoter, the Glacier Reporter, and the Valierian.* All notices directed readers to EPA Region 8's UIC Program website, which contained links to the relevant documents for the proposed actions. These documents included the draft permits, fact sheets, technical narratives, the complete application, the draft aquifer exemption record of decisions, and cover letter sent to the Permittee.

At the request of the Pondera County Sanitarian, the first public comment period was extended to January 24, 2024 to allow for a public meeting, organized and held by the Pondera County Sanitarian. This meeting took place on January 3, 2024. EPA agreed to extend the comment period beyond the standard 30-day period and virtually attended the public meeting. Prior to the end of the extended comment period, a request was received from U.S. Senator Jon Tester's office to further extend the comment period. In response, the EPA extended the comment period a second time to February 15, 2024.

Due to the proximity of the wells to the Blackfeet Indian Reservation and increased community interest, the EPA extended an offer to the Blackfeet Tribe to meet and answer questions about the Permits. This meeting was held virtually on February 7, 2024. Prior to the February 15, 2024, public comment period closing date, the EPA received a request to hold a public hearing. Due to the public hearing request, the EPA provided 30-day notice of the hearing on the EPA Region 8 UIC Program's website and in the *Cut Bank Pioneer Press, the Shelby Promoter, the Glacier Reporter, and the Valierian* and extended the public comment period a third time.

The EPA held a public hearing on Wednesday, April 3, 2024, at the Conrad High School Auditorium, 308 S Illinois Street, Conrad, Montana 59425. The EPA began with an informative question-and-answer session from 5:00 to 6:30 pm. The public hearing followed, from 6:30 p.m. to 8:30 p.m. Attendees were notified before and during the question-and-answer session that their comments would not be recorded until the public hearing officially started. The public hearing was attended by approximately 105 people. Attendees included representatives from MOGO, Pondera County Commissioners, Pondera County Sanitarian, Pondera Disaster & Emergency Services Coordinator, a representative from the Blackfeet Tribe, media, and residents. Approximately twenty speakers registered to provide testimony for the court reporter. Residents who spoke expressed concerns about the injectate, the laboratory results of the injectate, the adequacy of EPA's scientific review, and other concerns. To ensure the public was able to submit comments after the hearing, the comment period closed five days later on April 8, 2024. The total 123-day length of the comment period exceeded the standard 30-day comment period.

EPA's 2025 Public Review Process (2nd Public Comment Period)

In response to comments received, the EPA made changes to the draft Permits and draft AE Record of Decision (AE ROD) and provided a second 30-day public notice of the draft Permits on August 20, 2025. EPA published notice of comment period for the permitting actions on the EPA Region 8 UIC Program's website and in the *Cut Bank Pioneer Press, the Shelby Promoter, the Glacier Reporter, and the Valierian*. The public was provided information on how to comment in the notice.

The purpose of the 2nd public notice and comment period was to provide interested and affected parties the opportunity to comment on the proposed changes to the MOGO Jody Field 34-1 & 34-2 draft Permits and draft AE ROD. The public was notified that input considered during this comment period was limited to the changes made since the first public notice period in 2023-2024, specifically the AE expansion, the Area of Review (AOR) expansion, and the AOR analysis. The public was provided with the online link to Regulations.gov for submitting comments using the docket number: EPA-R08-OW-2025-0852-0001.

Regulations.gov documents included all Administrative Record documents compiled in the following sections: Application and Supporting Documents from Applicant, Other Supporting File Documents, Public Notice Documents 2023, Procurement – Public Notice, Additional Information following PN Period, Public Notice Documents 2025. The full docket included over 2,500 pages of information.

Many commenters requested an extension of the public comment period that started on August 20, 2025, by at least 60 days, with some preferring up to 90 days. Due to the limited scope of the changes made to the documents that were noticed in 2025, the public comment period was extended for an additional 17 days beyond the usual regulatory 30-day time frame, for a total of 54 days in response to multiple requests from the public for additional time to review these actions and documents.

The EPA held a public hearing on Wednesday, September 23, 2025, at the Conrad High School Auditorium, 308 S Illinois Street, Conrad, Montana 59425. The EPA began with an informative presentation from 5:30 to 6:00 pm. The public hearing followed from 6:00 p.m. to 8:00 p.m. The public hearing was attended by approximately 99 people. Approximately 34 speakers registered to provide testimony for the court reporter. To ensure the public was able to submit comments after the hearing, the comment period closed 20 days later, on October 13, 2025.

EPA's Final Permit Decision Making Process including Responses to Comments

During the December 2023 public comment period and subsequent April 2024 public hearing, EPA received over 250 emailed, hand-written, and court-reporter-documented testimony comments on the draft Permits and associated documents. The EPA received an additional 120+ documents during the second comment period held in August of 2025. EPA reviewed and considered all comments received during the public comment periods and determined it would be appropriate to further update the draft Permits and associated documents.

All comments are included in the Final Administrative Record for the final permitting decisions and are available on Regulations.gov at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002.

EPA has prepared this Response to Comments in accordance with the regulations at 40 CFR § 124.17. This document: 1) specifies which provisions of the draft permits have been changed in the final permit decisions and the reasons for those changes; and 2) describes and responds to all significant comments received on the draft Permits and associated documents.

Since EPA received comments on the draft Permits during the public review process, the final permit decisions will not be effective until 30 days after the date of service of notice of the final permit issuance (noted above) as required by 40 CFR § 124.15. The purpose of this 30-day period is to allow time for those who submitted comments or participated in a public hearing to appeal the final permit decisions as described under 40 CFR § 124.19, which is paraphrased below.

Within 30 days after the Region serves notice of the issuance of the UIC final permit decisions, any person who filed comments on the draft permits or participated in a public hearing may petition the Environmental Appeals Board to review any condition of the final permit decisions. Any person who failed to file comments or failed to participate in a public hearing on the draft permits may petition for administrative review only to the extent of the changes from the draft to the final permit decisions. The 30-day period within which a person may request review under this section begins with the service of notice of EPA's final permit decisions unless a later date is specified in that notice. The petition must identify the contested final permit condition or other specific challenge to the final permit decisions and clearly set forth, with legal and factual support, contentions for why the final permit decisions should be reviewed, including a demonstration that any issues being raised on appeal were raised during the draft public comment period (including any public hearing) to the extent required by these regulations and a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous.

CHANGES TO THE FINAL PERMITS

Pursuant to the permitting regulations at 40 CFR § 124.17, this section of the Response to Comments specifies which provisions of the draft permits have been changed in the final permits and provides a reason for each change.

1. Page 1. Signature Authority

Draft Permit:
Sarah Bahrman, Manager
Safe Drinking Water Branch
Water Division

Final Permits:
Sarah Bahrman
Acting Director
Water Division

Reason for change: The EPA signatory was updated to provide the updated signatory for the Acting Director of the Water Division.

2. Section A. Footer

The permit number was added to the footer.

3. Section B.2 Requirements Prior to Receiving Initial Authorization to Commence Injection

Draft language:

*2. **Requirements Prior to Receiving Initial Authorization to Commence Injection***

Well injection may commence only after the Permittee has received written authorization to inject from the Director and has met all well construction and pre-injection requirements, including the following:

(a) The Permittee has:

(i) submitted to the Director a notice of completion of construction and a completed EPA Form 7520-18 and required attachments or its equivalent. If the well construction is different than the approved construction found in ATTACHMENT I, the Permittee must also provide a revised well diagram and a description of the previously approved modification to the well construction;

(ii) conducted all applicable requirements found in ATTACHMENT III and ATTACHMENT V and submitted required records to the Director. The logging and testing requirements include demonstration of mechanical integrity (MI) pursuant to 40 CFR § 146.8(a) in accordance with the conditions found in Section C of this Permit; and

(iii) satisfied requirements for corrective action in ATTACHMENT VII, if applicable.

Final language:

*2. **Requirements Prior to Receiving Initial Authorization to Commence Injection***

Well injection may commence only after the Permittee has received written authorization to inject from the

Director and has met all well construction and pre-injection requirements, including the following:

(a) The Permittee has:

(i) submitted to the Director a notice of completion of construction and a completed EPA Form 7520-18 and required attachments or its equivalent. If the well construction is different than the approved construction found in ATTACHMENT I, the Permittee must also provide a revised well diagram and a description of the previously approved modification to the well construction;

(ii) conducted all applicable requirements found in ATTACHMENT III, ATTACHMENT V, and ATTACHMENT VIII and submitted required records to the Director. The logging and testing requirements include demonstration of mechanical integrity (MI) pursuant to 40 CFR § 146.8(a) in accordance with the conditions found in Section C of this Permit; and

(iii) satisfied requirements for corrective action in ATTACHMENT VII, if applicable.

Reason for change: EPA received a number of comments and concerns regarding the volume and contents of the waste being transported to the well site. EPA added the Site Security and Manifest System Requirements to address the commercial nature of the well which requires the Permittee to submit a copy of the Facility Manifest prior to receiving authorization to inject and keep records of every disposal load received. The manifest requirements can be found in ATTACHMENT VIII in the Permit. EPA added ATTACHMENT VIII to Section B.2(a)(ii) to specify that the Permittee is required to comply with Attachment VIII prior to receiving authorization to inject and commencing well injection.

4. Section B.11 Well Injection and Seismicity

Draft language:
None

Final language:

*11. **Well Injection and Seismicity***

The U.S. Geological Survey (USGS) Earthquake Hazards Program operates an email notification service which reports real-time earthquake events for any area specified by the user. The Permittee is required to subscribe to this service, known as the Earthquake Notification Service (ENS) to monitor seismic activity. Details for the ENS can be found at: https://earthquake.usgs.gov/ens/.

(a) The Permittee must subscribe to this service and check daily for notification emails from the service.
(b) For any seismic event measuring 4.5 magnitude (MMI scale) or greater reported within two miles of the injection well,
   i. The Permittee must notify the Director within twenty-four (24) hours of discovery;
   ii. The Permittee must immediately cease injection; and
   iii. Injection must not resume until the Permittee has obtained approval to recommence injection from the Director. The Director may require mechanical integrity tests, well rework and/or additional monitoring as conditions to resume injection.
(c) The Permittee must document any recorded seismic event measuring 2.0 magnitude (MMI scale) or greater occurring within twenty miles of the injection well and report such events to Director on a quarterly basis.

Reason for change: Several commenters noted feeling earthquakes in the area and expressed concerns regarding the potential for an earthquake to affect the wells and potentially contaminate groundwater. To address concerns regarding the effect an earthquake may have on the well, EPA added the requirements

above requiring the Permittee to subscribe to the U.S. Geological Survey (USGS) Earthquake Hazards Program notification system. Further requirements include quarterly notification of earthquakes of 2.0 magnitude or greater within 20 miles of the well and to cease operations if any earthquake activity of magnitude greater than 4.5 is detected within 2 miles of the facility.

5. Section B.12 Site Security and Manifest Requirements

Draft language:
None

Final language:

*12. **Site Security and Manifest System Requirements***

The Permittee must implement the site security and manifest system requirements as described in ATTACHMENT VIII. These measures must be put into place and documentation of compliance with the measures must be provided to EPA prior to receiving authorization to inject.

Reason for change: EPA received a number of comments and concerns regarding the volume and contents of the waste being transported to the well site. EPA added the Site Security and Manifest System Requirements to address the commercial nature of the well which requires the Permittee to submit a copy of the Facility Manifest prior to receiving authorization to inject and keep records of every disposal load received. The manifest requirements can be found in ATTACHMENT VIII in the Permit.

6. Section E.6 Effect of Plugging and Abandonment

Draft language:
None

Final language:

*6. **Effect of Plugging and Abandonment***

If the well is plugged and abandoned prior to the end of the Permit's 10-year term, this Permit will expire if following submission of the required plugging and abandonment report in Section E.4, the Director provides written notification to the Permittee acknowledging plugging in accordance with this Permit.

Reason for change: Some commenters noted concerns about the life of the well and ongoing injection of wastes into the well. To clarify the life of the Class V permits, this provision specifies that plugging and abandonment in accordance with the Permit will cause expiration of the Permit once written notification is provided by the Director, ending authorization of any injection activities.

7. Section J. Continuation of Expiring Permits

Draft language:
None

Final language:

*1. **Duty to Reapply***

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this

Permit, the Permittee must submit a complete application for a new permit at least 180 days before this Permit expires.

2. ***Permit Extensions***

The conditions of an expired permit continue in force in accordance with 5 U.S.C. 558(c) until the effective date of a new permit, if:

(a) The Permittee has submitted a timely application, which is a complete application for a new permit; and

(b) The Regional Administrator or his/her authorized representative, through no fault of the Permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit.

3. ***Enforcement***

When the Permittee is not in compliance with the conditions of the expiring or expired permit, the Regional Administrator or his/her authorized representative may choose to do any or all of the following:

(a) Initiate enforcement action based upon the permit which has been continued.

(b) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit.

(c) Issue a new permit under 40 CFR part 124 with appropriate conditions.

(d) Take other actions authorized by the UIC regulations.

4. ***State or Tribal Continuation***

An EPA issued permit does not continue in force beyond its expiration date under Federal law if at that time a State or Tribe has primary enforcement authority. A State or Tribe authorized to administer the UIC program may continue the EPA issued permits until the effective date of the new permits, if State or Tribal law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State or Tribal-issued new permit.

Reason for change: Some commenters noted concerns about the life of the well and ongoing injection of wastes into the well. To clarify the life of the Class V permits, continuation language and clarifying enforcement language was added to the permit. Permit continuation is required by § 144.36 Duration of permits. (a) Permits for Class I and V wells shall be effective for a fixed term not to exceed 10 years. This requirement was added to clarify the requirements for the Permittee to reapply prior to the end of 10 years.

8. Attachment II.1 Area of Review

A. Changes Specific to Jody Field 34-1 Permit

Draft language:
The AOR for this Permit is within a fixed 0.25-mile radius about the injection well.

Final language:
The AOR for this Permit is within a fixed 2.0-mile radius around the injection well.

Reason for Change: Several commenters raised concerns about the potential for migration of fluids away from the wells. Following consideration of these comments, the EPA performed additional modeling to

address these concerns. As a result, the AOR for the Permit has been expanded to a fixed 2.0-mile radius. The AE was also expanded to account for the natural hydraulic gradient and accommodate for migration of injected fluids.

B. Changes Specific to Jody Field 34-2 Permit

Draft language:
The AOR for this Permit is within a fixed 0.25-mile radius about the injection well.

Final language:
The AOR for this Permit is within a fixed 2.1-mile radius about the injection well.

Reason for Change: Several commenters raised concerns about the potential for migration of fluids away from the wells. Following consideration of these comments, the EPA performed additional modeling to address these concerns. As a result, the AOR for the Permit has been expanded to a fixed 2.1-mile radius. The AE was also expanded to account for the natural hydraulic gradient and accommodate for migration of injected fluids.

9. Attachment II.2 Injection Zone

A. Changes Specific to Jody Field 34-1 Permit

Draft language:

Formation Name or Stratigraphic Unit	Top (ft.)	Bottom (ft.)	Exemption Status
Madison Formation	3,428	~3,700*	Montana Board of Oil and Gas Conservation (MBOGC) submitted an Aquifer Exemption (AE) for the Madison Formation for the Jody Field 34-1 well to the EPA. On August 15, 2011, the EPA reviewed and concurred on this aquifer exemption for the Madison Formation within a one-quarter (1/4) mile radius from the wellbore between the depths of 3,428 to 3,493 feet, in accordance with 40 CFR §§144.7 and 146.4 of the Safe Drinking Water Act.

*An aquifer exemption expansion is proposed for the Madison Formation between the depths of 3,493 to approximately 3,700 feet.

Final language:

Formation Name or Stratigraphic Unit	Top (ft.)	Bottom (ft.)	Exemption Status
Madison Formation	3,428	~3,700*	In accordance with 40 CFR §§ 144.7 and 146.4 of the Safe Drinking Water Act, EPA approved an aquifer exemption expansion for the Madison Formation within a 6.6-square mile area for the entire vertical depth from the lower confining layer to the upper confining layer of the Madison Formation.

*The bottom depth of the Madison at the Jody Field #34-1 varies across the exemption area.

Reason for Change: The draft language referred to the status of the aquifer exemption expansion as initially proposed. The AE was expanded to account for the natural hydraulic gradient and accommodate for migration of injected fluids. The AE for the associated project has been updated based on comments received during the comment periods.

B. Changes Specific to Jody Field 34-2 Permit

Draft language:

Formation Name or Stratigraphic Unit	Top (ft.)	Bottom (ft.)	Exemption Status
Madison Formation	3,418	~3,700*	Montana Board of Oil and Gas Conservation (MBOGC) submitted an Aquifer Exemption (AE) for the Madison Formation for the Jody Field 34-2 well to the EPA. On March 15, 2010, the EPA reviewed and concurred on this aquifer exemption for the Madison Formation within a one-quarter (1/4) mile radius from the wellbore between the depths of 3,418 to 3,451 feet, in accordance with 40 CFR §§144.7 and 146.4 of the Safe Drinking Water Act.

*An aquifer exemption expansion is proposed for the Madison Formation between the depths of 3,451 to approximately 3,700 feet.

Final language:

Formation Name or Stratigraphic Unit	Top (ft.)	Bottom (ft.)	Exemption Status
Madison Formation	3,418	~3,700*	In accordance with 40 CFR §§144.7 and 146.4 of the Safe Drinking Water Act, EPA approved an aquifer exemption expansion for the Madison Formation within a 6.6-square mile area for the entire vertical depth from the lower confining layer to the upper confining layer of the Madison Formation.

*The bottom depth of the Madison at the Jody Field 34-2 varies across the exemption area.

Reason for Change: The draft language referred to the status of the aquifer exemption expansion as initially proposed. The AE was expanded to account for the natural hydraulic gradient and accommodate for migration of injected fluids. The AE for the associated project has been updated based on comments received during the comment periods.

10. Attachment II.3 Maximum Allowable Injection Pressure (MAIP)

Draft language:

Specific Gravity must be derived from the results of the analytical sample required in ATTACHMENT III. The specific gravity value used to calculate the initial authorized MAIP was estimated. Prior to authorization to inject, the Permittee must provide a measured specific gravity value of the injectate.

Final language:

Specific Gravity must be derived from the results of the analytical sample required in ATTACHMENT III. The specific gravity value used to calculate the initial authorized MAIP was estimated. Prior to authorization to inject, the Permittee must provide the specific gravity value of the injectate.

Reason for Change: This change standardizes the terminology to ensure consistency with language used elsewhere in the Permits for specific gravity.

11. Attachment II.6 Injection Fluid Limitation

Draft language:
Injected fluids are limited to fluids associated with oil and natural gas production and industrial wastewater from Montana Renewable, generated from the pretreatment of renewable feedstocks. The renewable feedstocks may include, but are not limited to, vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat) distiller's corn oil, and used cooking oil. The Permittee shall not inject any hazardous substances, as defined in 40 CFR 261, at any time during the operation of the facility.

Final language:
This Permit authorizes injection of only the following fluids:

- Produced fluid from oil and gas exploration and production wells as defined at 40 CFR § 144.6(b)(1).
- Non-hazardous wastewater received from Montana Renewables generated from the processing of renewable feedstocks. The renewable feedstock may only include vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat), distiller's corn oil, and used cooking oil. The wastewater from Montana Renewables is prohibited from including any hazardous waste as defined at 40 CFR 261.3.

The burden of ensuring that only fluids authorized by the Permit are disposed of into the well is on the Permittee.

Reason for Change: This change is intended to clarify the allowable injectate. The Fact Sheet that accompanied the 2023 proposal to approve the Class V permits stated, "[i]n addition to continued oil and gas injection, MOGO proposes to inject wastewater generated from renewable feedstocks, which may include, but are not limited to, vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat) distiller's corn oil, and used cooking oil."[3] This description led the public to believe that the described food and animal byproduct feedstocks would be trucked to the wells and injected into the two wells. Rather, this list described the feedstock that will go into the refining process at the Montana Renewable Refinery in Great Falls. The refining processes for vegetable oils coming from plant biomass includes pyrolysis, saccharification, gasification, and hydrothermal liquefaction and the refining process for animal fats/tallow include degumming, transesterification (ethanol and potassium hydroxide addition), separation, and washing. The wastewater generated from these refining processes that would be trucked and injected into the wells is primarily composed of water, weak acid, phosphorus, nitrogen, salts and other impurities. Commenters were also concerned that the "may include, but are not limited to…" language does not sufficiently limit injection materials. In response, the phrase "but are not limited to…" was removed to clarify the injectate limitation.

12. Attachment II.7 Endangered Species Act Mitigation Measures

Draft language:
None

Final language:

*7. **Endangered Species Act Mitigation Measures***

To address the potential for impacts to grizzly bears related to truck traffic, trucking deliveries of

[3] EPA Seeks Comments on Injection Well Permit, Fact Sheet (2023).

wastewater for injection at the Jody Fields site must only occur during daylight hours between one hour after dawn and one hour before dusk. Permit limitations on trucking delivery hours are in effect annually, from March 1st through November 30th.

Reason for Change: Permit limitations on trucking delivery hours were included to limit deliveries to daylight hours during non-hibernation periods to reduce potential interactions with threatened grizzly bears. These limitations on trucking delivery hours will be in effect annually from March 1st through November 30th since grizzly bears are in hibernation (torpor) and are not expected to be out of their dens or on the roadways from December 1st through the end of February.[4] These permit provisions are intended to limit the trucking activities associated with this action to times when grizzly bears are expected to be less active.

13. Attachment III Sampling Requirements

Draft language:

Sampling Requirement	MAIP Revision Trigger	Minimum Recording Frequency	Minimum Reporting Frequency
Total Dissolved Solids (TDS)	--	Quarterly	Quarterly
pH	--	Quarterly	Quarterly
Specific Gravity	1.054*	Quarterly	Quarterly
Specific Conductance/Conductivity	--	Quarterly	Quarterly

* The specific gravity of the fluid provided with the application was estimated. A specific gravity greater than the MAIP Revision Trigger may require a MAIP recalculation (see Section B.4 of the Permit). The specific gravity MAIP Revision Trigger value will be revised after a sample analyzed for specific gravity is provided.

Final language:

Sampling Requirement	MAIP Revision Trigger	Recording Frequency	Reporting Frequency
Total Dissolved Solids (TDS)	NA	Quarterly	Quarterly
pH	NA	Quarterly	Quarterly
Specific Gravity	1.054*	Quarterly	Quarterly
Specific Conductance/Conductivity	NA	Quarterly	Quarterly
Toxic Characteristic Leaching Procedure (TCLP)**	NA	Annually	Annually

* The specific gravity of the fluid provided with the application was estimated. A specific gravity greater than the MAIP Revision Trigger may require a MAIP recalculation (see Section B.4 of the Permit). The specific

[4] Montana Natural Heritage Program. 2026. "MTNHP Species Observations: Grizzly Bear (Ursus arctos) Records in Montana." Data set. Accessed April 10, 2026. https://mtnhp.org/MapViewer/

gravity MAIP Revision Trigger value will be revised after a sample analyzed for specific gravity is provided.
** TCLP sampling applies only to the non-hazardous feedstock wastewater injectate from Montana Renewables.

Reason for Change: Several commenters voiced concerns about the injectate characteristics and that the EPA did not have controls in place for limiting potential introduction of hazardous injectate into the well. Required analytical methods were updated to include Toxic Characteristic Leaching Procedure (TCLP) analysis to provide a more robust chemical composition analysis of fluids in the injectate. These requirements more fully identify the nature of the waste being placed into the subsurface, ensuring regulatory compliance, protecting underground sources of drinking water (USDWs), and evaluating the potential for geochemical reactions within the receiving formation. TCLP measures the mobility of organic/inorganic contaminants (metals, volatiles, pesticides) to ensure environmental safety and is utilized to determine if a liquid waste is hazardous. These analyses provide additional protection, and enforcement accountability for the EPA and public.

14. Attachment IV Monitoring and Reporting Requirements

A. Changes Specific to Jody Field 34-1 Permit

Draft language:

Monitoring and Reporting Requirement	Maximum Permit Limit	Report Parameter	Monitor Frequency	Recording Frequency	Reporting Frequency
Surface Inj Pressure (psi)	1,484	Min/Average/Max	Continuous	Monthly	Quarterly
TCA Annulus Pressure (psi)	100	Min/Average/Max	Continuous	Monthly	Quarterly
Injection Rate (bbl/day)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Cumulative Volume (bbl) (since Class V authorization)	8,811,350*	Monthly Total	Continuous	Monthly	Quarterly
Injection Volume (bbl)	NA	Monthly Total	Continuous	Monthly	Quarterly
Bradenhead Annulus Pressure (psi)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Field 14-34 Wellhead Pressure (psi)	NA	Min/Average/Max	Monthly	Monthly	Quarterly
Field 4-1A Wellhead Pressure (psi)	NA	Min/Average/Max	Monthly	Monthly	Quarterly
The Permittee must provide a listing of the sources of injected fluids. Copies of all monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Quarterly Report.					Quarterly

Document the review performed to determine if additional wells exist within the area of review that have not previously been identified. For those wells within the AOR that penetrate the overlying confining zone, a well construction diagram, cement records and cement bond log are also required.	Quarterly

*This value represent the volume limitation permissible as a Class V UIC well. Past injection volumes have been accounted for in this calculation.

Quarterly Reports must cover the period from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. Quarterly Reports must be submitted by the fifteenth day of the month following the end of the data collection period. EPA Form 7520-8 may be used or adapted to submit the Quarterly Report. The monitoring requirements specified in this Permit are mandatory even if an EPA form does not include all information.

Final language:

Monitoring and Reporting Requirement	Maximum Permit Limit	Report Parameter	Monitor Frequency	Recording Frequency	Reporting Frequency
Surface Injection Pressure (psi)	1,484	Min/Average/Max	Continuous	Monthly	Quarterly
Tubing Casing Annulus (TCA) Pressure (psi)	100	Min/Average/Max	Continuous	Monthly	Quarterly
Injection Rate (bbl/day)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Bradenhead Annulus Pressure (psi)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Monthly Injection Volume (bbl)	NA	Monthly Total	Continuous	Monthly	Quarterly
Cumulative Injection Volume (bbl) (since Class V authorization)	8,811,350*	Monthly Total	Continuous	Monthly	Quarterly
AOR well, Field 14-34 Formation Pore Pressure (psi)**	NA	Single Value	Monthly	Monthly	Quarterly
			Continuous (During PFOT)	Continuous (During PFOT)	Once
AOR well, Jody Field 4-1A Formation Pore Pressure (psi)**	NA	Single Value	Monthly	Monthly	Quarterly
			Continuous (During PFOT)	Continuous (During PFOT)	Once
The Permittee must provide a listing of the sources of injected fluids. Copies of all monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Quarterly Report.					Quarterly

Document the review performed to determine if additional wells exist within the area of review that have not previously been identified. For those wells within the AOR that penetrate the overlying confining zone, a well construction diagram, cement records and cement bond log are also required.	Quarterly
Summary of monthly reviews of seismic event(s) within a twenty (20) mile radius of the well, gathered from the USGS Earthquake Hazard Program website and/or personal communication.	Quarterly
The Permittee must submit a report describing the review in ATTACHMENT VIII 4.a. If the Permittee does not identify any discrepancies described in ATTACHMENT VIII 4.b., the report must state this.	Quarterly

*This value represents the volume limitation permissible as a Class V UIC well. Past injection volumes have been accounted for in this calculation.

**These wells must remain shut-in for the life of the Permit for the purposes of monitoring formation pore pressure. The pore pressure must be representative of top of the injection zone formation, and the Permittee must describe how the pore pressure was determined. The quarterly report must include all recorded formation pore pressure data, the date and time of the measurements, and the calculated change in pressure over time. The first formation pore pressure measurement must be recorded before injection begins and monthly thereafter. There is also a one-time requirement to continuously record the formation pore pressure at these wells during the first pressure fall off test (PFOT). This information must be included with the results of the PFOT, which must be submitted to the Director within 60 calendar days of the testing activity completion.

Quarterly Reports must cover the period from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. Quarterly Reports must be submitted by the fifteenth day of the month following the end of the data collection period. EPA Form 7520-8 may be used or adapted to submit the Quarterly Report. The monitoring requirements specified in this Permit are mandatory even if an EPA form does not include all information.

Reason for Change: The monitoring and reporting table was modified to clarify and support the changes made in Permit Change #4 (Section B.11. Well Injection and Seismicity), Permit Change #5 (Section B.12 Site Security and Manifest Requirements), and Permit Change #16 (Attachment VIII Site Security and Manifest Requirements). This change also provides clarity on the reporting submittal requirements. Because several commenters requested monitoring of the injectate plume, EPA re-evaluated the monitoring and reporting requirement for the Jody Field 4-1A and Field 14-34 wells (AOR wells) to determine if the wells can provide additional information and support the computational model. The formation pore pressure is a more appropriate monitoring parameter, as the wellhead pressure may not yield a meaningful result if the water level is below the surface, which is possible at the AOR wells because data indicate static water levels at the Jody Field injection wells are below the surface. The requirement for minimum, average, and maximum values would provide no additional insight; therefore only a single monthly value for pressure is required. EPA added a requirement to continuously monitor the formation pore pressures of the AOR wells during the first pressure fall off test. By monitoring formation pressures in the shut-in AOR wells and comparing them to the injection well pressures, EPA can confirm that the model inputs remain representative. When fluid is injected into a formation, it creates a pressure increase at the injection point. Pressure then dissipates outward based on the ability of the formation to transmit fluid (hydraulic conductivity). Shut-in wells in the AOR act like remote sensors. Since these shut-in wells are not actively being used, any change in pressure at the AOR well mainly reflects the influence of the nearby injection activity. The comparison of pressure changes at the shut-in wells with the pressure changes at the injection well can show if the pressure is

spreading as expected through the formation. This monitoring requirement will provide data for EPA to re-evaluate the hydraulic conductivity of the formation. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information.

EPA also made minor clarifying edits to the table in the Monitoring and Reporting Requirements column.

