

DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Permitting and Compliance Division
Water Protection Bureau

Name of Project: Skyview Water and Sewer Utility

Type of Project: Discharge of residential strength wastewater to ground water from a subsurface drainfield.

Location of Project: Northeast ¼ of Section 7, T11N, R3W; or 46° 43' 44" North Latitude and 112° 01' 22" West Longitude.

City/Town: Helena

County: Lewis and Clark County

Description of Project: AquaFlo, LLC applied for a renewal Montana Ground Water Pollution Control System permit for the discharge of domestic wastewater associated with the Skyview Water and Sewer Utility wastewater treatment system. The previous permit was issued on November 1, 2005 and was later modified on January 26, 2009 to reflect transfer of ownership. The permit expired on February 28, 2008.

Phases I, II, III and IV of the Skyview subdivision; and the adjoining Northwest Major and Northwest Minor subdivisions consists of 140 single-family residences and six commercial business. The Skyview WWTS has a design capacity of 30,660 gallons per day and consists of individual septic tanks with effluent filters, recirculation pump tanks, three recirculating sand filters (RSF), four drainfield dosing tanks, and distribution lines. The discharge is cycled between four zones within a single drainfield.

The proposed permit renewal authorizes the permittee to discharge treated domestic wastewater to ground water from a subsurface drainfield identified as outfall 002. Outfall 002 is approximately 2150 feet in width and is located along the southern edge of the Skyview subdivision bordering the North Star subdivision. It is situated in the northeast quarter of Section 7, Township 11 North, Range 03 West or 46° 43' 44" North Latitude and 112° 01' 22" West Longitude in Lewis and Clark County, Montana.

An Environmental Assessment (EA) was earlier completed for Golden Estates in June 2005 by the Montana Department of Environmental Quality. The EA recommended that no further analysis would be needed.

The receiving ground water classification is Class I.

Agency Action and Applicable Regulations: The proposed action is to issue an individual MGWPCS permit that has effluent limits and effluent monitoring requirements. The permit is issued under the authority of the Montana Water Quality Act 75-5-101 *et seq.* Montana Ground Water Pollution Control System Administrative Rules of Montana (ARM) 17.30.1001-1070, and Montana Numeric Water Quality Standards in the Department Circular DEQ-7 (February 2008).

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 applicant to implement,

monitor, and management practices to prevent pollution and degradation of groundwater. Refer to the June 2005 EA for further details.

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] Discharge will increase moisture in the vadose zone. There are no limiting layers present in the soil profile that would impede continued treatment of effluent discharged from the drainfield. The water bearing formation is unconfined.
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] A standard 500-foot mixing zone laying above Class I ground water with a historical specific conductance of less than 1,000 µmhos. Department conducted modeling analysis, indicated there would be no water quality or nondegradation significance limits exceeded outside of mixing zone for all parameters expected in the effluent. Static water levels in the immediate area average 69 feet below the surface. Refer to the June 2005 EA for further details. See statement of basis.
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 determined.
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. No major disturbances to vegetation are proposed. Refer to the June 2005 EA for further details.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] No significant impacts have been identified. The closest surface water capable of receiving ground water (Silver Creek) is approximately 14,700 feet downgradient of the discharge location.
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?	[N] No significant impacts have been identified from the EA, however the Montana National Heritage Program identified the following species of concern are present in the area of the discharge: <i>Cynomys ludovicianus</i> and <i>Canis lupus</i> .
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No significant impacts have been identified from the EA. The Montana State Historic Preservation Office reported that there have been no previously recorded sites within the designated search locales.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from	[N] No significant impacts have been identified. The wastewater treatment system is above grade, however they

IMPACTS ON THE PHYSICAL ENVIRONMENT	
populated or scenic areas? Will there be excessive noise or light?	are not aesthetically unappealing.
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 powerline or other energy source be needed?	[N] No significant impacts have been identified from the EA. Static water levels in the immediate area average 69 feet below the surface. Potential for ground water depletion is minimal. Refer to the June 2005 EA for further details.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] No significant impacts have been identified during EA preparation.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No significant impacts have been identified. The wastewater treatment facility should employ a fence on the perimeter of the property, and furnace a locking gate.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No significant impacts have been identified.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No significant impacts have been identified. As this is an existing system, no new jobs could be expected to be created.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No significant impacts have been identified.
15. 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.
16. 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.
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?	[N] No significant impacts have been identified.
18. 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.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No significant impacts have been identified.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No significant impacts have been identified.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No significant impacts have been identified.
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.	[N] No significant impacts have been identified.
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.	[N] No significant impacts have been identified.
22(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] No significant impacts have been identified.

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.

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 permittee will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. In preparing permit effluent limits, the Department has taken steps to ensure that beneficial uses of the receiving water are preserved and exceedance of water quality standards will not occur, which includes that the discharge will remain "nonsignificant", as required by ARM 17.30.subchapter 7 "Nondegradation of Water Quality". The Department provides assistance to applicants in understanding and implementing the requirements of the permit and conducts periodic inspections of permitted facilities, where potential problems with design or management practices

might be identified. If violations of the permit do occur, the Department will take appropriate action under the water quality act (Section 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 the individual MGWPCS discharge permit. This action is preferred because 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:

- 27. Public Involvement: A 30-day public comment period will be from September 21st through October 22, 2009. A public hearing has not been scheduled.
- 28. Persons and agencies consulted in the preparation of this analysis:
 - Damon Murdo, Cultural Records Manager, Historical Preservation Society
 - Montana Bureau of Mines and Geology Web site
 - Montana Fish and Wildlife Web page, animal species information
 - Natural Resource Information System, Montana State Library

EA Checklist Prepared By:

Chris Boe

August 24, 2009

Approved By:

Jenny Chambers, Chief
Water Protection Bureau

Date