

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Water Protection Bureau

Name of Project: Saddleback Ridge Water Treatment System

Type of Project: Drinking water treatment plant for the Saddleback Ridge Subdivision's public water supply. The existing Montana Ground Water Pollution Control System (MGWPCS) permit has established monitoring and limitations requirements.

Location of Project: Latitude: 45.68443° North; Longitude: 108.80569 West;
Southeast of Section 06, Township 02 South, Range 24 East

Nearest City/Town: Laurel

County: Yellowstone County

Description of Project: This Environmental Assessment (EA) is for the renewal of an existing MGWPCS permit (MTX000143) for the Saddleback Ridge Water Treatment System (facility). The permit reauthorizes Saddleback Ridge Homeowners Association, Inc. (permittee) to dispose of reject water generated from a community reverse osmosis drinking water treatment system.

The facility is located approximately 1.5 miles northwest of Laurel within the Saddleback Ridge Estates Subdivision. The respective subdivision is bounded by the Laurel Golf Club to the south and Golf Course Road to the east.

The first discharge permit issued by the State of Montana for this facility was in May of 2004. The permittee maintains a DEQ public water supply (PWSID: MT0004408) for this water treatment and distribution system.

DEQ recognizes that this treatment operation provides a public health benefit to the water users. The ground water aquifer that supplies source water to the system has elevated levels of sulfate, total dissolved solids, and selenium. The treatment system is designed to remove most of these pollutants (see the associate Fact Sheet document, Section II).

The associated wastewater is disposed of in the subsurface above an aquifer that is not a high quality state water. In addition, this aquifer already has elevated levels of pollutants. These factors limit the current beneficial uses of the aquifer (see Fact Sheet, Section II).

The scope of this EA addresses the operation of the water treatment plant and the associated reject water disposal system. The magnitude and significance of potential impacts are summarized below (bullet #26). Additional information and interpretive figures are provided within the MGWPCS permit fact sheet document.

The disposal structure is located at: Latitude: 45.68724° North; Longitude: 108.80771° West.

Agency Action and Applicable Regulations: The proposed action is to reissue the individual MGWPCS permit that contains effluent limits and effluent monitoring requirements. The permit is issued under the authority of the Montana Water Quality Act (MCA 75-5-101 et seq.), the Montana Ground Water Pollution Control System (ARM 17.30.1001-1045), and the Montana Numeric Water Quality Standards in the Department Circular DEQ-7.

Summary of Issues: The purpose of this action is to regulate the discharges of pollutants to state waters from the regulated facility. Issuance of an individual permit will require the permittee to implement, monitor, and manage practices to prevent pollution and the degradation of ground water.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts).

N = Not Present or No Impact will likely occur.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] DEQ performed a design review under the Public Water Supply Act for this public water system (PWSID: MT0004408).
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] This water treatment plant provides a public health benefit for the users of the public water supply. It provides a high level of treatment for ground water that is not high-quality water. As discussed within the associate Fact Sheet document, the source water aquifer has elevated levels of total dissolved solids, sulfate, and selenium. The treatment plant significantly lowers the concentration of these parameters that are considered to be toxic or undesirable. The facility covered under this permit must show evidence of treatment capable of meeting the established effluent limitations which were derived from the most restrictive ground water quality standards. These effluent limitations and standard conditions of the permit have been developed to maintain the beneficial uses which include drinking water. Facilities must be able to meet this restrictive effluent limitation prior to discharge. Please refer to the associated Fact Sheet document for additional information.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] No significant impacts have been identified.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] No significant impacts have been identified. This is an existing facility. No modifications to the facility have been proposed. The facility is located within an existing subdivision which may have impacted the native flora.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<p>Based on a search of the Natural Heritage Database, there are no species listed as either S1, S2, LE, or LT in the general vicinity of the facility. http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] No significant impacts have been identified. This is an existing facility. No modifications to the facility have been proposed. The facility is located within an existing subdivision which may have impacted the native fauna.</p> <p>Based on a search of the Natural Heritage Database, there are no species listed as either S1, S2, LE, or LT in the general vicinity of the facility. http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] See #4 and #5 above.</p> <p>This is an existing facility. No modifications to the facility have been proposed. The facility is located within a subdivision which may have impacted the native flora or fauna.</p> <p>Site and habitat inventories for the applicable species were recommended in consultation with the Montana Natural Heritage Program. The applicant is encouraged to contact and consult with this program or other Natural Resource Information Programs available at the Montana State Library: http://nris.msl.mt.gov/.</p>
<p>7. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: https://sagegrouse.mt.gov/</p>	<p>[Y] DEQ referred to the Montana Sage Grouse Habitat and Occurrence mapping program at https://sagegrouse.mt.gov/projects/. The project site is listed as being within general sage grouse habitat. The project is not listed as being within a core or connectivity area.</p> <p>The facility and associated subdivision is currently built. The applicant has not proposed to disturb the existing project area. The facility is located in a heavily populated area on the outskirts of the City of Laurel.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	The permittee must contact and consult with the Sage Grouse Habitat Conservation Program (https://sagegrouse.mt.gov/) prior to creating any new disturbances.
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	<p>[N] No significant impacts have been identified. This is an existing facility located within an existing subdivision. No modifications to the facility have been proposed.</p> <p>A general recommendation by the Montana State Historic Preservation Office (MSHPO) states that in the event that cultural materials are inadvertently discovered, the permittee should contact the MSHPO office for investigation.</p>
9. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] This is an existing facility located within an existing subdivision. No modifications to the facility have been proposed.
10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded power line or other energy source be needed?	[N] This is an existing facility located within an existing subdivision. No modifications to the facility have been proposed.
11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] No significant impacts have been identified.

