

2 2006 Summary

2.1 Introduction

On January 14, 1991, after an exhaustive permitting process including extensive opportunity for public input, the Flambeau Mining Company (Flambeau), wholly owned by Kennecott Minerals Company, received from the Wisconsin Department of Natural Resources (Department) eleven permits to operate an open pit copper mine in Rusk County, Wisconsin. Over the life of the mine (1993 – 1997), 181,000 tons of copper, 3.3 million ounces of silver, and 334,000 ounces of gold were mined.

Backfilling of the open pit began in earnest in early 1997. Waste rock and soils were replaced to their approximate original location in the open pit. Over 30,000 tons of limestone were added to the sulfide-bearing waste rock to neutralize and buffer the groundwater as it resaturated the backfilled materials.

In 1998, the surface reclamation of the mine site began by returning the land surface to its approximate original contour. Stockpiled topsoil was spread across the site where grasslands and woodlands were created. Hydric (wetland) soils had been stockpiled as well and were used to create over ten acres of wetlands. Reclamation activities since 1998 have included seeding, plug planting, tree planting, erosion control, mowing, invasive species control, trail construction, and prescribed burning. During 2001, Flambeau completed the planting plan and submitted the Notice of Completion (NOC) to the Department. Concurrent with the submittal of the NOC, the reclaimed Flambeau Mine nature trails were opened to the public for non-motorized recreational activities. The City of Ladysmith had partnered with Flambeau to develop the four-mile nature trail system.

During 2006, monitoring of the reclaimed mine site documented the continued development of high quality native grassland, woodland and wetland communities. Ecological monitoring has documented that 272 native plant species are established on the site. Fifty-two bird species were found to be using the reclaimed mine site and 33 bird species were recorded as nesting on the site.

Continued protection of the Flambeau River, located 140 feet from the backfilled pit, has been documented by extensive monitoring. Throughout each phase of the project, samples have been collected from the Flambeau River and include water quality, sediments, fish, and macroinvertebrates. Habitat characterizations were performed annually through 1998 as required along the east bank of the river to document conditions of the river substrate. Flambeau continues to voluntarily monitor river water quality semi-annually to provide further documentation that the Flambeau River remains fully protected.

2.2 Groundwater Quality Assessments

Assessments of the backfill groundwater quality have been routinely performed with the most recent being completed in January 2007. The assessments show that the regional groundwater flow, including backfill water, is flowing toward the Flambeau River as was predicted during permitting; all acidity in the backfill has been neutralized by the limestone; sulfate concentrations in the majority of the backfill are now controlled by gypsum precipitation and dissolution; and concentrations of solutes in the backfill are stable and should not significantly increase in the future and, in fact, many are showing a decreasing trend.

During January 2001, Flambeau installed an additional monitoring well nest, MW-1015A and MW-1015B, approximately 1000 feet northwest of the backfilled pit. The MW-1015 well nest is located closer to the compliance boundary than already previously installed monitoring wells. Existing groundwater monitoring well nests located between the backfilled pit and the compliance boundary show Flambeau to be in full compliance with permit standards. The monitoring wells closer to the compliance boundary provide additional information regarding baseline groundwater quality near the compliance boundary and provide further documentation of Flambeau's continued compliance with groundwater permit standards. Beginning in April 2001, monthly baseline monitoring data was collected from the MW-1015 wells and continued for twelve months. Following collection of the monthly baseline data, the monitoring schedule for well nest MW-1015 was consistent with the quarterly schedule of monitoring prescribed in the approved monitoring plan. In a document dated August 10, 2004, Flambeau provided to the Department a review of water quality in well MW-1015B. Iron and manganese concentrations in well MW-1015B had shown an increase beginning in October 2002 through 2003 and have since shown decreasing trends. The iron and manganese changes at MW-1015B are not due to flow from the backfill because they do not carry an increase in sulfate that would be expected due to the sulfate concentrations in the backfill. The iron and manganese changes are consistent with localized redox (not backfill) induced changes.

