

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment**

Water Protection Bureau

Name of Project: Montana Artesian Water Company

Type of Project: Drinking Water
Bottling Plant

Location of Project: 1085 Egan Slough Road

City/Town: Kalispell

County: Flathead

Description of Project:

Montana Artesian Water Company has applied for an Montana Pollutant Discharge Elimination System (MPDES) permit to discharge effluent from a drinking water bottling facility. Water would be drawn from an onsite, artesian, public water supply well, bottled, and sold as drinking water. For a more detailed description of the project please see the Fact Sheet prepared for the facility which includes a facility site map. The same water bottled for drinking would be used for two purposes that result in a discharge of effluent to be authorized by the proposed permit:

1. Non-contact heating water, which is an enclosed heating system. Water flow rate through the heating system is expected to be variable depending upon the heating needs of the facility at a given time with a maximum discharge rate of 60 gallons per minute (gpm). This water does not come into contact with any process or product and is discharged to an unnamed tributary to the Flathead River (receiving water) via a pipe (Outfall 001).
2. Drinking water bottle rinsate, which is the water used to rinse the drinking water bottles, as a cleaning step, prior to the bottles being filled with drinking water. This rinsate water would be discharged to the receiving water via a second pipe (Outfall 002). Discharge flow from the rinsing process through outfall 002 is expected to be a maximum of 5 gpm. The projected rinsate water quality is shown in Table 1 of the permit fact sheet.

Agency Action and Applicable Regulations:

The MPDES permit regulates point source discharge of pollutants to state surface waters. The permit includes monitoring requirements and effluent limits to protect the beneficial uses of state surface waters.

The agency action is to issue an MPDES permit to Montana Artesian Water Company for a five-year period.

ARM Title 17, Chapter 30, Sub-chapter 2 – Water Quality Permit Application and Annual Fees.
ARM Title 17, Chapter 30, Sub-chapter 5 – Mixing Zones in Surface and Ground Water.
ARM Title 17, Chapter 30, Sub-chapter 6 – Surface Water Quality Standards.
ARM Title 17, Chapter 30, Sub-chapter 7 – Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Sub-chapter 12 – MPDES Effluent Limitations and Standards,
Standards of Performance, and Treatment Requirements
ARM Title 17, Chapter 30, Sub-chapter 13 – MPDES Permits
Montana Water Quality Act, MCA 75-5-101 et seq.

Summary of Issues:

- Technology-based effluent limitations (TBELs) based on federal effluent limitation guidelines are applicable to the facility and have been included in the proposed permit for biochemical oxygen demand, total suspended solids, and pH. See Part I.B of the proposed permit.
- Water quality-based standards result in a more stringent limitation than the appropriate TBEL and have therefore been included in the proposed permit for oil and grease. See Part I.B of the proposed permit.
- The public has raised concerns regarding the volume, or quantity, of ground water approved for removal from the aquifer and the potential effect on neighboring wells. Public concerns regarding traffic, noise, and generation of dust have also been expressed regarding this project.

Affected Environment & Impacts of the Proposed Action:

Y = Impacts may occur.

N = Not present or No significant impact expected.

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] The discharge flow into the receiving water body is not expected to have any adverse impacts on the geology, soil quality or stability.
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] The MPDES permit includes effluent limits, monitoring requirements and other permit conditions that will ensure the water quality standards are protected. The permitted outfalls will cause a slight increase in water quantity within the receiving water. The Department of Natural Resources and Conservation (DNRC) EA for Water Use Permit 76LJ30102978, completed January 7, 2016 evaluated the ground water withdrawal DEQ considered the ground water withdrawal in determining no significant impacts are expected.
3. AIR QUALITY: Will pollutants or particulates be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] An increase in local traffic may occur with the potential to increase dust. However, the increase particulate matter would be short-lived and not significant. Flathead County has approved a road approach for this project (AE-2937).
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Seven plant species of special concern were identified by the Montana Natural Heritage Program to potentially be in the project area. This project is located in a well-developed residential and agricultural area and it is not anticipated that any of the species of concern will be impacted by the proposed project (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016).
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] Effluent limits and permit conditions will ensure water quality standards for aquatic life are protected.