B. Changes Specific to Jody Field 34-2 Permit

Draft language:

Monitoring and Reporting Requirement	Maximum Permit Limit	Report Parameter	Monitor Frequency	Minimum Recording Frequency	Minimum Reporting Frequency
Surface Inj Pressure (psi)	688	Min/Average/Max	Continuous	Monthly	Quarterly
TCA Annulus Pressure (psi)	100	Min/Average/Max	Continuous	Monthly	Quarterly
Injection Rate (bbl/day)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Cumulative Volume (bbl) (since Class V authorization)	7,156,173*	Monthly Total	Continuous	Monthly	Quarterly
Injection Volume (bbl)	NA	Monthly Total	Continuous	Monthly	Quarterly
Bradenhead Annulus Pressure (psi)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Field 14-34 Wellhead Pressure (psi)	NA	Min/Average/Max	Monthly	Monthly	Quarterly
The Permittee must provide a listing of the sources of injected fluids. Copies of all monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Quarterly Report.					Quarterly
Document the review performed to determine if additional wells exist within the area of review that have not previously been identified. For those wells that penetrate the confining zone, a well construction diagram, cement records and cement bond log are also required.					Quarterly

*This value represent the volume limitation permissible as a Class V UIC well. Past injection volumes have been accounted for in this calculation.

Quarterly Reports must cover the period from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. Quarterly Reports must be submitted by the fifteenth day of the month following the end of the data collection period. EPA Form 7520-8 may be used or adapted to submit the Quarterly Report. The monitoring requirements specified in this Permit are mandatory even if an EPA form does not include all information.

Final language:

Monitoring and Reporting Requirement	Maximum Permit Limit	Report Parameter	Monitor Frequency	Minimum Recording Frequency	Minimum Reporting Frequency
Surface Injection Pressure (psi)	688	Min/Average/Max	Continuous	Monthly	Quarterly
Tubing Casing Annulus (TCA) Pressure (psi)	100	Min/Average/Max	Continuous	Monthly	Quarterly
Injection Rate (bbl/day)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Bradenhead Annulus Pressure (psi)	NA	Min/Average/Max	Continuous	Monthly	Quarterly
Monthly Injection Volume (bbl)	NA	Monthly Total	Continuous	Monthly	Quarterly
Cumulative Injection Volume (bbl) (since Class V authorization)	7,156,173*	Monthly Total	Continuous	Monthly	Quarterly
AOR well, Field 14-34 Formation Pore Pressure (psi)**	NA	Single Value	Monthly	Monthly	Quarterly
			Continuous (During PFOT)	Continuous (During PFOT)	Once
AOR well, Jody Field 4-1A Formation Pore Pressure (psi)**	NA	Single Value	Monthly	Monthly	Quarterly
			Continuous (During PFOT)	Continuous (During PFOT)	Once
The Permittee must provide a listing of the sources of injected fluids. Copies of all monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Quarterly Report.					Quarterly
Document the review performed to determine if additional wells exist within the area of review that have not previously been identified. For those wells within the AOR that penetrate the overlying confining zone, a well construction diagram, cement records and cement bond log are also required.					Quarterly
Summary of monthly reviews of seismic event(s) within a twenty (20) mile radius of the well, gathered from the USGS Earthquake Hazard Program website and/or personal communication.					Quarterly
The Permittee must submit a report describing the review in ATTACHMENT VIII 4.a. If the Permittee does not identify any discrepancies described in ATTACHMENT VIII 4.b., the report must state this.					Quarterly

*This value represents the volume limitation permissible as a Class V UIC well. Past injection volumes have been accounted for in this calculation.

**These wells must remain shut-in for the life of the Permit for the purposes of monitoring formation pore pressure. The pore pressure must be representative of top of the injection zone formation, and the Permittee must describe how the pore pressure was determined. The quarterly report must include all recorded formation pore pressure data, the date and time of the measurements, and the calculated change in pressure over time. The first formation pore pressure measurement must be recorded before injection begins and monthly thereafter. There is also a one-time requirement to continuously record the formation pore pressure at these wells during the first pressure fall off test (PFOT). This information must be included with the results of the PFOT, which must be submitted to the Director within 60 calendar days of the testing activity completion.

Quarterly Reports must cover the period from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. Quarterly Reports must be submitted by the fifteenth day of the month following the end of the data collection period. EPA Form 7520-8 may be used or adapted to submit the Quarterly Report. The monitoring requirements specified in this Permit are mandatory even if an EPA form does not include all information.

Reason for Change: The monitoring and reporting table was modified to clarify and support the changes made in Permit Change #4 (Section B.11. Well Injection and Seismicity), Permit Change #5 (Section B.12 Site Security and Manifest Requirements), and Permit Change #16 (Attachment VIII Site Security and Manifest Requirements). This change also provides clarity on the reporting submittal requirements. Because several commenters requested monitoring of the injectate plume, EPA re-evaluated the monitoring and reporting requirement for the Jody Field 4-1A and Field 14-34 wells (AOR wells) to determine if the wells can provide additional information and support the computational model. The formation pore pressure is a more appropriate monitoring parameter, as the wellhead pressure may not yield a meaningful result if the water level is below the surface, which is possible at the AOR wells because data indicate static water levels at the Jody Field injection wells are below the surface. The requirement for minimum, average, and maximum values would provide no additional insight; therefore only a single monthly value for pressure is required. EPA added a requirement to continuously monitor the formation pore pressures of the AOR wells during the first pressure fall off test. By monitoring formation pressures in the shut-in AOR wells and comparing them to the injection well pressures, EPA can confirm that the model inputs remain representative. When fluid is injected into a formation, it creates a pressure increase at the injection point. Pressure then dissipates outward based on the ability of the formation to transmit fluid (hydraulic conductivity). Shut-in wells in the AOR act like remote sensors. Since these shut-in wells are not actively being used, any change in pressure at the AOR well mainly reflects the influence of the nearby injection activity. The comparison of pressure changes at the shut-in wells with the pressure changes at the injection well can show if the pressure is spreading as expected through the formation. This monitoring requirement will provide data for EPA to re-evaluate the hydraulic conductivity of the formation. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information.

EPA also made minor clarifying edits to the table in the Monitoring and Reporting Requirements column.

15. Attachment V Logging and Testing Requirements

A. Changes Specific to Jody Field 34-1 Permit

Draft language:

Test/Log Requirement	Date Due
MIT1-Standard Annulus Pressure	Prior to receiving authorization to inject. SAP will be conducted no less than every 5 years after the last successful internal (Part I) MI demonstration.
MIT2-Noise or Temperature Log	Either a noise log or a temperature log must be conducted 9-12 months after injection begins and subsequent tests must be conducted no less than every 5 years after the last successful external (Part II) MI demonstration.
Noise Log*	Prior to receiving authorization to inject
Pressure Fall Off Test**	The first test must be conducted 9-12 months after injection begins and subsequent tests must be conducted annually thereafter, not to exceed 12 months of the previous test.

*A noise log must be performed to assess the presence of fluid movement between the exposed upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent formations. Based on the calculated top of cement, the existing cement does not appear to prevent movement of fluids between the upper USDWs and the confining layers. The noise log must be conducted between the top of cement behind the 4.5-inch casing and the base of the 7-inch surface casing. If the noise log indicates fluid movement, there may be additional requirements to protect USDWs.

**The Permittee is required to prepare a plan for running the falloff test. *EPA Region 6 UIC Pressure Falloff Testing Guideline* should be used by the Permittee when developing a site-specific plan. This document can be found at: https://www.epa.gov/sites/production/files/2015-07/documents/guideline.pdf.

Final language:

Test/Log Requirement	Date Due
MIT1-Standard Annulus Pressure (SAP)	Prior to receiving authorization to inject. SAP will be conducted no less than every 5 years after the last successful internal (Part I) MI demonstration.
MIT2-Noise or Temperature Log	Either a noise log or a temperature log must be conducted 9-12 months after injection begins and subsequent tests must be conducted no less than every 5 years after the last successful external (Part II) MI demonstration.
Noise Log*	Prior to receiving authorization to inject
Pressure Fall Off Test**	The first test must be conducted 9-12 months after injection begins and subsequent tests must be conducted annually thereafter, not to exceed 12 months of the previous test. The formation pore pressures in Field 14-34 and Jody Field 4-1A must be recorded continuously during the first pressure fall off test.

*A noise log must be performed to assess the presence of fluid movement between the exposed upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent formations. Based on the calculated top of cement, the existing cement does not appear to prevent movement of fluids between the upper USDWs and the confining layers. The noise log must be conducted between the top of cement behind the 4.5-inch casing and the base of the 7-inch surface casing. If the noise log indicates fluid movement, there may be additional requirements to protect USDWs.

**The Permittee is required to prepare a plan for running the falloff test. *EPA Region 6 UIC Pressure Falloff*

Testing Guideline should be used by the Permittee when developing a site-specific plan. This document can be found at: https://www.epa.gov/sites/production/files/2015-07/documents/guideline.pdf. If the first test results are inadequate, EPA may require the continuous recording of the AOR well formation pore pressures in the subsequent test or until the results are adequate.

Reason for Change: Because several commenters requested monitoring of the injectate plume, EPA re-evaluated the logging and testing requirement for the pressure fall off test to determine if the test can provide additional information and support the computational model. EPA added a requirement to continuously monitor the formation pore pressures of the AOR wells during the first pressure fall off test. This monitoring requirement will provide data for EPA to re-evaluate the hydraulic conductivity of the formation. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information.

The logging and testing table was changed to define standard annulus pressure as SAP.

B. Changes Specific to Jody Field 34-2 Permit

Draft language:

Test/Log Requirement	Date Due
MIT1-Standard Annulus Pressure	Prior to receiving authorization to inject. SAP will be conducted no less than every 5 years after the last successful internal (Part I) MI demonstration.
MIT2-Cement Bond Log	Prior to receiving authorization to inject.
MIT2-Noise or Temperature Log	Either a noise log or a temperature log must be conducted 9-12 months after injection begins and subsequent tests must be conducted no less than every 5 years after the last successful external (Part II) MI demonstration.
Noise Log*	Prior to receiving authorization to inject
Pressure Fall Off Test**	The first test must be conducted 9-12 months after injection begins and subsequent tests must be conducted annually thereafter, not to exceed 12 months of the previous test.

*A noise log must be performed to assess the presence of fluid movement between the exposed upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent formations. Based on the calculated top of cement, the existing cement does not appear to prevent movement of fluids between the upper USDWs and the confining layers. The noise log must be conducted between the top of cement behind the 4.5-inch casing and the base of the 7-inch surface casing. If the noise log indicates fluid movement, there may be additional requirements to protect USDWs.

**The Permittee is required to prepare a plan for running the falloff test. *EPA Region 6 UIC Pressure Falloff Testing Guideline* should be used by the Permittee when developing a site-specific plan. This document can be found at: https://www.epa.gov/sites/production/files/2015-07/documents/guideline.pdf.

Final language:

Test/Log Requirement	Date Due
MIT1-Standard Annulus Pressure (SAP)	Prior to receiving authorization to inject. SAP will be conducted no less than every 5 years after the last successful internal (Part I) MI demonstration.
MIT2-Cement Bond Log	Prior to receiving authorization to inject.
MIT2-Noise or Temperature Log	Either a noise log or a temperature log must be conducted 9-12 months after injection begins and subsequent tests must be conducted no less than every 5 years after the last successful external (Part II) MI demonstration.
Noise Log*	Prior to receiving authorization to inject
Pressure Fall Off Test**	The first test must be conducted 9-12 months after injection begins and subsequent tests must be conducted annually thereafter, not to exceed 12 months of the previous test. The formation pore pressures in Field 14-34 must be recorded continuously during the first pressure fall off test.

*A noise log must be performed to assess the presence of fluid movement between the exposed upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent formations. Based on the calculated top of cement, the existing cement does not appear to prevent movement of fluids between the upper USDWs and the confining layers. The noise log must be conducted between the top of cement behind the 4.5-inch casing and the base of the 7-inch surface casing. If the noise log indicates fluid movement, there may be additional requirements to protect USDWs.

**The Permittee is required to prepare a plan for running the falloff test. *EPA Region 6 UIC Pressure Falloff Testing Guideline* should be used by the Permittee when developing a site-specific plan. This document can be found at: https://www.epa.gov/sites/production/files/2015-07/documents/guideline.pdf. If the first test results are inadequate, EPA may require the continuous recording of the AOR well formation pore pressures in the subsequent test or until the results are adequate.

Reason for Change: Because several commenters requested monitoring of the injectate plume, EPA re-evaluated the logging and testing requirement for the pressure fall off test to determine if the test can provide additional information and support the computational model. EPA added a requirement to continuously monitor the formation pore pressures of the AOR wells during the first pressure fall off test. This monitoring requirement will provide data for EPA to re-evaluate the hydraulic conductivity of the formation. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information.
The logging and testing table was changed to define standard annulus pressure as SAP.

16. Attachment VIII Site Security and Manifest Requirements

Draft language:
None

Final language:
ATTACHMENT VIII - SITE SECURITY AND MANIFEST REQUIREMENTS
Prior to receiving Authorization to Inject, the Permittee must provide evidence that the *Site Security* measures have been implemented and a copy of the Facility Manifest that contains the information

provided below under *Facility Manifest for Injection Fluids*.

Site Security

Signage

Waterproof sign(s) must be maintained and readily visible at the entrance from public roads leading to the commercial disposal well. The sign(s) must indicate the property is private, that no trespassing is allowed, and the name of the operator and emergency contact phone number.

Gates and Fences

All gates and entry points must be secured when the facility is unattended. Only authorized personnel will have access to the injection building (where the wastewater is pumped via injection lines to the wells) and individual well house buildings.

Tamper Proof Locks

All facility access and injection points, including but not limited to individual well house buildings, injection building, and tank ports, must be secured when the facility is unattended. The Permittee will provide tamper-proof seals for the master valve on the well; and install locking caps on all valves and connections on any holding tanks, unloading racks, and headers.

Facility Manifest for Injection Fluids

It is the responsibility of the Permittee to ensure that prohibited fluids are not injected into the well. Therefore, the Permittee is required to do the following to ensure that prohibited fluids are not injected for every disposal load received from Montana Renewables.

1. The Permittee must establish and maintain a three-party custody record between the Generator (responsible party from where the fluids were generated), Transporter and Disposal Facility (Permittee):

    a. Generator: company name, company address, company telephone number, the name and location from where fluids were produced, fluid type (source of fluid);
    b. Transporter: company name, company address, company telephone number, truck driver name, truck identification number, location, and date of pick up, volume of fluids picked up from the Generator; fluid type (source of fluid); and
    c. Disposal Facility: facility name, facility address, facility telephone number, date, time, volume of fluids unloaded at the Disposal Facility, and fluid type (source of fluid)

2. The Permittee must certify as follows:

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3. The Permittee must obtain certification from the Transporter that states:

I certify under penalty of law that the fluids that I am transporting have not been mixed with hazardous or radioactive fluids, and I have transported the fluids in compliance with Department of Transportation requirements for injection into a well subject to the requirements in this Permit and applicable Underground Injection Control Program regulations under the Safe Drinking Water Act.

The Facility Manifest records must be kept for a minimum of three (3) years after date of disposal on site at the facility and must be made available for inspection upon request. Additionally, each delivery and its volume injected must be logged and available for EPA to review.

4. Requirements if Discrepancies are Found Between Manifest and Permit Requirements

    a. The Permittee must review the manifest monthly:

        i. To ensure that the volume of fluids that the Transporter picked up matches the volume of fluids unloaded by the Disposal facility;
        ii. To ensure that the place of origin of the fluids are authorized sources of injectate according to the Permit;
        iii. To ensure that the fluid type listed in the manifest are authorized by the Permit.

    b. If the following discrepancies are found in the manifest review, the Permittee must immediately investigate the discrepancy to determine whether there is reason to believe that the injectate may not be a type of injectate authorized by the permit. The Permittee must also provide written notification to the Director within 24 hours of discovery. The Permittee must write a report describing the investigation and conclusions and submit it to the Director within 30 days of discovery.

        i. If the difference between the volume of fluids unloaded by the Disposal facility and the volume of fluids the Transporter picked up is greater than 5%;
        ii. If the place of origin of the fluids is not an authorized source of injectate according to the Permit;
        iii. If the fluid type listed in the manifest is not authorized by the Permit.

    c. If the Permittee's investigation concludes that there is reason to believe that the injectate may not be authorized by the Permit, the Permittee must take action to prevent the delivery of unauthorized fluids.

    d. The Permittee must also submit a quarterly report describing the review in 4.a above. If the Permittee does not identify any discrepancies described in 4.b, the report must state this.

Reason for Change: Several commenters voiced concerns regarding the source and content of the injectate and site security concerns that someone may tamper with the well and inject non-permitted waste into the well. EPA added site security to ensure protection for USDWs. The manifest was added to prevent the potential for non-authorized waste to be injected. These protections will also ensure that each load received by the Permittee will be tracked and documented for EPA or state inspections.

RESPONSE TO COMMENTS

Aquifer Exemption Expansion

1. *Commenters asked if EPA could guarantee that the proposed injectate waste will remain entirely within the 0.25-mile radius from the wellbore for these injection wells and will not migrate from the wellbore sites and contaminate nearby waterbodies. Another commenter asked how anyone will know if the wastewater is staying within its quarter-mile limit and how anyone would confirm that with tests or monitoring. Another commenter asked for assurance that such a volume injected under pressure will not migrate into unintended areas.*

   Commenters referenced a Pro Publica article from 2012 and expressed concerns with EPA's AE process. Specifically, they provided the following quote from the article about fluid migration: "'What they don't often consider is whether that waste will flow outside that zone of influence over time, and there is no doubt that it will,' said Mike Wireman, a senior hydrologist with the EPA who has worked with the World Bank on global water supply issues."

Response: As documented in the final Aquifer Exemption Expansion Record of Decision (AE ROD) and Supplemental Technical Analysis, EPA revised its analysis in response to these concerns. The updated evaluation used enhanced numerical modeling with MODFLOW and MODPATH to account for the natural hydraulic gradient and pressure interference effects, which resulted in expanding the originally proposed 0.25-mile aquifer exemption to a larger area that accommodates potential injectate migration over a 10,000-year period. This revised approach directly responds to commenters' concerns, including those raised in the Pro Publica article and provides enhanced modeling to demonstrate that the injectate is expected to remain in the revised aquifer exemption area and not affect the USDW outside of the exempted area. Monitoring requirements in the final permits for the Jody Field 34-1 and 34-2 wells (Permits), such as continuous pressure monitoring of the injection well, monthly formation pore pressure monitoring of AOR wells, and periodic pressure falloff testing, will assist EPA in evaluating the extent of the wastewater movement. The monitoring and reporting table was modified to require monthly monitoring of injection zone pressures in the shut-in Jody Field 4-1A and Field 14-34 AOR wells and continuous monitoring of the AOR wells during the first pressure fall off test. See Permit Change #14 (Attachment IV Monitoring and Reporting Requirements). By monitoring formation pressures in the shut-in AOR wells and comparing them to the injection well pressures, EPA can confirm that the model inputs remain representative. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information.

2. *Several commenters opposed exemption of the Madison Formation aquifer from protection under the SDWA. They expressed concern that this would compromise the water within the aquifer and allow groundwater contamination that would impact public health or eliminate drinking water resources needed by current and future generations.*

Response: EPA acknowledges that the Madison aquifer is an important source of drinking water in many places, but it is not a potential source of drinking water everywhere. UIC regulations allow for portions of USDWs to be exempted if there is no potential to be used as a drinking water source. Accordingly, EPA's AE decision in this case only pertains to the delineated area described in the AE ROD around the two subject wells in the Madison aquifer, not the entire Madison aquifer.

EPA disagrees that approval of the aquifer exemption expansion at this site would impact public health or eliminate drinking water resources. EPA determined that the Madison aquifer at this location will not be used as

a source of drinking water now or in the future, and EPA has included final permit conditions to prevent the fluids from contaminating USDWs outside of the exempted portion of the aquifer. Comments about groundwater contamination of the Madison at this site do not appear to consider information in the AE ROD regarding the poor water quality. As explained in the AE ROD, the wells are in an oil and gas production field and have previously been used to inject produced water, making this portion of the Madison aquifer unsuitable for use as a source of drinking water.

EPA reviewed MBOGC data to determine the number of active production wells producing from the Madison Formation surrounding Jody Field location. A total of 20 active Madison Formation production wells were identified across five Public Land Survey System (PLSS) townships: Township 27 North Range 5 West (T27N R5W), T27N R6W, T28N R4W, T28N R5W, and T28N R6W. In Pondera County, 68 active Madison Formation oil production wells were identified. Regionally, across Glacier, Teton, Toole, and Pondera counties, there are 490 active Madison Formation oil production wells. Statewide, Montana has 618 active Madison Formation oil production wells.

The aquifer exemption expansion is a lateral and vertical expansion of the previously exempted portions of the Madison aquifer[5] at the Jody Field 34-1 and Jody Field 34-2 wells (Jody Field wells). The original aquifer exemptions for the Jody Field wells were approved August 15, 2011, and March 15, 2010, respectively. The Jody Field wells injected Class II fluids into the aquifer from 2011 to 2021, which included fluids brought to the surface in connection with oil and gas production. Commenters do not provide support for their assumption that injection at this site would compromise water quality, nor do they provide evidence that refutes EPA's conclusion that the water is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption.

The AE ROD explains that the criteria at 40 CFR § 146.4(a) and (b)(2) & (b)(3) have been met. These comments express general concerns about contamination of the Madison aquifer but do not argue that the criteria were not met.

3. *Commenters disputed the finding that the Madison aquifer does not currently serve as a source of drinking water and noted that the Madison aquifer provides safe and adequate drinking water to North Central Montana, including Cascade County. Commenters stated that the "Aquifer Exemption Expansion Records of Decision for the Madison Formation – do not – and cannot – meet ALL legal requirements established by the Safe Drinking Water Act Exemption Criteria, Section 146.4, which clearly states for the Madison Formation/Aquifer that (1) It does not currently serve as a source of drinking water; AND (3) It is not reasonably expected to supply a public water system." One commenter stated that both of these legal criteria requirements are currently happening within the Madison aquifer today in other areas of the country. The commenter stated that while the Madison aquifer may contain contamination hot spots that require treatment to render it for human consumption, eight states and provinces have found ways that are "economically and technologically" feasible to "render this water fit for human consumption." The commenter stated that the Madison aquifer's deep, contaminated water supply is being recovered and treated to supply drinking water to millions of people, now.*

Response: EPA acknowledges that the Madison aquifer is an important source of drinking water in many places, but it is not a potential source of drinking water everywhere. UIC regulations allow for portions of USDWs to be exempted if there is no potential to be used as a drinking water source. Accordingly, EPA's AE decision in this case only pertains to the delineated area described in the AE ROD around the two subject wells in the Madison aquifer, not the entire Madison aquifer. As discussed in the AE ROD, the Madison aquifer is not a current source

[5] *Exempted aquifer* means an aquifer or its portion that meets the criteria in the definition of "underground source of drinking water" but which has been exempted according to the procedures of 40 CFR § 144.7.

of drinking water at this site; no drinking water wells utilize the Madison Aquifer within the nine-township area surrounding the Jody Field 34-1 well.

Commenters assert that the criterion at 40 CFR § 146.4(a) has not been met because the Madison aquifer is a current source of drinking water in North Central Montana, including Cascade County. However, the exemption is only for a portion of the Madison aquifer, specifically the 6.6 square mile delineated area around the two wells, which was not found to be currently used as a source of drinking water. The commenters did not assert that the area proposed for exemption currently serves as a source of drinking water.

Commenters also assert that EPA has an obligation to show that the aquifer "is not reasonably expected to supply a public water system." This language appears in the regulations at 40 CFR § 146.4(c). Commenters further appear to assert that the Madison aquifer does supply public water systems in other places so it would not meet this criterion. The AE ROD did not rely on the 40 CFR § 146.4(c) criterion as a reason for exemption, so EPA was not required to make any demonstrations under this regulation; thus, this was not specifically discussed in the AE ROD. The AE ROD sets forth EPA's rationale for approving the request pursuant to 40 CFR § 146.4(a), (b)(2) and (b)(3). The AE ROD explained that this limited portion of the Madison aquifer is in the middle of an old production field and has high levels of contaminants due to past production and injection activity, is very deep and has documented high TDS concentrations and potential presence of hydrocarbons, and is in a remote location that has better quality alternative drinking water sources within the shallower alluvial deposits, and therefore does not have the potential to serve as a source of drinking water either now or in the future.

4. *Several commenters argued that EPA's depiction of the Madison Formation as contaminated and unfit for future drinking water supply is misleading. Commenters disputed that the Madison is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical because "it is being recovered from the Madison across eight states and provinces have found ways that are 'economically and technologically' feasible to 'render this water fit for human consumption'. The Madison aquifer's deep, contaminated water supply is being recovered and treated to supply drinking water to millions of people, now." Other commenters pointed out that other communities in Montana, such as Cascade and Stanford, are using the Madison Formation for drinking water without the need for extensive pretreatment. One commenter stated that "the Madison Aquifer currently serves the City of Cascade and private wells around Great Falls with high quality drinking water." Another commenter cited Stanford, Montana, which reportedly drilled approximately 3,700 feet into the Madison Aquifer and obtains high-quality drinking water. A different commenter stated that the nearby towns of Belt and Cascade have drilled to comparable depths for potable supply, which was expensive, but feasible when it is the only viable option. The commenters requested that EPA's analysis recognize these existing uses across Montana, as overlooking them could lead to decisions that undermine future water security for communities statewide. Commenters asserted that an aquifer exemption is inappropriate because these similar deep formations are already being used for drinking water and could feasibly be used more in the future.*

Response: See Responses #2 and #3 regarding the use of the Madison as drinking water at other sites. Similar to those comments, the communities mentioned here (Stanford, Belt, Cascade, Great Falls) are far away from these injection wells, all over 70 miles, and are completed in a different hydrogeologic setting. The Madison Formation is not uniform across the region. The depth, water quality, degree of confinement, and productivity vary substantially from place to place.

Commenters here raise the concern that the aquifer exemption is inappropriate because there are similar deep formations that are being used as a source of drinking water. The reference to depth is likely a reference to the AE regulations at 40 CFR § 146.4(b)(2), which is one of the criteria upon which the EPA based its AE decision. This regulation allows for exemption of an aquifer from protection if it does not currently serve as a source of drinking water (40 CFR § 146.4(a)), and "[i]t cannot now and will not in the future serve as a source of drinking

water because It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical." 40 CFR § 146.4(b)(2).

EPA's aquifer exemption decisions are made on a site-specific basis and allow for exemptions of portions of aquifers. EPA acknowledges that depth alone is not an adequate basis to exempt an aquifer under 40 CFR § 146.4 and recognizes that there are communities that utilize deep USDWs as a source of drinking water, including the Madison, in other locations. However, the AE decision in this case was not based on depth alone. EPA's decision to approve an expansion of the AE exemption at this site is based on the criteria at 40 CFR § 146.4(a), (b)(2) and (b)(3). In addition to the criteria quoted above, the determination was also based on (b)(3), which states that "it cannot now and will not in the future serve as a source of drinking water" because "[i]t is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption." In considering whether 40 CFR § 146.4(b)(2) or (b)(3) have been met, the EPA considered a number of factors to determine whether the Madison aquifer "cannot now and will not the future serve as a source of drinking water" and does not have potential to serve as a source of drinking water at this location.

Consistent with Agency guidance[6], the EPA reviewed information about local hydrogeology, current sources of water supply, future water supply needs, availability of alternative supplies in the project area, depth of the Madison, water quality and contaminants in the Madison, the extent of current contamination, chemical composition of the injectate, and potential cost and ability to treat water from the injection zone for drinking water purposes. After consideration of this information, the EPA determined that the portion of the Madison aquifer at this location cannot now and will not in the future serve as a source of drinking water because the wells are in an area of the Madison that produces or has produced oil and gas and has already accepted waste fluids from oil and gas production and is contaminated; there are better quality alternate sources of drinking water to support the needs of the communities both now and in the future; and the cost to produce water from the Madison at this depth and location and treat it to safe drinking water levels are much greater than the shallower alternate sources. A more detailed explanation of the factors considered can be found in the AE ROD.

5. *One commenter stated that Montana communities are actively developing and using the Madison Aquifer through the Musselshell–Judith Rural Water System (MJRWS/CMRWA), noting Montana DEQ's Environmental Assessment identifies service to Hobson, Harlowton, Ryegate, Broadview, Roundup, and Melstone, with Harlowton connected in 2023 and Roundup in spring 2025. The commenter argued that this current and planned public use contradicts any "future non-use" showing required to justify expanding the aquifer exemption.*

Response: The MJRWS/CMRWA communities referenced in the comment are far from the project area. The closest community listed is Hobson, which is approximately 144 miles from the Jody Field wells. Similar to the communities addressed in Response #4 above, these communities are far away in a different hydrogeologic setting; the portion of the Madison aquifer at the project site is not currently being used as drinking water and is not suitable as a potential source of drinking water, either now or in the future. Aquifer exemption determinations are site-specific to the local area at the Jody Field wells. See also Responses #2 and #3 regarding the use of the Madison as drinking water at other sites.

6. *One commenter provided quotes from a ProPublica article about aquifer exemptions by Abrahm Lustgarten. The commenter asserted that the "EPA is only supposed to issue exemptions if aquifers are too remote, too dirty, or too deep to supply affordable drinking water. Applicants must persuade the government that the water is not being used as drinking water and that it never will be. Sometimes, however, the agency has*

[6] Guidance for Review and Approval of State Underground Injection Control (UIC) Programs and Revisions to Approved State Programs. GWPB Guidance #34, U.S. EPA, https://www.epa.gov/sites/default/files/2020-02/documents/guidance_for_review_and_approval_of_state_uic_programs_and_revisions_to_approved_state_programs.pdf

issued permits for portions of reservoirs that are in use, assuming contaminants will stay within the finite area exempted."

Response: EPA agrees that aquifer exemptions should only be issued for aquifers that are not suitable as a current or future source of drinking water. As discussed in the AE ROD and in Responses #2, #3, and #4 above, this portion of the Madison aquifer is not currently being used as drinking water and is not suitable as a potential source of drinking water, either now or in the future.

7. *One commenter stated that the Madison Aquifer is an EPA-identified underground source of drinking water in the area of the proposed injection wells and argued that the well operator has no legal authority to decide whether it will serve as a future drinking water source for Pondera County, nor does EPA have congressional authority to grant the operator that power.*

Response: See Responses #2, #3, and #4. While EPA agrees that the Madison aquifer meets the definition of a USDW at this site, EPA's AE ROD explains that the Madison aquifer in this area is not considered a potential source of drinking water either now or in the future. Not all aquifers that qualify as a USDW are useable as sources of drinking water. EPA recognized this in a preamble discussion of the aquifer exemption regulations and explained that "EPA's aquifer exemption mechanism was promulgated because of the Agency's decision to adopt a very broad definition of USDWs. This broad definition ensures that any aquifer even potentially usable as drinking water will be considered a USDW, but also results in classifying as USDWs some aquifers that are contaminated, inaccessible, or otherwise unsuitable or unlikely to be used as drinking water." 49 Fed. Reg. 20137, 20142 (May 11, 1984).