2.3 Notice of Completion/Certificate of Completion

Data obtained during monitoring of the reclaimed vegetation during 2000 documented that Flambeau met the vegetative performance standards for Notice of Completion (NOC). Flambeau met all reclamation vegetation standards. Prior to submitting the NOC, Flambeau was required to decommission electrical service to the former west wall and remove the perimeter security fence. During Spring 2001, the aboveground electrical line serving the area of the former west wall and the perimeter fence surrounding the site were removed. During August 2001, collection of biomass samples required at the time of the NOC was completed. Biomass at the time of NOC will be compared to biomass at the time of the Certificate of Completion (COC).

During September 2001, Flambeau submitted the NOC to the Department and the Department recognized that Flambeau had met the requirements for NOC and deferred acceptance until Flambeau had documented that the vegetative performance standards had

been met in 2001. The 2001 Annual Reclamation Report submitted to the Department in November 2001 provided the documentation that Flambeau had met the vegetative performance standards for two consecutive years.

In a letter dated March 8, 2002, the Department accepted Flambeau's NOC. The four-year monitoring period prior to COC began November 19, 2001. For Flambeau to receive the COC, the performance standards are to be met during the final year of the 4-year monitoring period. The final year of the 4-year monitoring period was 2005. The 2005 Annual Reclamation Report, submitted to the Department November 15, 2005, documents that Flambeau met the performance standards during 2005. All performance standards were met in 2005 and again in 2006 even during extreme regional climatic conditions such as the regional drought experienced in 2005 and 2006. The 2006 Annual Reclamation Report, submitted to the Department November 14, 2006, documents that performance standards continue to be met. On January 9, 2007, Flambeau Mining Company petitioned the Department for Certificate of Completion.

2.4 Industrial Outlot

2.4.1 Reuse of Industrial Outlot Facilities

On January 8, 1998 Flambeau submitted a request for modification of the Mining Permit and Reclamation Plan. The requested modifications included modification of the final land use for 32 acres of the mining site to allow for alternative use of the on-site buildings and related ancillary facilities, railroad spur and a portion of the former Type II waste rock stockpile area by the Ladysmith Community Industrial Development Corporation (LCIDC).

On July 30, 1998 the Department approved the request for modification of the final land use for the 32 acre industrial outlot with the following condition: "If the portion of the site covered by the lease agreement with the LCIDC has not been put to an acceptable alternative use by the end of 2004, the site shall be reclaimed in a manner consistent with reclamation of the remainder of the mining site. Any demolition waste resulting from such reclamation shall be disposed of in a properly licensed solid waste facility."

A long-term lease agreement exists between Flambeau and the LCIDC, where the LCIDC leases a 32-acre portion of the former mine site referred as the industrial outlot. The 32-acre area includes the former administration building now occupied by the Ladysmith Department of Natural Resources Service Center; the former Water Treatment Plant (WTP) building now occupied by Xcel Energy and the Department; the railspur for which the LCIDC has installed major improvements and purchased adjacent property outside of the mine project area; an approximate eight-acre area north of the railspur in the former Type II stockpile area; and a 0.9-acre biofilter constructed in 1998 to reduce suspended solids and other contaminants resulting from precipitation runoff from the industrial outlot.

During 2000, the LCIDC completed renovations on the administration building, now serving as the Department's Ladysmith Service Center, and WTP building, now housing Xcel

Energy's line maintenance shop and the Department's equipment storage area. In addition, the LCIDC constructed another building for the Department between the Service Center and the former WTP to house additional Department equipment. The Department and Xcel Energy continued to occupy the former mine buildings during 2004.

During 2003, the LCIDC submitted a request to the Department for the retention of the rail spur located east of Highway 27 as part of the communities' on-going efforts to increase industrial development. The LCIDC had committed to remove and reclaim about 200 feet of the rail spur east of Highway 27. In a letter dated June 12, 2003, the Department stated that it "...is satisfied that the portion of the rail spur east of the highway is being used for alternate purposes. Therefore, the rail spur east of Highway 27 will not need to be removed and revegetated..."

During early 2004, the Flambeau Riders, Inc. (Riders) approached Flambeau about the possibility of developing non-motorized trails on property owned by Flambeau south of the Industrial Outlot and east and south of the Flambeau River. In addition, the Riders inquired about using a portion of the west rail spur area and northern eight-acre area within the Industrial Outlot as driveway access off Highway 27 and as an equestrian trailhead, respectively. In a document dated May 19, 2004, Flambeau proposed to the Department an alternate use plan for Flambeau's former rail spur area west of Highway 27 and the eight-acre area north of the west rail spur area within the Industrial Outlot as a driveway and equestrian trailhead.

