

Exhibit 17

Excerpt from Updated Monitoring Plan for the Flambeau Project
July 1991

UPDATED MONITORING PLAN
for the
FLAMBEAU PROJECT



Prepared for:
FLAMBEAU MINING COMPANY

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Upon arrival at the site for sampling, one or two weeks later, water quality sampling all "wasted" water obtained from the lysimeter during sampling will be captured or the volume estimated. Upon completion of the sampling, the lysimeter will be pumped and the volume of water measured. This volume divided by the time since the last purging (one or two weeks prior) will then be used to determine volume and flow rates of water captured by the lysimeter.

2.4 Surface Water

Water-quality based effluent limitations have been established for the surface water discharges from the Flambeau Project. These limitations are designed to protect the sensitive components of the aquatic environment and they incorporate bioaccumulation and bioconcentration considerations in their development. The treatment technology to be installed for the Flambeau Project in order to meet these very strict effluent limitations is advanced and the best economically available system.

The purpose of the WPDES permit, therefore, is to protect the Flambeau River environment and the public health and welfare. Monitoring of the effluent for specific chemical parameters, together with bioassay tests provides the most direct and reliable measure of whether the effluent is within permit limits and whether it is toxic to aquatic life.

Monitoring of the Flambeau River in the vicinity of the discharge can also be undertaken to demonstrate the effectiveness of the effluent limits in protecting the environment. The Flambeau River, its sediments and aquatic life are influenced by a variety of factors not related to the mine site. It is estimated that the discharge from the Flambeau Project will constitute approximately one percent of the low flow (one-quarter of the 7Q10) of the river. As a result, should monitoring show changes in the chemical constituents in the Flambeau River, its sediments or aquatic life, they may not be directly related to the project.

Flambeau recognizes WDNR's interest in a secondary surface water monitoring program and believes such a program can provide information on the Flambeau River apart from serving regulatory or enforcement purposes.

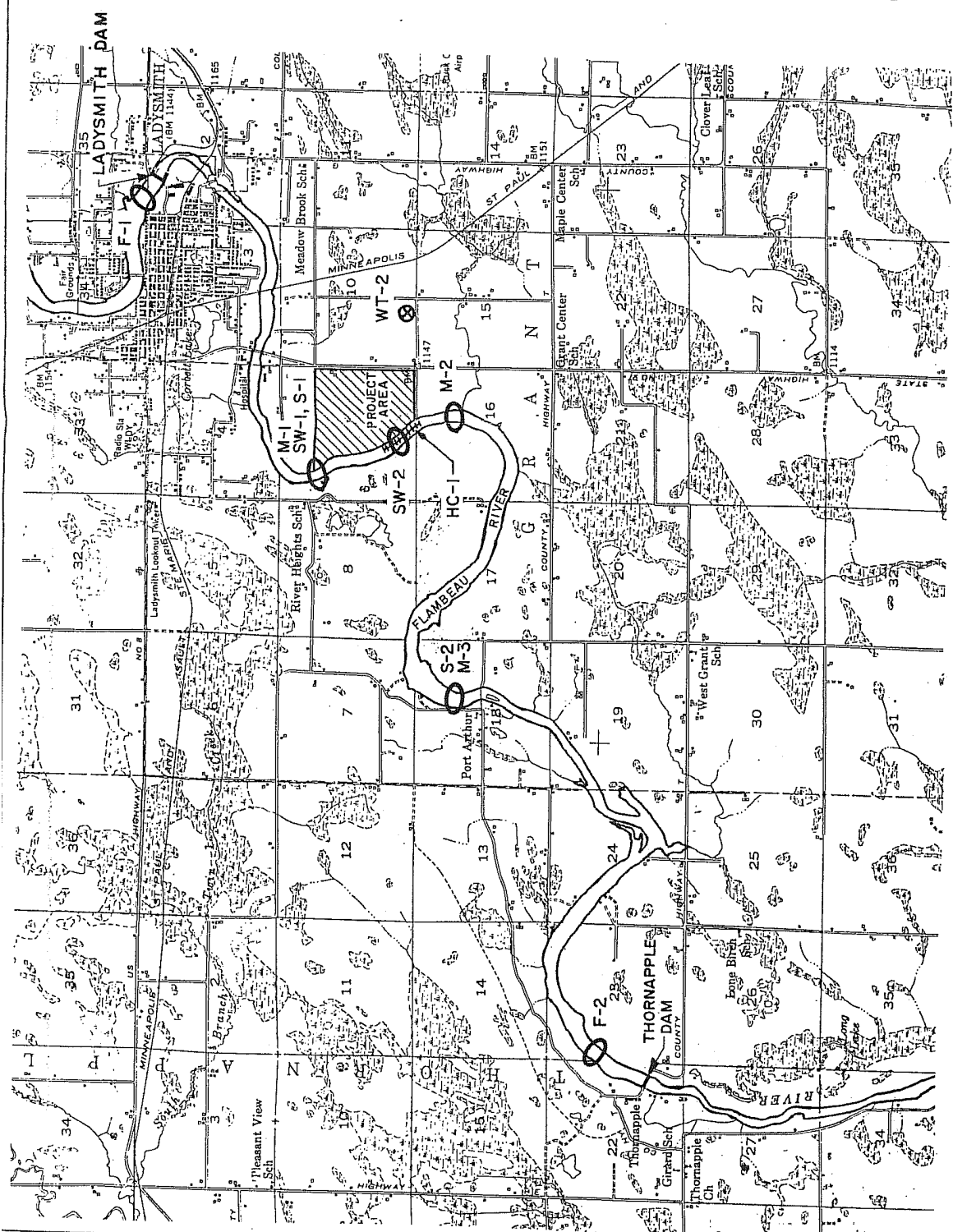
If at any time during which the construction and operation surface water monitoring program is in effect, data collected show that certain aspects of the plan do not warrant continuation, Flambeau will request to discontinue those parts of the program.