EPA agrees that the well operator has no legal authority to make AE decisions. Such determinations are made by EPA based on established criteria set forth in 40 CFR § 146.4. EPA's decision rests on a regulatory framework and comprehensive technical analysis. As discussed in Response #4, EPA evaluated this portion of the Madison aquifer under the regulatory framework and determined that it is not currently and will not in the future serve as a source of drinking water.

8. *One commenter asked where in the draft documents the applicant demonstrates that the Madison Formation does not currently serve as a source of drinking water and cannot and will not serve as a source of drinking water in the future.*

Response: The applicant provided information on the aquifer exemption request in Attachment H of the application. The AE ROD document includes EPA's conclusions on the aquifer exemption criteria.

9. *One commenter stated that EPA seems to justify the aquifer exemption by pointing to previous approvals from the Board of Oil and Gas Conservation, which the commenter thinks is not a reliable source because the board is primarily composed of oil and gas interests who have inherent conflicts in decisions on oil and gas projects.*

Response: EPA disagrees that the draft AE decisions rely upon previous approvals from Montana's Board of Oil and Gas Conservation. As documented in the AE ROD, EPA provides the reasons that the aquifer exemption criteria in 40 CFR 146.4 have been met.

10. *One commenter stated, "The EPA Director must use the discretionary power of their position to deny this aquifer exemption expansion application. Clearly, while this aquifer has been previously contaminated and impacted by 384,842 barrels of refinery waste injected by the applicant under the first aquifer exemption, an additional injection of 15 million+ barrels of additional waste – over 40 times more waste – would be a true miscarriage of justice, and a clear failure by the EPA to protect the Madison aquifer, an EPA identified source*

of U.S. drinking water."

Response: EPA's decision is based upon the criteria at 40 CFR § 146.4 and grounded in a comprehensive technical analysis that demonstrates the Madison Formation at this location is not a viable source of drinking water, now or in the future. The water quality of the formation is poor, with elevated total dissolved solids, naturally occurring hydrocarbons, and historical injection of Class II wastewater, making it economically and technically impractical for potable water use. The AE ROD includes a comprehensive evaluation of relevant factors. EPA's modeling and volume limitation strategies demonstrate that injected wastewater is expected to remain within the designated aquifer exemption area, preventing migration into adjacent USDWs. While the commenter highlights the injection volume relative to past activity, EPA's analysis accounts for this by setting strict cumulative volume limits and using conservative modeling to protect adjacent underground sources of drinking water.

11. *Many commenters questioned whether EPA can be certain that we will never need the Madison Aquifer, given the challenges posed by climate change, record heat, and droughts. One commenter stated that growing strain on water supplies, driven by volatile weather, drought cycles, and population pressures, may require communities to drill deeper for USDWs, meaning the Madison Aquifer could be needed in the future even if it is not heavily relied upon today. The commenter further argued that EPA's position that this interval is already degraded and costly to treat does not justify adding more pollution and that EPA's own estimate puts drilling and treatment under $10 million, which, while expensive for small towns, may become necessary if other sources are unavailable, and additional contamination would only increase future remediation costs.*

Response: EPA's analysis includes consideration of these concerns raised by commenters. As part of its evaluation of the potential for the Madison aquifer at the Jody Field location to be used as a future source of drinking water, the EPA considered historical trends in the Standardized Precipitation Evapotranspiration Index, aridity data in Sanford and Selnick (2012), and information in the 5th National Climate Assessment and Montana State Climate Summary, which indicate an overall slight trend toward mild drought conditions from 1900 to 2020. This trend is also reflected by a decrease in precipitation from the first half of the previous century to the first two decades of the 21st century in the western portion of the division. The average of all available model projections of future precipitation change indicates a slight increase in precipitation within the assessment area. EPA considered this information along with its technical assessment that the Madison Aquifer water quality at this location is poor, with high total dissolved solids and contamination from historic oil and gas production, among other relevant factors, and has determined that the aquifer is unsuitable for drinking water purposes either now or in the future. Even if drilling and related treatment costs are cited as under $10 million, those figures only cover initial expenses. Using the Madison Formation at this location would involve significantly higher operational costs due to the need for water distribution and treatment compared to using shallower, higher-quality aquifers. The AE ROD includes a more detailed evaluation of EPA's considerations.

12. *One commenter contended that EPA's reliance on shallower aquifers assumes reliable rain and snowmelt that cannot be assured under ongoing and future drought conditions. They argued that EPA's premise of developing and treating water from the Madison Aquifer would be prohibitively expensive is flawed, noting that while EPA's own estimates are substantial, they may well be necessary if surface aquifers become unreliable or are polluted by wastewater.*

Response: EPA considered aridity and precipitation trends, as well as projected drought conditions. As described in the response above, these considerations indicated an overall slight trend toward mild drought conditions and the average of available model projections indicates a slight increase in future precipitation. In addition, the reliance on shallower aquifers is supported by both historical performance and technical evaluations. The shallower alluvial and Tertiary aquifers have reliably provided water for local communities through recharge by

rain and snowmelt. EPA's economic assessments demonstrate that even under low precipitation scenarios, these shallower sources remain the preferred and cost-effective option. As discussed above, the Madison Aquifer water quality at this location is poor, with high total dissolved solids and contamination from historic oil and gas production, along with other relevant factors, and is both technically and economically unsuitable for drinking water purposes either now or in the future. While the commenter asserts that the costs estimated for treating Madison water might be acceptable if shallow sources were compromised, EPA found that the extensive treatment, infrastructure requirements, and inherent water quality limitations of the Madison would involve prohibitive costs, significantly exceeding those associated with developing or maintaining shallow aquifers.

13. *Many commenters objected to the way in which EPA documents describe their community. In particular, they felt that the characterization of their area as being "sparsely populated" or "low and declining" minimizes the true value, history, and resilience of their region. They argued that the use of such terminology in technical documents misrepresents local realities.*

Response: EPA appreciates this comment and recognizes that terms such as "sparsely populated" and "low and declining" can feel dismissive of a community's identity, history, and resilience. EPA's intent was not to minimize any community, but to describe projected drinking-water demand in potential future use and cost analyses, based on the latest Census data. To be clearer and more respectful, EPA revised the text in the final AE ROD. EPA is committed to protecting every community's right to clean, safe drinking water.

14. *Several commenters argued that EPA's analysis focuses solely on the human population, overlooking the critical role of livestock and agriculture in the region's water use. One commenter asked, "But what about the livestock that drink the water or the farmer who irrigates his crops?" Others observed, "The EPA claims that the local population was too low to justify treatment of water coming from the Madison Aquifer, but in their analysis the EPA ignored the livestock and agricultural uses for this water, which greatly increases the users of this water beyond the human population," adding that "in arid Montana water is used for agriculture as well as drinking water." Finally, a commenter stressed that by focusing solely on human drinking water costs, EPA neglects the agricultural needs for livestock and irrigation, and when weighed against the potential loss of ranching and farming due to water scarcity, the economics of deeper drilling and treatment might be more reasonable.*

Response: EPA's evaluation of the regulatory criteria under 40 CFR § 146.4 reflects a comprehensive evaluation of multiple factors including water quality and water quantity; however, an important component of the evaluation shows the Madison Aquifer would not provide a practical source for human or agricultural users, due to its poor water quality (including total dissolved content (TDS) over 5,000 mg/L) and the high treatment costs required. The agency found that the region's needs are met by shallower alluvial aquifers (Two Medicine Formation and Eagle/Virgelle Sandstone) that offer water of substantially higher quality and lower treatment costs. The Supplemental Technical Analysis documents that local water systems, are served by wells completed in these shallower formations. See Responses #11 and #12 regarding considerations of future use.

15. *One commenter stated that expanding the area of review to 6.6 square miles would simply widen the zone in which Montalban Oil and Gas Operations could pollute, without improving protection of the resource or providing any public interest benefits. Another commenter asserted that the increase of the area available for Montalban Oil and Gas Operations (MOGO) to pollute is not an answer to solving their problem of potentially polluting the Madison Aquifer forever. They stated that humans are not capable of cleaning an aquifer once it is polluted and that it would be wise not to put pollutants down a well under high pressure and assure citizens that it won't migrate to their drinking water source for themselves, their animals, and their crops. Similarly, another commenter stated that EPA's proposal to expand the aquifer exemption to a 2.4-mile radius and a 3,700-foot vertical limit effectively extends the area where pollution could occur and*

diminishes residents' ability to assert Clean Water Act violations.

Response: As discussed in Response #7, the EPA's AE process is an evaluation to determine whether a portion of a USDW has the potential to serve as a source of drinking water because the EPA's broad definition of USDW results in classifying as USDWs some aquifers that are contaminated, inaccessible, or otherwise unsuitable or unlikely to be used as drinking water. The AE ROD provides a detailed evaluation of the Madison aquifer at this site and concludes that based on many factors, including the existing contamination, it is not a potential source of drinking water within the 6.6 square-mile AE area.

Following review of comments from the 1st comment period, the EPA conducted additional site-specific modeling to more accurately understand the likely path of fluid migration. This resulted in a revision to the area of review[7] for both permits; this is the area in which migration of the injection fluids may occur. Based on the modeling, the EPA revised the aquifer exemption boundary to account for the potential migration of injection and formation fluid movement over a 10,000-year period. The modeling demonstrates that the injected fluids are expected to remain within the revised boundary and not impact adjacent USDWs. Revising the AE boundary does not allow for additional injectate; the maximum cumulative injection volume limitation in the permits at Attachment II was unchanged.

The AE ROD analysis was completed for this entire revised 6.6 square-mile area. As previously discussed in this Response to Comments, and in the AE ROD analysis, the EPA explained the many factors were considered prior to determining that the Madison aquifer at this location cannot now and will not in the future serve as a source of drinking water. While the commenters express general concern about expansion of the AE to a larger area, they do not assert that the AE criteria at 40 CFR § 146.4 have not been met.

It is unclear what commenters' concerns are relative to the Clean Water Act, as the permits and aquifer exemption action here are issued under the Safe Drinking Water Act. Therefore, these comments are outside the scope of these Permits and aquifer exemption decision. The Clean Water Act protects surface water quality; this decision does not affect the surface water protections available under the Clean Water Act.

16. *One commenter stated that expanding the aquifer exemption could weaken incentives to prevent accidental contamination by reducing potential legal consequences.*

Response: It is unclear what commenter's concerns are with regard to expanding the aquifer exemption. As explained above in Response #15, the EPA's AE process is an evaluation to determine whether a portion of a USDW has the potential to serve as a source of drinking water because the EPA's broad definition of USDW results in classifying as USDWs some aquifers that are contaminated, inaccessible, or otherwise unsuitable or unlikely to be used as drinking water. The AE ROD concludes that this portion of the Madison aquifer cannot now and will not in the future be a source of drinking water. Response #15 also explains that the lateral expansion of the AE area was based on site-specific modeling to more accurately determine the potential path of injected fluid migration. Approval of the AE area expansion will remove the area from protection under the SDWA because evaluation of the AE criteria led to a determination that it does not have potential as a source of drinking water. It is not clear from the comment what type(s) of accidental contamination they are concerned about. The Permits are written to prevent contamination of USDWs through strict operating limits, mechanical integrity requirements, monitoring and reporting, and plugging and abandonment requirements.

17. *One commenter stated that at the previous hearing, Montalban Oil executives stated that the wastewater*

[7] The area of review is discussed in 40 CFR § 146.6. For permitting actions, this concept is described as "the area the radius of which is the lateral distance in which the pressure in the injection zone may cause the migration of the injection and/or formation fluid into an underground source of drinking water." 40 CFR § 146.6(a)(i).

intended for injection into these wells would not leach beyond the wells, but the subsequent request to expand the aquifer exemption catchment area contradicts that claim and suggests a potential for broader migration.

Response: The application from the operator proposes underground injection of wastewater into the Madison aquifer. The operator did not request a lateral expansion to the AEs, rather, the subsequent proposed lateral expansion of the AE was triggered by commenters' concerns about fluid migration away from the wells due to the natural hydraulic gradient. As a result of these concerns, the EPA conducted site-specific modeling to more accurately determine the potential path of injected fluid migration over a 10,000-year period. The lateral expansion reflects a precautionary, modeling-based approach to ensure that potential future fluid migration is contained within the exempted area.

18. *Many commenters were concerned that approving these permits will set a precedent by opening Pondera County and the Madison Formation to waste disposal beyond the current bounds. They stated that these permits could allow not only Montana Renewables' high-strength industrial wastewater but waste from across the state and beyond to be dumped here. As one commenter stated, this area could become "a dumping ground for waste from all over the State or even the Country." Another stressed that once the radius is expanded, there would be no effective limits on the waste injected, leaving local residents, farmers, and ranchers to bear the full burden of the pollution and potential degradation of a critical water resource. Such a strategy, they argued, would transform their local aquifers into a repository for unwanted and untested waste, with long-term environmental, economic, and public health consequences. Another commenter was concerned that if this application is allowed, other oil wells, closer to their property will be utilized for similar injections and will contaminate their drinking water source. Another commenter was concerned that these two wells may be just the first of many non-producing oil and gas wells to be converted into wastewater injection wells.*

Response: Aquifer exemptions are site-specific determinations based on site-specific factors. These comments express general concern about the aquifer exemption process and do not identify any specific concerns regarding whether the aquifer exemption criteria have been met in 40 CFR § 146.4.

Contrary to the assertion that once an AE radius is expanded, there would be no effective limits on the waste injected, the Permits include very specific limitations on the waste injected. Importantly, as discussed in Response #15, there is a limit on the quantity of wastewater that can be injected. In Attachment II of the Permits, this limit is identified as the maximum cumulative injection volume limitation and was unchanged from the draft. The Permits also specifically limit the types of wastewater that can be injected. Injecting a new or different waste stream not included in the Permits without authorization is a violation of the Permits. Any changes to these limitations will require approval by the EPA and may require permit modifications. Furthermore, permits are also site-specific. Therefore, any future permit applications will require a separate and comprehensive evaluation and opportunity for public comment.

19. *A commenter requested that all language stating anything about "the entire Madison Formation" be stricken from EPA documents, including the statement "Therefore, the entire Madison Formation must be exempted so that the Permittee can comply with the permit and AE." Commenters emphasized there should be no exemptions of the entire Madison Formation because this wording sets a precedent that cannot be allowed and contradicts the exempted area around each well. A commenter asked why EPA would exempt the entire Madison Formation when EPA has not said how the Madison Formation is hydraulically connected, where, or to what degree. Commenters requested scientific specifics on the repeated statement that the "Madison Formation is most likely hydraulically connected." A commenter asserted that EPA must not use a lack of evidence of less permeable layers as a rationale to exempt the entire formation. Commenters asked that EPA explicitly limit any aquifer exemption to the defined area around each*

permitted well and prohibit blanket language that could open the door to broader injection. A commenter requested clarification to prevent misuse of any exemption, including whether EPA could allow Montalban to inject into "any old oil wells" reclassified as Class V injection wells since the entire Madison Formation is exempt and hydraulically connected.

Response: EPA specifically defines the portion of the Madison aquifer being exempted in the AE ROD. This decision document exempts the Madison Formation only within a defined lateral boundary of approximately 6.6 square miles, as shown in Figure 1 of the AE ROD. Within that mapped area, the exemption spans the full vertical interval between the upper and lower confining zones; outside that mapped area, the Madison Formation remains a USDW and is not exempted. The statement that the Madison Formation is "likely hydraulically connected" refers to the vertical connectivity within the Madison Formation at this site and not to lateral connectivity across the broader formation. Workovers at both Jody Field wells showed no confining zone of less permeable layers immediately below the original injection depths, which is why the proposed exemption covers the total vertical section of the Madison Formation within the area of exemption. The lack of internal confining layers within the Madison Formation at this site justifies a vertical exemption, while confining zones above and below the Madison Formation protect other USDWs. The exemption is not a basin-wide or formation-wide exemption, and it does not authorize injection outside the defined AE boundary or into wells other than the two specifically permitted wells. The conversion from Class II to Class V applies only to the two Jody Field wells and only authorizes specified injectate. The AE and permits are well- and site-specific; they do not authorize injection into any other wells, nor do they create a blanket approval across the Madison Formation. Any additional wells would require their own permit action and, if applicable, aquifer exemption decision.

20. *A commenter asked: Did the EPA exempt the Madison Aquifer without requiring a sample to be taken from each well before injections began? Please advise why this information is not available.*

Response: It is unclear what the commenter's concerns are relative to the current permits and AE decision. The commenter appears to be asking questions about the 2010 and 2011 original aquifer exemptions. A water sample was collected from Field 14-34, located between both Jody Field injection wells, and EPA considered the sample representative of water quality at the Jody Field injection wells. This information can be found in the original 2010 and 2011 AE decision documents, which cite a total dissolved solids (TDS) of 5,440 mg/L.

21. *Commenters objected to relying on studies from the Bakken oil fields "hundreds of miles from the Rocky Mountain Front" to draw conclusions about the Madison here, asserting the hydrogeology of the Rocky Mountain Front is different and requires site-specific evaluation.*

Response: EPA clarifies that the Gaswirth et al. (2010) reference was not used to extrapolate hydrogeologic behavior, but only to establish that the Sun River Dolomite section of the Madison Formation is hydrocarbon producing. All other aspects of the evaluation are based on local data and approaches that are informed by both regulatory guidance and site-specific analyses.

22. *A commenter was concerned about the lack of an aerial or satellite map clearly showing the AE boundary so the public can see whether Dupuyer Creek, the irrigation canal to Lake Frances, Lake Frances, Pondera and Birch Creek Colony wells, and private water wells (including one 1/2 mile from the injection wells) overlie the exempted area. They asked for a list of private properties that will be affected.*

Response: EPA developed a new figure that overlays the AE boundary on an aerial map. Figure 1 below shows the location of Dupuyer Creek, the irrigation canal to Lake Frances, Lake Frances, the Pondera and Birch Creek Colony wells, and other private water wells, including one situated about ½ mile from the injection wells. There is no hydraulic connection between the injection zone and surface waters or the domestic, irrigation, or stock wells in the area. At the Jody Field wells, there is an upper confining zone of approximately 215 to 221 feet of

siltstone, low-permeability marlstone, shale, and fine-grained sandstone above the injection zone, separating the injection zone from the overlying USDW. This vertical confinement prevents injected fluids within the injection zone from migrating out of the injection zone, thereby protecting shallow USDWs and mitigating risk of contamination. Detailed analyses outlined in both the Supplemental Technical Analysis and the AE ROD demonstrate that wells within the area of review (AOR) are plugged and abandoned. See Response #33 for additional discussion on the AOR review.

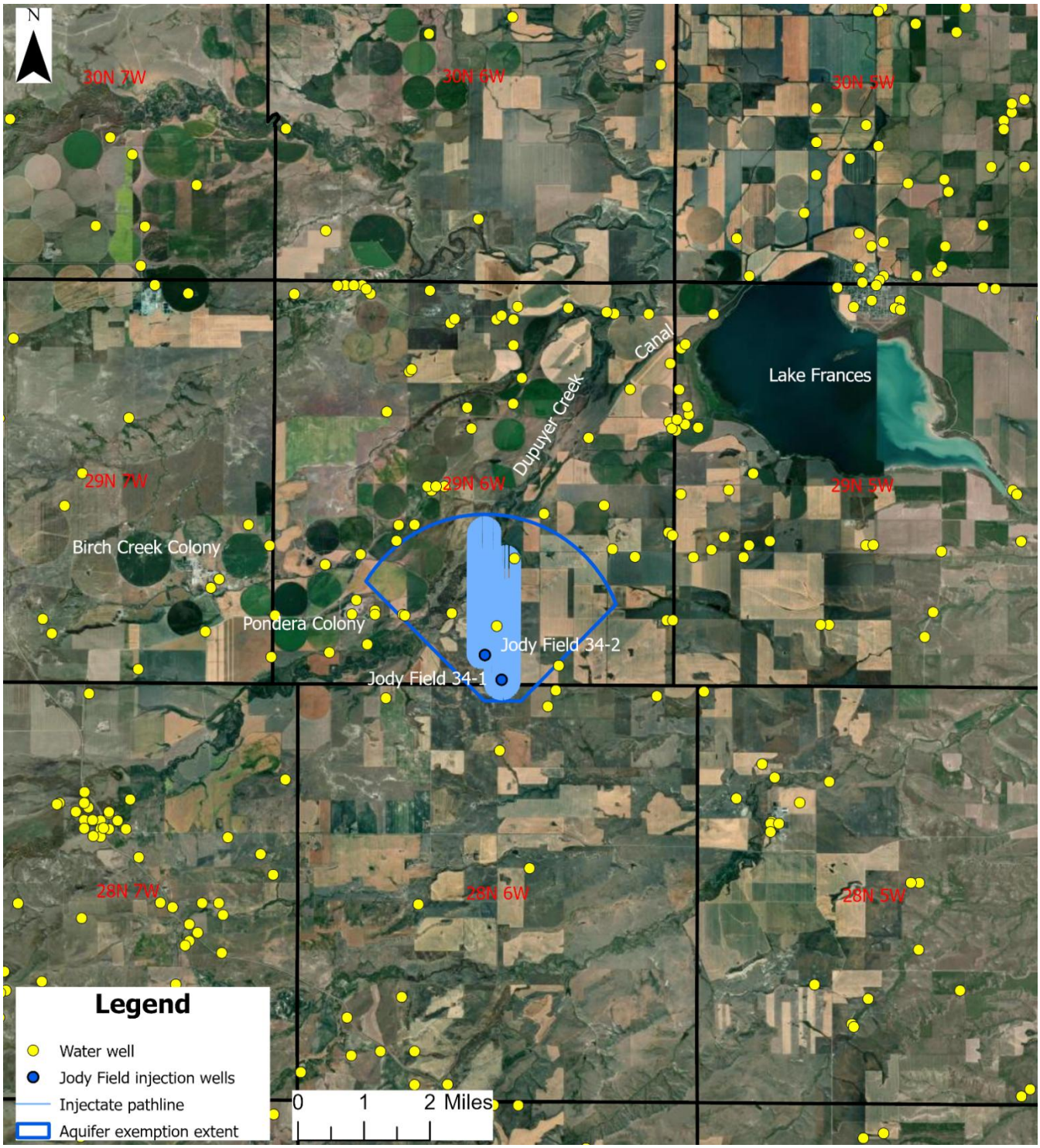

Figure 1: Aquifer Exemption Boundary Aerial Map. Water wells from Montana Bureau of Mines and Geology GIS Data Hub (https://gis-data-hub-mbmg.hub.arcgis.com/pages/water-resources).

23. *A commenter said EPA should provide full-page, horizontal, Google Earth-style maps extending seven miles in every direction from the injection wells, using line-drawn AE boundaries, and labeling all nearby surface waters, canals, colonies, and private wells. A commenter was concerned that AE graphics omit bodies of water, private well locations, and the "volume limit" boundary where injected fluids would reside. The commenter said the fact sheet maps are too tightly cropped to convey the full subsurface extent of the AE and its relation to surface waters and properties.*

Response: See Response #22. EPA developed a new figure that overlays the AE boundary on an aerial map that meets these requests.

24. *Several commenters were concerned that the model used by EPA underestimates the risks of fluid migration beyond the designated aquifer exemption boundary. They argue that the simulation graphics, which show a neatly confined wastewater plume, fail to account for the unpredictable nature of the subsurface geology—where disparate rock layers, folded formations, and preferential pathways can force contaminants to travel in unexpected directions. One commenter warned that the modeling "misses the reality that under continuous injection at elevated pressures, the wastewater could rapidly disperse far beyond the exemption area, reaching nearby private wells and surface water bodies before detection occurs." Others noted that due to uncertainties in the hydrogeologic parameters and the existence of undocumented abandoned wells, the actual plume could extend far beyond EPA's predicted limits, potentially contaminating drinking water sources that lie just outside the current exemption. These commenters insist that the potential for fluid movement outside of the review area is not being adequately modeled, and that the risks to nearby communities from undetected, long-term contaminant migration are therefore significantly underestimated.*

Response: EPA's analysis incorporates site-specific geologic and hydrologic data, including the results of MODFLOW/MODPATH modeling that estimate long-term fluid migration laterally. EPA recognizes that models are simplifications of reality, and there can be uncertainty in subsurface conditions and simulation results. However, EPA used a conservative, protective approach by using modeling assumptions that account for uncertainties. For example, EPA used a 10,000-year simulation period to evaluate injectate migration based on a hydraulic gradient value that results in a greater downgradient injectate extent and larger (more conservative) area. This hydraulic gradient was selected after performing a quality-control measure to verify it represented the general trend of the potentiometric surface rather than localized sinks that may reflect transient withdrawal of produced water during oil and gas operations. In addition, the AE boundary was extended laterally by 45 degrees from the injection wells to account for uncertainty concerning the direction of the hydraulic gradient. These choices are intended to serve as safety margins, ensuring that even with unknown variables or fine-scale heterogeneities, any potential migration of fluids stays within the designated aquifer exemption area. As explained in Response #22, there is no hydraulic connection between the injection zone and private wells or surface water. See Response #33 regarding concerns about undocumented pathways in the area of review.

25. *A commenter asked for 3-D and overhead plume modeling that shows concentration changes over time, incorporates total barrels injected per well, and presents results in graphics understandable to the public. They asked for 3-D modeling over 10–40 years that identifies AE boundaries and where potential problems could occur relative to springs, livestock/wildlife waters, and private wells. They asked for 3-D and overhead maps that delineate the underground volume-limit footprint and label per-well barrel limits. They asked for comprehensive 3-D models of the total available storage capacity and the entire Madison Formation AE boundary in the area (and any other counties affected), tied to surface waters and private properties, plus 2-D overhead versions for clarity. They asked for time-lapse migration graphics (overlaid on satellite maps) showing how far wastewater could travel at 5, 10, 20, 30, 40, 50, 75, 100, and 150 years so landowners can gauge potential accumulation beneath surface waters and private wells. A commenter said current figures illustrate only post-injection conditions and therefore minimize impacts during the first decade of continuous*

injection. They asked for modeling of the first 10 years of operations, including the effects of contaminants with different densities and the furthest dispersion under continuous injection at the stated pressures.

Response: EPA's analysis intentionally focused on a long-term 10,000-year numerical groundwater-flow simulation to define an area that encompasses long-term migration of injected fluids. The analysis demonstrates that injected fluids are expected to remain confined within the defined AE boundary. This approach incorporates the injection volumes for each well, formation properties, pressure conditions, and natural hydraulic gradients observed at the site and is designed to be more protective than a shorter-term assessment would be. A 10,000-year period was selected as a conservative approach similar to that taken by the EPA for no migration petitions for Class I underground injection of hazardous waste. This is a substantial length of time to allow for dilution, attenuation, and geochemical transformations of the waste that would be injected into these two wells such that it will not adversely affect underground sources of drinking water and human health at the boundary in 10,000 years. Please see the Supplemental Technical Analysis document for additional details regarding the modeling period and geochemical transformations. The conservative 10,000-year simulation provides a comprehensive evaluation of potential migration paths well past the full life of the facility. Developing separate 3-D, time-lapse models showing concentration changes over shorter time intervals or producing additional overhead maps delineating volume-limit footprints would not add additional protection beyond what has already been demonstrated by the long-term simulation. It is unclear why commenters request more detailed 3-D and time-lapse plume graphics showing how the injectate could travel between 5 to 150 years, as the existing modeling and graphics demonstrate the appropriate AE boundary based on a 10,000 year time frame. The graphics they request would not help to inform the regulatory requirements in 40 CFR § 146.4 nor help to determine the appropriate AE boundary. As explained in Responses #22 and #33, there is no hydraulic connection between the injection zone and private wells or surface water.

26. *A commenter was concerned that well 34-1 (planned at ~1,484 psi) is not the primary set-point for the AE radius even though its injection pressure is more than double well 34-2 (~688 psi). They asked for modeling that reflects higher-pressure dispersion from 34-1, lower pressure at 34-2, and simultaneous operation of both wells.*

Response: The modeling used to establish the AE boundary explicitly incorporates both wells operating simultaneously and accounts for the specific pressure of each well and the pressure interference between them. The injection pressure affects only the extent of injectate during the injection and pressure fall off period. Post injection, the injectate extent is defined by the long-term migration of the combined plume, which far exceeds the injectate extent during the injection period.

27. *Commenters expressed concern about inconsistent and misleading descriptions of the AE size (for example, 6.4 vs 6.6 "square miles," and misuse of "miles squared" such as 13.9 miles squared) in the AE ROD and Supplemental Technical Analysis. One commenter noted that 13.9 miles squared equals 13.9 × 13.9, or 193.21 square miles, and questioned which value applies. They asked EPA to resolve discrepancies, state the actual exempted area unambiguously, including radius and acres, using correct units consistently.*

Response: In the draft 2025 AE ROD, the AE expansion area is described as 4,096 acres or 6.4 square miles based on numerical groundwater-flow modeling over a 10,000-year timeframe to evaluate potential injectate migration from the injection zones. In contrast, the Supplemental Technical Analysis presents the same area as 6.6 square miles. EPA recognizes there was a typographical error in the draft 2025 AE ROD and an incorrect numerical value was used for the area of the AE. In the final documents, EPA used consistent units and clarified that the AE covers an area of 6.6 square miles or about 4,230 acres.

The 13.9 square mile area refers to the area of a circle with a 2.1-mile radius centered on Jody Field 34-2. The 6.6 square mile exemption area is a portion of that circle. The shape and extent of the 6.6 square mile area was

determined based on the simulated downgradient distance of injectate migration and uncertainty concerning the true direction of the groundwater gradient. To account for uncertainty concerning the direction of the local hydraulic gradient near the well, the AE boundary was determined by the arc of a circle having a radius of 2.1 miles centered on Jody Field 34-2 within 45 degrees of the maximum upgradient and lateral injectate extent for Jody Field 34-1. Note that "mi^2" is standard notation for square miles and therefore "13.9 mi^2" is equivalent to 13.9 square miles and should not be interpreted as 13.9 multiplied by 13.9.

28. *A commenter asked EPA to confirm that 208 feet is not a typographical error in the discussion about the impermeable thickness of the Duperow Formation on page 6 of the draft 2025 AE ROD, to provide the actual TDS measurement for API #25-073-21523, and to explain why the calculated TDS value was not included for public review.*

Response: The geologic log in the public well file for Powers Farm 29-1 (API #25-073-21523), which is approximately 5 miles west northwest of the Jody Field wells, shows that the Duperow Formation is from 4,492 feet below ground surface (ft bgs) to 5,268 ft bgs. The well log included in the well file shows that the permeability from 4,492 ft bgs to 4,992 ft bgs is below 1 millidarcy, indicating a good confining layer. Permeability values under 1 millidarcy typically suggest the formation has very low fluid flow, which is essential for effectively sealing and isolating fluid movement. Therefore, the value should instead be 500 feet for the impermeable thickness of the Duperow Formation. The final AE ROD has been updated.