Upon further review, Flambeau reconsidered the proposed use of the west rail spur area since there would be impacts to adjacent wetlands during construction and concerns regarding highway safety associated with multiple driveways within relatively close proximity. As a result, Flambeau provided a submittal to the Department dated May 28, 2004, that provided details regarding the reclamation of the west and east rail spur areas in a manner consistent with the previous October 23, 2003 submittal regarding reclamation of the west rail spur area. The May 28 submittal replaced the submittal dated May 19.

Flambeau continued to consider the Riders proposal of non-motorized trail development for equestrian use on Flambeau property south of the Industrial Outlot and the associated trailhead and trailhead access within the Industrial Outlot. During 2004, a Community Advisory Group was formed to advise Kennecott Minerals on development of a land use management plan for the 2177 acres owned by Flambeau as of year end 2004. The Advisory Group is represented by Rusk County, City of Ladysmith, Town of Grant, Ladysmith Area Trails Association, Flambeau Riders, LCIDC and the Department's Northern Rivers Initiative. During a late December 2004 meeting, the Advisory Group agreed that the expansion of trails south of the reclaimed mine site and using a portion of the Industrial Outlot as an equestrian trailhead are acceptable and beneficial uses of the property. The access to the trailhead will follow Copper Park Lane west and turn north along the eastern edge of the Service Center parking lot crossing the reclaimed west rail spur area. It was agreed to formalize the agreement with 1) a Trail Easement & License between Flambeau and the City of Ladysmith and 2) a Sublease between the LCIDC and the City of Ladysmith.

Fully executed documents, Trail Easement & License and Sublease, dated January 1, 2005 are in place.

In a letter to the Department dated December 30, 2004, Flambeau provided notice that the 32 acre industrial outlot has met the condition of “acceptable alternative use.”

The Department responded in a letter dated February 18, 2005 that the only portion of the industrial outlot for which an acceptable alternate use had not been designated was the section lying north of the railspur in the area of the former Type II waste rock stockpile. The Department conceptually found the proposed use as an equestrian trail head acceptable, but required further details to review and approve the proposed construction plans.

In a submittal dated March 1, 2005, Flambeau provided to the Department drawings showing the proposed equestrian trailhead and access via Copper Park Lane. Also included with the March 1 submittal were copies of 1) the sublease between the LCIDC and the City of Ladysmith for the area within the industrial outlot proposed for construction of the parking area and 2) the Easement and License Agreement between Flambeau and the City of Ladysmith for the development of trails on property located south of the industrial outlot.

In a letter dated March 12, 2005, the Department requested further detail on construction of the equestrian trailhead and access to the trailhead. Flambeau provided the additional detail in a submittal dated July 21, 2005. The Department provided approval subject to provisions for the construction of the equestrian trailhead in a letter dated July 28, 2005.

A part of the equestrian trail project was the relocation of the foot bridge from the reclaimed mine site to the designated trail crossing on Intermittent Stream C. A General Permit Application for a clear span bridge was submitted to the Department on July 20, 2005. Flambeau received the General Permit which was in effect July 21, 2005 through November 1, 2006. The footbridge was relocated during late August 2005 using small equipment to minimize disturbance to the former bridge location site and the site of the Intermittent Stream C crossing.

The construction of the equestrian trailhead initiated on August 11, 2005 with the removal of trees and an electrical panel to allow construction of the access road. Prior to the start of grading in the trailhead area, silt fence was installed in the southeast corner of the trailhead area to minimize impacts to wetlands and Intermittent Stream C. As the project progressed, additional erosion control including silt fence, straw bales, riprap, seeding and straw mulch were installed. The trailhead area was seeded with a low-grow fescue seed mix comprised of creeping red fescue (30%), hard fescue (25%), chewings fescue (20%), slender creeping fescue (15%), and sheep fescue (10%). The fescue seed mix was seeded at an approximate rate of 220 pounds per acre and followed by a chopped straw mulch. The area along the access road was seeded with oats and a permanent native seeding will take place in Spring 2006. The trailhead construction was complete by September 8, 2005.