IMPACTS ON THE HUMAN ENVIRONMENT	
12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<p>[N] This is an existing facility located within an existing subdivision. No modifications to the facility have been proposed.</p> <p>DEQ recognizes that this treatment operation provides a public health benefit to the water users. The ground water aquifer that supplies source water to the system has elevated levels of sulfate, total dissolved solids, and selenium. The treatment system is designed to remove most of these pollutants (see Fact Sheet document, Section II).</p>
13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No significant impacts have been identified.
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No significant impacts have been identified.
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No significant impacts have been identified.
16. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No significant impacts have been identified.
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No significant impacts have been identified.
18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] No significant impacts have been identified.
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]

IMPACTS ON THE HUMAN ENVIRONMENT	
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
23(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N]
23(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N]
23(c). PRIVATE PROPERTY IMPACTS: If the answer to 23(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	[N] No significant impacts were identified in 23(b).

24. **Description of and Impacts of other Alternatives Considered:**

- A. No Action: Under the “No Action” alternative, the Department would not issue this ground water discharge permit. “No Action” may lead to the creation of non-permitted wastewater systems. This may result in a net negative impact to ground water quality as the permit would prevent pollution and degradation of state waters.
- B. Approval with Modification: The Department has not identified any necessary modifications to grant approval.

25. **Cumulative Effects:**

The operation of the water treatment system may not lead to an increase of pollutants in the shallow aquifer. All waters (both produced and reject waters) are eventually disposed of on-site through individual household septic systems or the treatment system's infiltration pit. All water may eventually infiltrate back to the ground water aquifer where it originated from (public water supply wells). Some water may be lost due to evaporation.

The permit prohibits pollution of state waters. The permit includes monitoring and compliance limitations. The Department actively reviews self-monitoring records in order to monitor any potential impacts to the beneficial uses of statewaters. Please refer to the MGWPCS fact sheet document for additional information.

26. **Summary of Magnitude and Significance of Potential Impacts:**

Impacts were assessed with the assumption that the facility will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. Violations of the permit are not an effect of the agency action since the permit itself forbids such activities. However, the Department has taken steps to ensure that violations do not occur. The Department provides assistance to applicants in understanding and implementing the requirements of the permit. The Department also conducts periodic inspections of permitted facilities, and identifies potential problems with design or management practices. If violations of the permit do occur, the Department will take appropriate action under the water quality act (75-5-617, MCA). Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

27. **Preferred Action Alternative and Rationale:** The preferred action is to reissue the existing individual MGWPCS discharge permit. This action is preferred since the permit provides a regulatory mechanism for protecting ground water quality by applying effluent limits and monitoring requirements to the discharged wastewater.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: An EIS is not required under the Montana Environmental Policy Act because the project lacks significant adverse effects to the human and physical environment.

28. **Public Involvement:** Legal notice information for water quality discharge permits are listed at the following website: <http://deq.mt.gov/Public/notices/wqnotices>. Public comments on this proposal are invited any time prior to close of business on **November 08, 2017**. Comments may be directed to:

DEQWPBPublicComments@mt.gov

or at:

Water Protection Bureau
PO Box 200901
Helena, MT 59620

All comments received or postmarked prior to the close of the public comment period will be considered in the formulation of the final permit. DEQ will respond to all substantive comments pertinent to this permitting action and may issue a final decision within thirty days of the close of the public comment period.

All persons, including the applicant, who believe any condition of the draft permit is inappropriate, or that DEQ's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing). All public comments received for this draft permit will be included in the administrative record and will be available for public viewing during normal business hours.

Copies of the public notice were mailed to the applicant, state and federal agencies and interested persons who have expressed interest in being notified of permit actions. A copy of the distribution list is available in the administrative record for this draft permit. Electronic copies of the public notice, draft permit, fact sheet, and draft environmental assessment are available at the following website:
<http://deq.mt.gov/Public/notices/wqnotices>.

Any person interested in being placed on the mailing list for information regarding this permit may contact the DEQ Water Protection Bureau at (406) 444-3080 or email DEQWPBPublicComments@mt.gov. All inquiries will need to reference the permit number (MTX000143), and include the following information: name, address, and phone number.

During the public comment period provided by the notice, DEQ will accept requests for a public hearing. A request for a public hearing must be in writing and must state the nature of the issue proposed to be raised in the hearing.

29. **Persons and/or Agencies Consulted or Referenced in the Preparation of this Analysis:**

Montana Natural Heritage Program
Montana Bureau of Mines and Geology, Ground Water Information Center
Natural Resource Information System, Montana State Library
U.S. Geological Survey, Publication Warehouse
Montana State Historic Preservation Society

Additional references are further detailed within the MGWPCS fact sheet document.

EA Checklist Prepared By:

Chris Boe

September 06, 2017

Approved By:

Jon Kenning, Chief
Water Protection Bureau

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Signature

Date