IMPACTS ON THE PHYSICAL ENVIRONMENT

<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] Eleven animal species and seven plant species of special concern were identified by the Montana Natural Heritage Program to potentially be in the project area. The discharges to the unnamed tributary are proposed to be located approximately 1,300 feet from the confluence of the receiving water with the Flathead River which is considered Bull Trout habitat (a threatened species) at this location. The permit limits will protect aquatic life in the receiving water prior to its confluence with the Flathead River and will prevent impacts to Bull Trout. This project is located in a well-developed residential and agricultural area and it is not anticipated that any of the species of concern will be impacted by the proposed project (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016). During a site visit on April 11, 2016, DEQ did not identify any wetlands impacted.</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: http://dnrc.mt.gov/divisions/cardd/sage-grouse? If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.</p>	<p>[N] The Department has verified the facility is not within core, general, or connectivity sage grouse habitat.</p>
<p>8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] The building for the project is already constructed and the project is located entirely on private property. No known historical or archaeological sites are present.</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] The bottling facility building is constructed as verified on the April 11, 2016 site visit. The area is moderately developed. The constructed building is not located on a prominent topographic feature and due to the surrounding developed land; this is not a scenic area.</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 powerline or other energy source be needed)</p>	<p>[N] The project will use groundwater as its source water; however, water rights issues are regulated by the Montana Department of Natural Resources and Conservation (see DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016). DEQ has not identified other nearby activities affecting the project.</p>
<p>11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] Not present. No other nearby activities that would affect the project are known.</p>

IMPACTS ON THE HUMAN ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N] Effluent limits and permit conditions will ensure water quality standards for protection of human health are protected.</p>

IMPACTS ON THE HUMAN ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N]
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] The operation of the facility may create additional employment.
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Operation of a new business has the potential to create tax revenue. In addition, fees are required to apply for and maintain an MPDES permit. However, these fees are not significant.
16. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] Flathead County has already approved a road approach authorization for the project (AE-2937). An increase in local traffic on county roads will occur. Impact on roads and transportation in the area is unknown.
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] Applicant must comply with all applicable federal, state, county, and other local requirements related to zoning, authorizations, permits, and approvals.
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] Not present.
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] Given that the area is moderately developed it is unlikely that the operation of the facility would alter the density and distribution of housing or population.
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] The area is an existing community within a moderately developed area.
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]

IMPACTS ON THE HUMAN ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
23(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(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]

24. Description of and Impacts of other Alternatives Considered:

No action alternative: Deny issuance of the permit. Permit denial would require the applicant to find other, potentially more costly alternatives for effluent disposal or potentially prevent the discharge-generating activity from being possible.

25. Summary of Magnitude and Significance of Potential Impacts:

The discharges from Outfall 001 and Outfall 002 are regulated by the conditions of the proposed permit. The permit conditions ensure that all beneficial uses of the receiving water are protected and the discharges will not cause significant changes in existing water quality.

26. Cumulative Effects:

There are no other permitted discharges to the unnamed tributary to the Flathead River and the permit conditions ensure there will be no significant changes to existing water quality prior to the receiving water confluence with the Flathead River. The nearest permitted discharges to the Flathead River are located several miles upstream of the Montana Artesian site. There are no known cumulative effects from these discharges.

Cumulative effects resulting from other State actions at this site are generally related to water appropriation for the project's water supply well and potential effects on water availability in other nearby water supply wells. These concerns are addressed in the ongoing analysis conducted by DNRC. See also the EA for Water Use Permit 76LJ30102978, completed January 7, 2016.

The public water supply well (source water well for the project) was reviewed by DEQ and no significant impacts were found, EQ#15-1097, EA completed August 13, 2014.

The process for treating the water prior to bottling is also subject to State review and will undergo a separate MEPA analysis (EQ#16-1158).

Operation of the facility will likely cause indirect effects related to increased traffic and generation of nuisance dust on local roadways. Even if the no action alternative were selected, and this discharge permit denied, these indirect effects could still occur if the applicant elected to continue the operation of the facility and dispose of wastewater via a method that did not require a discharge to state waters.

27. Preferred Action Alternative and Rationale:

The preferred action is to issue the MPDES permit. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit while allowing the applicant to proceed with their intended project.

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 (MEPA) because the project lacks significant adverse effects to the human and physical environment.

28. Public Involvement:

A 35-day public comment period will be held. In addition to the public comment period public hearing will be held on August 1, 2016, at the Creston School. DEQ will be accepting oral comments at the public hearing and will respond in writing to all substantive comments at a later date.

29. Persons and agencies consulted in the preparation of this analysis:

DNRC EA for Water Use Permit 76LJ30102978, completed January 7, 2016, by Nathaniel T. Ward

DEQ EQ#15-1097, EA completed August 13, 2014, by Emily J. Gillespie, P.E.

DEQ EQ#16-1158, EA pending; contacted Denver Fraiser.

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EA Prepared By:

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DEQ Water Protection Bureau, May 31, 2016

Approved By:

Jon Kenning, Chief
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Date