There are multiple TDS values reported for the Duperow Formation in the public well file for Powers Farm 29-1 (API #25-073-21523) in MBOGC's online database. There is one TDS value that is below 10,000 mg/L in the well file, which is the reported value of 9,470 ppm as NaCl. This value is not the result of a direct chemical analysis but instead comes from a calculation based on resistivity measurements. In this method, the resistivity of the formation water is measured using well logging tools and then an empirical calibration is applied to convert that resistivity reading to a total dissolved solids value expressed as an equivalent concentration of sodium chloride. The approach of using resistivity measurements and an established calibration to calculate total dissolved solids is a standard industry method to estimate the TDS in the absence of a direct sample measurement. Although the historical water quality data provided only one calculated TDS value below 10,000 mg/L, EPA opted for a conservative approach by designating the Duperow aquifer as a USDW. This decision was driven by the need to account for uncertainties inherent in extrapolating from a single value, as well as to ensure the utmost protection for drinking water sources.

29. *One commenter asked how total dissolved solids readings for both wells could fall within the mid-range of EPA's criteria for an underground source of drinking water after approximately 400,000 barrels of wastewater had already been injected into these wells.*

Response: EPA utilized several sources of data to evaluate the water quality of the Madison Formation. A water sample was collected from Field 14-34, located between both Jody Field injection wells, and EPA considered the sample representative of water quality at the Jody Field injection wells prior to approval of the original AEs in 2010 and 2011. This information can be found in the original 2010 and 2011 AE decision documents, which cite a total dissolved solids (TDS) of 5,440 mg/L. Because these samples were collected prior to injection, they are more representative of the water quality of the Madison aquifer at this location than if a sample were collected post-injection. Based on EPA's evaluation and data reviewed, the Madison aquifer at this location, with the exception of the portions already exempted, falls under the definition of a USDW. However, as discussed in Response #2, EPA determined that the unexempted portions of the Madison aquifer at this location will not be used as a source of drinking water now or in the future based on a number of factors, including that the wells are in an oil and gas production field and have previously been used to inject produced water.

30. *A commenter said that the Supplemental Technical Analysis shows the Potentiometric Surface Map of the Madison Group and noted that MBMG Open File 99 indicates TDS measurements of 3,800 to 4,200 around Stanford, 3,700 to 3,770 around Roundup, and 4,120 to 4,175 around Lewistown. They noted that the measurements in the Valier area in Pondera County are lower ranging from 2,980 to 3,220 TDS to the north and south and 3,160 to 3,200 TDS to the west and east. The commenter asked whether Madison Aquifer water in Valier could also be as clean and pure, since high-quality water from the Madison Aquifer (as seen in Stanford, Roundup, and Lewistown) yields water so clean that treatment systems are not necessary.*

Response: The potentiometric surface map depicts groundwater elevations and hydraulic gradients and does not show TDS or water quality. TDS data come from separate water quality analyses and are not represented on the elevation map used in the AE ROD analysis.

31. *A commenter requested that EPA clarify how the recharge zone off the Rockies could potentially shift contaminants further into the Madison Aquifer, especially eastward toward local towns and counties. Another commenter stated that low TDS measurements at the two sites indicate recharge from rain and snowmelt from the Rocky Mountain Front and suggest that previously injected wastes may have migrated offsite. The commenter further asserted that these low TDS values undermine EPA's rationale that the water is so contaminated that making it fit for human consumption would be economically or technologically impractical, and alleged that the draft 2025 AE ROD contains misleading statements.*

Response: The EPA's technical review does not support the commenter's hypothesis that recharge could potentially shift contaminants further into the Madison aquifer eastward. Regional mapping by the U.S. Geological Survey and Montana Bureau of Mines and Geology (MBMG) demonstrate that the hydraulic gradient of the Madison aquifer at the site is generally northward, which causes fluids to travel in that direction rather than eastward. The natural hydraulic gradient of the Madison aquifer reflects long-term regional recharge and flow patterns, including potential recharge along the Rock Mountains to the west. Therefore, recharge is already integrated into the direction of groundwater flow in the Madison and would not cause the injectate to change direction. In addition, thrust faults along the eastern side of the Rocky Mountains have displaced geologic layers such that Madison outcrops in the mountains are hydraulically disconnected[8] from the Madison aquifer near the injection wells and it is unlikely that direct recharge at Madison outcrops in the mountains affects groundwater flow near the wells. To account for the uncertainty in the exact direction of the hydraulic gradient, the boundary was drawn using a curved area that covers the likely range of gradient directions. The TDS values at the two sites do not suggest that recharge from rain or snowmelt at the Rocky Mountain Front is diluting the aquifer or that previously injected wastes have migrated offsite. Rather, the available data indicate that the Madison aquifer is naturally characterized by variable water chemistry. The overall contaminant profile, well depth, and historical water quality assessments collectively demonstrate that the water in the Madison aquifer at this location would require extensive treatment if ever used as a source of drinking water.

32. *One commenter asked whether the aquifer exemption allows fluid or material to be placed in a different aquifer or whether it is to be placed into the UIC well.*

Response: The aquifer exemption is a lateral and vertical expansion of the previously exempted Madison aquifer surrounding the wells. Therefore, the aquifer exemption expansion only applies to the limited portion of the Madison aquifer specified in the AE ROD. The Permits specify in Attachment II that injection into the Jody Field wells 34-1 and 34-2 wells is only allowed into the authorized injection zone, which is the Madison aquifer. Therefore, neither the Permits nor the approved aquifer exemption expansion would allow injection into a different aquifer.

[8] Berg, R.B., 2002, Geologic map of the Valier 30' x 60' quadrangle, northwestern Montana: Montana Bureau of Mines and Geology Open-File Report 453, 10 p., 1 sheet, scale 1:100,000.

Area of Review

33. *Commenters assert that interconnected aquifers and legacy well infrastructure create significant risk pathways. They cite uncased and improperly abandoned wells (including MBOGC's acknowledgement of improper caps, a USGS report, and a Los Alamos National Laboratory Newsletter), undocumented or minimally documented wildcat drilling, and widespread shot-hole exploration with incomplete records, questioning whether all such locations are accurately mapped within the proposed affected area. They argue that unknown fractures or fissures could open under high-volume, high-pressure injection (~3,400 ft depth at ~1,400 psi), and that wastewater could migrate vertically or laterally through these features.*

Response: EPA provided a detailed discussion of the Area of Review in the Supplemental Technical Analysis. In this document, EPA reviewed information to determine potential pathways of migration out of the injection zone. At the location of the injection wells, there is an upper confining zone of approximately 215 to 221 feet of siltstone, low-permeability marlstone, shale, and fine-grained sandstone above the injection zone, separating the injection zone from the overlying USDW. A lower confining zone of approximately 1,000 feet of limestone and shale is located below the injection zone and separates the injection zone from the underlying USDW. These confining zones were found to be free of known faults or fractures. The upper and lower confining zones are adequate to prevent fluid movement out of the injection formation. EPA explained in both the Supplemental Technical Analysis and the 2023 and 2025 Permit Fact Sheets that the wells in the area of review are all cemented properly, preventing the potential for fluids to move up out of the Madison aquifer. While the commenters assert the existence of widespread interconnections via uncased or improperly abandoned wells, they do not provide any evidence of such wells through specific well IDs, locations, or documentation. The Permittee submitted appropriate information required under 40 CFR § 144.31(e)(7) which includes "those wells springs, and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a quarter mile of the facility property boundary." Furthermore, while the regulations do not require EPA to review additional information in the area of review for Class V injection wells, EPA reviewed more extensive information consistent with the Class II regulations when evaluating this application. This includes information and maps showing the location of all existing producing wells, including wells, abandoned wells, dry holes and water wells, surface waters, mines, quarries and other pertinent surface features, and faults if known. See 40 CFR § 146.24(a)(2). EPA inventoried all wells within the expanded AORs and evaluated corrective action needs, such as re-plugging or remedial cementing, for any wells that could act as conduits. EPA's review did not find potential conduits for fluid migration from the injection zone.

34. *Commenters requested that EPA account for the unique conditions of the Rocky Mountain Front as a recharge area, emphasizing that seasonal snowmelt could significantly influence groundwater levels and flow. They noted decades of seismic testing and shot-hole drilling along the Rocky Mountain Front for missile siting and oil exploration may have altered geology and hydrology, increased potential transmissivity, and created undocumented pathways and are not captured in current analyses. Commenters stressed that the Madison Formation near the Rocky Mountain Front exhibits karstic features and fracture permeability, producing heterogeneous, preferential flow paths that simpler MODFLOW or MODPATH approaches may under-represent, and requested that EPA use more refined or hybrid modeling and incorporate uncertainty analysis.*

Response: See Response #31 regarding EPA's evaluation of the Rocky Mountain Front. See Response #33 regarding concerns about undocumented pathways in the area of review. While commenters broadly allege "decades of seismic testing and shot-hole drilling," they do not provide any evidence of such potential conduits. EPA used best available data from local well logs, geological maps, and regional hydrogeologic studies. The analysis used data from local sources such as the Montana Bureau of Mines and Geology (Noble et al., 1982) and published regional studies (Downey, 1984) for hydraulic gradient and flow estimations. EPA acknowledges that these models simplify the inherent heterogeneity of the subsurface. However, EPA incorporated these

uncertainties into its modeling framework by applying protective assumptions. See Responses #24 and #25 regarding the modeling assumptions that account for uncertainties. Unless additional site-specific data are made available, such as further detailed fracture or karst mapping, EPA must rely on the documented subsurface conditions and address uncertainty by using conservative measures to demonstrate that potential injectate migration remains within the aquifer exemption boundary.

35. *Commenters asserted that we should pause our actions until Department of Natural Resources and Conservation (DNRC) completes a study on the hydrology and hydraulic connections of the Madison Aquifer in this area, asserting that only a DNRC study can determine what connectivity exists to shallower aquifers and surface waters and how transmissivity occurs, where it occurs, and to what degree. They stated that hydrogeologic information specific to Pondera County is limited and fine-scale local data are lacking, and they pointed to decades of wildcat/shot-hole drilling that may have increased potential transmissivity and created pathways not captured by current modeling. They noted DNRC prepared a proposal at the community's request, supported by local officials, and urged EPA to encourage and fund this study and wait to issue permits until its findings can be applied to EPA's analysis.*

Response: EPA's review of permit applications and the aquifer exemption request for the Madison Formation at the Jody Field wells is based on the best available technical and site-specific data, as discussed in Response #34. While commenters have expressed concerns that a study is needed to better characterize the hydrology and hydraulic connections of the Madison Aquifer, and solicits DNRC to conduct such a study, EPA's decision is based on data that are currently available and cannot include consideration of information that does not exist. Response #33 provides information about the confinement of the Madison aquifer at this location and the protection of the shallow USDWs. While additional studies could further refine the understanding of fine-scale hydrogeologic connectivity, there is adequate available data to support the determination that the confining layers effectively isolate the injection zone from shallower USDWs.

36. *One commenter stated that EPA's MODFLOW analysis better constrains hydraulic head pressure gradients than it does the underlying aquifer properties, and that the principal sources for aquifer parameters, Noble (1982) and Downey (1984), are dated, pre-fracking studies. They noted Downey focuses on North and South Dakota and easternmost Montana rather than the Rocky Mountain Front and that supplemental inputs from Montana Bureau of Mines and Geology databases and local logs are incomplete and sometimes inaccurate. Citing the Montana Department of Natural Resources, the commenter argued that a rigorous hydrogeological study of the region and the Madison Formation is needed first, before making decisions, and asserted that the Supplemental Technical Assessment relies on questionable, dated, and incomplete data and uses unscientific terminology.*

Response: EPA's hydrogeologic and modeling evaluation does not rely solely on Noble (1982) or Downey (1984); these sources were utilized for the hydraulic gradient. As discussed in Response #34, EPA used the best available data. In addition to Noble (1982) and Downey (1984), EPA's review incorporated more recent, site-specific data including well logs, cores, injectivity, measured injectate properties, and mapping and studies for the Madison and confining units in the Rocky Mountain Front and Pondera County. These data were used to input aquifer properties including hydraulic conductivity, transmissivity, and storativity into the MODFLOW and related analyses, and EPA applied conservative assumptions to bound uncertainty. See Responses #24 and #25 for a discussion on the conservative modeling inputs that account for uncertainties. Response #35 addresses comments related to the request for additional hydrogeological study. While additional studies could further refine the understanding of fine-scale hydrogeologic connectivity, there is adequate available data to support both the determination that the confining layers effectively isolate the injection zone from shallower USDWs and that the predicted horizontal migration distances of injected fluids remain within the defined aquifer exemption boundaries over the modeled time period.

37. *Commenters argued the proposed aquifer exemption and AOR are unsafe given the project's extraordinary injection volume (~670.6 million gallons across two wells) into a potable formation. They contended that EPA's analysis relies on homogeneous assumptions that do not reflect the Madison Formation's karstic and fractured nature, especially the Sun River Member, where anisotropy, preferential flow paths, and heterogeneity can produce faster, farther plume transport. They stated that MODFLOW/MODPATH's laminar, constant-property framework may therefore underestimate plume extent and persistence. Commenters also raised geochemical concerns that low-pH injectate could dissolve dolostone, increasing porosity and permeability. Additionally, they asserted the new AE boundary is expressly designed to allow modeled injectate to travel ~2.0+ miles over 10,000 years, expanding risk, and urged EPA to fully characterize uncertainties, reconsider the exemption, and assess potential plume interception of abandoned wells within a larger, uncertainty-informed AOR.*

Response: As explained in the AE ROD and in Responses #2, #3, #4, and #10, the Madison aquifer at this location is not a potential source of drinking water (i.e. – not potable) and does not have potential to serve as a source of drinking water. As explained in responses above, the combination of expanded AE and AOR boundaries (Responses #15 and #31), the AOR review for potential conduits (Response #33), injection volume limits (Response #15), and built-in safety factors (Responses #24 and #25) adequately account for uncertainties, including those raised by the commenters, and protect USDWs. Regarding the concern that low-pH injectate could dissolve dolostone, as discussed in Response #25, EPA selected a 10,000-year period as a conservative approach similar to that taken for no migration petitions for Class I underground injection of hazardous waste. This is a substantial length of time to allow for dilution, attenuation, and geochemical transformations (including dissolution-precipitation reactions) of the waste that would be injected into these two wells such that it will not adversely affect underground sources of drinking water and human health at the boundary in 10,000 years. Please see the Supplemental Technical Analysis document for additional details regarding the modeling period and geochemical transformations.

38. *Commenters asserted EPA lacks a definitive, site-specific understanding of this aquifer and should not treat it as homogeneous. They cited incomplete and inaccurate regional datasets, like the Montana Board of Oil and Gas records, amid decades of wildcat drilling, fracking, and shot-holing, and noted USGS's caution that mapping conduit networks and obtaining high-quality calibration data is difficult. They contended averaged modeling likely underestimates the AOR and plume extent, raising the risk of injectate intersecting orphan or improperly sealed wells, registered or not, inside and beyond the current AOR, with potential impacts to present and future water supplies. They argued EPA's updated analysis is inadequate because it does not fully address aquifer complexities or geochemical effects like dolostone dissolution from acidic waste, potentially understating transport time and distance, and it insufficiently evaluates contamination pathways via legacy wells. Finally, they requested EPA develop a plume-monitoring plan, release it for public comment before any permit is issued, and include baseline sampling of all existing drinking and agricultural wells within the AOR.*

Response: As discussed in Response #34, EPA's analysis used the best available data. See Response #33 regarding concerns about potential conduits for vertical fluid migration within the expanded Area of Review. See Responses #24, #25, and #31 regarding the modeling assumptions that account for uncertainties. Responses #26 and #36 provide additional information about the modeling analysis.

The commenters requested a plume-monitoring plan. The Permits do not include a plan to install monitoring wells but do include other types of monitoring and testing requirements that will provide information regarding the computed plume extent. The integrated approach of using an expanded exemption area and AOR together with pressure falloff testing and continuous monitoring at the injection wells is protective of existing water supplies. EPA has incorporated pre- and post-startup testing and monitoring requirements into the Permits that

will identify changes in injection performance and the computed plume extent. See Permit Change #14 (Attachment IV Monitoring and Reporting Requirements). The Permits provide for ongoing evaluations, including mechanical integrity tests, performance monitoring, and corrective actions if needed, to prevent endangerment to USDWs.

The commenters requested a baseline sampling of all existing drinking water and agricultural wells within the AOR. As explained in the AE ROD, there are no drinking water wells in the Madison injection zone. An August 2025 search of the Montana Groundwater Information Center (GWIC) indicated no drinking-water wells utilize the Madison Aquifer within the nine-township area surrounding the Jody Field 34-1 well. The deepest perforation for any wells used for domestic, household, and municipal purposes in this area is 310 feet, which is over 3,000 feet shallower than the top of the Madison Aquifer at the Jody Field 34-1 well (3,428 feet) and Jody Field 34-2 well (3,418 feet). At this depth, the 310-ft deep domestic well is likely completed into the Two Medicine Formation or the Eagle Formation. There are multiple confining units in between the Madison Aquifer and the Two Medicine and Eagle Formations, including: the Colorado, Blackleaf, Bow Island, Swift, Rierdon, and Sawtooth confining zones. These provide additional separation of the shallow drinking water resources from the Madison Formation. This stratigraphic stacking increases the effectiveness of vertical containment by creating several barriers to upward migration. The uppermost USDWs occur from the surface to about 664 ft below ground surface (bgs), whereas the top of the Madison injection interval is around 3,418 to 3,428 ft bgs. The thousands of feet of total vertical separation further reduces the potential for upward movement into USDWs. The UIC regulations emphasize siting as a way to prevent endangerment to USDWs. While there are not specific siting requirements for Class V wells, the EPA relied on the more stringent requirements in the Class II regulations regarding siting, which require that "…wells shall be sited in such a fashion that they inject into a formation which is separated from any USDW by a confining zone that is free of known open faults or fractures within the area of review." 40 CFR § 144.22(a). The Jody Field injection wells meet this siting requirement. In this case, the commenters' concern is about the shallow groundwater aquifers currently being utilized, and due to the presence of multiple confining zones and the fact that no conduits were identified in the AOR (See Response #33), there is adequate protection for these USDWs, as it is highly improbable for fluid injected into the Madison Formation to reach the shallow drinking water aquifers.

39. *A commenter asserted that EPA would have to exempt the entire Madison Aquifer to allow millions of gallons of jet-fuel wastewater to be injected into the wells near Valier, MT, on the Rocky Mountain Front and stated that Montana Free Press reported EPA itself found that the wastewater "could drift as far as two miles, deep underground in the Madison Aquifer," potentially affecting the drinking water of thousands of people.*

Response: The commenter appears to disagree with EPA's modeling and analysis and has concerns that the aquifer exemption boundary may not be adequate to contain the injected fluids. The EPA clarifies that the exemption is limited to a 6.6 square mile area around the Jody Field wells location. See Response #19 for clarification on the portion of the Madison Formation that is exempted. The discrete, deep interval being exempted is defined with horizontal and vertical boundaries of the Madison Formation that meet criteria for exemption. See Responses #24 and #31 regarding the concern about the injectate staying within the aquifer exemption boundary and see Responses #19, #33, and #38 regarding the concern about confinement within the Madison. The 2-mile reference reflects conservative subsurface modeling run over a period of 10,000 years that was used to delineate the exemption boundary and set protective permit limits (See Response #25). EPA's analysis demonstrates that while wastewater could migrate roughly two miles over 10,000 years, this projected movement is fully contained within the defined area of exemption and since drinking water supplies rely on unaffected, shallower aquifers, the risk to public water resources is effectively mitigated.

40. *Commenters challenged EPA's proposed expansion from a 0.25-mile radius to 2.1 miles, asserting the modeling is unreliable and based on inaccurate porosity and permeability assumptions from 2010–2011*

studies. One commenter also stated that local hydrogeologic research is incomplete or nonexistent and questioned why EPA is confident that the current projection of wastewater migration and the expanded area will be more accurate.

Response: The commenters' assertions that EPA's wastewater-migration model is not reliable or adequate and that local research is lacking are general criticisms and do not provide any specificity about their concerns through examples, data, or methodological deficiencies. As discussed in Response #34, EPA used the best available data. Responses #24, #25, and #31 address the conservative assumptions used to address uncertainty. Commenters did not provide additional details or identify flaws in the information that EPA referenced for EPA to respond to.

41. *One commenter asserted that previous assessments regarding the drift of the injected chemicals have been revised outward and have been based on parameters that are not from this aquifer and that it seems likely they are wrong again. Another commenter stated: The Record of Decision acknowledges the error of assuming, back in 2010, that a confining zone of less permeable layers lay directly beneath the Jody wells. A workover on the wells in 2022 proved that assumption dead wrong. In 2023 the EPA was confident that no injectate would migrate beyond a quarter-mile. When we objected, the EPA (to its credit) re-examined the migration issue. Then, despite the collapse of two earlier assumptions, the EPA in 2025 is now confident that a 2.1 radius exemption will handle it all. Like the tremors in Denver, my confidence is not so steady.*

Response: As discussed in the above responses, EPA's current analysis is based on the best available site-specific data (Responses #34 and #36) and conservative modeling assumptions that explicitly incorporate uncertainties related to magnitude and direction of the hydraulic gradient in the Madison Formation (Responses #24, #25, and #31). The current evaluation relies on hydraulic gradient data and a long-term simulation period designed to ensure that even conservative estimates of fluid migration from the injection process remain within the defined boundaries. The current analysis is protective, reducing the likelihood of underestimating the movement of fluid as a result of the natural hydraulic gradient. The commenters generally express concern about the reliability of EPA's modeling and cite to two examples where the EPA corrected previous assumptions. However, they do not provide any specific concerns about the modeling, the data used in the modeling, or current modeling assumptions. In this case, as the commenter points out, EPA re-examined the migration issue. The updated modeling and safety margins incorporated into the new aquifer exemption area provide greater confidence than the prior assumptions, due to incorporation of injectate migration over a 10,000-year period. Regarding the concern about vertical boundaries, see Responses #19, #33, and #38. Due to the presence of multiple confining zones and the fact that no conduits were identified in the AOR, there is adequate protection for USDWs, as it is highly improbable for fluid injected into the Madison Formation to reach the shallow drinking water aquifers.

42. *One commenter asked, "How will the proposed rate and volume of injected fluids impact groundwater flow in the Madison aquifer over the next decade/century? Specifically, what is the horizontal radial distance from the well(s) in which injected fluids would move?"*

Response: The active injection period was modeled as 20 years at about 1,255 bbl/d for Jody Field 34-1 and 1,049 bbl/d for Jody Field 34-2. The pressure mound near each well pushes injectate out less than a third of a mile. The modeled maximum extent during injection is about 1,540 ft (0.29 mi) from Jody Field 34-1 and 1,430 ft (0.27 mi) from Jody Field 34-2. The farthest extents are oriented away from the other well due to pressure interference. After injection stops and pressure dissipates, movement is controlled by the natural hydraulic gradient (about 0.001 to the north northwest). EPA's particle tracking shows a total downgradient travel distance of roughly 10,700–10,900 ft (2.03–2.06 mi) over 10,000 years, which equates to about a foot per year (ft/yr). Over the next decade, the injection period is assumed to be active and the injectate would remain within the maximum extent reached at any time during the 20-year injection phase, which is about 0.27 to 0.29 miles from each well. Over the next century, additional downgradient movement is slow after injection stops at a rate

of about 1 ft/yr based on the 10,000-year result. That would be approximately 100 ft per century beyond the end-of-injection extent.

43. *One commenter stated: [The] CORRECTIVE ACTION PLAN states that "no corrective action is required at this time as EPA's evaluation did not identify migration pathways within the area of review". In some instances, fluids have traveled faster and farther than researchers thought possible. No hydrogeological study has been conducted; therefore, this claim is pure supposition. MOGO must develop a corrective action plan for wastewater fluid movement outside the area of review as part of the application process.*

Response: The commenter here does not provide any citations or specific information about claimed "instances" where fluids traveled "faster and farther than researchers thought possible." Therefore, there is no way for EPA to know whether the commenter has information relevant to the Madison aquifer at this location for EPA to consider. Further, while the commenter characterizes EPA's evaluation as "pure supposition," EPA's evaluation included a detailed review of information, as discussed in Responses #34 and #36, and computer modeling that included site-specific data and conservative assumptions to account for any uncertainties about which the commenter expresses concern, as discussed in Responses #24, #25, and #31. Response #35 addresses comments related to the request for additional hydrogeological study. Based on EPA's technical analysis, the fluids are not projected to move beyond the area of review of the two wells; therefore, it is not warranted to require corrective action on wells outside the area of review because the regulations specify that corrective action is only required for wells within the area of review. See 40 CFR § 144.55. See Responses #25, #26, and #42 for more information about EPA's modeling. As discussed in Response #38, EPA has incorporated pre- and post-startup testing and monitoring requirements into the Permits that will identify changes in injection performance and the computed plume extent. See Permit Change #14 (Attachment IV Monitoring and Reporting Requirements).

44. *One commenter stated existing studies and assumptions regarding the local geology, specifically the confining zones in the Madison Formation, have been found to be flawed. The commenter also stated that the proposed expansion of the aquifer exemption to over six square miles does not guarantee that contaminants will be permanently contained and that the consequences of a failure would be catastrophic for our water supply.*

Response: The commenter did not provide information on the existing studies or a specific flaw in local geological analysis. EPA utilized the most complete and up-to-date data available to support scientific decisions, as discussed in Responses #34 and #36. Computer modeling included site-specific data and conservative assumptions to account for any uncertainties, as discussed in Responses #24, #25, and #31. See Responses #24 and #31 regarding the concern about the injectate staying within the aquifer exemption boundary and see Responses #19, #33, and #38 regarding the concern about confinement within the Madison. Due to the presence of multiple confining zones and the fact that no conduits were identified in the AOR, there is adequate protection for USDWs, as it is highly improbable for fluid injected into the Madison Formation to reach the shallow drinking water aquifers.

45. *A commenter was concerned that the current plume figure is misleading by showing two narrow columns moving north and a hard south boundary under well 34-1 without depicting dual injections at different pressures. They asked how EPA knows that the injection migration will only go north. They requested accurate 3-D modeling of 10 years of continuous, dual-well injections totaling ~16 million barrels, and disclosure of any geologic barriers that would limit southward movement.*

Response: The current plume representation is based on numerical simulations that account for the dual injection from Jody Field 34-1 and 34-2 and the resulting pressure interference between them. The modeling uses simulations with MODFLOW and MODPATH to represent simultaneous injection of about 16.8 million

barrels over an active period of 20 years, followed by long-term 9,980-year migration under a natural hydraulic gradient, which was estimated based on available data from the USGS (Downey, 1984) and Montana Bureau of Mines and Geology (Noble et al, 1982). Although the exact direction of the hydraulic gradient is uncertain, the data indicate it has a predominately northward direction. As discussed in Response #31, the AE boundary was expanded to include an arc through the probable range of gradient directions to account for this uncertainty. The narrow plume columns shown in the figure reflect the combined injectate extent from both wells migrating downgradient over time. As discussed in Response #26, the model integrates injection at both wells and their associated pressure effects to delineate a protective aquifer exemption boundary. No geologic barriers are known to exist near the injection wells that would limit southward plume movement or otherwise affect its movement. The simulation incorporates the effects of pressure decay and natural gradients that effectively limit migration in that direction. The current methodology and its representation are detailed in the Supplemental Technical Analysis, which explains that the plume geometry results from both the injection rates and the hydrologic conditions present at the site.

46. *One commenter noted, "It's suspicious that the former wastewater underground movement from injection was 2 miles and now that's been changed to ¼ miles. Rigorous comparison of determination methods between 2 and ¼ miles need analysis and results comparison."*

Response: The commenter may be mistaken because the original AE areas for Jody Field 34-1 and 34-2 were set as circles with a ¼-mile radius around the well locations. However, after incorporating new data and refined hydrogeologic modeling, EPA reevaluated its methods and concluded that wastewater migration could extend to about 2 miles. The final AE ROD combined and increased the AE area to 6.6 square miles. This larger area encompasses the modeled migration of the injectate, as well as an uncertainty buffer to accommodate for an estimated hydraulic gradient. By expanding the estimated migration distance to about 2 miles, EPA is taking a more protective and conservative approach, ensuring that potential offsite migration of contaminants is fully taken into account when assessing risks to USDWs.

47. *One commenter stated that since the original application was submitted, many additional wells and drilling activities have occurred in the area and, given that the radius was already expanded eightfold, they anticipate the current radius estimate is still too small.*

Response: The commenter does not provide information about the additional wells or drilling activities that they allege have occurred in the area. The commenter also does not include specific well identifiers, locations, dates, data sources, or a methodology explaining how the current estimate is too small. The AOR review is discussed in Response #33. EPA broadened the radius of the AORs based on modeling that demonstrated the potential for fluid migration over a 10,000-year period. The modeling included migration simulations that incorporate a natural hydraulic gradient and account for uncertainties. See Responses #24, #25, #26, #31, and #42 for more information.

48. *One commenter stated they have concerns about the new 10,000-year projection of wastewater migration, questioning how such a forecast can be made without a comprehensive hydrologic study of the proposed area and expressing skepticism about predicting conditions so far into the future.*

Response: See Responses #34, #35, and #36 for a discussion on how EPA used site-specific geologic and hydrologic data. See Responses #24, #25, and #31 for a discussion on how EPA used conservative modeling assumptions to address uncertainty and conservatively bound long-term injectate migration without requiring a new comprehensive hydrologic study.

Confinement, Fluid Migration, and Monitoring

49. *One commenter stated this is a poor location for a disposal well both because of the presence of threatened wildlife and the proximity to the headwaters of important community water sources like Dupuyer Creek, Lake Frances, and the Swift Dam canal and further asserted "EPA's new analysis shows the flow of water goes right into Dupuyer creek above where it feeds into canals that fill Lake Frances, which provides drinking water for thousands of people."*

Response: EPA's considered information about potential endangerment to surface water supplies, including Dupuyer Creek, Lake Frances, and the Swift Dam canal, from underground injection activities. 22Contrary to commenter's assertions, the EPA's analysis does not show that the injected fluids will reach the Dupuyer Creek; rather, the injection will be occurring thousands of feet below ground surface, into the Madison aquifer. As noted in Response #22, there is no hydraulic connection between the Madison aquifer at the location of the wells and these surface water resources.