The surface water monitoring program will include sampling and analytical testing of the following: sediments, fish, macroinvertebrates, water quality, habitat characteristics, and wetland surface flows. Unless noted below, construction and operation surface water sampling and/or monitoring will commence the year before discharges from the wastewater treatment plant begin, and cease at the time the discharge ceases. A discussion of each program element follows.

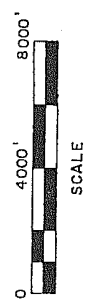
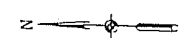
2.4.1 Sediments

Sediments in the Flambeau River will be collected once annually at two locations (Figure 2-7). An upstream sampling station will be established at Blackberry Lane, and a downstream station will be located at the old Port Arthur dam site. At each of these locations, three sediment traps will be installed after the spring runoff period is over. The traps will be suspended above the river bed in May of each year. Sediment samples will be analyzed individually for the following parameters:

- Particle Size
- Percent Volatile Solids
- Iron
- Manganese
- Aluminum
- Arsenic
- Silver
- Nickel
- Cadmium
- Chromium
- Copper
- Lead
- Mercury
- Selenium
- Zinc



NOTE: SEE FIGURE NO. 2-1 FOR THE LOCATION OF WETLAND STAFF GAUGES WT-1, WT-3, WT-4 AND WT-5.



LEGEND

- SW-1 SAMPLING LOCATIONS FOR SURFACE WATER SAMPLES
- S-1 SAMPLING LOCATION FOR SEDIMENTS
- M-1 SAMPLING LOCATION FOR MACRO-INVERTEBRATES
- F-1 SAMPLING LOCATION FOR FISH
- ||||| HC-1 LOCATION FOR HABITAT CHARACTERISTICS OBSERVATIONS
- ⊗ WT-2 WETLAND STAFF GAUGE

FOTH & VAN DYKE GEOLOGICAL & ENVIRONMENTAL MANAGEMENT DIVISION 1500 W. WISCONSIN ST., MILWAUKEE, WISCONSIN 53233		FLAMBEAU PROJECT LADYSMITH, WISCONSIN	
MAP SOURCE: U.S.G.S. LADYSMITH, WI. 15 MINUTE QUADRANGLE		FIGURE NO. 2-7 CONSTRUCTION AND OPERATION SURFACE WATER MONITORING SITE LOCATIONS	
KENNACOTT MINERALS COMPANY 100 W. WISCONSIN ST., MILWAUKEE, WISCONSIN 53233		DRAWING NO. _____ REVISION NO. _____ DATE _____	
DATE _____ DESCRIPTION _____ REFERENCE _____		SHEET NO. _____ TOTAL SHEETS _____ DATE _____ DRAWN BY _____ CHECKED BY _____	

Sampling procedures will be consistent with those stated in the project's QA/QC plan. Holding times, levels of detection and analytical procedures to be used for sediments are also delineated in the QA/QC plan. Samples that contain adequate quantities to allow for analysis by the WDNR will be split prior to laboratory analysis and a sample will be provided to the WDNR for their quality assurance work.

2.4.2 Fish

Fish (walleye) will be collected once annually during the low flow period of the year from the Ladysmith Flowage upstream of the site and the Thornapple Flowage downstream of the site (Figure 2-7). Acceptable sampling methods will include hook and line, electroshocking and fyke nets. A reasonable effort will be made to collect walleyes from each location according to the following size ranges:

- Ten to 12 inches - one fish.
- Twelve to 15 inches - two fish.
- Fifteen to 18 inches - three fish.
- Eighteen to 22 inches - two fish.
- Greater than 22 inches - one fish.

It is possible that, even after a reasonable effort is put forth, individual fish to coincide with the prescribed size ranges may not be collected. Therefore, the sampling effort will cease after a reasonable effort is put forth. A reasonable effort is defined as an eight hour, nocturnal sampling period. The WDNR will be notified of each sampling effort prior to mobilization so that their representative can be present.

