

DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)
Environmental Assessment

Permitting and Compliance Division
Water Protection Bureau

Name of Project: F.H. Stoltze Land & Lumber Company Cogeneration Facility

Type of Project: Cogeneration Facility

Location of Project: 600 Halfmoon Road
Columbia Falls, MT 59912
Section 2, Township 30 North, Range 21 West

City/Town: Two miles northwest of Columbia Falls, Montana

County: Flathead

Description of Project: This proposed permit is associated with the proposed Stoltze Cogeneration Facility located approximately two miles northwest of Columbia Falls, Montana. Stoltze is replacing the existing onsite boilers with a new cogeneration facility on the existing Stoltze Lumber Mill site. The facility will include a new wood-fired boiler and also a new electrical generation facility. The steam generated from the boilers will be used in heating the buildings, drying of lumber, and in the generation of 2.5 megawatt of electricity from the steam-turbine generator.

The proposed permit authorizes the discharge of wastewater streams associated with the operation and maintenance of the boiler and the associated cooling tower. The contributing wastewater streams include: multi-media filter backwash, cooling tower bleed, water softener backwash/regeneration, reverse osmosis concentrate (filtride), air compressor condensate, and floor drains.

The receiving water for the proposed discharge structure (Outfall 001) is shallow ground water. The receiving water is Class II ground water as defined in ARM 17.30.1006(2). Outfall 001 is recognized as a disposal (infiltration) pond which is proposed as the sole discharge structure for all collected wastewater sources. The disposal pond has been proposed to be situated in the southeast ¼ of Section 2, Township 30 North, Range 21 West, or 48.38722° North Latitude and -114.24861° West Longitude.

In addition to the pending MGWPCS permit, the applicant is authorized under the Montana Pollution Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activity, MTR000019. The applicant also maintains a department Air Quality Permit #2934-01, Public Water Supply approval pursuant to 75-6-101, Montana Code Annotated (MCA) et seq., and Class III Solid Waste Management System licenses.

This checklist Environmental Assessment is specifically targeted at potential water quality impacts due to discharge under the proposed MGWPCS permit number MTX000228 and is tiered to Montana Environmental Policy Act (MEPA) analysis and disclosure conducted during permitting to the Montana Air Quality Permit (MAQP) #2934-01.

Agency Action and Applicable Regulations: The proposed action is to issue an individual MGWPCS permit that contains 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 (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 applicant to implement, monitor, and manage practices to prevent pollution and degradation of state waters.

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] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. Based on the proposed activity, the applicant has modeled potential ground water mounding of the receiving ground water bearing unit using generalized ground water flow modeling software (MODFLOW). The model estimated a predicted rise of 1.18 feet occurring which results in minor ground water mounding. The applicant has predicted that the minor mounding influence will not result in the water table rising above ground surface level. See MEPA analyses for MAQP 2934-01 for additional analysis.
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 permit contains numeric effluent limits as based on applicable water quality standards for Class II ground water, nondegradation significance criteria, and an authorized 500 foot length mixing zone. Discharges in compliance with the limitations of the developed MGWPCS permit constitute nonsignificant degradation.

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	Based on information provided within the application and supplemental materials, the applicant has not demonstrated interference with or a threat to the beneficial use of the receiving water. Refer to bullet #24 below (Summary of Magnitude and Significance of Potential Impacts).
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] The facility currently maintains and is compliant with MAQP permit #2934-01. See MEPA analyses for MAQP 2934-01 for additional analysis.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. Also refer to #6 below regarding regionally listed sensitive species below.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. The permit contains numeric effluent limits as based on applicable water quality standards for Class II ground water, nondegradation significance criteria, and an authorized 500 foot length mixing zone. Discharges in compliance with the limitations of the developed MGWPCS permit constitute nonsignificant degradation. Based on information provided within the application and supplemental materials, the applicant has not demonstrated interference with or a threat to the beneficial use of the receiving water. See MEPA analyses for MAQP 2934-01 for additional analysis. Also refer to bullet #24 below (Summary of Magnitude and Significance of Potential Impacts).
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] The Department believes that this project has a low likelihood of impacting fragile or limited environmental resources. The Montana National Heritage Program has not identified any species of concern which commonly reside in the immediate area of the discharge; however the following sensitive species were listed to be in the overall regional area: <i>Lathyrus bijugatus</i> , <i>Cypripedium parviflorum</i> , <i>Dolichonvx orzivorus</i> , and <i>Oncorhvnchus clarkia lewisi</i> . All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed)

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	industrial site.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] The Department believes that this project has a low likelihood of impacting cultural properties. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project the State Historic Preservation Office (SHPO) should be contacted.
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?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site.
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] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. Potential for ground water depletion or excessive demands on other environmental resources is minimal. The project will use existing source water supply water wells as discussed within the MGWPCS fact sheet document.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. See MEPA analyses for MAQP 2934-01 for additional analysis.

IMPACTS ON THE HUMAN ENVIRONMENT	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of the existing lumber mill complex which is an existing (disturbed) industrial site. The permit contains numeric effluent limits as based on applicable water quality standards for Class II ground water, nondegradation significance criteria, and an authorized 500 foot length mixing zone. Discharges in compliance with the limitations of the developed MGWPCS permit constitute nonsignificant degradation. Based on information provided within the application and supplemental materials, the applicant has not demonstrated interference with or a threat to the beneficial use of the receiving water. See MEPA analyses for MAQP 2934-01

IMPACTS ON THE HUMAN ENVIRONMENT	
	for additional analysis.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] The proposed project will not result in significant impacts. The proposed facility is located within an existing industrial site. The existing boilers will be replaced by a cogeneration facility which will produce functional heat and electricity.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Construction of the proposed facility may result in a temporary increase and potentially create additional permanent employment positions.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Proposed operation of the facility may result in generation of 2.5 megawatt of electricity which may be placed onto the local power grid. This may result in additional tax revenue.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] The proposed project may not result in additional government services. All proposed activities would take place within an existing industrial site.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] All proposed activities would take place within an existing and historical industrial site.
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] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of an existing and historical industrial site.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of an existing and historical industrial site.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of an existing and historical industrial site.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of an existing and historical industrial site.

IMPACTS ON THE HUMAN ENVIRONMENT	
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary of an existing and historical industrial site.
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] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary belonging to the permittee.
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] The proposed project will not result in significant impacts. All proposed activities would take place within the defined property boundary belonging to the permittee.
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.	[N] No significant impacts were identified in 22(b).

23. **Description of and Impacts of other Alternatives Considered:** None

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 (75-5-617, MCA). Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