See the section 'Endangered Species Concerns and FWS Consultation' for concerns about threatened wildlife.

50. *Several commenters voiced concerns that injection fluids could migrate from the injection formation and contaminate nearby Dupuyer Creek, Lake Frances, the Swift Dam Canal, springs near Great Falls, Ulrich Springs, local natural artesian springs, or other non-specified water sources. Another commenter stated that water near the well site supplies drinking water for Valier, Conrad, and Brady, and that a nearby creek and canal feed a lake that provides water for crops, livestock, and residents across Pondera County.*

Response: Please see Responses #22, #33 and #38 regarding the area of review and confinement of the Madison aquifer at this location from currently-used shallow water sources. The commenters expressed general concerns about the potential for migration of injectate to shallow water resources but provides no specific information to suggest that EPA's technical analysis about confinement is inadequate or flawed.

51. *If the injection wells are approved, what will the water quality be for future use? Conrad gets its drinking water from Lake Francis. With lack of normal snowmelt this spring, the lake level is low.*

Response: See Responses #2, #3, #4, #1111, and #12 regarding the potential for future use. See Responses #22, #33 and #38, and #49 regarding the area of review and confinement of the Madison aquifer at this location from currently-used shallow water sources, including Lake Frances. The permitted injection will not endanger Lake Frances.

52. *One commenter asserted that the presence of artesian groundwater supply in Great Falls could be affected by the injection into the Madison Aquifer.*

Response: The commenter provides no information about the location of this artesian groundwater supply in relationship to the wells; therefore the EPA does not have information to consider regarding the existence of an artesian groundwater supply in Great Falls that may connect to this portion of the Madison aquifer. However, as it is approximately 70 miles southeast of the Jody Field wells, the city is far outside the area impacted by injection. In addition, mapping of the potentiometric surface within the Madison Group by the Montana Bureau of Mines and Geology (Noble et al., 1982) indicates Great Falls is upgradient from the injection wells. Therefore, injectate will migrate over time away from the city rather than toward it.

53. *One commenter asked, "Where are these supposed confinements that will limit movement of this wastewater?" Another asked, "Is the Colorado Group an effective confining formation, impeding flow of injected fluids between the Madison Group and shallower aquifers?"*

Response: See Responses #22, #33 and #38 regarding the area of review and confinement of the Madison aquifer at this location from currently-used shallow water sources.

54. *One commenter asked, "Where is the proof that this aquifer will not allow wastewater contaminants to travel below the well? EPA stated, 'there is not sufficient evidence of less permeable layers within the lower Madison Formation…'" They stated, "In plain English, this means there is no confinement to stop wastewater from traveling along the bottom of this aquifer."*

Response: The commenter misunderstands the EPA's statements in the AE ROD regarding the sufficiency of evidence of less permeable layers within the lower Madison Formation. The original AEs issued in 2010 and 2011 were issued for only the upper Madison due to the assumption that there was an intermediary confining layer within the Madison that separated the upper Madison from the lower Madison Formation. After data from well-workovers became available, it was determined that this intermediary layer did not provide confinement and that the upper and lower parts of the Madison Formation are likely hydraulically connected. Therefore, the AE depth is being extended down to the base of the Madison Formation, where there is a competent regional lower confining zone beneath the Madison Formation to prevent downward migration of injected fluids out of the exempted area. The regional lower confining zone is comprised of the tight limestones and shale layers of the Mission Canyon and Lodgepole (Mississippian) and the Three Forks and Potlatch (Devonian). Those confining formations are mapped from about 3,700 to 4,700 ft and are characterized as low-permeability lithologies that act as the boundary below the Madison Formation.

55. *One commenter alleges that "the shale substrate is not impermeable to seepage," while others express that the shale on their property is porous and not uniform in nature.*

Response: The upper confining layer at this location is over 200 feet thick, and the lower confining layer at this location is about 1,000 feet thick. While commenters allege that the shale substrate is not impermeable to seepage and express other similar concerns, technical experts recognize shale as an appropriate confining layer for injection due to its low permeability and ability to act as a barrier to fluid migration. Due to a fine-grained structure, high clay content, and low permeability, shale is commonly cited as a confining layer that restricts the flow of water in hydrogeologic contexts.[9] Response #38 provides more detailed information about the multiple layers of confinement from shallow water resources. The commenters generally allege that shale is not impermeable but do not provide any evidence or support about this for EPA to consider.

56. *Several commenters raised concerns about future fracking for oil and gas production, one stating that "future fracking of the area could risk destabilizing the geological structures, which would cause infiltration into our ground water sources." Another commenter raised concerns about the injecting into the wells at high pressure and stated "[i]f indeed these volume numbers increase what happens to the increased formation pressure caused by these operations? Aren't these high-pressure injection concerns similar to the issues that have been raised by "fracking", it is another form of fracturing formation rock to allow the formation to accept pressure and volumes not produced by nature."*

Response: Because the commenter only makes general reference to potential future fracking activities and does not identify any specific projects, the EPA has no specific information to consider and is unable to consider speculative future actions in permitting decisions. Regarding high pressure, both permits set maximum allowable injection pressures (MAIP) as an enforceable permit condition. See Response #133 for a discussion on MAIP.

[9] Fetter, C.W. (2001). Applied Hydrogeology (4th ed.). Prentice Hall. ISBN: 9780130882394.

57. *A commenter asked if the layer of rock is porous enough to accept truckloads upon truckloads of wastewater under pressure, then what prevents it from eventually (like even 10 or 100 years from now) seeping into the surrounding drinking water aquifers? The same commenter asked whether there was a way to clean up any contamination.*

Response: First, the commenter questions if the Madison Formation is "porous enough" to accept the volume of fluids that will be injected. EPA's analysis indicates that the Madison Formation does have measurable porosity (around 9.4% and 9.7%, for Jody Field 34-1 and 34-2 respectively) sufficient to accept the proposed volume of fluids.

Next, the commenter raises concerns about the potential for wastewater to seep into drinking water and asks about clean up. Responses #33 and #38 address the vertical migration of fluid and explain why USDWs above and below the injection zone are protected from contamination. Responses #24 and #31 address the lateral migration of fluids and why USDWs outside the exempted area will not be affected. As explained in these Responses, the EPA's computer modeling demonstrates the predicted extent of the fluid migration within the Madison aquifer over 10,000 years, and the AE boundary is based on this modeling. Due to the exemption process, this portion of the aquifer is not a potential source of drinking water, and because it will no longer be a USDW, will not require clean-up.

58. *Several commenters asked for clarification on the proposed maximum volume of wastewater to be injected into the injection well. Commenters were concerned that the injection zone formation cannot accommodate such volumes, noting that the permit application does not explain where this increased capacity actually exists. Other commenters raised concerns about aquifer capacity.*

Response: The Permits set maximum cumulative injection volume limits (8,811,350 barrels (bbl) for Jody Field 34-1 and 7,156,173 bbl for Jody Field 34-2) calculated by estimating the available pore volume in the injection zone using measured formation thickness and porosity values (around 9.4% and 9.7%, respectively) derived from nearby neutron log data. As discussed in Response #57, EPA's analysis indicates that the Madison Formation does have the capacity to accept the fluids.

It should be noted that the Permits limit the volume of fluids injected in two ways. One is through the maximum allowable injection pressure, which limits the injection pressure to prevent initiation of new fractures or propagation of existing fractures in the injection zone, except during stimulation. The second is through permit volume limits. The Permits set strict cumulative volume limits and use conservative modeling to protect adjacent underground sources of drinking water. EPA's modeling and volume limitation strategies demonstrate that injected wastewater is expected to remain within the designated aquifer exemption area, preventing migration into adjacent USDWs.

59. *Several commenters voiced concerns regarding the volume available in the aquifer based on EPA's calculations, stating that the volume of fluid extracted from the well when it was a production well was not equal to the projected volume of fluid to be injected into the well. Commenters stated concerns regarding the proposed quantity of injected material being 171 times more than the original production volume of oil and gas from the wells, with the permit applications seeking permission to inject another 15,967,523 barrels within the next 10 years. Commenters noted concern regarding the amount of oil extracted from the Madison Formation versus the amount of injectate proposed to be injected.*

Response: See Responses #57 and #58. The injection volume limits are not based on historic production volumes but on a detailed evaluation of the actual storage capacity of the Madison Formation. EPA used numerical groundwater-flow modeling and site-specific data for the formation thickness and porosity to compute the cumulative injection volume. The modeling informs that the fluids will remain confined within the exemption

area over a 10,000-year period. While the historical production numbers may be much lower, they reflect recoverable hydrocarbons rather than the available pore space for fluid injection, which can accommodate a substantially larger volume of wastewater.

60. *One commenter said that they would like EPA to pay close attention to the other wells that fall within the Area of Review to ensure that there is no possibility of wastewater polluting underground drinking water via the injection well.*

Response: The EPA evaluated all wells within the AOR; this is discussed in more detail in Response #33. As discussed in Response #38, there are multiple layers of confinement between the injection zone and the shallow USDWs. EPA's review of the AOR wells confirms that the construction of the wells penetrating the upper confining zone will help to ensure that the injection zone remains isolated from the aquifers above it. Specifically, the construction data shows that wells penetrating the injection zone are cemented continuously from the well bottom to above the upper confining layer or Sawtooth Formation. This cementing is designed to prevent any movement of injected fluids along the wellbores, thus reducing the risk of wastewater reaching USDWs.

61. *Several commenters repeatedly stressed that the proposed monitoring plan falls short of what is needed. They argue that testing the wellbore integrity alone is not enough and requested that all wells be retested on a routine, well-defined interval using dedicated monitoring wells or other advanced technologies capable of detecting the slightest migration of the injection plume. As one commenter puts it, "by the time water quality monitoring detects contamination it will be too late." They requested that EPA develop a comprehensive monitoring plan that not only tracks the integrity of the wells but also continuously monitors the behavior and dispersion of the injectate, including through realistic 3-D modeling of plume dynamics at various injection pressures. Commenters suggested that failure to do so could allow leakage to go undetected until contamination occurs.*

Response: The Permits include several requirements to prevent endangerment to USDWs, and EPA updated monitoring and testing requirements in response to comments. The Permits require continuous recording of wellhead injection pressure to ensure injection pressure does not exceed the maximum allowable injection pressure (MAIP); annuli pressures to detect leaking between the tubing and casing; bradenhead pressure to detect pressure build up between the long-string casing and the surface casing; monthly and cumulative volumes to track the total volume injected; and monthly formation pore pressure readings at two nearby shut-in Madison wells (Jody Field 14-34 and Jody Field 4-1A) to evaluate the extent of the plume. These data are recorded monthly and reported quarterly to EPA. The injectate is sampled at least quarterly using EPA approved analytical methods. The results must be submitted prior to authorization to inject, before any new source is accepted, and on the required schedule. The Permits require periodic subsurface testing that can detect leakages or movement of fluids out of the injection zone, through internal and external mechanical integrity tests (MITs). The internal MIT must be conducted before injection and at least every five years. The external MIT or temperature log is required 9–12 months after startup and at least every five years after the last successful MIT. An annual pressure fall-off test is required to help evaluate changes in formation conditions over time. A one-time noise log is required before EPA authorizes injection, to evaluate potential flow behind casing between the upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent formations. If any fluid movement is detected, EPA can require well remediation. The Permits limit surface pressure (i.e. - MAIP) to prevent fracturing, limit total injected volume, require a pressure actuated shutoff on the injection line, and continuous rate/volume metering. If any monitoring indicates potential for endangerment of USDWs, EPA can require well remediation, corrective action, modified operating conditions, additional monitoring, reporting, or closure.

See Responses #25, #26, and #42 for more information about EPA's modeling. As discussed in Response #38, EPA has incorporated pre- and post-startup testing and monitoring requirements into the Permits that will

identify changes in injection performance and the computed plume extent. See Permit Change #14 (Attachment IV Monitoring and Reporting Requirements).

The commenters generally request more monitoring without providing specificity about why they believe the Permit requirements are not sufficient.

62. *A commenter asked, if the injection zone is 3,700 feet deep, then how will anyone know if the wastewater is staying within its exemption area, what methods are used to test for this, and who is responsible for monitoring.*

Response: The EPA performed computer modeling to predict the extent of the fluid migration. See Responses #25, #26, and #42 regarding the modeling. Monitoring requirements in the Permits, such as continuous pressure monitoring of the injection well, monthly formation pore pressure monitoring of AOR wells, and periodic pressure falloff testing, will assist in evaluating the extent of the plume. The monitoring and reporting table was modified to require monthly monitoring of injection zone pore pressures in the shut-in Jody Field 4-1A and Field 14-34 AOR wells and continuous monitoring of the AOR wells during the first pressure fall off test. See Permit Change #14 (Attachment IV Monitoring and Reporting Requirements). By monitoring formation pressures in the shut-in AOR wells and comparing them to the injection well pressures, EPA can confirm that the model inputs remain representative. If EPA observes pressure changes that suggest the local hydraulic conductivity value used initially in the modeling is lower than indicated by the monitoring data, and the injectate plume might move beyond the AE boundary, there is an opportunity to refine the computational model and determine additional appropriate actions to prevent endangerment to USDWs based on this information. The Permittee will be responsible for monitoring the total injection volume and monitoring the pressures in the shut-in wells.

63. *One commenter expressed that because there is no monitoring, there is no way to know whether the proposed injectate will contaminate nearby USDWs. Another commenter suggests that water quality monitoring wells should be installed to establish baseline and to monitor water quality on a schedule in consultation with EPA, MBMG, MT Rural Water Systems, and MT DEQ, and that any change in the baseline levels would require an immediate stop to the wastewater injection.*

Response: Contrary to commenters' assertions that there is "no way to know whether the proposed injectate will contaminate nearby USDWs," the purpose of EPA's evaluation of the applications and AE information was to determine whether the proposed activity could be authorized without endangering USDWs. As discussed in Responses #33 and #38, EPA's technical review confirmed the appropriateness of the geologic setting to prevent endangerment to USDWs (both above and below the injection zone), and that over 3,000 feet and multiple confining layers separate the injection zone from the currently used shallow aquifers. The EPA performed computer modeling to predict the extent of the fluid migration laterally within the Madison aquifer for a conservative 10,000 years. See Responses #25, #26, and #42 regarding the modeling. Thus, EPA's analysis demonstrates that the fluid is expected to remain in the exempted portion of the Madison aquifer. Water quality monitoring is not required within the exempted area because EPA's aquifer exemption determination establishes that it is not a potential source of drinking water and will no longer be protected, as explained in the AE ROD and in Responses #2, #3, #4, and #10. However, the Permits require pressure monitoring, as discussed in Responses #61 and #62. While this monitoring does not require the Permittee to install new monitoring wells and establish baseline water quality as requested by the commenters, using existing wells to monitor pressure will avoid additional drilling through the protective confining layer and will provide the necessary information to refine the computational model and evaluate the plume extent to protect adjacent USDWs.

64. *One commenter stated that because the proposed plan relies on mechanical systems that can fail, they question why there are no requirements for monitoring wells throughout the area.*

Response: The commenter raises concerns about the potential for mechanical failure of the well and suggests that monitoring wells should be required, but failures in mechanical integrity of the well would suggest potential fluid movement at the well bore, not lateral movement in the injection zone. The Permits include many protections that prevent endangerment to USDWs from mechanical failure of the well, and installation of monitoring wells is not an appropriate method to address well failures. The UIC program is designed to prevent endangerment to USDWs. Therefore, EPA's Permits require that the Permittee "must cease injection immediately upon becoming aware that the well(s) lacks or is suspected of lacking MI." The Permit requires continuous monitoring of surface injection, tubing casing annulus, and bradenhead annulus pressures to directly monitor the well integrity. In addition, periodic mechanical integrity testing is required. See Responses #127 and #128 for more detail on mechanical integrity testing requirements. These requirements aim to identify mechanical failure of the wells as soon as possible, with the goal of preventing contamination of any overlying USDWs. In addition to the required monitoring, the facility utilizes a virtual well-site monitoring system, which will continuously monitor injection volumes and flow rates, pressure on the tubing, and pressure on the backside of the packer and tubing casing annulus, to notify the operator of issues real-time. The existing Permit requirements provide adequate protection of USDWs. EPA's integrated monitoring plan, including pressure monitoring, and continuous reporting, provides safeguards to detect any mechanical failure.

65. *Several commenters requested baseline drinking water quality testing of community water supplies, funded by the Permittee; free private well and household water quality testing; installation of monitoring wells; and baseline studies of water quality. Other commenters asked who will monitor the Madison Formation to ensure injectate does not migrate beyond the 2.1-mile radius at depths greater than 3,400 feet, and who would install and pay for monitoring wells, especially since even a single well has been deemed too expensive.*

Response: The UIC regulations do not require baseline water quality testing of the shallow aquifers or installation of ground water monitoring wells. While the UIC regulations do not have required monitoring for Class V wells, the Permits are consistent with the more stringent Class II monitoring requirements in 40 CFR § 146.23(b), which do not include ground water monitoring wells. As discussed in more detail in Responses #33 and #38, there is no hydraulic connection between the injection zone and the shallow water resources currently being used as drinking water, and there are multiple confining layers and over 3,000 feet of separation between the two. The EPA delineated the aquifer exemption boundary based on the computer modeling discussed in Responses #25, #26, and #42, and due to the results of the injectate migration modeling, EPA does not consider the installation of monitoring wells necessary to protect USDWs for this permitted activity. The commenters do not provide any technical information to refute these findings. Finally, the commenters request the Permittee to fund baseline water quality testing. This is not required by the SDWA or the UIC regulations and is outside the scope of the UIC program.

66. *One commenter asserted that with funding reductions to EPA, EPA would never be able to monitor potential impacts after approving this permit.*

Response: UIC permits require the Permittee, not EPA, to conduct monitoring, testing, and reporting (e.g., mechanical integrity tests, pressure/volume tracking, injectate characterization, and any additional monitoring EPA requires). EPA funding will not affect these requirements.

67. *One commenter asked who would be responsible for funding and drilling replacement drinking water wells for farmers, ranchers, homeowners, private well owners, and public systems if their wells are contaminated by Montana Renewables' jet-fuel wastewater, and what legal recourse would be available and against whom.*

Response: As discussed in more detail in Responses #33 and #38, there is no hydraulic connection between the injection zone and the shallow water resources currently being used as drinking water, and there are multiple confining layers and over 3,000 feet of separation between the two. Therefore, contamination of the shallow water resources from injection at these wells is highly improbable. However, it is a violation of the Permits and of the Safe Drinking Water Act (SDWA) to cause movement of a contaminant into a USDW from injection activities. Furthermore, if it is determined that contamination of drinking water sources has occurred due to injection activities which present an imminent and substantial endangerment to the health of persons, the EPA can use its emergency authorities to take such actions as are necessary to protect the health of persons. See 42 USC § 300i. Comments regarding legal questions outside of the SDWA are outside the scope of the UIC program and its regulations.

Earthquakes and Seismicity Concerns

68. *Commenters requested disclosure on how the earthquake analysis was performed.*

Response: EPA utilized standard practices[10] for reviewing injection-induced seismicity for disposal wells. The review includes looking at injection zone pressure buildup from injection activities, review of nearby faults, and review of pathways allowing the increased injection-induced pressure to communicate from the injection zone to the fault.

During permit development, EPA utilized U.S. Geological Survey's (USGS) Global Earthquake Archive data layer. The data is sourced from the USGS Earthquake Hazards Program (EHP) catalog to determine seismic activity and faults in the area around the wells. According to the USGS EHP[11] data, since 1979, 14 earthquakes have been detected within 50km (~31 miles) of the well location. These sites include; 8 km S of Valier (M 2.33), 13 km NNW of Conrad (M 3.1), 18 km SW of Heart Butte (M2.9), 8 km W of Valier (M 2.6), 1 km E of Cut Bank (M 2.9), 11 km S of Little Browning (M 3.2), 4 km SSE of Little Browning (M 2.6), 3 km SSE of Cut Bank (M 2.5), 10 km S of Little Browning (M 3.5), 3 km SSE of Little Browning (M 3.4), 2 km NW of Cut Bank (M 3.3), 18 km SW of Shelby (M 3.6), 9 km S of Little Browning (M 3.5), and 6 km SW of Little Browning (M 3.2), Montana. Review of the area showed that west of the well the geology of the Lewis Range contains known faults with normal slip action with a slip rate between 0.2 and 1.0 mm/yr[12].

EPA notes that suitable geology is a primary consideration in its review of all UIC permit applications. Based on an examination of seismic history in the region, injection pressure limits, and other protective measures in the Permits, EPA has determined that conditions do not exist that would result in an induced seismic event that would be felt at the surface. The geologic log in the public well file for Powers Farm 29-1 (API #25-073-21523), which is approximately 5 miles west northwest of the Jody Field wells, shows that the bottom of the Madison Formation at this well is approximately 2,000 ft above the Precambrian, crystalline, igneous/metamorphic bedrock, sometimes referred to as “basement rock”, which is located below sedimentary bedrock. In most historic cases, felt injection-induced seismicity was the result of direct injection into basement rock or injection into overlying formations with permeable avenues of communication with basement rocks[13]. Additionally, consistent with Class I requirements at 40 CFR § 146.13(a)(1), Section B.4 of the Permit specifies that the injection pressure at the wellhead must not initiate new fractures or propagate existing fractures in the injection zone and must not cause the movement of injectate or formation fluids into a USDW.

[10] EPA, 2015, *Underground Injection Control National Technical Workgroup, 2015, Minimizing and Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal Wells: Practical Approaches*.
[11] https://www.usgs.gov/programs/earthquake-hazards and https://www.usgs.gov/programs/earthquake-hazards/faults.
[12] Quaternary Fault and Fold Database of the United States, Interactive Fault Map.
[13] EPA, 2015, *Underground Injection Control National Technical Workgroup, 2015, Minimizing and Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal Wells: Practical Approaches*.

69. *Several commenters raised concerns about earthquakes. One commenter stated: "Earthquakes have been felt in this area. The EPA's report said the well is planned for an area 'several miles east of mapped faults in an area with low earthquake risk' (MOGO 34-2 Factsheet, page 3). In 2017, there was a 5.8 magnitude earthquake near Lincoln, MT that was felt in the Conrad and Valier area (see this USGS page to see how far across the region it was felt). While the risk is 'low' that an earthquake would impact the injection well, this is not a risk that should be taken, given the high stakes."*

Response: EPA considered suitable geology as a primary factor in reviewing these UIC applications. Consistent with UIC regulations at 40 CFR § 146.6(b) and 146.24(a), EPA reviewed all required geologic information and determined that the geology at this site was suitable for the proposed underground injection. See Responses #33 and #38 for additional information about the evaluation of the AOR and confining layers. Although the commenter suggests that there is too much risk to issue Permits for the proposed injection at this site, the evidence offered does not contradict EPA's determination of suitability.

The magnitude 5.8 earthquake that occurred on July 6, 2017, was 11 kilometers (6.8 miles) southeast of Lincoln, Montana. This places the earthquake approximately 98 miles south-southwest of the Jody Field wells. This earthquake was included in EPA's preliminary review but was determined to be too far away to affect well integrity at this site.

To address commenters' concerns regarding earthquake risk, EPA added seismic safeguards to the Permits which require the Permittee to subscribe to the USGS Earthquake Notification System, cease injection and notify the Director within 24 hours if any event of magnitude 4.5 or greater occurs within two miles of the wells. If any event of magnitude 2.0 or greater occurs within twenty miles, the Permits require the Permittee to document the event and report quarterly. See Permit Change #4 (Section B.11. Well Injection and Seismicity).

Additionally, several factors help to prevent injection wells from failing in a seismic event and contributing to the contamination of a USDW. The casing in these wells is designed to withstand both significant internal and external pressure. The injection wells are constructed with steel casing cemented in place. Furthermore, the injection wells will be required under the Permits to be mechanically tested to ensure integrity before they are operated and will be continuously monitored during operation to ensure that mechanical integrity is maintained.

70. *One commenter stated that because the Montana Bureau of Mines and Geology indicates seismographic monitoring coverage east of the Rocky Mountains is relatively sparse, EPA must consider this lack of data and its implications for assessing the risk of seismic events associated with the injection process.*

Response: As explained in Responses #68 and #69, EPA's evaluation confirmed the geologic suitability of this site. Additionally, EPA included conditions in the final Permits related to seismic activity. See Permit Change #4 (Section B.11. Well Injection and Seismicity).

71. *Comments were received stating that Pondera County notes that the earthquake risk for this region of the Rocky Mountain Front is rated as medium, however, limited data exists. Commenters stated that EPA appears to fallaciously rely on absence of data to support its claim of an absence of risk and that a greater evaluation of earthquake risk is necessary.*

Response: See Responses #68 and #69 regarding EPA's evaluation of seismic risk and permit conditions added to address seismic risk concerns. The commenter raises general concerns about earthquake risk but does not identify specific concerns about EPA's evaluation nor asserts that it did not meet the regulatory requirements.

72. *Commenters requested an accident or earthquake disaster plan.*

Response: The final Permits include a provision requiring that the Permittee cease injection if any seismic event of magnitude 4.5 (MMI scale) or greater is reported within two miles of the permit boundary. See Permit Change #4 (Section B.11. Well Injection and Seismicity) and Response #69 for additional information. The Safe Drinking Water Act and its UIC regulations only authorize permit conditions that relate to the protection of USDWs, and the Permits include these requirements (see Response #69). Accident or earthquake disaster plans are outside the scope of the UIC program and are at the discretion of the Permittee.

73. *One commenter asked whether any seismic studies have been conducted and whether any 3-D seismic surveys have been acquired in the immediate area.*

Response: The UIC regulations do not require seismic studies or 3-D surveys to be submitted or reviewed in the permitting process. See Responses #68 and #69 regarding EPA's evaluation of seismic risk and permit conditions added to address seismic risk concerns.

74. *Commenters question EPA's geologic and seismic assumptions. They note the Revised Fact Sheet says the wells are several miles east of mapped faults and that the confining zone above the injection interval is "free of known transmission faults or fractures," but ask whether the area has been remapped for fractures since widespread fracking, what mapping dates underpin these conclusions, and how current the fault/fracture data are given modeling extends 10,000 years. They also argue that earthquakes can occur away from mapped faults, cite a nearby 2017 event felt locally, and contend EPA's determination that earthquakes won't impact the site is flawed.*

Response: See Responses #33, #68 and #69 regarding EPA's evaluation of the AOR and seismic risk and permit conditions added to address seismic risk concerns. EPA considered the 2017 earthquake recorded south of Valier. Regional seismicity remains low to moderate and does not indicate active faults beneath the site that would compromise confinement.

75. *Some commenters raised geohazard concerns, citing the Rocky Mountain Front fault and the potential for seismic events to affect containment of injected fluids.*

Response: See Responses #68 and #69 regarding EPA's evaluation of seismic risk and permit conditions added to address seismic risk concerns. While it is not clear what the commenter is referring to with regard to the "Rocky Mountain Front fault," EPA reviewed geologic mapping in the area and understands the comment to refer to the Mission, Swan, and the South Fork Flathead fault systems, which are mapped Quaternary faults within the northern Rocky Mountains west-southwest of the site.[14] EPA has confirmed that the subject wells are located approximately 55 miles from the South Fork Flathead Fault. This significant distance and the current geologic characterization indicate that any seismic activity along the fault would not directly impact the injection zone. Furthermore, operators are required to adhere to all applicable permit requirements. As discussed in Response #69, these requirements ensure that well construction, operation, and monitoring are designed to maintain the integrity of the injection system and to protect underground sources of drinking water. Additionally, EPA included conditions in the final Permits related to seismic activity. See Permit Change #4 (Section B.11. Well Injection and Seismicity).

[14] Quaternary Fault and Fold Database of the United States, Interactive Fault Map.

Endangered Species Concerns and FWS Consultation

76. *Several commenters expressed concerns regarding the threatened and endangered status of the grizzly bear and piping plover under the ESA, stating that EPA failed to consult with the Fish and Wildlife Service. Commenters stated that the area around these wells is important habitat for the species. Another commenter stated that due to the high density of grizzly bears in the area, this project would need to undergo section 7(a)(2) consultation under Endangered Species Act with the United States Fish and Wildlife Service and develop a Habitat Conservation Plan to offset mortalities to grizzly bears resulting from this disposal well.*

Response: Consistent with ESA Section 7(a)(2), EPA prepared a Biological Evaluation (BE) and completed the consultation process with the U.S. Fish and Wildlife Service (FWS). The BE includes evaluation of the potential effects to federally listed species and species proposed for listing within the action area. Specifically, the BE analyzes potential effects to the grizzly bear (threatened), pallid sturgeon (endangered), monarch butterfly (proposed threatened), and the Suckley's cuckoo bumble bee (proposed endangered). There is no designated or proposed critical habitat for these species within the evaluated action area. The FWS Information for Planning and Consultation (IPaC) Report did not identify the piping plover or its designated critical habitat as being present in the action area, thus this species was not carried forward for detailed analysis in the BE.

The EPA BE concludes that the actions of approving the Permits and aquifer exemption request may affect, but are not likely to adversely affect, the grizzly bear and the pallid sturgeon, and are not likely to jeopardize the continued existence of the monarch butterfly and Suckley's cuckoo bumble bee. The EPA BE explains that the Permits will include appropriate seasonal limitations on the timing of trucking deliveries of wastewater for injection at the site. These seasonal timing limitations are intended to limit the trucking deliveries to times when grizzly bears are expected to be less active. On March 23, 2026, the FWS concurred with the effects determinations set forth in the EPA BE. This consultation process does not implicate requirements for a Habitat Conservation Plan under Section 10 of the ESA.

77. *Commenters stated that EPA failed to consider all activities associated with this permit likely render EPA's determination of "no impacts" to grizzly bears as arbitrary and capricious per the Administrative Procedures Act.*

Response: EPA re-evaluated its initial conclusions reflected in the technical narrative document that its actions would have "no effect" on federally listed species including the grizzly bear. As described in Response #76, consistent with ESA Section 7(a)(2), EPA prepared a Biological Evaluation (BE) and completed the consultation process with the U.S. Fish and Wildlife Service (FWS). EPA updated the action area and prepared a Biological Evaluation (BE) that concludes its actions may affect, but are not likely to adversely affect the grizzly bear and pallid sturgeon. The BE includes, among other things, analysis of potential effects to listed species and evaluates activities at the project site including facility operations, trucking emissions and noise, transfer and storage of wastewater, injection, operations, and maintenance activities; as well as potential effects associated with transportation of wastewater to the site.

