

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Permitting and Compliance Division
Water Protection Bureau

Name of Project: Parcel #698800

Type of Project: Proposed discharge of treated domestic wastewater into ground water via a subsurface drainfield under the Montana Ground Water Pollution Control System (MGWPCS) permit program.

Location of Project: Northwest ¼ of Section 6, Township 5 North, Range 20 West

City/Town: Hamilton

County: Ravalli

Description of Project: This Environmental Assessment (EA) is for a new MGWPCS permit for Parcel #698800 (facility). The proposed MGWPCS permit authorizes Lee Foss (permittee) to discharge treated wastewater from a subsurface drainfield (designated as one discharge structure, Outfall 001) into Class I ground water.

Agency Action and Applicable Regulations: The proposed action is to issue an 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 (October 2012).

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
<p>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?</p>	<p>[N] The discharge will increase the amount of moisture in the vadose zone. No limiting layers were identified in the soil profile.</p>
<p>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?</p>	<p>[N] A standard ground water mixing zone is authorized by the Department; the approved mixing zone does not leave the property boundary. The ground water in the vicinity of Outfall 001 is Class I ground water with a specific conductance less than 1,000 $\mu\text{S}/\text{cm}$. The Department developed end-of-pipe numeric effluent limits such that, unless exceeded, the water quality standards outside of the approved mixing zone will be met.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] No significant impacts have been identified.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[Y] The construction of the wastewater treatment system will alter the current land use (agriculture). Based on a search of the Natural Heritage Database, there are not any vegetative species listed as either S1 or S2 for this section of Ravalli County in the vicinity of the facility.</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] Based on a search of the Natural Heritage Database, there are two species listed as either S1 or S2 in the vicinity of the facility: the Westslope cutthroat trout and the bull trout. Neither of these species is found in either the first receiving water (Class I ground water) or the nearest downgradient surface water (the spring beyond the northwest boundary of the parcel on the opposite side of US 93). Information provided during the public comment period indicates that elk may use the site during the winter.</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. Site and habitat inventories for the applicable species were recommended in consultation with the Montana Natural Heritage Program.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] No significant impacts have been identified. The Montana State Historic Preservation Office (MSHPO) recommends that in the event that cultural materials are inadvertently discovered the permittee should contact the MSHPO office for investigation.</p>
<p>8. 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. The proposed location for the drainfield is subsurface. The proposed location for the wastewater treatment system is inside a building.</p>
<p>9. 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. The Department analysis indicates that the water quality standards will not be exceeded outside of the standard mixing zone for the parameters expected in the effluent. Monitoring and reporting requirements of the effluent ensures the identification of significant variations in the wastewater.</p>
<p>10. 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>

IMPACTS ON THE HUMAN ENVIRONMENT

<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N] No significant impacts have been identified.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[Y] Land that is currently used for agriculture will be removed from production.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[Y] The construction of the wastewater treatment system and discharge structure will result in the creation of several temporary jobs until construction is completed. The operation and maintenance of the wastewater treatment system may result in the creation of a small number of part-time permanent jobs.</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N] No significant impacts have been identified.</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>[N] Traffic may increase during the construction of the wastewater treatment system and drainfield. Once the construction of the wastewater system and discharge structure is complete, there will be minimal traffic for the operation and maintenance of the wastewater treatment system.</p>

IMPACTS ON THE HUMAN ENVIRONMENT

<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] No significant impacts have been identified.</p>
<p>17. 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?</p>	<p>[N] No significant impacts have been identified.</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N] No significant impacts have been identified.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] No significant impacts have been identified.</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N] No significant impacts have been identified.</p>
<p>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>[N] No significant impacts have been identified.</p>
<p>22(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.</p>	<p>[N] No significant impacts have been identified.</p>
<p>22(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.</p>	<p>[N] No significant impacts have been identified.</p>
<p>22(c). PRIVATE PROPERTY IMPACTS: If the answer to 22(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.</p>	<p>[N] No significant impacts were identified in 22(b).</p>

23. **Description of and Impacts of other Alternatives Considered:**
- A. No Action: Under the "No Action" alternative, the Department would not issue an individual ground water discharge permit under the Montana Ground Water Pollution Control System administrative rules. The proposed action will have environmental benefits compared to leaving the facility unpermitted.
- B. Approval with Modification: The Department has not identified any necessary modifications to grant approval.
24. **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.
25. **Cumulative Effects:** The issuance of this individual MGWPCS discharge permit would not have cumulative effects because the permit prohibits pollution and degradation of state waters.
26. **Preferred Action Alternative and Rationale:** The preferred action is to issue an 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.

27. **Public Involvement:** This EA was posted on DEQ's web page: <http://deq.mt.gov/notices/WQnotices.mcp.x>. DEQ also maintains a list of persons who have expressed an interest in all environmental water quality related issues. DEQ sent a copy of this document to all persons who have submitted their name, address, and

telephone number to DEQ for the purpose of being included on the water quality interested parties' mailing list.

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

Montana Natural Heritage Program
Montana Bureau of Mines and Geology web site
Montana Fish, Wildlife and Parks, Montana Fisheries Information System (MFISH)
Montana Fish and Wildlife web site, animal species information web page
Natural Resource Information System, Montana State Library
Historical Preservation Society
United States Department of Agriculture, Natural Resources Conservation Service
Soil Survey

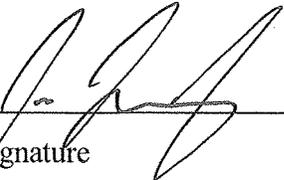
EA Checklist Prepared By:

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November 13, 2014

Approved By:

Jon Kenning, Chief
Water Protection Bureau
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Signature

November 17, 2014

Date

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