On September 10, 2005 Flambeau held an open house event to celebrate the grand opening of the equestrian trails and the successful reclamation of the mine site. Self-guided audio tours, horse trail rides, wildflower tours, community fair and lunch were well received by over 600 visitors.

During 2006 the City of Ladysmith received a matching funds grant from the Department to install a bridge crossing for Meadowbrook Creek located south of the former mine site. The bridge crossing will allow the expansion of the Copper Park Equestrian Trails to the south and along the Flambeau River on Flambeau owned property.

2.4.2 Rail Spur Reclamation

During Spring 2003, Flambeau and the LCIDC agreed that the Wisconsin Department of Transportation should remove the rail crossing as part of the renovation of Highway 27 during 2004. In addition, storm water sampling had measured copper concentrations entering the 0.9-acre biofilter that may have been associated with the west rail spur area. Consequently, Flambeau began planning for the 2003 removal of the rail spur west of Highway 27. On July 9, 2003, Flambeau submitted to the Department a workplan for soil sampling at the west rail spur area to delineate and characterize the soils previously subjected to ore handling activities. In a letter dated July 18, 2003, the Department provided comments based upon the review of the sampling plan. On July 24, 2003, a Foth & Van Dyke representative collected soil samples for off-site laboratory analyses to determine the extent of soil removal and ultimate disposal of the soils.

A report dated October 20, 2003 was submitted to the Department and contained the final soil sampling results and remediation plan for the rail spur west of Highway 27. The plan called for excavating two feet below the existing rail spur grade west of Highway 27 to remove gravel and ballast impacted by ore handling activities.

Waste Management's Timberline Landfill located west of Bruce, WI agreed to accept the non-hazardous materials for road building within the boundary of the landfill's disposal areas. In a letter dated October 24, 2003, the Department agreed with Flambeau's proposal to remove the upper two feet of material present on the rail spur and properly dispose of it in a licensed facility. The Department provided comments regarding installation of appropriate erosion control, requirement for more detail regarding subgrade preparation, topsoil handling and seeding, timing of topsoil application and seeding, continued monitoring of the nearby biofilter and Stream C, and schedule of excavation.

Volkman Railroad Builders, Menomonee Falls, WI, removed the rail spur line, ties and all associated hardware during mid-October 2003. During early November 2003, Thompson Excavating, Ladysmith, WI excavated 7400 tons of ballast and gravel and hauled the excavated materials to the Timberline Landfill. Erosion control included installation of silt fence to minimize impacts to Intermittent Stream C and establishing drainage to the 0.9-acre biofilter. Application of topsoil and seeding was deferred until Spring 2004.

A submittal dated May 28, 2004 included details of the proposed reclamation of the west and east rail spur areas. Details of reclamation covered excavation of ballast from the east rail spur area, topsoil application, seeding, fertilizing, mulching and erosion control. The Department provided a conditional approval dated June 2, 2004.

The reclamation of the rail spur areas began on June 2, 2004 with the installation of silt fence to minimize erosion until the disturbed areas were stabilized. The east rail spur area was prepared to receive topsoil with the removal of approximately 322 yards of fractured rock ballast. Prior to and during ballast excavation and removal, the ballast was continually observed to segregate and remove sulfide rock material. An insignificant quantity of sulfide rock material (one or two pieces measuring less than three inches) was observed in the ballast and removed for proper disposal. The ballast was relocated to Russ Thompson Excavating's Rock House pit located a short distance north of Ladysmith. The ballast was temporarily stockpiled until it was crushed with pit run from the Rock House pit during September. The crushed material (ballast and pit run) totaling 2000 yards is to be used in local construction projects.

Topsoil relocation took place over the course of five days. Approximately 2760 yards (184 truck loads at 15 yards per truck) of topsoil were removed from the approximate 12,000 yard stockpile. The topsoil was spread to an approximate depth of 12 inches across the rail spur areas with the exception of thinner topsoil where tying into existing contours.

Hand seeding, fertilizing and mulching began on June 8 and was complete by June 18. Seeding, fertilizing and mulching took place over the course of five days.