78. *Commenters noted that trucks may hit and kill or injure grizzly bears. The commenters stated that wastewater spilled at the site will attract grizzly bears due to the animal byproducts it contains. The commenters allege that this same industrial wastewater is regularly spilled when transported. The commenters stated that human food or other waste products discarded at the site by employees could also attract bears and that these attractants could lead to conflicts, or food conditioning that necessitate management removals (i.e. relocation or euthanasia) of grizzly bears.*

Response: As described in Response #76, consistent with ESA Section 7(a)(2), EPA prepared a Biological Evaluation concluding that its actions may affect, but are not likely to adversely affect, listed species including the grizzly bear. The FWS concurred with EPA's conclusions. The EPA BE and Permits clarify that the injectate will not be comprised of the renewable feedstock itself – rather the wastewater to be injected will be comprised of water, weak acid, phosphorus, nitrogen, salts, and other impurities (Permit Change #11). While the wastewater will not likely be completely odorless, it is not expected to emanate a smell of food products. The BE includes consideration of activities at the project site such as facility operations, trucking emissions and noise, transfer and storage of wastewater (including potential spills or leaks), injection, operations, and maintenance activities; as well as potential effects associated with transportation of wastewater to the site. The EPA BE explains that the Permits will include appropriate seasonal limitations on the timing of trucking deliveries of wastewater for injection at the site. These seasonal timing limitations are intended to limit the trucking deliveries to times when grizzly bears are expected to be less active. With regard to human activities such as food or waste disposal during operations at the well locations, these wells have been in operation for approximately 15 years and EPA does not have a reasonable basis to expect that the conversion from Class II to Class V wastewater injection would result in an increased risk of human-induced conflicts with grizzly bears at the well site.

79. *A commenter alleged that "Dupuyer Creek, which runs just north of the wells, and local, shrub-lined irrigation canals provides important habitat and habitat security for grizzly bears. Bears use these vegetated corridors to forage and stay out of sight of humans. These waterways also serve as critical dispersal corridors for bears in the Northern Continental Divide Ecosystem to expand their range eastward and recolonize historical habitat on the great plains. This range expansion is biologically critical to the long-term recovery of the species."*

Response: The habitat surrounding the wells is currently utilized for agricultural planting with limited natural habitat or coverage areas. Surrounding private property land parcels are utilized for farming and livestock. Dupuyer Creek and tributaries to the creek are located approximately 0.8 miles NW of the property and create a wildlife corridor. As described in the EPA Biological Evaluation, the aquifer at this location is at a depth of approximately 3,400 feet and is overlain by multiple, thick confining layers (predominantly low-permeability shales and siltstones) that isolate the deep carbonate aquifer from the shallow groundwater systems. The underground injection into the formation is not expected to reach surface water and is thus not expected to impact species that may utilize surface waters, including grizzly bears at Dupuyer Creek.

80. *Commenters stated that the wells are in the vicinity of the only breeding habitat for piping plover along the Rocky Mountain Front and that piping plovers could be killed by trucks.*

Response: The FWS Information for Planning and Consultation (IPaC) Report did not identify the piping plover or its designated critical habitat as being present in the action area. Consequently, this species was not carried forward for detailed analysis in the Biological Evaluation.

81. *One commenter noted that the permit application did not address species listed on the Endangered Species Act, such as grizzly bear and piping plover.*

Response: The permit applicant is not required to submit this information to EPA; the UIC Permit Application for a Class V Well, EPA Form 7520-6, lists the submittal of NHPA and ESA information as optional in Section K. Consistent with the requirements of the Endangered Species Act (ESA) Section 7(a)(2), EPA prepared a Biological Evaluation (BE) and completed the consultation process with the U.S. Fish and Wildlife Service (FWS). The BE includes evaluation of the potential effects to federally listed species and species proposed for listing within the action area. The FWS provided concurrence with EPA's determination on March 23, 2026.

82. *Commenters ask whether expanding the potentially affected area (Area of Review and aquifer exemption expansion) could further jeopardize federally protected wildlife, particularly grizzly bears, and other species, and they urge EPA to consult with the U.S. Fish and Wildlife Service under the Endangered Species Act to evaluate potential take, harm, or jeopardy. They also express concern about potential impacts to piping plover, Pluhars, and other listed or candidate species in the area.*

Response: Consistent with ESA Section 7(a)(2), EPA prepared a Biological Evaluation (BE) and completed the consultation process with the U.S. Fish and Wildlife Service (FWS). The BE includes evaluation of the potential effects to federally listed species and species proposed for listing within the action area. Specifically, the BE analyzes potential effects to the grizzly bear, pallid sturgeon, monarch butterfly, and the Suckley's cuckoo bumble bee. EPA found no species identified as "Pluhar," and the commenter did not provide additional details for EPA to consider.

The expansion of the AOR and aquifer exemption only affects the groundwater aquifer at ~3,400 feet below the surface and would not affect any surface area. Thus, for purposes of the BE, the expanded AOR and aquifer exemption did not affect the action area. The underground injection of wastewater from both process wastewaters into the Madison Formation is not expected to impact surface water and is thus not expected to impact species that may utilize surface waters.

Environmental Justice and Climate Change Analysis

83. *Several commenters generally criticized EPA's Draft Environmental Justice and Climate Change Analysis as incomplete, poorly substantiated, and containing significant omissions. Commenters raised questions about how EJScreen factors were utilized and interpreted, whether other EJ screening tools should have been included, adequacy of the outreach to communities, and concerns about groundwater availability, particularly in light of climate change.*

Response: EPA invited public comment on its Draft *Environmental Justice and Climate Change Analysis* during the initial comment period that began on December 7, 2023. The draft analysis was informed by several Executive Orders including, E.O. 12898, E.O. 13985, E.O. 13990, E.O. 14008, E.O. 14091, and E.O. 14096, all of which have since been rescinded. *See*, E.O. 14148 and E.O. 14173. Thus, these decisions are not informed by any portions of the analysis that were developed solely pursuant to the rescinded Executive Orders. In addition, due to the rescissions, EPA is not finalizing or making any changes to the draft analysis. With respect to general concerns about groundwater and the potential for future use of the aquifer, please see Responses #2, #3, #4, #1111, and #12.

Injectate

84. *Several commenters submitted comments questioning the injectate description, "The renewable feedstocks may include, but are not limited to, vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat) distiller's corn oil, and used cooking oil. The Permittee shall not inject any hazardous substances, as defined in 40 CFR 261, at any time during the operation of the facility." Commenters are concerned that the "may include, but are not limited to…" language does not sufficiently limit injection materials.*

Response: EPA agrees that the language in the draft permit was unclear. EPA removed the phrase "but are not limited to…" to clarify the injectate limitation in Attachment II.6 (Injection Fluid Limitation). The final permit language appears in Permit Change #11 (Attachment II.6 Injection Fluid Limitation). The same language was also revised in the AE ROD. The injectate is now limited to: produced fluid from oil and gas exploration and production wells as defined at 40 CFR § 144.6(b)(1) and non-hazardous wastewater received from Montana

Renewables generated from the processing of renewable feedstocks. The renewable feedstock may only include vegetable oils (such as soybean oil and canola oil), animal fats (such as beef tallow, choice white grease, and poultry fat), distiller's corn oil, and used cooking oil. The wastewater from Montana Renewables is prohibited from including any hazardous waste as defined at 40 CFR 261.3.

85. *One commenter stated that because the draft AE ROD notes Montana Renewables' pretreatment system is still under construction and final water quality data for feedstock blends are unavailable, they question what materials have been shipped to Idaho or other destinations in the interim and why EPA has not sampled those truck or rail shipments. Commenters raised concerns about the following statement from the permit application language dated October 2022: "The pre-treatment system is currently under construction and final water quality data for the various blends of feedstock are not available." They note that the statement may have been accurate at that time, but by the start of EPA's permitting process on December 7, 2023, over 13 months later, the final water quality data for the various blends of feedstock was known to Montana Renewables and their engineering consultants.*

Response: Water quality data about the injectate is available in the administrative record. This is discussed in more detail at Response #88. The draft 2025 AE ROD was only updated for the sections regarding the expanded Area of Review and new AE modeling and therefore retained original information supplied by the applicant in 2023. EPA has updated the final AE ROD to reflect the water quality data.

86. *Commenters expressed concern that no public notification is required if or when the materials in the injectate change and that public safety could be compromised as a result. Another commenter stated that the operator could switch to a different injectate in the future and claim nothing had changed, raising concerns about undisclosed changes to the waste stream.*

Response: As explained above in Response #84, the Permits have been changed to provide limitations on the injectate. The Permits limit the types of fluids that may be injected and include recordkeeping and monitoring requirements to guard against any undisclosed changes. Under the Injection Fluid Limitation provision, only the fluids specifically identified in Attachment II are authorized. If the operator wishes to introduce a different injectate at any point, they must first submit detailed notification and a description of any new fluid, including sampling results and an analysis of the new waste stream, to the Director for approval. Any such change would trigger EPA review and may require a permit modification to ensure that the Permittee is in compliance with the Permit and USDWs are protected. This process ensures that any material change in the composition of the injectate is fully disclosed, reviewed, and approved before it can be injected. Additionally, the Permits require accurate manifests and source records, with periodic sampling and analysis as outlined in Attachment III, making any unauthorized or undisclosed changes a violation subject to enforcement and penalties. See Permit Change #5 and #16.

87. *A commenter requested that only industrial wastewater from Montana Renewables generated from the pretreatment of renewable feedstocks be injected into the two wells. The commenter wanted injection of any wastewater from other unidentified sources to require EPA approval with County notification. The commenter noted that this request does not apply to the injection of wastewater previously permitted by the Board of Oil and Gas.*

Response: See Response #84, regarding Permit changes limiting the injectate. See Response #86 regarding the Permit requirements in order to change the injectate. The Safe Drinking Water Act and its UIC regulations do not authorize EPA to include Permit conditions requiring the Permittee to notify the County.

88. *Commenters expressed concern about the composition of the proposed injection fluid, stating that the injectate analysis required by EPA was insufficient to properly characterize the fluid proposed for injection,*

does not prove that the operation is in compliance with the permit, and asked EPA to clarify the composition of the injectate. One commenter asked for a complete list of all components, both organic and inorganic, that are in the industrial wastewater including proprietary components. Commenters voiced concern about the possibility of heavy metals and chemicals being present in the injectate. One commenter was concerned that there could be PFAS in the injectate. Commenters stated that no test results of the wastewater had been provided to the public or EPA and questioned if anyone knew what was in the injectate. Commenters also stated that the proposed compliance fluid tests specified for this permit in Attachment III—Sampling Requirement includes only general water quality parameters that will not characterize the non-hazardous or hazardous fluids or the hazardous derivative constituents that will likely be in the fluid mixture injected. Commenters also claimed sampling Requirements only include testing TDS, pH, Specific Gravity, Conductivity, which do not give any indication of presence of Hazardous or Non-Hazardous constituents. Commenters requested that fluid testing must include testing for these constituents and related or associated or possible hazardous constituents that might be present in the fluid and exceed the limits of the non-hazardous requirement."

Response: Contrary to commenters' assertion that no test results of the wastewater had been provided, the Permittee provided EPA with water quality analyses of the injectate for EPA's technical review of the permit application, including analyses of the injectate sampled during bench scale testing and sampling performed after the startup of the biorefinery pretreatment unit. As part of its review of the permit application, EPA evaluated water quality sample results of representative wastewater samples. Additionally, Calumet water sample analyses were also submitted by members of the public to EPA. EPA considered all of the submitted information. While this information was submitted to EPA at various times, some of the water sample analyses were available in the draft administrative record during the 1st public comment period. All of the water sample analyses were part of the draft administrative record during the 2nd public comment period. These water samples were analyzed for Total Suspended Solids, Total Dissolved Solids, Chemical Oxygen Demand, Biochemical Oxygen Demand, Total Metals, Oil and Grease, and Semi-volatile Organic Compounds. Additionally, water quality test results of the proposed Montana Renewable injectate were provided to EPA on January 22, 2024, which was analyzed using the Toxic Characteristic Leaching Procedure (TCLP) to determine if the constituents occur at hazardous levels. These analytical results confirmed that the representative samples of the feedstock waste do not contain any hazardous constituents. As discussed in Responses #2, #3, and #4, this portion of the Madison Aquifer is being exempted from protection under the SDWA because it has no potential to be used as a source of drinking water. Therefore, injection is allowed as long as the constituents are non-hazardous and meet the requirements of the Permits.

The Final Administrative Record for the permitting decisions contains laboratory analytical results and is available on Regulations.gov at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002.

89. *Some commenters had questions about the source of the injectate wastewater. Several commenters were concerned that the injected biofuel waste could be anything that Montana Renewables would like to dispose of. 1213111312One commenter stated that EPA has not conducted its own testing and instead relied on the company's tests to reach its conclusions. Commenters expressed concern that determinations of compliance will be based on self-reporting by the applicant and expressed concern that the Permittee and Montana Renewables could not be trusted to properly sample the injectate. Commenters contend EPA relied on the operator's tests without independent verification and note that Montana Renewables allegedly denied access to the Pondera County Sanitarian and refused independent sampling, eroding public trust. Commenters expressed concern that there is no oversight to ensure that the companies follow the rules, with another stating that oversight is severely insufficient to safeguard compliance. Questions were submitted asking how EPA can expect these companies to regulate themselves. Why would the company report a problem with the well?*

They assert the injectate is not fully characterized in the permit documents and that neither EPA nor local officials know the exact composition, including potential trace constituents such as heavy metals, residual pesticides, or other chemicals. They argue that the lack of regular, independent testing makes EPA's expansion modeling suspect, because unknown or variable properties (e.g., viscosity, density, pH) could alter migration behavior and fracture risk, increasing the threat to USDWs. Another commenter asked how EPA knows if the next truckload of wastewater is not more hazardous than the last, since the contents of the wastewater will vary depending on the feed stock. Another commenter asked how the Permittee will not get the truckloads mixed up and how the Permittee will ensure the contents of one truckload don't intermingle with the contents of another. They request full disclosure and characterization of the injectate and routine independent sampling before any approval. Commenters requested that EPA allow the Pondera County Sanitarian, or other delegated outside entity, to take random samples at their discretion of any waste stream at Montana Renewables/Calumet, from tanker trucks, or at any Class V injection well-site in Pondera County for independent certified lab testing, with analysis and reporting to Pondera County commissioners and citizens. Commenters also stated that all costs incurred must be paid by the producer of wastewater.

Response: EPA acknowledges the importance of appropriate and accurate water quality testing. However, self-monitoring and self-reporting are consistent with the SDWA and the UIC regulations. There is no requirement that testing be done under EPA supervision or by a third party. The documents reporting the results of tests and monitoring activities must be certified under penalty of law as complete, true, and accurate by the Permittee. See 40 CFR § 144.32(d) and § 144.51(k). The required certification acknowledges that there are significant penalties for submitting false information. Sampling, monitoring, and reporting requirements for UIC permits are specified in 40 CFR §144.51 and 144.52, and include the use of proper sampling requirements, chain-of-custody, certified laboratories, and the use of accepted analytical methods. Under the EPA UIC program, the Permittee must allow EPA and its authorized representatives to enter, inspect, and collect samples to verify compliance. This authority is an enforceable permit condition under the UIC regulations.

EPA added a requirement in Attachment III of the Permits to require more detailed characterization of the injectate. This change is detailed in Permit Change #13 (Attachment III Sampling Requirements). The new permit condition requires the Permittee to perform an annual Toxic Characteristic Leaching Procedure (TCLP) analysis of the injectate from Montana Renewables to test for any hazardous characteristics. Hazardous characteristics include ignitability, corrosivity, reactivity extractable metals concentrations, extractable volatile organic compound concentrations, extractable semi-volatile organic compound concentrations, extractable pesticide concentrations, extractable herbicide concentrations. Additionally, Permit Change #11 (Attachment II.6 Injection Fluid Limitation) more specifically clarifies the allowable injectate. These permit conditions were included to adequately characterize and monitor the wastewater proposed for injection, to verify that the fluids to be injected into the well are the type of fluids authorized in the Permits, and to ensure the fluids meet the classification standard for Class V wells.

The EPA added a condition to the Permits that require the Permittee to submit a copy of the facility's manifest system prior to receiving authorization to inject. The Permits require the Permittee to maintain a manifest that includes a three-party custody record between the generator, transporter, and disposal facility. The Permits also require a certification from the Permittee that fluids injected into the wells are non-hazardous and are in compliance with the Permits. See Attachment VIII of the Permits. The purpose of these provisions is to protect USDWs by requiring accountability through detailed records of the waste being received and injected into the Class V wells. These changes are documented in Permit Change #5 (Section B.12 Site Security and Manifest Requirements) and Permit Change #16 (Attachment VIII Site Security and Manifest Requirements).

The SDWA and its UIC regulations do not provide authority to require Calumet/Montana Renewables, an entity

not regulated under the UIC program, to allow Pondera County to take samples of their wastewater. Furthermore, the SDWA and its regulations do not provide EPA the authority to require that the Permittee allow Pondera County to take samples at the Class V injection site.

90. *One commenter believes that quarterly sampling of the injection water is not adequate to monitor the potential degradation of groundwater above the limits for Class V injection wells.*

Response: The sampling requirements in the Permits are consistent with the UIC regulations which require that the samples taken for the purpose of monitoring "shall be representative of the monitored activity." 40 CFR 144.51(j). The commenter does not specify what alternate sampling intervals may be more appropriate nor what constituent(s) may be of concern. In this case, the wells inject into a portion of the Madison aquifer that has been exempted from protection under the SDWA because it does not have value as a potential source of drinking water. Therefore, the purpose of the Permits is not to prevent degradation of groundwater in the non-USDW areas where there is injection. The purpose of the Permits is to allow for injection into non-USDWs while preventing endangerment to the adjacent USDWs.

91. *A commenter asked how often the wastewater will be tested and who will test it.*

Response: Permit requirements for wastewater sampling, including recording and reporting frequency, are listed in Attachment III Sampling Requirements. It is the Permittee's responsibility to ensure that sampling and reporting of the wastewater be performed in accordance with the Permits. The Permits do not specify who must perform the tests.

92. *A commenter asked where the results of these wastewater tests will be published so that the public can know what is being transported and injected.*

Response: EPA does not typically publish laboratory analyses data or other data submitted by Permittees related to UIC permits post-permit issuance. With regard to the question about what wastewater injectate is being transported, Permit Change #5 (Section B.12 Site Security and Manifest Requirements), manifest requirements were added to the Permits. These include a requirement for a three-party custody record between the generator (responsible party from where the fluids were generated), transporter, and disposal facility (Permittee). The types of information required to be recorded include: where fluids were produced, fluid type (source of fluid), and volumes transported. For more information, see Attachment VIII of the Permits.

93. *The Pondera County Canal & Reservoir Company (PCCRC) asked to be provided with any analysis performed on the transported injectate current and future and that they be contacted immediately should an accidental spill occur in or around their water delivery system.*

Response: EPA does not typically publish laboratory analyses data or other data submitted by Permittees related to UIC permits post-permit issuance. Surface spills are outside the scope of the UIC program. Additionally, the UIC regulations do not authorize EPA to include permit conditions requiring the Permittee to provide notifications to third parties.

94. *One commenter noted that they received a Safety Data Sheet (SDS) from Montana Renewables and that the Safety Data Sheet states in Section 2, Hazards Identification under OSHA/HCS Status that "This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200)." The commenter also noted that under Section 5. Fire-fighting measures, Special protective equipment for fire-fighters states "Fire-fighters should wear appropriated protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode."*

Response: It is not clear what product is referenced by the SDS and whether it is related to the fluids that are proposed for injection. However, as discussed in Permit Change #11 (Attachment II.6 Injection Fluid Limitation), the Permits specifically prohibit the injectate from Montana Renewables to contain hazardous waste. The UIC regulations define hazardous waste as "hazardous waste as defined in 40 CFR 261.3." 40 CFR § 144.3. The Permits also require that the fluids from Montana Renewables are tested and determined to be non-hazardous prior to injection.

95. *One commenter asked what the currently unidentified corrosion inhibitor to be injected is and whether it could pose hazards if the characterization or analysis proves incorrect.*

Response: Corrosion inhibitors are typically emplaced in the annulus (the space between the tubing and casing) and are isolated by a packer; therefore the corrosion inhibitor and annulus fluid do not contact any geologic layers. The proper operation and maintenance of a Class II well can require use of such additives. The only potential contact with the geological formations is when a small, metered dose of corrosion inhibitor travels with the injectate into the deep, exempted injection zone. If this were to occur, it would not have the potential to impact USDWs because the injectate is expected to stay within the exemption boundary.

96. *One commenter stated that no evidence has been furnished by the Applicant, by the U.S. Environmental Protection Agency nor the Montana Department of Environmental Quality that the biodiesel wastewater projected to be injected into these two wells is potable and otherwise safe for human or animal consumption.*

Response: The Safe Drinking Water Act and its UIC regulations do not require the wastewater injectate proposed for injection at the Jody Field wells to be potable or safe for human or animal consumption. As explained in Responses #2 and #3, this portion of the Madison aquifer is being exempted from protection because it does not have potential to serve as a source of drinking water. In this case, the wells inject into a portion of the Madison aquifer that has been exempted from protection under the SDWA because it does not have value as a potential source of drinking water. Therefore, the purpose of the Permits is not to prevent degradation of groundwater in the non-USDW areas where there is injection. The purpose of the Permits is to allow for injection into non-USDWs while preventing endangerment to the adjacent USDWs.

97. *One commenter asked what kinds of hazards these types of wastewater from Montana Renewables pose.*

Response: It is not clear about what kinds of hazards the commenter is concerned about. Under the Safe Drinking Water Act, EPA is issuing final Permits because the evaluation of technical information confirms that the fluids can be injected in accordance with the Permits without endangerment to USDWs. Therefore, EPA does not anticipate hazards associated with injection in accordance with the Permits.

98. *One commenter expressed concern about the injectate from Montana Renewables clogging the well and causing failure.*

Response: The Permits include a condition that requires the Permittee to "properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the Permittee to achieve compliance with the conditions of this Permit." Furthermore, the Permit requires the Permittee to always maintain mechanical integrity of the well; injection into a well lacking mechanical integrity is prohibited. The commenter did not express concerns that these permit conditions are not adequate to protect USDWs.

99. *One commenter noted that "after looking at the sample brought in by Calumet, it was determined that the sample contained 250 ppm of phosphorous," which the commenter believed was "sky high compared to the*

usual 3 - 5 ppm they stated the plant was capable of treating." The commenter stated that "any leakage or movement of the biodiesel waste into the ground waters could lead to eutrophication of the entire Madison Formation groundwater system."

Response: As explained in the Fact Sheets for these Permits, injection will occur into the Madison Formation, thousands of feet below ground surface. Eutrophication[15] is due to excessive nutrients (e.g. nitrogen and phosphorus) entering a surface water body, frequently due to runoff from the land, which can cause a dense growth of algae. Significant increases in algae harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Eutrophication is not expected to occur in the Madison Formation at this location, since it is a deep groundwater formation over 3,000 feet deep, and algae require sunlight to grow. In addition to the depth of aquifer, the Madison Formation at the location of the proposed wells is separated from surface water bodies by thousands of feet of impermeable rock formations, including a competent confining layer.

Liability Bond and Financial Assurance

100. *Commenters requested that EPA require the Permittee and Montana Renewables/Calumet to have a 50-million-dollar bond spanning 30 years after closure and containing legally-enforceable guarantee and Covenant Safeguards. A commenter requested that the bond be in place for the full term of this project with Pondera County named as an additionally insured in the event of problems with the project because there should be money available to remediate any problem discovered several years later. Other commenters suggested that the financial assurance provisions listed in the permit were inadequate and had concerns regarding the bond amount, the bond covering damages if contamination occurs, mitigation, and the site being abandoned by the Permittee. One commenter asked what would happen in the event the applicant's company fails and goes into bankruptcy.*

Response: For Class V wells, the UIC regulations only authorize EPA to require the Permittee to provide financial assurance to properly close, plug and abandon UIC wells. There are no provisions under the Safe Drinking Water Act or its implementing regulations that would allow EPA to require the Permittee to have financial assurance for other purposes, including the cleanup costs of any potential contamination. With this permitting action, the Permittee must maintain financial responsibility and resources to properly close, plug, and abandon the Jody Field 34-1 & 34-2 injection wells in a manner prescribed by EPA, which MOGO has satisfied. The Permittee has submitted a Standby Trust Agreement and Letter of Credit in the amount of $46,357. This was executed on October 10, 2022, between Montalban Oil & Gas Operations, Inc. and Freedom Bank. The fund is explicitly established for plugging and abandonment of injection wells Jody Field 34-1 and Jody Field 34-2.

101. *One commenter stated that there appear to be no liability requirements beyond plugging the wells once injections end.*

Response: The Permits require compliance with financial responsibility conditions, as discussed above in Response #100.

[15] https://www.epa.gov/nutrientpollution/basic-information-nutrient-pollution. https://www.epa.gov/nutrientpollution/where-occurs-ground-water-and-drinking-water. https://19january2021snapshot.epa.gov/nutrientpollution/sources-and-solutions_.html

NEPA

102. *EPA received comments regarding compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ)'s implementing regulations including evaluation of direct, indirect and cumulative effects, as well as the scope of the NEPA functional equivalence doctrine with respect to the Agency's actions on the Class V Underground Injection Control Permits and Aquifer Exemption for Jody Field 34-1 (MT52443-12513) and 34-2 (MT52439-12514). EPA also received general comments regarding the need to conduct environmental assessment or impact analyses including review of cumulative impacts as well as identifying mitigation for impacts.*

Response: The EPA's Safe Drinking Water Act (SDWA) actions here regarding the Class V Underground Injection Control (UIC) permits and associated aquifer exemption (AE) are not subject to NEPA because they are functionally equivalent, consistent with EPA's regulations and the U.S. Court of Appeals for the 8th Circuit's decision in *Western Nebraska Resources Council v. U.S. EPA*, 943 F.2d 867 (8th Cir. 1991). *See* 40 CFR § 124.9(b)(6). EPA did not need to conduct further formal NEPA analysis prior to making its SDWA decisions on the applications for the UIC permits and aquifer exemption.

Ordinarily, federal agencies must prepare an environmental impact statement (EIS) for, *inter alia*, "major Federal Actions significantly affecting the quality of the human environment…" NEPA § 102(C), 42 U.S.C. § 4332. However, courts have consistently and broadly held that certain EPA actions are not subject to the procedural requirements of NEPA because of the "functional equivalence" doctrine. *See* 72 Fed. Reg. 53652, 53654 (Sept. 19, 2007). *See also***,** ***e.g.*****,** *Merrill v. Thomas*, 807 F.2d 776 (9th Cir. 1986) (Federal Insecticide Fungicide and Rodenticide Act (FIFRA)); *State ex rel. Siegelman v. EPA*, 911 F.2d 499 (11th Cir. 1990) (Resource Conservation and Recovery Act (RCRA)); *Warren County v. North Carolina*, 528 F. Supp. 276 (E.D.N.C. 1981) (Toxic Substances Control Act (TSCA)); and *Maryland v. Train*, 415 F. Supp. 116 (D. Md. 1976) (Marine Protection Research and Sanctuaries Act (MPRSA)). The courts have reasoned that EPA actions under these statutes are functionally equivalent to the review required under NEPA because they consider relevant environmental impacts and provide an opportunity for public involvement. 72 Fed. Reg. at 53654.

The U.S. Court of Appeals for the 8th Circuit found the SDWA environmental impacts analysis is the functional equivalent of NEPA, and therefore formal NEPA compliance is not required by the EPA when the Agency takes action pursuant to the SDWA. *Western Nebraska Resources Council v. U.S. EPA*, 943 F.2d 867 (8th Cir. 1991) (finding that a formal NEPA analysis was not required for issuance of an aquifer exemption under the SDWA by EPA Region 7 because the SDWA and EPA's aquifer exemption issuance in that case were the functional equivalent of NEPA). In doing so, the court agreed with "the many circuits that have held that EPA does not need to comply with the formal requirements of NEPA in performing its environmental protection functions 'under organic legislation [that] mandates specific procedures for considering the environment that are the functional equivalents of the impact statement process.'" *Id*. at 871-872 (quoting and citing *State of Ala. ex rel. Siegelman*, 911 F.2 499, 504 (11th Cir. 1990), and cases cited therein). The 8th Circuit "further agree[d] that [the] SDWA is such legislation, and that the procedures employed and the analysis undertaken by EPA in this proceeding covered the core NEPA concerns." *Id*. at 872. Therefore, the meritless allegations of non-compliance with NEPA did not provide a basis for the court to reverse the Agency approval of the aquifer exemption. *Id*.

Further, for over 45 years, EPA's longstanding position is that regulatory actions taken under SDWA (and among other statutes) are exempt from NEPA's EIS requirements. *See* 44 Fed. Reg. 64,174 (Nov. 6, 1979). Specifically, the EPA consolidated permitting regulations at 40 CFR § 124.9(b)(6) exempt certain EPA permitting actions, including the issuance of UIC permits, from NEPA:

> "…NPDES permits other than permits to new sources as well as *all* RCRA, *UIC* and PSD permits are not subject to the environmental impact statement provisions of section 102(2)(C) of the National

Environmental Policy Act, 42 U.SC. 4321." 40 CFR § 124.9(b)(6) (emphasis added).

The EPA Environmental Appeals Board (EAB or Board) first addressed 40 CFR § 124.9(b)(6) in the SDWA UIC permitting context in *In Re Am. Soda, LLP*, 9 E.A.D. 280, 290-292 (EAB 2000). In a challenge to EPA Region 8's issuance of a SDWA UIC Class III area permit, the EAB analyzed the EPA's NEPA obligations and the functional equivalence doctrine. "Notwithstanding NEPA's general application to major federal actions, courts have long recognized that NEPA' s primary goal is to require government to consider the environmental consequences of its decision…[and] courts have developed the doctrine of 'functional equivalency' to ensure that NEPA remains consistent with its primary goal and does not add one more regulatory hurdle to the process." *In re American Soda* at 290.

The Board described the functional equivalency test as providing that "where a federal agency is engaged primarily in an examination of environmental questions, and where substantive and procedural standards ensure full and adequate consideration of environmental issues, then formal compliance with NEPA is not necessary, [and] functional compliance [is] …sufficient. *In re Am. Soda* at 290-291 citing *Warren County v. North Carolina*, 528 F. Supp. 276, 286 (E.D.N.C. 1981).

