



Legislative Fiscal Bureau

One East Main, Suite 301 • Madison, WI 53703 • (608) 266-3847 • Fax: (608) 267-6873

February 16, 2012

TO: Members
Joint Committee on Finance

FROM: Bob Lang, Director

SUBJECT: Fiscal Impacts of 2011 Assembly Bill 426 on the Department of Natural Resources

This memorandum provides information regarding the fiscal effect of the iron mining bill, 2011 AB 426, as passed by the Assembly, on the Department of Natural Resources (DNR). The bill would create a separate regulatory framework for the permitting of ferrous mines and make a number of changes to DNR regulatory powers and procedures, timelines for decisions, and fee amounts for ferrous mining projects.

DNR submitted a fiscal note, and an updated fiscal note, to the bill that characterized the fiscal effect as indeterminate given the variety of circumstances, complexity, number, and timing of iron mining projects that could be encountered under the terms of the bill. The DNR submissions do identify potential areas of impact and ranges of potential costs which are discussed below.

State Tipping Fees. Under current law, state fees are imposed for the disposal of most materials in solid waste facilities (landfills). These fees are generally based on the number of tons disposed and are often referred to as state tipping fees. The fee is currently \$13 per ton for most waste, other than certain high-volume (charged at 50¢ per ton) or exempt waste. Certain mining wastes disposed of in state licensed landfills are also subject to state tipping fees, but at a different rate. The bill would exclude mining wastes disposed in a mining waste site covered by an iron mining permit from certain fees, most notably the \$7 per ton recycling tipping fee, and instead apply a 2.7¢ per ton rate. The following table shows state tipping fees for most non-high volume waste disposed in Wisconsin under current law and for mining wastes under the bill.

State Solid Waste Disposal (Tipping) Fees

<u>Tonnage Fees</u>	<u>Current Law</u>		AB 426
	<u>General</u>	<u>Mining</u>	<u>(Mining)</u>
Recycling	\$7.000	\$7.000	None
Environmental Repair	2.500	0.010	\$0.010
Groundwater	0.100	0.010	0.010
Well Compensation	0.040	None	None
Nonpoint	3.200	None	None
Landfill Lic. Surcharge	0.150	None	None
Waste Facility Siting	<u>0.007</u>	<u>0.007</u>	<u>0.007</u>
	\$12.997	\$7.027	\$0.027

The amount of waste materials that would be disposed of either at the mining site or off-site would depend on the size, configuration and structure of the ore body and the mining operation. However, significant amounts of waste materials would be generated. For each ton of taconite produced, it is possible that, on average, over three tons of wastes could be produced. Mining waste materials include overburden (the rock materials overlaying or surrounding the ore body), waste rock (rock materials not containing significant amounts of iron) and tailings (the crushed ore waste left over from processing taconite pellets). How these wastes are handled depends in part on their composition, the available land at the mining site, and reclamation plans. It is likely that more than one type of waste disposal facility would be utilized at a mine. The reclamation plan for the mine site would need to address the long-term storage, disposal, or reuse of the waste materials.

The tipping fees identified in the table are paid when solid wastes are deposited at a state licensed landfill. DNR staff indicate that almost all mining wastes would be expected to be subject to the \$7 per ton recycling fee under current law. In addition to the tipping fees, DNR is required to develop by administrative rule graduated charges to cover the costs of solid waste license and review activities. Under the bill, license fees would not apply to mining waste disposed at a site covered by a mining permit. In addition, certain other fees apply to disposal of hazardous wastes. It is not known the extent to which this provision may apply to a potential ferrous mine under current law, or be exempted under the bill.

A potential iron mine could be located along the Penokee Ridge (also known as the Gogebic Range that stretches into the Upper Peninsula of Michigan) in Ashland and Iron Counties. No mining application has been submitted to date, and the size and scope of a potential mining operation may vary substantially. However, a potential phase one project might consist of an approximately 900 to 1,500-acre open-pit reaching up to 1,000 feet deep, on a mining site extending four to five miles on over 4,000 acres south of state highway 77 between Mellen and Upton. In later phases the mining could potentially be extended for a total of 20 miles or more. It is estimated that perhaps 280 million tons of taconite pellets (approximately eight million tons per year) could be produced over an approximately 35-year phase one lifespan, and perhaps 16 million tons of taconite annually, potentially totaling over one billion tons, if subsequent phases of mining were completed. On-site crushing and processing plants would be included to process the iron ore into taconite pellets for shipment primarily by rail and ship to steel mills. One or more significant

sources of energy would also be required for the mining and processing facilities.

In early 2011, Gogebic Taconite received a DNR permit to drill up to eight exploratory holes to begin to determine the size, composition and other features of the ore body. Drilling was expected to begin in July, 2011, but has been put on hold by the mining company. Pending results of these initial borings, more expansive drilling, followed by other excavating and related analysis (known as prospecting or bulk sampling) would likely be necessary before the potential scope of mining would be known and the formal mine permitting process would be started.