The approved Industrial Outlot seed mix is composed of four native species (two forbs and two grasses). Flambeau proposed increasing the native species diversity for reclamation of the rail spur areas to 24 native species (17 forbs and seven grasses) which the Department approved.

Following hand broadcast seeding, fertilizer was mechanically applied by a hand operated broadcaster. Straw mulch was mechanically chopped and applied at a rate consistent with past practices. As a result of high winds occurring prior to completion of straw mulch crimping, small areas of chopped straw were relocated exposing seed to drying conditions and consumption by birds. The stabilization of the soil was not affected. Remedial seeding in these small areas was completed in late October as a dormant fall seeding. The spot seeding was conducted in a manner consistent with the seeding completed in June.

Observation of the rail spur areas during the growing season showed evidence of abundant native plant seedlings and substantial vegetative cover providing stabilization.

Storm water runoff within the eight-acre undeveloped parcel north of the west rail spur area and within the Industrial Outlot drains toward two manholes connected to the 0.9-acre biofilter. The open manholes were a safety concern and the May 28 submittal proposed abandonment by plugging with concrete. While preparing the manholes for abandonment, it was realized that an alternate plan would still make the manholes safe and allow them to

serve as part of the storm water management within the Industrial Outlot. The Department agreed with Flambeau's plan to cut the HDPE extending above ground, fill the manholes with large (> 8-inch) fractured rock, and fill the voids around and top off the large rock with 1.5-inch fractured rock. The manholes were filled with off-site rock during mid-June 2004.

A submittal, Rail Spur Reclamation Documentation, dated November 10, 2004 was made to the Department and included a topographic drawing showing the east and west reclaimed rail spur areas and details regarding the reclamation of the rail spur areas.

Further detail on reclamation of the east and west rail spur areas was provided to the Department in the 2004 Annual Reclamation Report.

2.4.3 Intermittent Stream C

The Flambeau Mine remains committed to the protection of water quality in the Flambeau River. Since final reclamation in 1999, Flambeau has continued its monitoring of water quality in the Flambeau River as well as surface runoff into the Flambeau River. This monitoring indicates that the water quality of the Flambeau River remains fully protected.

Copper and zinc concentrations have been measured in offsite background storm water runoff and in runoff from the Industrial Outlot located on the reclaimed mine site. The non-point sources of runoff from the Industrial Outlot are being passively treated by the 0.9-acre biofilter that substantially reduces the concentrations of metals before flowing into Intermittent Stream C that eventually discharges to the Flambeau River. The biofilter itself supports populations of aquatic biota, including fish and frogs.

A proposed expanded surface runoff monitoring program including a bioassessment of the intermittent stream was submitted to the Department for review in a document dated August 5, 2004. The purpose of the work plan was to:

- Evaluate the biological conditions within Stream C;
- Evaluate areas of the Stream C watershed that may be contributing to the water in Stream C;
- Evaluate aspects of the industrial outlot bio-filter that may influence copper levels that are discharged from the bio-filter to Stream C; and
- Evaluate the hydrology and water quality within Stream C.

In a letter dated September 15, 2004 the Department provided the results of their review of Flambeau's proposed expanded monitoring program.

Blue Iris Environmental, Inc. completed a late summer biological assessment on August 17 and 18, 2004. Representatives of the Department and the Great Lakes Indian Fish and Wildlife Commission were present in the field during assessment activities on the 18th of August. Sediments from the 0.9-acre biofilter were collected by Foth and Van Dyke on September 10, 2004. Water quality samples were collected by Flambeau on September 15-16, 2004 and October 22-24, 2004.

In a submittal dated January 20, 2005, Flambeau provided a memorandum prepared by Foth & Van Dyke that summarized and assessed the data that was collected in 2004.