Fillets (with skin left on) will be tested for total mercury. The livers of the fish collected at each of the two sampling stations will be composited into one upstream and one downstream sample. Each will be analyzed for the metal parameters included on the list of analytical parameters for sediments. Each organism will be measured for total length, sexed, and the stomach contents noted. The age of each individual fish will be determined using commonly-accepted techniques. Fish monitoring, sampling, and analytical procedures are prescribed in the project's QA/QC plan.

2.4.3 Macroinvertebrates

Three sampling locations will be established for the collection of macroinvertebrates (Figure 2-7). An upstream station will be located at Blackberry Lane. Downstream stations will be located at the site immediately above the mouth of Meadowbrook Creek and at a site to coincide with the sediment sampling location near the old Port Arthur dam site. All macroinvertebrate collection stations will be restricted to within 50 yards of the eastern bank of the river.

Once per year, an adequate sample size of crayfish (25 individuals or more) will be collected from each site using the best available methods. Each of the three composite samples will be analyzed for:

- Aluminum
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Mercury
- Zinc
- Selenium
- Nickel
- Silver

If an adequate sample size is not available after a reasonable effort, the tests will be run on the sample that is available, if any. At each of the three macroinvertebrate sampling stations, the macroinvertebrate fauna will be collected in the autumn of each year. Sample collection and an analytical method to be employed will be as specified in the project's QA/QC plan.

2.4.4 Water Quality

Although the mass balance and mixing ratios of treated discharge to the Flambeau River show there will be no detectable increases in concentrations of the discharge parameters in the river, sampling of surface water in the Flambeau will be undertaken quarterly (January, April, July, and October) from two locations (Figure 2-7) as long as the permitted discharge is occurring. Parameters tested, methods and procedures

will be those included in the WPDES Permit. A grab sample will be taken at each site. The upstream site will be located at the western end of Blackberry Lane and the downstream site will be located approximately one hundred yards below the wastewater treatment plant discharge at the point where a dye test conducted at the first sampling period demonstrates the sampling point is in the discharge plume.

Chemical parameters designated for testing in the program will be phased out of the monitoring program in a manner similar to that for the WPDES permit. Therefore, as substances included in the WPDES permit are eliminated from the discharge monitoring list because they are not found in the effluent, they will be eliminated from the surface water monitoring program at the same time.

2.4.5 Habitat Characteristics

The design and construction of the project features, including the discharge locations on the river bank, have been selected to minimize sedimentation. However, a physical evaluation of the river bottom habitats along the eastern bank of the Flambeau River from a point 100 yards upstream of the northern discharge location to a point 1,000 yards downstream of the southernmost discharge (Figure 2-7) will be done annually during the summer low-flow period. The evaluation will note the physical character of the bottom habitats (i.e., location of river sediment bars, percent of area that is sand or finer particle size, unusual biological growth) and include the production of a map of the bottom types in the area where habitat characterization was completed. The evaluation procedure will occur prior to the construction of the discharge structures on the bank of the river and approximately two months after discharges begin to function. This analysis will be completed annually during the low flow period until the permitted surface water discharges from the site cease.

During the field investigation to monitor changes in habitat characteristics, the river bank and near shore habitats will be documented using a series of panoramic photographs taken from the river. The purpose of these photos will be to document visible changes, if any, that may occur downstream of the project.

2.4.6 Wetland Surface Flows

Water level gauges will be installed at the outflow locations of Wetland Nos. 1, 5c, 7 and 10a. A gauge will also be installed in Wetland 6c at a point that is representative of its water level. The locations of the various water level gauges are shown on Figure 2-1 and 2-7. Water levels will be read and recorded monthly from March to December of each year. The staff gauges will be installed and read beginning two months (or as soon as practical depending on the season) after project permits are granted in order to obtain preconstruction water levels. At the time the pit is backfilled, the data will be compared to preconstruction levels and the recent precipitation history for the region. If water levels indicate there has been no significant drawdown effects on these wetlands attributable to the project, readings will cease.

2.5 Terrestrial Ecology

Aerial and color infrared photography will be used during the construction and operation monitoring period to monitor the impact of the project on vegetation in and around the project area. The photography will be completed once prior to the start of construction and during the third and sixth year of site operations. The area to be photographed will consist of the entire project area, less the railroad spur line corridor east of STH 27, as defined on Figure 4-2 of the December 1989 Mining Permit Application and the area within and 500 feet beyond the maximum extent of drawdown as defined by Figure 12 of 19 of the July 1989 Groundwater Modeling Report completed for the project.

Photography work completed during site operation will be conducted in the late summer period. If at all possible, the preconstruction photography will be completed in the late summer also. If permitting and construction schedules preclude this from occurring, photography will be completed as close to late summer as possible. Copies of the aerial photos will be forwarded to the WDNR with the project's annual monitoring report for the years in which photos are taken.