Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Note: Instructions to DNRC staff for preparing this EA can be found at:
http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: Thompson River Lumber Co. of Montana
PO Box 7338
Kalispell, MT 59904

2. *Type of action*: Application to Change a Water Right 76N 30019829

3. *Water source name*: Clark Fork River

4. *Location affected by action*: NW¼ SE¼, Section 13, Township 21N, Range 29W, Sanders County.

5. *Narrative summary of the action to be taken, proposed project, purpose, and benefits*: The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311, MCA are met. The applicants are seeking to change a portion of an existing right for industrial use to power generation purposes. The power generated by Thompson River Co-Gen (TRC) plant will provide electrical power for use at the adjacent Thompson River Lumber Company (TRL), as well as up to 9000 Montana homes. The flow rate of 300 gpm is based upon system design and the volume is per historical use at TRL. The water will be pumped directly from the Clark Fork River in a shared pipeline. A computer-controlled valve will divert up to 250 gpm to TRC, the rest going to an existing 100,000 gallon cistern for use by TRL. During the power generation process, approximately 150 gpm will be used by the cooling tower, which will all evaporate. Some of the steam will be diverted to TRL for use in the kiln and building heating. Twenty-five gpm will be used as plant operational water; the boiler 'make-up' water will consume an additional twenty-five gpm. Fifty gpm, commonly called "blow down" water will be bled off the system. The blow down water and any floor drain water will be collected in a 9000-gallon buried storage tank. From the storage tank the water can be treated on site in a new wastewater treatment facility, or stored in a lined evaporation pond designed by Morrison-Maierle. The pond will have a capacity of approximately 34 acre-feet and the liner will ensure no discharges to groundwater. By treating all of the "blow down" water a discharge permit would not be required. Water from the pond may be used for TRL. Up to 80.4 acre-feet (AF) may be pumped from the pond for log watering. An additional 7.4 AF could be used for dust abatement. Using the storage evaporation pond for dust abatement and log watering will require approval from the Department of Environmental Quality (DEQ). Any mitigation measures deemed

necessary for a discharge permit will be in accordance with DEQ regulations. TRC may use up to 32.2 AF to provide steam to TRL for operation of the kiln and building heating. The appropriator will benefit from selling the power and an increased power supply benefits the State.

6. *Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)*

Fish, Wildlife & Parks
State Historic Preservation Office
Montana Natural Heritage Program
Montana Department of Environmental Quality

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: The source is not identified as chronically or periodically dewatered.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: This segment of the Clark Fork River is identified on the Montana 303(d) list as water quality impaired. The list shows only partial support for cold-water fish, and does not support drinking water. It does fully support recreation, aquatic life, agriculture and industry. The application is to add power generation to an existing industrial water right and should not affect water quality. All water diverted is consumed on-site and will not be returned to the river.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: The use of water from the Clark Fork River should not impact groundwater quality or supply. Water from the river has been used for industrial purposes (sawmill) at this site since at least 1954. The power generation facility requires a retention pond to accommodate the 'blow down' water discharged from the plant. The pond has a capacity of 34 acre-feet, and must be constructed with either an HDPE or PVC liner to ensure that no discharge occurs into the aquifer. Water quality compliance will be regulated by the DEQ.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: Twin 25 horsepower Gould's centrifugal pumps will divert water from the Clark Fork River. The amount of water used in power generation will be controlled by a computer operated valve system. Upon demand, the valves will open and the delivery pumps will function. The timing of the diversions will be similar to the historic use of water at this site. There should be no new impacts.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The Montana Natural Heritage Program was contacted to determine proximity of threatened or endangered species, if any. Bull Trout are currently endangered throughout most of Western Montana. Fish, Wildlife & Parks determined there would be no adverse impact because Bull Trout spawn in the headwaters of a drainage. They rear in these headwaters for two to three years at which time they reach 6 to 9 inches long before moving downstream to deeper water. By the time they move in to the river they are large enough the low velocity water intake does not pose a danger to this sub-adult size fish. The area is shown as habitat for Grizzly Bear and Lynx, however, the sawmill has been at the location for more than 50 years so there should be no new impact from the power generation facility.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: This development is not in a wetland area.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: The project includes one pond for discharge water. It will not impact existing wildlife, waterfowl or fish. The pond will be constructed and operated in accordance with DEQ regulations. It will be lined to prevent groundwater contamination. A net will cover the pond to mitigate impact to wildlife and waterfowl.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: A field investigation of the Thompson River Lumber Company site found the soil is not heavy in salts. If the dust abatement use is authorized by the DEQ saline seep should not be a concern.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: The mill site does not have vegetative cover and the production of power will not result in the establishment or spread of noxious weeds. There will not be an impact to the very limited vegetation found growing at the mill site.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: An updated air quality permit is required. Impacts, if any, will be identified and mitigated through the air-quality permitting process by the DEQ.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: The Co-Gen plant is completed on site at the existing Thompson River Lumber Company. The State Historic Preservation Office did not identify any historic or archeological sites in this section.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: This change is to add the option of power generation to an existing water right for industrial use. The Co-Gen plant has an existing right to use water from a groundwater well. Water from the well has a higher mineral content than water from the river. The settling pond is used to precipitate excess minerals out of the water. Use of water from the Clark Fork River for the Co-Gen plant would result in a smaller amount of 'blow down' water that would have to be cycled through the settling pond.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: The project is consistent with the land uses of the area. TRL has been in operation for decades and the old Champion Timberlands re-sort yard where logs were sorted is within a ½-mile of the TRC site. In short, the general area has been used and continues to be used for industrial purposes. The Co-Gen plant has already been constructed.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: There will be no impact to the quality of recreation or wilderness activities nor will access be denied to any established recreation areas.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: Local residents have voiced concern regarding air quality. An updated air quality permit from the DEQ will assess and identify any impact related to air quality. Mitigation measures, if necessary, will be in accordance with the issuance of the air quality permit. Lining the evaporation pond should prevent any contamination of the shallow aquifer or the river.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes___ No_X_. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: Private property rights are not impacted or regulated by this proposed action. The right to use water belonging to the State of Montana will become a property right if approved.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? No

(b) Local and state tax base and tax revenues? A viable operating power generation plant should increase the local tax revenues. This change will allow the plant to operate more efficiently.

(c) Existing land uses? No

(d) *Quantity and distribution of employment?* No

(e) Distribution and density of population and housing? No

(f) Demands for government services? No

(g) Industrial and commercial activity? Yes

(h) Utilities? No

(i) Transportation? No

(j) Safety? No

(k) Other appropriate social and economic circumstances? No

2. *Secondary and cumulative impacts on the physical environment and human population:* An application for an air quality permit has been submitted and a wastewater

discharge permit is optional with the on-site wastewater treatment facility. If necessary, TRC can treat all of the "blow down" and "floor drain" water. Water quantity impacts are negligible. Secondary and cumulative impacts should be addressed by the Sanders County planning department.

3. ***Describe any mitigation/stipulation measures:*** There are no mitigation/stipulation measures necessary for the action being requested of this agency.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** No action would increase the costs of operating the Co-Gen plant. Water from the well requires more treatment than a similar amount from the river. A reasonable alternative would be to use water from the Clark Fork River for all of the power generation requirements. A permit to allow this option is still pending with DNRC.

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant impacts have been identified, therefore an EIS is not necessary.

Name of person(s) responsible for preparation of EA:

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Title: Water Resources Specialist
Date: August 31, 2006