In summary, Stream C is an intermittent stream with poor aquatic habitat that lacks aquatic vegetation and aquatic macroinvertebrates. As a result of the poor habitat and very limited food source, no fish were observed in the stream during the 2004 biological assessment. Stream C does not possess the types of characteristics that are needed for it to support any type of fishery. The sediment sampling of the biofilter indicates that it is functioning as designed. This is supported by the fish and amphibians that have been observed in the biofilter. The surface water sampling that has been completed within the watershed of Stream C suggests that some areas, particularly those affected by highway runoff, may naturally exhibit elevated copper levels in the water. In addition, the sampling indicates that there appear to be localized areas at the Industrial Outlot that may be contributing elevated copper levels to storm water that passes through the biofilter. Based on this last point, Foth and Van Dyke advised that Flambeau may want to consider implementing measures to minimize storm water contacting the localized areas that may be contributing to the elevated copper levels.

In a letter dated March 22, 2005 the Department responded to the submittal of the 2004 surface runoff monitoring results with the requirement of additional sampling including increased frequency for biofilter sediment sampling and surface runoff sampling. During April 2005, the surface runoff monitoring program resumed and continued through the summer.

A spring biological assessment was conducted by Blue Iris Environmental, Inc. on May 24 and 25, 2005. Sediments from the Industrial Outlot biofilter were collected by Foth & Van Dyke on April 26, June 29, August 9, and September 9, 2005. Water quality samples were collected by Flambeau on April 6, April 25-26, May 13, June 7-9, August 26-27, and September 19-20, 2005.

In a document dated October 24, 2005, Flambeau submitted to the Department the results of the 2005 surface runoff monitoring program. The 2005 results were consistent with the 2004 results.

Monitoring of the surface water at the site since the completion of reclamation has indicated that the Industrial Outlot biofilter is working well in lowering copper levels of surface water runoff flowing from the Outlot area. The biofilter typically removes 95 percent of the copper when biofilter inlet and outlet surface water samples are compared. During 2003 and 2004 the former rail spur was reclaimed in an effort to reduce the concentration of copper in surface water runoff. During 2006, Flambeau further reduced sources of copper from the Outlot area to the biofilter.

On behalf of Flambeau, Foth & Van Dyke submitted to the Department an Industrial Outlot action plan dated November 22, 2005. The work plan addressed additional measures that will be implemented in the Industrial Outlot area such that copper levels in runoff to the

biofilter will be further reduced. The workplan proposed a combination of grading, select removal of surficial materials, replacement limestone fill and replacement of the collection ditch.

In a letter dated December 2, 2005, Flambeau provided an amended action plan to the Department. The amended action plan proposed, rather than a select removal of surficial materials, a removal in all areas of surficial material that are currently gravel around the buildings of the Industrial Outlot. The entire area of excavation around the buildings and within drainage ways is approximately 10,500 square yards. In addition, asphalt installation in select areas will be determined by the Industrial Outlot tenants' needs. Water quality sampling to evaluate effectiveness in reducing the source of copper to the biofilter will follow the completion of the action plan.

The Department responded in a letter dated December 6, 2005 stating that the proposed excavation work is a positive additional step in addressing the continuing issue of elevated copper concentration in site runoff and the biofilter. The Department found the action plan presented in the November 22 and December 2 letters generally acceptable.

Unseasonably cold winter temperatures prevented the initiation of the action plan during 2005 due to frozen ground conditions. The action plan was deferred until Spring 2006.

In a letter dated March 30, 2006, Foth & Van Dyke provided to the Department further detail for the action plan and monitoring. The Department received the Final Work Plan dated May 2, 2006 which superseded the March 30 submittal and incorporated additional information.

The May 2, 2006 document included results of additional soil surface samples collected April 5, 2006 on the ground access road leading from the southwest corner of the outlot to the reclaimed mine site to the north. There were no elevated copper concentrations at any of the sampled locations.

Additional surface soil samples and surface water samples were also collected on April 5, 2006. The locations of these samples were along Highway 27 to the north and south of the mine site. A total of eight soil samples and three surface water samples were obtained. The top four inches of soil ranged in copper concentrations from 12 to 85 mg/kg. The surface water ranged from 30 to 35 ug/l.

In a letter dated May 4, 2006 the Department found the May 2 Work Plan generally acceptable subject to recommendations including removal of additional material based upon visual observations, collection of soil samples following excavation at three specified locations, and timing collection of surface water samples in order to establish that long-term, stable conditions have been achieved.