The Board also noted that in *In re IT Corp*., 1, E.A.D. 777 (EAB 1982)(RCRA), "the Administrator observed, '[T]he courts have recognized that Federal regulatory action taken by an agency with recognized environmental expertise, when circumscribed by extensive procedures, including public participation for evaluation of environmental issues, constitutes the functional equivalent of NEPA's requirements.'" *In re Am. Soda* at 291 (citing *In re IT Corp*. at 778).

Ultimately, in *In re Am. Soda*, the EAB found that 40 CFR § 124.9(b)(6) was dispositive of the question of the UIC permit program's functional equivalence to NEPA and under the plain language of the provision Region 8 was not required to prepare an EIS in support of the UIC permit at issue in that case. *In re Am. Soda* at 291-292. The EAB made similar findings in later cases that challenged EPA's issuance of UIC permits under SDWA. *See In re Beeland Group*, *LLC*, 14 E.A.D. 189, 205-206 (EAB 2002) (finding the "part 124 permitting regulations codify the functional equivalence doctrine and exempt UIC Permit actions from NEPA's environmental impact statement requirement…"); *In re Powertech (USA), Inc*., 19 E.A.D. 23, 40 (EAB 2024) (Board affirmed that it is well settled that the environmental impacts analysis of SDWA and the UIC program are the functional equivalent of NEPA); and *In re Wabash Carbon Services, LLC,* 19 E.A.D. 128, 147 n. 18 (EAB 2025) (Board reaffirmed the finding that the UIC program is exempt from NEPA).

Furthermore, although NEPA is not applicable to EPA's action regarding the SDWA Class V UIC Permits and AE for Jody Field 34-1 (MT52443-12513) and 34-2 (MT52439-12514), EPA notes that the U.S. Supreme Court recently stated that "NEPA is a purely procedural statute" that does not mandate particular results or substantive outcomes. *Seven County Infrastructure Coal. v. Eagle Cnty*., 605 U.S. 168, 180 (2025). NEPA imposes no substantive constraints on an agency's ultimate decision to build, fund, or approve a proposed project. *Id.* Federal agencies, including EPA, have "substantial discretion" to assess whether relevant environmental impacts are significant, and thus whether preparation of an EIS is warranted in advance of a particular federal action. *Seven County Infrastructure*, 605 U.S. at 181-82. The Supreme Court noted that courts should afford substantial deference to agency choices regarding the depth and breadth of NEPA analyses so long as they fall within a broad zone of reasonableness. *Id*. at 183.

Commenters stated that pursuant to NEPA and CEQ's implementing regulations, EPA must evaluate direct, indirect, and cumulative effects of its UIC permitting and AE actions. EPA notes that on January 8, 2026, the Council on Environmental Quality (CEQ) issued a final rule removing all iterations of CEQ's regulations implementing NEPA. *See* 91 Fed. Reg. 618 (Jan. 8, 2026). Further, when determining potential environment effects to evaluate, the U.S. Supreme Court stated that the textual focus of NEPA is the environmental effects of

the "proposed action—that is, the project at hand—not other future or geographically separate projects that may be built (or expanded)." *Seven County Infrastructure*, 605 U.S. at 188-189. As reflected in the administrative record for the EPA SDWA actions on the Class V UIC Permits and AE for Jody Field 34-1 (MT52443-12513) and 34-2 (MT52439-12514), the EPA complied with SDWA and its implementing regulations, conducted multiple public comment periods and other opportunities for public involvement, completed consultation with the U.S. Fish and Wildlife Service regarding the Endangered Species Act, and complied with the National Historic Preservation Act. EPA completed an environmental review of the impacts when taking its actions pursuant to SDWA and its implementing regulations, and the review was functionally equivalent to NEPA. Therefore, EPA did not conduct additional environmental analyses in response to the comments received.

12Public Process - 1st Comment Period

103. *Comments were received requesting that EPA not issue this permit without holding another public hearing. Several people submitted comments requesting that EPA provide another public notice and extend the comment period until April 3, 2025, for additional review the permit documents.*

Response: The 1st comment period, that began on December 7, 2023, was extended until April 8, 2024. This 1st public comment period was open for 123 days, exceeding the usual regulatory 30-day time frame. Following consideration of the public comments, EPA made revisions to the Permits and AE ROD and provided a 2nd public notice and comment period that was limited to only the changes that were made.

104. *One commenter raised concerns about the public hearing on January 3, 2024, identifying a number of concerns, including that it was held two days after a holiday, had poor audio quality, and that people were publicly silenced.*

Response: The public meeting held on January 3, 2024 was not an EPA meeting; it was organized and held by the Pondera County Sanitarian. While EPA Region 8 attended this meeting virtually at the request of the Pondera County Sanitarian, this meeting was not a part of Region 8's public process for the Class V permits or associated aquifer exemptions, and EPA did not have any control or input into the logistics or organization for this meeting.

Public Process - 2nd Comment Period

105. *Many commenters requested an extension of the public comment period that started on August 20, 2025 by at least 60 days, with some preferring up to 90 days, to allow adequate time for technical review and to accommodate local agricultural schedules, given the short interval between the public hearing and the current deadline.*

Response: The 2nd public comment period was extended for an additional 17 days beyond the usual regulatory 30-day time frame, for a total of 54 days. The purpose for the 2nd public notice and comment period was limited to the changes to the area of review and aquifer exemption boundary; therefore the scope of new materials for review was also limited.

106. *One commenter stated that EPA was informed prior to the April 3, 2024 public hearing that the Independent Observer is the county's paper of record and was provided contact information, yet no notice was published there; the commenter requested documentation showing that EPA is not required to publish public notices in the county's paper of record for the affected permitting action.*

Response: EPA's public notice requirements for UIC permitting actions are set forth in 40 CFR § 124.10. This regulation requires public notice to various entities and persons via specified methods. This regulation does not require public notice by publication in newspapers for permits except for "major permits." The Permits in this

case are not classified as "major permits." However, in an effort to reach as many members of the public as possible EPA published notice in a number of newspapers, including the *Cut Bank Pioneer Press, the Shelby Promoter, the Glacier Reporter, and the Valierian.*

Requests for Information

107. *One commenter asked how they can be more involved in this process, how they can receive all public records that involve this process now and in the future, how they can receive this information from the Freedom of Information Act request(s), and who from EPA can provide them with complete records in a timely manner.*

Response: With this permitting action, all commenters who submitted comments will be notified of the final permit and aquifer exemption actions. The final administrative record for the final permitting decisions will be available on Regulations.gov at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002. The public can send any inquiries to the UIC program via the Region 8 UIC mailbox R8UICMailbox@EPA.gov or the R8 UIC Program website at: https://www.epa.gov/uic/underground-injection-control-epa-region-8-co-mt-nd-sd-ut-and-wy. Any additional request for information can be submitted through a Freedom of Information Act (FOIA) request, and the process and access to the FOIA submittal request link can be found at https://www.epa.gov/foia/foia-request-process. If the commenter is interested in other future actions, they can request to be put on a mailing list for specific UIC permits.

108. *One commenter requested more information on what quarterly monitoring and continuous monitoring consists of in terms of parameters.*

Response: The quarterly and continuous monitoring requirements set out in Attachment IV of the Permits provide both real-time operational data and periodic summary data on key well parameters. In this case, continuous monitoring means that certain parameters, such as surface injection pressure, tubing-casing annulus (TCA) pressure, injection rate, cumulative injection volume, monthly injection volume, and where applicable, bradenhead annulus pressure and wellhead pressures, are recorded continuously using automated instrumentation so that detailed operating data (minimum, average, and maximum values) are available throughout the injection period. Monthly minimum, maximum and average values are recorded from the continuous data and reported to EPA on a quarterly basis. These multiple layers of monitoring help ensure that any operational anomalies can be detected quickly via the continuous data stream while still enabling a summarized quarterly review to track trends, verify overall well performance, and check compliance with permitted limits.

109. *One commenter noted that the initial AE Records of Decision from the 2010 and 2011 AEs were not posted to the EPA website and requested that they receive a copy and wanted the documents posted for public access.*

Response: The 2010 and 2011 AE Records of Decision were part of the administrative record for the draft documents. These were available in the docket at regulations.gov during the 2nd public comment period. These will also be available in the final administrative record and can be found on regulations.gov at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002.

110. *One commenter asked what alternative method EPA will be using if the noise test for mechanical integrity is not going to be used.*

Response: Prior to receiving authorization to inject, the Permittee must conduct a noise log to assess the presence of fluid movement between the exposed upper USDWs (Dakota, Kootenai, and Sunburst) and adjacent

formations, according to Attachment V of the Permits. There is no alternative method for this testing requirement. If the noise log indicates fluid movement, there may be additional methods required to protect USDWs. After injection begins, the Permittee can decide whether to use a noise log or a temperature log for subsequent external mechanical integrity tests.

111. *Commenters had questions about the Class II vs. Class V wells given that different agencies administered them. One commenter had questions about whether MT would monitor the Class II injectate and EPA the Class V injectate and requested communication between the agencies. One commenter asked about the factors and steps that are considered during the permitting modification process when changing from a Class V injection well to a Class II injection well.*

Response: The Permittee has applied for Class V well permits because they plan to inject both produced fluid from oil and gas related activities and the non-hazardous wastewater from Montana Renewables. Because the Montana Renewables wastewater cannot be injected into a Class II well, the well must be converted to Class V in order to accept both types of waste. EPA Region 8 is the permitting agency for Class V wells in Montana and will administer and enforce the Permits. If the Permittee wanted to convert the Class V injection wells back to a Class II injection wells, the Permittee must notify the EPA of its intent to convert and apply for a Class II permit from Montana Board of Oil and Gas Conservation (MBOGC). Financial assurance on the Class V wells would not be released until the conversion has been finalized and financial assurance is in place for the Class II injection wells.

112. *During the public comment period and after the close of the public comment period, one commenter requested access to all comments received by EPA and access to the public hearing transcript.*

Response: All public comments and the public hearing transcript are included in the Final Administrative Record for the final permitting decisions and can be found on Regulations.gov at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002.

113. *One commenter requested the waste logs and the annual injection reports for the past years of UIC Class II well operation. The commenter requested the MAIPs for the Class II wells. The commenter also requested information on the history of both wells, and if there were any issues when they were used for oil and gas waste. The commenter also wanted to know why the wells were taken off-line and not used.*

Response: The Class II injection well permits for these two Jody Field wells were issued and administered by Montana Board of Oil and Gas Conservation (MBOGC). Information and historical documents concerning the Class II permits can be requested from MBOGC or may be found on their website at https://dnrc.mt.gov/bogc/.

114. *Commenters requested clarification on the expected life of the well and the injection project.*

Response: EPA is unable to predict the expected life of the well or injection project because the regulations do not require applicants to provide that information for permitting purposes. These decisions are made by the Permittee. However, the UIC wells must always be operated in accordance with the Permits. The Class V Permits are issued for a period of 10 years. To continue operation past the 10-year period, the Permittee will be required to re-apply at least 180 days prior to the expiration of the Permits. Re-issuance of these Permits will require a new public notice and comment process. See Permit Change #7.

115. *One commenter asked how an "open hole height" differs from the total well depth.*

Response: The total well depth represents the entire length of the well from the surface to the bottom of the

drilled borehole. In contrast, the "open hole height" is the portion of the well that remains uncased and is available for injection. For example, for Jody Field 34-2 the well has a total depth of 3,499 ft, but casing is installed to a depth of 3,418 ft. Therefore, the uncased interval from 3,418 ft to 3,499 ft provides an open hole height of 81 ft. In comparison, Jody Field 34-1 is cased continuously to the full depth, with perforations in the casing instead of an open hole, meaning that it does not have an open hole interval.

116. *One commenter asked why wastewater under pressure flows to the bottom and not back up and/or flows out sideways through other porous layers above on its way down and then asked if that is why there is a quarter-mile exemption.*

Response: The wastewater does not contact other permeable layers on its way down because it travels inside tubing that is isolated from surrounding formations by cemented steel casing and a downhole packer. It can only exit at the permitted injection interval through perforations in the casing. Operating pressure limits and confining geology keep the injectate in the injection zone. Evaluation of the injection zone demonstrated that the geologic siting is appropriate and that fluids will be confined within the intended formation. In this setting, the pressure from injection forces the fluid into available pore spaces in the injection formation rather than pushing it upward or sideways because impermeable overlying and underlying layers (confining zones) prevent vertical fluid migration and fluids will preferentially stay in the more permeable injection zone. Information on the previously delineated injection zone exemption area can be found in Response #1.

117. *One commenter requested that the public be provided a complete and detailed geological report that has been done for the containment of the proposed injected industrial wastewater for this project, including, but not limited to reservoir size and shape, testing done to determine how much fluid can be safely stored, containment limits and how fluid under pressure will travel to final resting place.*

Response: The project documentation includes a comprehensive geological report. Detailed information regarding these concerns is provided in the Fact Sheets, Technical Narratives, Supplemental Technical Analysis, AE ROD, and other documents in the administrative record. The administrative record can be found at: https://www.regulations.gov/document/EPA-R08-OW-2025-0852-0002.

118. *One commenter asked who decides when it's time to plug and abandon the well, what triggers that action, and how will that process be monitored for compliance?*

Response: Generally, the Permittee determines when to plug and abandon their well. If a Permittee decides to plug and abandon a well, they must first notify the EPA. In some circumstances, EPA may require the well to be plugged (e.g. - due to prolonged inactivity (after two years of non-injection) or evidence of compromised mechanical integrity). The Permittee must follow the approved Plugging Plan found in Attachment VI or submit a revised plan to the Director. The Permits require that prior to abandonment, the well(s) must be plugged with cement in a manner that isolates the injection zone and will not allow the movement of fluids into or between USDWs. The Director must approve any deviations or proposed modifications to the P&A plan before work begins, ensuring that the abandonment process meets regulatory requirements. Once plugging is complete, the Permittee must submit a final plugging report to the EPA. EPA will review the report to determine whether it is in compliance with the Permits and approved P&A plan. These requirements can also be found in Section E and Attachment VI of the permits, which outlines the plugging and abandonment requirements.

119. *One commenter asked how the new wastewater being pumped down the hole will interact with the old contents of the well and will new and exotic chemical compounds potentially be created.*

Response: The MOGO Jody Fields wells have been authorized to inject Class II waste since 2011 and 2012 respectively. With this permitting action, the injectate includes oil and gas wastewater and bio-fuels

wastewater. The additional non-hazardous waste to be injected into the well is not expected to react with previously injected Class II wastewater to create new or different chemical compounds, based on additional fluids that are to be injected which are characterized as primarily water, weak acid, phosphorus, nitrogen, salts and other impurities.

120. *One commenter asked if remnant pockets of gas and oil will be pushed into layers they've never been in before.*

Response: Both the UIC regulations and Permits prohibit any injection activity that allows the movement of a fluid containing any contaminant into USDWs. EPA's evaluation of the permit applications determined that the injection zone is hydraulically isolated from other USDWs. As discussed in Response #33, there is an upper confining zone of approximately 215 to 221 feet of siltstone, low-permeability marlstone, shale, and fine-grained sandstone above the injection zone, separating the injection zone from the overlying USDW. A lower confining zone of approximately 1,000 feet of limestone and shale is located below the injection zone and separates the injection zone from the underlying USDW. These confining zones were found to be free of known faults or fractures. The upper and lower confining zones are adequate to prevent fluid movement out of the injection formation. These confining layers serve as barriers, ensuring that fluids, including any residual hydrocarbons, remain within the designated zone rather than being pushed upward into other formations.

121. *One commenter asked where onsite treatment is documented in these permits.*

Response: No treatment will occur onsite at the Jody Field wells.

122. *One commenter asked what the allowable limits for grease and oil are.*

Response: The Permits do not specify allowable limits for grease and oil. This Permit authorizes injection of only the following fluids: produced fluid from oil and gas exploration and production wells as defined at 40 CFR § 144.6(b)(1) and non-hazardous wastewater received from Montana Renewables generated from the processing of renewable feedstocks. As clarified in Permit Change #11, the wastewater generated from these refining processes that would be trucked and injected into the wells is primarily composed of water, weak acid, phosphorus, nitrogen, salts and other impurities. The wastewater from Montana Renewables is prohibited from including any hazardous waste as defined at 40 CFR 261.3.

123. *One commenter sought guidance on what they should be testing their home water for in the future.*

Response: EPA provides information how to protect your home's water at the following website, https://www.epa.gov/privatewells/protect-your-homes-water.

Tribal Consultation – 1st comment period

124. *Commenters stated that it is not clear that EPA has actually conducted meaningful consultation with the Blackfeet Tribal government about this project and the potential impacts it has on Blackfeet reserved rights and resources. They stated that failure to meaningfully consult would violate EPA's trust responsibilities and policy including Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments," and Executive Order 14096 "Revitalizing our Nation's Commitment to Environmental Justice" as well as other orders and current administrative memoranda on the subject. The commenters stated that this deficiency needs to be corrected, if it has not been already, prior to issuing any permit for wastewater injection in these two wells. Others stated concern that EPA did not consult with tribes that may be affected by the permitting action.*

Response: The EPA notes that the Blackfeet Tribal government did not submit these comments, nor did it request Tribal consultation. The EPA conducts Tribal consultation with the governments of federally recognized Tribes pursuant to its EPA Policy on Consultation with Indian Tribes. That policy, per its terms, implements Executive Order 13175, and states that "[t]he U.S. Environmental Protection Agency's policy is to consult on a government-to-government basis with federally recognized Tribal governments when EPA actions or decisions may affect Tribes. Consultation is a process to ensure meaningful and timely input by Tribal officials prior to EPA taking actions or implementing decisions that may affect Tribes." In this case, though, the EPA determined that the subject wells would not affect the Blackfeet or any other federally recognized Tribes, and accordingly the EPA did not offer Tribal consultation. The closest Indian country lands (the Blackfeet Reservation) to the two wells are located 6.6 miles away, but the maximum distance that fluid is permitted to flow from the wellbore closest to the Reservation (Jody Field 34-2) is 2.1 miles. Therefore, fluid injected into the two wells is not permitted to reach the Blackfeet Reservation, or any other Indian country lands. The Blackfeet Tribe possesses off-reservation water rights, including surface and groundwater rights in the Birch Creek Basin in the general vicinity of the two wells. *See* Montana Code Annotated section 85-20-1501; https://blackfeetnation.com/watercompact/map/). The EPA determined that injection activities at the wells will not affect the groundwater or surface water in the Birch Creek Basin. See Responses #19, #33, and #3833 regarding confinement. Thus, injected fluids will not affect the Blackfeet Tribe's off-reservation water rights. Despite these determinations, due to the proximity (6.6 miles) of the wells to the Blackfeet Reservation, the EPA directly notified during the draft permit public notice period by sending written communication to the Chairperson, the Environmental Director, and the Tribe's attorney. Following this notification, the Tribe requested a meeting with EPA. This meeting was held on February 7, 2024, and allowed the Tribe to discuss details and concerns regarding the permitting action. The Blackfeet Tribe also submitted comments that the EPA considered in this response to comments document. Additionally, on March 31, 2026, the EPA sent a Section 106 consultation offer letter to the Blackfeet Tribe's Tribal Historic Preservation Officer (THPO) and Tribal leadership seeking input on matters related to the National Historic Preservation Act. The EPA communicated by email and phone on multiple occasions in April with Blackfeet Tribe Deputy THPO. The Deputy THPO requested a more comprehensive State Historic Preservation Office (SHPO) records check, a Tribal Cultural Specialist site visit, and information concerning the wastewater's chemical composition and spill contingency plans. In response, the EPA provided a copy of the SHPO concurrence, a copy of the wastewater chemical composition analysis, and links to information regarding how spills are regulated by Montana Department of Environmental Quality. The EPA also offered but was unable to facilitate a site visit by a Blackfeet Tribal Cultural Specialist.

This comment raises questions about the nature and extent of the federal trust responsibility to federally recognized Tribes. EPA understands the importance of these comments and considered the federal trust responsibility in this matter. As explained by the EPA Environmental Appeals Board, "[i]t is well settled that the United States 'maintains a general trust relationship with Indian Tribes,' but that "'unless Congress has created a conventional trust relationship with a tribe as to a particular trust asset, th[e] Court will not 'apply common-law trust principles' to infer duties not found in the text of a treaty, statute, or regulation.'" *In re Deseret Generation*, 19 E.A.D. 67, 95-96 (EAB 2024). Further, "[i]t has also been established that in the absence of a conventional trust relationship, an agency fulfills its general trust responsibility by complying with the statutes and regulations it is entrusted to implement." *Id*. at 96 (concluding in that case that the EPA fulfilled its general trust responsibility by complying with the requirements of the Clean Air Act and its implementing regulations). In this case, commenters did not assert, and the EPA is not aware of, a conventional trust relationship based upon the text of a treaty, statute, or regulation that would be affected by the disposal wells. Additionally, in this case, the EPA's issuance of the final UIC Permits pursuant to the Safe Drinking Water Act is consistent with the federal general trust responsibility, as the final UIC Permits contain adequate conditions to protect underground sources of drinking water as required by that Act.

Executive Order 14096 has been rescinded by E.O. 14148, 90 Fed. Reg. 8237 (Jan. 28, 2025). Thus, this decision is not informed by E.O. 14096.

125. *One commenter asked how EPA informs the tribal government and asked about the response. The commenter asked if EPA had prior informed consent to proceed with permitting.*

Response: As noted in the response directly above, EPA Region 8 representatives met with members of the Blackfeet Tribe to discuss the draft permits and answer any questions that the Tribe had. Comments were submitted to EPA from the Tribe, and these are included in this Response to Comments document. Also, the Safe Drinking Water Act and its UIC regulations do not authorize the EPA to condition the issuance of UIC permits on prior informed consent of Tribes.

Tribal Consultation – 2nd comment period

126. *Commenters noted that the project is near sacred Tribal lands, and since the Blackfeet Nation has requested that the aquifer not be impacted, their wishes should be paramount. A commenter also expressed concern that EPA has not fulfilled its Tribal consultation obligations and asks whether EPA has meaningfully consulted with the Blackfeet Nation and the Little Shell Band of Chippewa Indians.*

Response: Please refer to Response #124 above. Additionally, EPA notes that the Little Shell Band of Chippewa Indians Tribal government did not submit these comments, nor did it request Tribal consultation. The Little Shell Band of Chippewa Indians does not currently have a reservation or other Indian country lands that might be affected by the subject wells. Accordingly, the EPA did not offer Tribal consultation to the Tribe.

Well Integrity

127. *One commenter requested the date and results of the most recent Mechanical Integrity Test. They stated, "I understand that under current Class II categorization the Montana Board of Oil and Gas has jurisdiction over these wells and EPA would not have completed these tests, but the results should be reviewed and included in the draft permit investigation and report."*

Response: As the commenter acknowledges, the Montana Board of Oil and Gas Conservation (MBOGC) administers the UIC Class II program. Therefore, the commenter should request information about Mechanical Integrity Tests (MITs) related to the Class II wells from MBOGC. For purposes of the Class V Permits, the UIC regulations do not require submission or review of past mechanical integrity tests, and the EPA does not agree that information would be necessary in the evaluation of the permit applications or aquifer exemption request. This is because the Permits require the operator to perform and submit MITs to EPA before operations begin and this information will be more representative of current conditions than past MITs. The results of the MITs will be reviewed by EPA to ensure that mechanical integrity has been demonstrated before authorization of injection. The Permits require the Permittee to demonstrate that the injection well has internal and external mechanical integrity before operations begin and periodically thereafter.

128. *One commenter requested more information on the process EPA is using to determine that the existing wells are mechanically and structurally sound enough to handle a new bio-fuel waste product to be injected for safe disposal. Another commenter stated that casings eventually crack, rust, and/or fail. One commenter noted that well liners, sealers and grout have a high likelihood of failure over a long-term period.*

Response: Mechanical integrity of wells is an important component of the UIC program. See 40 CFR §§ 144.52(a)(8) and 146.8. The Permits include conditions on mechanical integrity of the wells. This includes a requirement that mechanical integrity is always maintained and a condition that prohibits injection of injectate into a well that lacks mechanical integrity. These protections ensure the injection wells have the mechanical integrity required. The Permittee must perform mechanical integrity testing on the injection well before

operations begin and continuously monitor the injection well during operations to identify any potential mechanical integrity failures.

EPA acknowledges that well failure can occur. For this reason, continuous monitoring of surface injection pressure and annular pressure is required in Attachment IV of the Permits. Specifically, the tubing annulus will be kept full of fluid and monitored with a pressure gauge for any pressure anomalies or changes in the fluid level due to leakage in the casing, packer or tubing. In the event of a loss of mechanical integrity, the well must be promptly shut-in, and EPA must be notified. The Permits further require repairs to be conducted and a demonstration of mechanical integrity prior to resuming injection. Per Attachment V of the Permits, the Permittee must also demonstrate internal and external mechanical integrity at least once every five years. While the commenters expressed general concerns about the potential for well failure, they did not specify any concerns about these permit conditions.

129. *Commenters expressed concern about the potential for leaks due to flaws in the casing. One commenter asserted there is no guarantee leaks will not occur at shallower depths. One commenter points out that the wells have been used as Class II disposal wells in the past and that Class II wells have a history of fracturing. Some commenters sought clarification on the monitoring procedures for the injection well and wanted to understand how leaks will be detected and how frequently the well will be inspected to ensure that injected fluids are reaching the intended injection zone.*

Response: See Responses #127 and #128 regarding the requirements for mechanical integrity testing of the wells and other monitoring requirements to detect potential integrity issues with the wells. Specifically, Attachment V of the Permits requires noise or temperature logs to demonstrate that there is no significant movement of fluids behind the casing. General information from the commenter about the alleged history of fracturing of unnamed Class II wells is outside the scope of factors that EPA can consider in UIC permitting decisions.

Inspections are one component of a broader comprehensive compliance monitoring program to ensure the protection of underground sources of drinking water. Inspection frequency is informed by several factors including considerations such as potential risks to underground sources of drinking water, site-specific conditions, and compliance history. Wells that present higher potential risk or have identified compliance concerns may be inspected more frequently.

130. *Commenters noted concerns with the well integrity and provided links and quotes to ProPublica reports. They stated that "EPA data shows most failures are patched within six months of being discovered, but with as much as five years between integrity tests, it can take time for leaks to be discovered." Commenters also assert that in the three years analyzed by ProPublica, more than 7,500 well test failures involved what federal water protection regulations describe as "significant leaks." Another commenter stated that injection wells sometimes leak and provided a link to an article in the Big Bend Sentinel from 2019 about a leaking injection well in Texas.*

Response: See Responses #127 and #128 regarding the requirements for mechanical integrity testing of the wells and other monitoring requirements to detect potential integrity issues with the wells. The Permits include well construction standards as well as mechanical integrity testing requirements to ensure that the wells do not allow migration of fluids into USDWs. The commenters do not identify any concerns with the construction standards or mechanical integrity requirements in the Permits or explain why the Permit conditions are not adequate to protect USDWs. Commenters' generalized claims about well failures based on the ProPublica articles are not sufficiently specific and do not raise concerns about the Permits' mechanical integrity conditions.

131. *One commenter stated that even if there was a problem, capping the well will not solve the issue because*

the wastewater will continue to leak.

Response: It is not clear what commenter meant with regard to "capping the well." However, EPA requires mechanical integrity tests and other monitoring to address potential leaks from the well during its life and plugging and abandonment plan requirements to properly plug a well. See Responses #127 and #128 regarding mechanical integrity of the wells and other monitoring to detect potential leaks during the life of the well. Prior to abandonment, the well(s) must be plugged with cement in a manner that isolates the injection zone and will not allow the movement of fluids into or between USDWs. See Response #118 for more information on plugging and abandonment. The commenter does not identify any concerns with these conditions or specify why the Permits are not adequate to protect USDWs.

132. *Commenters inquired about the responsible party tasked with conducting inspections if not an EPA representative. Another commenter asked what would happen in the case of non-compliance.*

Response: Under the SDWA, the EPA is responsible for conducting inspections where the EPA directly implements the UIC program. Representatives of the EPA with the appropriate inspection credentials are authorized to conduct, participate in, and assist with environmental compliance inspections/field investigations to assess compliance with the regulatory and/or permit requirements. Regarding non-compliance, any permit non-compliance constitutes a violation of the SDWA and is grounds for enforcement action. Violations of the SDWA may subject the Permittee to enforcement for compliance, civil penalties, and/or criminal prosecution as specified in Section 1423 of the SDWA. Non-compliance of a permit can also result in permit termination, revocation and reissuance, or modification.

133. *Some commenters raised concerns about injection pressure causing fractures. One commenter raised a concern that "a worker can inject the wastewater at an even higher pressure than allowed."* Another *commenter stated that "oil companies have a long history of maximizing profits over all else" and that "it is possible the company could inject the waste into the well at a higher-pressure rate to save time, which will cause fracturing of the well casing and geological formations."*

Response: The Permits include a condition limiting the allowable injection pressure. This limit is a calculated maximum allowable injection pressure (MAIP) that is derived from site-specific data, including the formation fracture gradient determined via a step rate test, the specific gravity of the injection fluids based on representative fluid analysis, and the depth to the upper injection interval. The MAIP condition ensures that injection does not initiate new fractures or propagate existing fractures in either the injection or confining zones. To further protect against any inadvertent or intentional exceedance of the MAIP, the Permits require the use of pressure-actuated safety devices and continuously calibrated pressure gauges that automatically monitor the wellhead pressures. In addition, the Permits explicitly prohibit any operational practice that would allow injection at higher pressures than permitted. Any attempt to exceed these limits would constitute noncompliance with the Permits and the Safe Drinking Water Act. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action. Non-compliance of a permit can also result in permit termination, revocation and reissuance, or modification, or enforcement actions.

134. *One commenter requested more information on the two different maximum allowable injection pressures in the Permits and justification for these two different pressures.*

Response: The maximum allowable injection pressure (MAIP) is based on the formula described in the Permits in Section B.4. As explained above in Response #133, the MAIP is set at a value to ensure that injection does not initiate new fractures or propagate existing fractures in the injection and confining zones. The inputs for the formula come from site-specific information at each well. The site-specific data needed to calculate the MAIP includes: the formation fracture gradient in the vicinity of the injection well (which was determined by a step

rate test); the specific gravity of the injection fluids (based on the fluid analysis of a representative sample); and the well-specific depth of the top perforation or the top of the open hole where injected fluids enter the subsurface. The Jody Field 34-1 well and Jody Field 34-2 well have different fracture gradients and depth values and therefore have different calculated MAIPs.

