

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Environmental Assessment**

**Water Protection Bureau**

**Name of Project:** Advanced Domestic Wastewater Treatment General Permit

**Type of Project:** Issuance of a Montana Ground Water Pollution Control System general permit for discharges of treated domestic wastewater to ground water.

**Location of Project:** Statewide (except within the boundaries of federally recognized Indian lands)

**City/Town:** Statewide

**County:** Statewide

**Description of Project:** This Environmental Assessment (EA) is for a new Montana Ground Water Pollution Control System (MGWPCS) General Permit (GP) for discharges of treated domestic wastewaters to ground water. All facilities covered under this Advanced Domestic Wastewater Treatment (ADWT) GP must show evidence of treatment capable of meeting the established effluent limitation which was derived from the most restrictive ground water quality standard and nondegradation-significance criteria. These facilities may be capable of removing up to thirteen times more nitrogen than conventional treatment (septic tank system). For additional information, please refer to the Fact Sheet document located at the following website: <http://deq.mt.gov/Water/WQINFO/mgwpcs>.

**Agency Action and Applicable Regulations:** The proposed action is to issue the 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 ground waters from the regulated facilities. Issuance of the MGWPCS 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.

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
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] No significant impacts have been identified. All discharge structures authorized by this permit are required to undergo DEQ design review under the Sanitation in Subdivisions Act and/or the Public Water Supply Act.
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] No significant impacts have been identified. All facilities covered under this general permit must show evidence of treatment capable of meeting the established effluent limitation which was derived from the most restrictive ground water quality standards and nondegradation-nonsignificance criteria. This effluent limitation, along with special conditions and standard conditions of the permit has been developed to maintain the beneficial uses of all state ground waters including drinking water. Facilities must be able to meet this restrictive effluent limitation prior to discharge.
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?	[Y] Construction of new wastewater treatment systems may alter current land uses. Most systems are located on pre-disturbed lands previously used for agriculture practices. The applicant is encouraged to contact and consult with the Natural Resource Information Programs of the Montana State Library: <a href="http://nris.msl.mt.gov/">http://nris.msl.mt.gov/</a>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[Y] Construction of new wastewater treatment systems may alter current land uses. Most systems are located on pre-disturbed lands previously used for agriculture practices. The applicant is encouraged to contact and consult with the Natural Resource Information Programs of the Montana State Library: <a href="http://nris.msl.mt.gov/">http://nris.msl.mt.gov/</a>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<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>[Y] See #4 and #5 above. All discharge disposal structures must meet the minimum set back requirements of ARM 17.36.323, which includes surface water, flood plains, and springs. Site and habitat inventories are 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: <a href="http://nris.msl.mt.gov/">http://nris.msl.mt.gov/</a></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: <a href="http://dnrc.mt.gov/divisions/cardd/sage-grouse?">http://dnrc.mt.gov/divisions/cardd/sage-grouse?</a></p>	<p>[Y] The applicant is encouraged to contact and consult with the Sage Grouse Habitat Conservation Program at: <a href="https://sagegrouse.mt.gov/">https://sagegrouse.mt.gov/</a>. If the project is located in Sage Grouse core habitat, applicable documentation from the DNRC Sage Grouse program is required. The document(s) provided must list any applicable conditions on the proposed wastewater treatment system. For more information, please refer to the respective application Form NOI-MTXG03.</p>
<p>8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[Y] 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>
<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?</p>	<p>[N] No significant impacts have been identified. Most drainfields are constructed sub surface. Most wastewater treatment systems are enclosed within buildings located on pre-disturbed lands previously used for agriculture practices.</p>
<p>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?</p>	<p>[N] No significant impacts have been identified.</p>
<p>11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] No significant impacts have been identified.</p>

<b>IMPACTS ON THE HUMAN ENVIRONMENT</b>	
12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No significant impacts have been identified.
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.	[Y] The construction of new wastewater treatment systems and discharge structures may result in the creation of several temporary jobs until construction is completed. The operation and maintenance of the wastewater treatment system may also result in permanent jobs.
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. Traffic may increase during the construction of any new wastewater treatment systems and discharge structures. Once construction is complete, there may be minimal traffic for the operation and maintenance of the wastewater treatment system.
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[Y] Wastewater treatment systems may be owned and operated by local communities or sewer districts. These systems are a vital tool in protection of their public and environmental health.
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] No significant impacts have been identified.
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No significant impacts have been identified.
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No significant impacts have been identified.

<b>IMPACTS ON THE HUMAN ENVIRONMENT</b>	
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No significant impacts have been identified.
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] No significant impacts have been identified.
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] No significant impacts have been identified.
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 redesign and creation of wastewater systems that are exempt from permitting requirements. Having more non-permitted systems may result in an overall negative impact to ground water quality as they are not required to comply with permit conditions that 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:**

Cumulative effects were analyzed as part of this permitting determination. No cumulative impacts have been identified. The treated wastewater must meet all ground water quality standards and nondegradation-nonsignificance criteria prior to discharge (see Fact Sheet). As no dilution is needed, the permit prohibits pollution and degradation of state waters prior to discharge (at end-of-pipe).

26. **Summary of Magnitude and Significance of Potential Impacts:**  
Impacts were assessed with the assumption that the facilities 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 issue the 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 **June 22, 2016**. Comments may be directed to:

[DEQWPBPublicComments@mt.gov](mailto:DEQWPBPublicComments@mt.gov)

or,

Department of Environmental Quality  
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. The Department will respond to all substantive comments pertinent to this permitting action and may issue a final decision within 30 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 the Department'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 Water Protection Bureau at (406) 444-3080 or email Jenna Stamper at [JStamper@mt.gov](mailto:JStamper@mt.gov). All inquiries will need to reference the permit number (ADWT GP - MTXG03), and include the following information: name, address, and phone number.

During the public comment period provided by the notice, the Department 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 (ARM 17.30.1373).

For additional information concerning the ADWT GP, or the information, documents, and procedures discussed in this Fact Sheet, please contact the Water Protection Bureau at (406) 444-3080. Note: comments pertaining to the public comment period may not be submitted over the phone.

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

**Analysis:**

Montana Natural Heritage Program

Montana Bureau of Mines and Geology web site

Natural Resource Information System, Montana State Library

Historical Preservation Society

United States Department of Agriculture, Natural Resources Conservation Service Soil Survey

**EA Checklist Prepared By:**

Chris Boe

April, 2016

**Approved By:**

Jon Kenning, Chief  
Water Protection Bureau

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Signature

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Date