Foth & Van Dyke oversaw the design and implementation of the workplan. The workplan was implemented starting May 18, 2006 and complete by June 21, 2006. The work consisted of excavation of approximately 900 linear feet of the existing drainage ditch collecting storm water runoff from the area around the Copper Park buildings and replacement of the cobbled

drainage way with limestone cobbles. Approximately 2.2 acres of gravel parking lot was excavated to a minimum depth of four inches. Soil sampling was conducted following completion of excavation. The average copper concentration of the exposed subgrade after removal was approximately 38 mg/kg (ppm). Crushed limestone gravel was placed as subgrade material and the parking lot was paved with three inches of bituminous concrete (asphalt). A non-woven geotextile fabric was placed in the exposed subgrade of all excavated areas within the area of asphalt and the drainage ditch prior to backfilling. All excavated material (2300 cubic yards) was appropriately disposed at the licensed Timberline Trail Landfill.

Rainfall events occurred on July 26, 2006 and August 3, 2006 providing a set of storm water samples to obtain “immediate, post construction” data. The initial data indicated a marked reduction in copper concentrations in storm water reaching the biofilter.

A report prepared by Foth & Van Dyke titled Construction Documentation Report – Flambeau Industrial Outlot was submitted to the Department on September 12, 2006. Included with the report were results of soil sampling following excavation. The report provides further detail on the completion of the workplan.

On January 12, 2007, the Biofilter Management Plan was submitted to the Department. The report presents recent surface water data (post 2006 construction) which documents a dramatic reduction in copper loading to the biofilter. The report also presents a biofilter management plan including monitoring of the biofilter. The plan is currently being reviewed by the Department.

2.5 Community Involvement

Flambeau’s involvement with the surrounding communities has included promotion of community activities, partnering with the communities, economic development, promoting tourism, enhancing communication, restoration projects, and maintaining an open door policy.

The major achievements for 2006 are set forth below:

- The Flambeau Community Advisory Group formed during 2004 continued to advise Kennecott Minerals on the development of a land use management plan related to the 2177 acres owned by Flambeau.
- Flambeau’s partnership with the City of Ladysmith and Flambeau Riders, Inc. continued with plans to expand the non-motorized multi-use recreational trails south of the reclaimed mine site. These trails, the Copper Park Equestrian Trails and Trailhead, were opened to the public in September 2005. During 2006 the City was awarded a matching funds grant from the Department to install a bridge crossing on Meadowbrook Creek.
- In early May 2006 the Deertail 4-H Club planted approximately 150 wildflower and

grass seedlings in two large planters constructed to separate the Ladysmith Service Center parking area from the access road to the Copper Park Equestrian Trailhead.

- The Reclaimed Flambeau Mine nature recreation trails were open to the public for the fifth entire year. In addition, through a cooperative effort, the Hunt Hill Audubon Nature Center, Department's Ladysmith Service Center, Bluebird Restoration Assc. of Wisconsin – Rusk Co. Chapter and Flambeau held a birding workshop and nature hike on July 5, 2006 on the reclaimed mine site with about 50 residents in attendance.
- A local geocache enthusiast established geocache sites on Flambeau property in 2005. Geocache sites can be searched out along the Reclaimed Flambeau Mine Nature Trails, Copper Park Equestrian Trails and Sisters Farm Trails. During 2006 many geocachers visited the reclaimed mine site. Details on geocache sites can be found at www.geocaching.com.
- On July 29, 2006, the reclaimed mine site was one of many stops at garden tours being held in the community as part of the 2nd Annual Conference in the Garden.
- The UW-Extension's Healthy Lifestyles for Rusk County held their second annual community walk on the reclaimed Flambeau Mine nature trails on September 9, 2006. Nearly 100 individuals participated in the event.
- On September 23, 2006 as part of the Leaf it to Rusk Fall Festival, the Reclaimed Flambeau Mine hosted trail rides on the Copper Park Equestrian Trails and a trivia scavenger hunt along the Reclaimed Flambeau Mine Nature Trails. Over 50 community members turned for the event.
- Costumed children gathered at the reclaimed mine site on October 28, 2006 as part of a Halloween Hunt hosted by Flambeau.
- Flambeau continued its open door policy and upon request conducted tours of the mine site.