135. *One commenter stated that the Permits indicate the calculated maximum injection pressure of 1,484 psi is based on an estimated injectate specific gravity that may be updated once the actual specific gravity is obtained as a permit condition prior to authorizing injection; they asserted that EPA must not approve based on estimates.*

Response: The 1,484 psi in the draft is a provisional value based on an estimated specific gravity value. Before any approval, the Permits require a sample of the injectate to be analyzed for specific gravity, among other constituents. The Maximum Allowable Injection Pressure (MAIP) will be recalculated from the verified data and will replace the MAIP value given in ATTACHMENT II of the Permit and will become effective and enforceable upon written correspondence from the Director. No injection can occur until these final, data-based limits are established.

General Comments

Some commenters provided comments that lack enough specificity for EPA to respond to. These comments do not identify any specific permit condition(s) of concern or explain how the permits fail to comply with regulatory standards. In the case of aquifer exemption comments, they did not provide specific comments about the aquifer exemption criteria. However, in the interest of providing information to the public, EPA provides responses below where it is possible to do so.

136. *Commenters expressed general concern about injection activity impacting the local environment and human health.*

Response: The Safe Drinking Water Act and the UIC regulations were promulgated to protect USDWs from endangerment due to underground injection activity. In this case, both the geologic siting and the Permit requirements serve to protect USDWs. The wastewater will be injected over 3,000 feet beneath earth's surface into a part of the Madison aquifer that produced oil and gas and where Class II produced oil and gas waste has previously been injected. As discussed in further detail in Responses #57 and #75, in addition to evaluating the geologic suitability, the Permits contain a number of conditions to prevent the migration of fluids into USDWs.

137. *One commenter stated that it does not make sense to "inject wastewater of undisclosed hazardous content deep into crevasses and aquifers where it can never be removed if geologic movement or unforeseen contamination should occur."*

Response: It is not clear whether the commenter is expressing concerns with underground injection and the regulations or whether they are just expressing general concerns about the environment. Regarding concerns about injection into the Madison aquifer, please refer to Responses #2, #3, and #4. For information on the potential for geologic movement, please refer to the Earthquakes and Seismicity Concerns Section beginning with Response #68. As discussed in Response #89, the permits also prohibit the injection of hazardous fluids.

138. *The Tribe requests notification within 24 hours when there is a problem with the wells, as well as a copy of the incident notification protocol that Montalban and the bio-fuel company Montana Renewables have in place. As this process moves forward the tribe would like to be kept informed whenever tests or monitoring are being done and to be on site when this is happening whenever possible. The Tribe would like Montalban to keep the tribe in the communication loop as they are moving forward and be as transparent as possible.*

Response: While the EPA is mindful of the government-to-government relationship with the Blackfeet Tribe and carefully considered this request, given the distance from the Reservation and because the injection activities are adequately confined from impacting shallow water resources in the area, there is no basis to include permit conditions to address the Tribe's request, as they are not related to the protection of USDWs. Additionally, EPA has no authority under the Safe Drinking Water Act and the UIC regulations over Montana Renewables.

139. *A commenter asked if EPA grants approval of the aquifer exemption expansion to allow an additional 15 million+ barrels of refinery waste, then where is the incentive for Montana Renewables to stop using these injection wells to dispose of their waste. Another commenter stated that denying the permit will motivate/encourage Montana Renewables to take important steps that will further protect our environment locally and globally.*

Response: This commenter expresses general concerns about the practice of underground injection. EPA's obligation when reviewing permit applications is to review the required information submitted by the applicant to determine whether an injection activity can be conducted in a manner that prevents endangerment of USDWs. In this case, EPA reviewed all the necessary information submitted by the applicant such as site suitability and well construction to propose permit conditions for the Class V permits that would protect USDWs. EPA considered potential avenues of contamination to USDWs from the injection activity associated with this project and incorporated measures to address potential migration of contaminants into areas that may endanger USDWs. These permit conditions prevent endangerment to USDWs by ensuring that injection well construction, operation and maintenance, monitoring, and well closure are conducted in compliance with UIC regulations. EPA's evaluation has also determined that the portion of the Madison Formation proposed for exemption does not currently serve as a source of drinking water and cannot and will not serve as a source of drinking water. See Response #2. The commenters do not allege that any of the permit conditions fail to meet the UIC requirements or that they do not protect USDWs.

140. *One commenter requested that these Draft Permits and Aquifer Exemption Expansion RODs be revised and limited to two years maximum and that this project should be required to request an extension, instead of allowing up to 10 years for this project. The commenter stated that they had heard this project will only require one to two years to occur.*

Response: The commenter did not specify why the Permits should be limited to two years or assert that a 10-year permit term is not protective of USDWs. Therefore, EPA is unable to ascertain the commenter's concerns relative to the Permits and their conditions. Aquifer Exemptions do not have time limits or durations.

141. *One commenter said, "If the EPA approves these Draft Permits and RODs, then the EPA will have failed to uphold Executive Order 13990 by saddling Pondera County with 15+ million barrels of refinery waste, and potential for future contamination that ultimately residents and Pondera County will have to deal."*

Response: Executive Order 13990 has been rescinded by E.O. 14148. The Permits are written to be protective of USDWs.

142. *There were comments asserting that the permitting and aquifer exemption actions are contrary to EPA's mission of protecting the environment and comments that EPA is protecting business interests over the environment.*

Response: EPA disagrees that the permitting action and aquifer exemption actions are contrary to EPA's mission. EPA's obligation when reviewing permit applications is to review the required information submitted by

the applicant to determine whether an injection activity can be conducted in a manner that prevents endangerment of USDWs. In this case, EPA reviewed all the necessary information submitted by the applicant such as site suitability and well construction to propose permit conditions for the Class V permits that would protect USDWs. EPA considered potential avenues of contamination to USDWs from the injection activity associated with this project and incorporated measures to address potential migration of contaminants into areas that may endanger USDWs. These permit conditions prevent endangerment to USDWs by ensuring that injection well construction, operation and maintenance, monitoring, and well closure are conducted in compliance with UIC regulations. EPA's evaluation has also determined that the portion of the Madison Formation proposed for exemption does not currently serve as a source of drinking water and cannot and will not serve as a source of drinking water. See Response #2. The commenters do not allege that any of the permit conditions fail to meet the UIC requirements or that they do not protect USDWs.

143. *One commenter requested that EPA, Montalban Oil & Gas Operation, Inc., Montana Renewables, and Calumet delegate a direct contact for all questions, comments, and complaints, to be available for us, Pondera County Commissioners, and our agents (Departments). The commenter believes they should be able to easily access information without having to make Freedom of Information requests. The commenter stated that this request is to streamline any concerns or items requiring EPA's immediate attention.*

Response: As EPA personnel may change positions, please contact R8UICMailbox@epa.gov for questions and comments. EPA's Report an Environmental Violation website provides a way for you to report suspected environmental violations or potentially harmful environmental activities in your community, the website is, https://www.epa.gov/report-violation. EPA does not require designated contact information for Permittees. Further, EPA cannot impose requirements on Montana Renewables or Calumet, as they are not regulated under the UIC program.

144. *One commenter asked who they should complain to if this operation suddenly changes to an around the clock operation and who can put a stop to this and make the trucking company adhere to what the owner assured them would happen.*

Response: As EPA personnel may change positions, please contact R8UICMailbox@epa.gov for questions and comments. EPA's Report an Environmental Violation website provides a way for you to report suspected environmental violations or potentially harmful environmental activities in your community, the website is, https://www.epa.gov/report-violation. The Permits are issued under authority of the Safe Drinking Water Act, to Montalban Oil & Gas Operations, Inc. EPA has no authority over the trucking company.

145. *One commenter stated that EPA denied that the injectate material was transported to the Jody Field wells and injected into the wells.*

Response: On October 13, 2023, the Montana Department of Environmental Quality (MDEQ) notified EPA that fluids from Montana Renewables had been transported to and stored in a 60,000 gallon water tank at the Jody Fields site during the permit review process. However, since the Class V injection Permits had not been finalized, these fluids were not injected into either well. The water tank and fluids were eventually required to be removed by the MDEQ.

146. *One commenter stated that aquifer protection areas are scientifically established, and there's no evidence that Montalban has shown otherwise.*

Response: The commenter does not provide any context for EPA to determine what their concern is relative to these wells. It is not clear what the commenter means by "aquifer protection area." EPA's sole source aquifer regulations at 40 CFR § 149.3 provides a definition for "Critical Aquifer Protection Area," but the Madison

aquifer at this site is not designated as a sole source aquifer nor does it meet the definition of a critical aquifer protection area.

147. *One commenter asked, "who is at fault if this expansion goes through and it moves faster than anticipated, who is at fault if there is an earthquake, and who cleans up the mess?"*

Response: The operator is responsible for complying with the UIC permit requirements. It is a violation of the Permits and of the Safe Drinking Water Act (SDWA) to cause movement of a contaminant into a USDW from injection activities. See the Earthquakes and Seismicity Concerns section for additional information about EPA's evaluation of the applications relative to seismicity and permit conditions added to address concerns.

Out of Scope Comments – 1st comment period

Many commenters raised concerns about matters outside of the UIC Program's jurisdictional scope, which EPA lacks the regulatory authority to address in the UIC permitting and aquifer exemption processes. EPA's authority is limited by the SDWA and the UIC regulations governing this Program. However, in the interest of providing information to the public, EPA provides responses below where it is possible to do so**.**

148. *Variations of comments were made regarding Montana Renewables/Calumet, their waste collection and transportation practices, and other business decisions. Commenters requested controls, oversight, limits, and inspections on the refinery as the supplier of injectate.*

Response: EPA has no authority under the SDWA and its UIC regulations to oversee the waste collection and transportation activities of Montana Renewables.

149. *A commenter asked why these EPA draft documents focus entirely on the operator, and the operations of the injection wells, when the primary beneficiary of EPA's approval is not the operator or the trucking company. The commenter stated that the primary beneficiary of these draft documents, and all aspects related to EPA's approval, is Montana Renewables.*

Response: The UIC program regulates underground injection activities. Montana Oil & Gas Operations is the permit applicant and operator of the UIC well. As specified in 40 CFR § 144.31(b), it is the operator's duty to apply for a permit.

150. *Several commenters noted that EPA should require the Permittee and Montana Renewables to find another way to dispose of this wastewater, for example discharging the waste into surface waters or constructing a new wastewater treatment facility to take the waste.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. The UIC program does not have the authority to require alternative options for disposal.

151. *Several commenters suggested that the injection activity be relocated due to the proximity of the Jody Field wells to wildlife and surface water features. One commenter asked why the injection activity can't be into an aquifer that doesn't require an aquifer exemption? Another commenter stated there are plenty of old wells near Kevin, MT or Power, MT where the risk to water and wildlife is much lower.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. Other than appropriateness of the geologic setting, siting of well locations is outside the scope of the

SDWA and its regulations. See Response #7 regarding concerns about injection into a USDW that requires an aquifer exemption before injection can be authorized.

152. *Commenters had concerns about the processes used by Calumet/Montana Renewables to treat wastewater. Several commenters were concerned about how the waste is treated before it is injected. One commenter asked if pre-treatment should be required before the wastewater leaves the refinery. Commenters were concerned about the safety of the injectate, citing that the wastewater treatment plant will not accept the wastewater.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. The UIC regulations do not require that wastewater be pretreated at the refinery, nor do they specify a treatment process for fluids destined for injection. Therefore, treatment of fluids prior to injection is outside the scope of the SDWA and its regulations. The Class V Permits prohibit the injection of any fluids from Montana Renewables that could be defined as hazardous waste, as defined at 40 CFR § 144.3 and specifically limits what fluids can be injected. EPA's UIC program does not regulate how an operator meets those standards, only that they must meet them.

153. *Commenters expressed concerns about Calumet's compliance history, alleging they are unreliable with safety and noting that EPA fined Calumet nearly $400,000 for violations of safety protocols.*

Response: Calumet has not applied for a UIC permit and is not engaged in injection activities. Therefore, EPA has no authority over Calumet under the SDWA and its UIC regulations for this project, and this comment is outside the scope of the SDWA and its regulations.

154. *Various comments were received regarding acceptance and refusal of the biofuels waste, and decisions made by the Great Falls Wastewater Treatment Plant.*

Response: Concerns about the acceptance of waste at the Great Falls Wastewater Treatment Plant (WWTP) fall under the authorities of the National Pollutant Discharge Elimination System (NPDES) wastewater permitting regulations and are outside the scope of the SDWA and its UIC regulations.

155. *One commenter requested that the author of each document prepared for public comment be indicated including the Public Notice, Cover Letter, MOGO 34-2 Draft Permit, MOGO 34-2 Fact Sheet, MOGO 34-2 AE Expansion Record of Decision, MOGO 34-1 Draft Permit, MOGO 34-1 Fact Sheet, MOGO 34-1 AE Expansion Record of Decision, Montalban Oil & Gas Operations, Inc., Jody Field Wells Aquifer Exemption Expansion, MOGO 34-1 Narrative, MOGO 34-1 Narrative, and Class V Permit Application.*

Response: EPA utilized a multi-disciplinary team of geologists, hydrogeologists, biologists, environmental scientists, engineers, attorneys, and other subject matter experts to develop and review various portions of the above referenced documents. Furthermore, individual agency employee participation in preparation of documents is not relevant to the public's ability to understand and comment on the proposed decisions.

156. *One commenter stated that the question was asked in the information period of Tuesday evenings session with EPA "If 6,000 people live in Pondera County and 4,000 people are against this project, can we stop it" and that the EPA panel refused to answer that question leading everybody in the room to believe that this is a "done deal." Many commenters expressed general opposition to the Permits and aquifer exemptions.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC

permits. General opposition is not a factor that EPA can consider in making permitting decisions. EPA carefully reviews and considers all comments received before making final permitting decisions.

157. *Several commenters voiced support for the issuance of the MOGO Jody Field UIC permit. Supporters referenced the protective conditions in the Permit; EPA's review of the permit application; the safety of injection; and the benefits of energy production. Commenters mentioned the positive impact on Montana's economy, revenue for Pondera County, reduction of out of state transportation emissions, support of sustainable biofuel technologies, private citizens rights and property rights, source of income for oil crop farmers, a method of minimizing food industry waste, and a source of local jobs.*

Response: EPA acknowledges comments supporting issuance of the Permit. However, EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. General support, like general opposition, is not a factor that EPA can consider in making permitting decisions.

158. *Comments were received regarding Montana State Constitution in Article II, Sections 1 and 3, which allege that "if the EPA approves this permit request for Montana Renewables, without a clear understanding of the material to be disposed of, or its potential effects on surface or sub-surface ground and water, that is a clear and blatant violation of these constitutional protections."*

Response: EPA disagrees that it must consider the Montana Constitution in determining whether to issue or deny a UIC permit. EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits.

The issuance of EPA permits does not infringe upon any state or local laws. Both Permits include a provision that states: "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 applicable federal, tribal, state, or local law or regulations." Both this Permit condition and the UIC regulations at 40 CFR §144.35(c) make clear that issuance of a UIC permit does not obviate the need for a permittee to comply with other applicable laws. However, these matters are outside the scope of the SDWA and its regulations.

159. *Commenters expressed positive and negative concerns for their property, property values, and property rights. Commenters stated that homeowners in the immediate area need to be compensated or bought out at fair market value by the involved parties as their property values and quality of life have declined due to this industrial activity. Other commenters voiced support for Mr. Field's right to use his property as he chooses and support for the prevention of public officials and employees from participating in efforts to undermine or seize private property rights.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. Property values and property rights are outside the scope of the SDWA and its UIC regulations.

Both Permits include a provision that states: "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 applicable federal, tribal, state, or local law or regulations." Both this Permit condition and the UIC regulations at 40 CFR §144.35(c) make clear that issuance of a UIC permit does not obviate the need for a permittee to comply with other applicable laws. However, these matters are outside the scope of the SDWA and its regulations.

160. *Commenters stated that during the public meeting, Montalban stated that the injectate was fit to drink. Commenters stated that they knew this wasn't true and they were also told that Pondera County was welcome to collect their own samples of the wastewater.*

Response: Statements from entities other than EPA should not be attributed to EPA. As stated in Response #96, the Permits do not require that the injectate be potable as injection will be into a non-USDW.

161. *Commenters noted that in the light of climate change, and our rapidly forthcoming tipping points, we can instead care for the land with prairies. In fact, for every 100 acres of ethanol, we could convert 99% to prairies and 1% to solar panels and it would be more efficient than biofuels.*

Response: The commenter did not provide a question or assertion for EPA to respond to.

162. *One commenter asked, how the liquid that was stored in the tank that has been removed from the site was disposed of?*

Response: EPA has no information on this activity, as it is not an injection activity regulated under the SDWA. As stated in Response #145, the 60,000-gallon tank and fluids were required to be removed by the MDEQ.

163. *Commenters suggested other methods of wastewater disposal for this project and that EPA should identify alternative treatment and disposal for waste from Montana Renewables. One commenter stated that if the wastewater can be used for irrigation or drinking it should be and asked why it would be injected into an oil site. A commenter stated that if the waste is as "non-toxic" as people say, just dump it in the Missouri River. A commenter stated maybe you should try to sell it to the people that haul water and try to get rid of it. One commenter stated that the biofuel byproducts should be processed above ground until they are harmless and allowed to evaporate in non-leaking holding ponds. Another commenter asked for a list of alternative ways of disposal other than injection wells for this strength of waste.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. The UIC program does not have the authority to require alternative options for disposal.

164. *One commenter stated that Montana has a long history of having environmental consequences thrust upon us by industry officials with well-spoken promises of no future ill effects and that these spoken promises have created many superfund sites in the state.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits.

165. *One commenter stated that this is the intermountain West, where water is precious and asked how much water is being wasted per gallon of biodiesel produced and where that water comes from.*

Response: The production of biodiesel is not relevant to these actions and is outside the scope of the SDWA and its regulations.

166. *One commenter asked if the applicant is powering his trucks with bio-diesel and asked how much diesel do the trucks use. The same commenter asked if more pollution is being put in the atmosphere by trucking*

wastewater than what is being gained from producing bio-diesel. The same commenter asked if bio-diesel production in its entire path, from feedstock field to disposal site, is an environmentally sustainable option and should bio-diesel wastewater dumping be permitted at all, given that there are other alternatives, or is it environmentally beneficial if it's done right.

Response: These comments are not relevant to these actions and are outside the scope of the SDWA and its regulations.

167. *One commenter asked why the refinery does not use one of the other three known methods of bio-diesel refining that produce much less wastewater and they asked if that would be safer.*

Response: These comments are not relevant to these actions and are outside the scope of the SDWA and its regulations.

168. *One commenter stated that "[t]he EPA must assess the direct, indirect, and cumulative effects of more wells (and all the associated truck traffic) must be considered as they are reasonably foreseeable and likely to occur" citing to 40 CFR § 144.33(c)(3). Another commenter raised concerns that the project's cumulative impacts have not been listed, addressed, or mitigated.*

Response: The regulations at 40 CFR § 144.33(c)(3) are not applicable because the Permits are not area permits. Therefore, there is no requirement for a cumulative effects analysis under 40 CFR § 144.33(c)(3) nor any other provision of the Safe Drinking Water Act's Underground Injection Control regulations.

169. *Commenters raised concerns that any spilled wastewater could migrate into the creek, canals, and groundwater.*

While commenters raise concerns about the potential for surface spills at the site, the Safe Drinking Water Act and its Underground Injection Control regulations do not provide authority to condition or deny permits based on concerns about surface spills. Therefore, with the exception of requirements to consider this issue under other Federal laws[16] (40 CFR § 144.4; e.g. The National Historic Preservation Act of 1966, 16 USC 470 et seq, The Endangered Species Act, 16 USC 1531 et seq.) they are outside the scope of the UIC program.

170. *Several commenters, including the Pondera County Commissioners, Sanitarian, Disaster and Emergency Services Coordinator, and the Blackfeet Environmental Program Director, requested notification of spills and accidental releases. One commenter requested an emergency response plan to ensure prompt and complete cleanup of any spills from truck accidents. Other commenters alleged that any leaks or spills on or offsite must be reported to appropriate state, local or federal agencies.*

Response: The Safe Drinking Water Act and its UIC regulations do not authorize EPA to include permit conditions for Class V wells requiring the Permittee to provide notifications to third parties or require emergency response plans unless it is related to the protection of USDWs.

171. *Commenters wanted safeguards and a $1.00 per gallon Waste Disposal Fee for each gallon of waste payable to Pondera County by wire-transfer prior to wastewater delivery to any/all Class V injection well sites because this would support free testing, replacement water, water treatment systems, monitoring wells to be installed, road maintenance, in case of contamination.*

[16] The UIC regulations include a requirement requiring adherence to other federal laws in the UIC permitting process. See 40 C.F.R. § 144.4.

Response: The SDWA and its UIC regulations do not authorize EPA to impose fees with a UIC permitting action.

172. *One commenter requested provisions in the Permit limiting the applicant from reapplying, stating that the applicant cannot submit and/or seek EPA, Montana DEQ, or approval from any authority having primacy for any new, or additional, Class V injection well permit applications in Pondera County before April 3, 2025.*

Response: This concern is outside the scope of factors the EPA can consider in making permitting and AE decisions under the Safe Drinking Water Act and the UIC regulations, as they do not provide authority to limit the number of wells that can be permitted by one operator.

173. *Some commenters expressed concern about impacts to surface soils and agriculture.*

Response: EPA acknowledges that the public has general environmental concerns about the project. However, concerns about surface soils and agriculture is outside the scope of the Safe Drinking Water Act's Underground Injection Control program. See Responses #49 and #50 for details about confinement.

174. *Several commenters raised issues regarding truck traffic and road quality. Comments included concerns about compensation for road maintenance costs, vehicle collisions, spills, particulates in the air, carbon emissions, noise pollution, spill potential, traffic congestion, school bus and farm equipment interactions, limitations on operating hours, and the questions about who the public should contact to address road concerns. Commenters noted that Montana Renewables has publicly stated that each truck can legally haul 150 barrels of contaminated wastewater for each 91-mile trip. To haul 15,967,523 barrels, 106,450 trucks must drive 182 miles (round-trip) on gravel county roads, state and interstate highways, an average of 29 trucks every day for 10 years. The commenters stated that the permit applications did not address public safety concerns or increased air pollution through dust and exhaust. However, other commenters disputed allegations about impacts from the biofuel truck traffic and claimed that these tankers are underloaded, do not cause abnormal road conditions, have safe and courteous truck drivers, and that Calumet agreed to maintain the gravel to include mitigative measures. They also raise concerns about restricting use of public county roads to these trucks.*

Response: Truck traffic, road use, air emissions, noise, and compensation for road maintenance are generally addressed by county and state transportation and environmental agencies. With the exception of consideration under other federal laws (40 CFR § 144.4[17]), these are outside the scope of the UIC program. The Permits require manifests and recordkeeping. Routing, speed limits, and road restrictions are generally established by local authorities; concerns about traffic or road conditions should be directed to the county road department and Montana DOT, and dust/exhaust questions to Montana DEQ Air Quality.

175. *Commenters asserted that the project would bring approximately 1,835,333 tanker trips carrying potentially hazardous waste onto local roads, increasing heavy truck traffic on rural routes. They contend this will cause road wear and damage not covered by the company, elevate public safety risks including potential leakage and community harm, and provide no revenue to Pondera County to offset impacts.*

Response: Truck traffic volumes, road wear, revenue, routing, and general public safety are generally handled by local and state transportation authorities. With the exception of consideration under other federal laws (40 CFR

[17] The UIC regulations include a requirement requiring adherence to other federal laws in the UIC permitting process. See 40 C.F.R. § 144.4.

§ 144.4[18]), these are outside the scope of the UIC program. The UIC permit focuses on protecting underground sources of drinking water. The permit also prohibits disposal of hazardous waste fluids.

Out of Scope Comments – 2nd comment period

Many commenters raised concerns that extended beyond the specific focus of the 2nd comment period, which was limited to evaluating the changes made since the initial public notice in 2023–2024. This limited scope included the proposed lateral aquifer exemption (AE) expansion, the expanded Area of Review (AOR), and the associated AOR analysis, as detailed in the public notice document. While EPA understands that a range of issues have been raised, comments that did not fall within the defined scope of the comment period are provided below and additional information is offered, when possible, for the public's benefit.

176. *A commenter was concerned about discrepancies between the proposed combined volume limit (~16 million barrels for wells 34-1 and 34-2) and the permit application's calculated storage capacity (275.3 million barrels) and stated 40-year facility life. They asked for written clarification of the true volume limit and injection duration, and for public review of any staged increases with cumulative impact analysis. Other commenters asked whether EPA could approve increases without new public comment. They said if 275.3 million barrels is cited as "available" or "probable" storage, EPA should provide 3-D models demonstrating impacts of injecting that volume within a 2.1-mile radius, or else remove that capacity language. Another commenter asked whether injections could later expand toward the 275.3 million barrels.*

Response: This is beyond the specific focus of the 2nd comment period, which was limited to evaluating the changes made since the initial public notice in 2023–2024. This limited scope included the proposed lateral aquifer exemption (AE) expansion, the expanded Area of Review (AOR), and the associated AOR analysis, as detailed in the public notice document. However, in the interest of providing information to the public, EPA provides the following response. As specified in the Permits, the maximum cumulative injection volume limits are 8,811,350 barrels (bbl) for Jody Field 34-1 and 7,156,173 bbl for Jody Field 34-2. All submissions of information from an applicant related to an application are considered by EPA and is retained in the administrative record. If there are discrepancies in information, EPA's evaluation considers them in making decisions. Responses #57 and #58 discuss the injection volume limits in more detail and describes how the EPA determined these limits. The Permits do not incorporate any conditions regarding staged increases nor do they specify a 40-year facility life. Any increases to the maximum cumulative injection volume must be approved by modification of the Permits, with public notice and opportunity to comment.

177. *A commenter said volume limits are not identified for the other referenced wells 14-34 and 4-1A despite extensive discussion in the permit application. They asked why there is so much information included on wells 4-1, 4-1A and 14-34. They asked why well tests for wells 4-1 and 14-34 were included in the permit application and asked for the well tests for 34-1 and 34-2.*

Response: The UIC permit application requires applicants to submit information on wells that are found within the Area of Review (AOR), such as wells 4-1, 4-1A, and 14-34. EPA reviews each well's construction to ensure that these AOR wells do not serve as a conduit for fluids to leave the injection zone. Consistent with the regulations at 40 CFR § 146.24, the well tests for Jody Field 34-1 and 34-2 will be conducted after the Permits are finalized and before injection is authorized. The Permittee cannot begin injection until those well tests are completed and the results reviewed and approved by EPA. This ensures that all injection activities are based on current, site-specific data that confirms the integrity and safety of these wells prior to startup.

[18] The UIC regulations include a requirement requiring adherence to other federal laws in the UIC permitting process. See 40 C.F.R. § 144.4.

178. *Several commenters urge regulators to require Montana Renewables/Calumet to build and operate an on-site wastewater treatment plant in Great Falls—funded by a $1.67 billion DOE loan announced in January 2025—as a more sustainable approach used by other biofuel producers. They note the company's July 2025 announcement to treat water on-site and send it to the Great Falls facility but emphasize that construction has not begun and the company has not clarified whether it will use the Pondera injection wells in the interim. They oppose injecting high-strength industrial wastewater (HSIWW) and insist the company properly treat its waste on-site*.

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. The UIC program does not have the authority to require alternative options for disposal.

179. *Commenters argue that EPA should prioritize and choose the construction of Montana Renewables' already funded on-site wastewater treatment plant to fulfill its environmental protection mandate. They add that MOGO's sole source of Class V waste is Montana Renewables, which is currently sending wastewater to other facilities and plans to complete its own on-site plant, meaning there will be no wastewater left for Mr. Montalban to inject once that facility is operational. One commenter stated that any permit action by EPA requires consideration of alternatives, and another commenter argued that it is unnecessary to assume long-term risks when existing technologies could treat the high-strength industrial wastewater and return the water to its source as clean or cleaner than it began.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. The UIC program does not have the authority to require alternative options for disposal.

180. *One commenter asked who would be responsible for installing wastewater treatment plants (WWTP) in Valier, Conrad, and Heart Butte if aquifers overlying the Madison become polluted by injectate, and who would be legally liable for the design, construction, operation, and labor costs if such WWTPs become necessary due to EPA-permitted injections.*

Response: See Responses #33 and #38 regarding EPA's consideration of the area of review and confinement of the Madison aquifer at this location from currently used shallow water sources. The commenters expressed general concerns about the potential for migration of injectate to shallow water resources but provide no specific information to suggest that EPA's technical analysis about confinement is inadequate or flawed.

181. *Commenters stated that the Montana Constitution guarantees a clean and healthful environment (including clean air and water) and that the permit would violate that guarantee; that groundwater belongs to the State, its citizens, and future generations for beneficial public use under state law; and that EPA lacks congressional authority to remove legal protections or grant unconditional control to a well operator or refinery, thereby stripping Pondera County citizens of rights under Montana's constitution and laws.*

Response: EPA disagrees that it must consider the Montana Constitution in determining whether to issue or deny a UIC permit or aquifer exemption. EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. Therefore, comments about the Montana Constitution are outside the scope of this federal permitting action.

182. *Commenters assert that the rules have been amended to accommodate this specific business and that expanding the AOR serves no purpose other than providing monetary benefits to MOGO and Montana Renewables. If EPA proceeds, they urge adoption of stricter, tailored conditions for the expanded AE/AOR,*

including: excluding industrial pretreatment wash water; committing to an on-site treatment alternative; requiring full chemical characterization with independent sampling; installing sentinel monitoring with automatic shut-in; and ensuring transparent operations.

Response: The permitting and AE decisions are not rulemakings. This action includes no rule amendments. With regard to the requested list of conditions, commenters identify measures to regulate Montana Renewables. The EPA does not have authority under the Safe Drinking Water Act to regulate the activities of Montana Renewables under the UIC program. With respect to the other requested conditions, the EPA evaluated the permit applications and drafted Permits with conditions to prevent endangerment to USDWs. The commenter does not specify specific concerns with the Permits nor allege that it is inadequate to protect USDWs.

183. *One commenter expressed support for the proposed modifications to the draft permit and draft AE Record of Decision as necessary to proceed with the project. The commenter further indicated approval for the Joint Venture Committee to move forward with operations, citing the Director, the Office of Inspector General, the Office of General Counsel, EPA, and other relevant agencies.*

Response: EPA's role in evaluating permit applications is to determine whether the SDWA and its UIC regulations have been met. These laws provide the only criteria that EPA can use to grant, deny, or condition UIC permits. General support is not a factor that EPA can consider in making permitting decisions. EPA has no knowledge of the "Joint Venture Committee" referred to by the commenter.