2.6 Water Management

2.6.1 Precipitation Runoff

During the first two years of surface stabilization of the reclaimed mine site, Flambeau had approval to pump runoff from the 1.7-acre biofilter to the south gravel pit to minimize impacts to the Flambeau River. During 1999, the Department agreed that the site had become sufficiently stabilized to discontinue this practice. During 2000 the reclaimed mine site continued to be stabilized and pumping of water before it reached the river was discontinued. Since 2000, the reclaimed mine site surface remains stabilized by vegetative growth and there is minimal evidence of erosion. Aerial photographs (color and infrared) taken during August 2006 document that the surface stabilization of the reclaimed mine site

is functioning as planned.

Flambeau River water quality samples were collected upstream (SW-1) and downstream (SW-2) from the reclaimed mine site during August and November. Comparing analytical results, there was no notable difference between downstream and upstream samples and this further confirms that the reclaimed site is stable and functioning as designed. A summary of Flambeau River water quality results is found in Section 4.2.2.1.

2.5.2 River Water Withdrawal

On May 5, 1998 the Department approved Flambeau's application to withdraw water from the Flambeau River for use on site. The Department's approval requires submittal of monthly summaries for months during which a withdrawal occurs. The irrigation pump system is operated with a portable generator since electrical supply had been removed during 2001. During 2006 water withdrawn from the Flambeau River for irrigation totaled 1,039,000 gallons.

Wetland 1 is located immediately west of the reclaimed mine site. During permitting, it was recognized that groundwater seeps within Wetland 1 had a high probability of being impacted by groundwater drawdown associated with the development of the open pit. During mining, it was noted that these seeps did cease to produce water. With the backfilling of the open pit being complete in 1997, the groundwater table has recovered significantly and Wetland 1 has been documented to be notably moister with groundwater seeps again flowing.

During 2006, Flambeau continued to monitor the staff gauge within Wetland 1 and maintain the ability to add mitigation water to the wetland. A regional drought during 2005 and 2006 resulted in lowering of water levels of wetlands located in the region including Wetland 1. As a result of Wetland 1's dryer condition resulting from natural causes, regional climatic conditions, mitigation water was not added during 2006 as was also the case during 2002, 2003, 2004 and 2005.

Table 2-1 contains a summary of water withdrawal from the Flambeau River during 2006.

Table 2-1. 2006 River Water Withdrawal

2006	Reclamation Irrigation (Gallons)	Wetland Mitigation (Gallons)	Monthly Totals (Gallons)
April	0	0	0
May	0	0	0
June	0	0	0
July	1,039,000	0	1,039,000
August	0	0	0
September	0	0	0
Totals	1,039,000	0	1,039,000

2.7 2006 Milestones

The following is a summary of significant milestones throughout the year:

Table 2-2. 2006 Milestones

	Month
Seventh Year Prescribed Burn Complete	May
Flambeau Partnered with the Community to Host Five Events on the Reclaimed Mine Site	Summer/Fall
2006 Annual Reclamation Report Documents Sustainable Site Conditions that Meet Performance Standards for COC	November

2.8 Modifications & Deviations

Condition 2-4 in the Mine Permit requires an inventory of deviations and modifications to the Permit received subsequent to permit issuance. Reclamation activities during 2006 were consistent with permits, approved plans, and modifications received subsequent to permit issuance. During 2006 there were no modifications or deviations to the Permit.

2.9 Construction Reports

The Construction Documentation Report – Flambeau Industrial Outlot was submitted to the Department on September 18, 2006. Further detail on the Construction Documentation

Report can be found in Section 2.4.3.

2.10 Incident Log

Mine Permit Condition 2-6 requires a log of all incidents such as spills, pond overflow, embankment failure or leakage. This log is maintained on-site and is available for inspection. Spills are reported in accordance with Wis. Adm. Code ch. NR 706, CERCLA Reportable Quantities and SARA Section 302 Extremely Hazardous Substances Reportable Quantities.

During 2006 there were no reportable or recordable incidents that occurred on the reclaimed Flambeau Mine site.

2.11 Drill Holes

Mine Permit Condition 2-7 requires a summary of all exploration drilling activities conducted on the mine site during the previous year. No exploration drilling activities were conducted on the reclaimed mine site during 2006.