Gogebic Taconite has indicated approximately eight million long tons (2,240 pounds) of taconite could be produced annually over the expected 35-year life of a phase one mine. Precise waste estimates are not possible at this time and may vary substantially based on mine design. However, an annual production of eight million long tons (equivalent to 8,960,000 U.S. short tons) of taconite could be expected to produce roughly 29 million short tons (2,000 pounds) of mining waste materials annually and perhaps one billion tons over 35 years. Annual mining wastes could be comprised of approximately 18 million tons of tailings and 11 million tons of overburden or other waste rock. Based on a 2.7¢ per ton tipping fee under AB 426, 29 million tons of mining wastes could generate state revenues of perhaps \$665,000 to \$785,000 annually once the mine were in full production. The lower estimate would reflect about 40% of the non-tailings waste being recycled or put to some other beneficial reuse that would exempt it from the fee. Based on the \$665,000 annual figure, \$493,000 would be deposited to the segregated environmental fund and \$172,000 as Waste Facility Siting Board program revenues. The Waste Facility Siting Board is attached to DOA and facilitates negotiation and arbitration between a landfill license applicant and local municipalities. If the \$7 per ton recycling fee were applied to this amount of waste it would generate over \$172 million annually for the environmental management account of the environmental fund (the recycling program was folded into the environmental fund under 2011 Act 32). The environmental management account funds several activities including the following: recycling assistance to local governments; debt service costs for general obligation bonds issued for contaminated land, sediment and water pollution abatement programs; DNR administration of recycling, contaminated land and brownfields cleanup programs; state-funded cleanup where there is no responsible party able or willing to pay for the cleanup; brownfields and clean sweep grants; and, other programs. After mining activities are underway, the 2¢ per ton mining waste disposal fee that would be deposited in the environmental management account of the environmental fund could be appropriated by the Legislature to offset DNR ongoing costs of monitoring the iron mining operation.

Application Fees. The bill would limit application fees to the lesser of DNR's actual costs or \$2 million for evaluating all aspects of the mining permit. Under current law, the company proposing to mine is responsible for fees related to the mining permit and various other environmental permits that can vary significantly depending on the size and scope of the particular project and the state resources that would be potentially affected. However, in addition to the mining permit, a typical application would include state permits related to mining waste storage and disposal, water withdrawal, wetland and water quality impacts, and air emissions. In general, the mining company is either responsible for a set fee (typically established in administrative rule or statute and intended, in the aggregate, to recoup DNR costs of review and/or monitoring) or the

actual costs of review for these permits.

Application fees under current law can vary considerably and would depend on a variety of factors including the size, location and complexity of the proposed mining project. A smaller project where the mining company includes high-quality data with its mining application and environmental report may cost DNR \$1 million or less to review and analyze, while a large, complex project would be expected to cost several millions. It appears likely that a proposed Penokee/Gogebic Range iron mine would also include large on-site crushing and processing plants to produce taconite pellets. One or more major sources of energy to run the operations would also be required. A major cost of any mining proposal is the environmental impact statement (EIS) required under state law. The EIS is to address a variety of issues including the following: (a) the environmental and economic impact of the proposed action; (b) alternatives; (c) the impacts to tourism, employment, schools, medical facilities, social services, tax base, and the local economy; and (d) other significant factors. Current Wisconsin law requires the applicant to pay the cost of the state's preparation of the EIS, including any consultant costs, printing, and postage. Under the bill an EIS would also be required, but "other significant factors" identified under "(d)" above would not be required to be addressed. It is unclear the extent to which this difference might reduce the cost or scope of an EIS under the bill.

The costs of an EIS and other permit reviews for a potential Penokee/Gogebic iron mine are not known at this time. The two most recent mining applications received by DNR may provide some idea of the range of costs likely to be encountered. However, it should be noted that the costs for both these mining projects were incurred some time ago and may not be representative of current costs.

The proposed Crandon, or Nicolet, mine would have been located south of Crandon in Forest County. Exploration on a large zinc and copper deposit occurred in the 1970s. The application process for a mine was begun in 1978, but the application was withdrawn in 1986 shortly after DNR had published a final environmental impact statement. In 1995 a second proposal was advanced to mine approximately 55 million tons of zinc and copper ore from an underground mine. Ownership of the mine site and planned mining activity changed several times over the following years culminating in an October, 2003, sale to the Sokaogon Chippewa (Mole Lake) and Forest County Potawatomi Communities. The mining application was withdrawn in late 2003 before a draft EIS had been published by DNR.

The original application (withdrawn in 1986) generated DNR fee revenue of approximately \$1.85 million. This included over \$1.6 million for development of the environmental impact statement, and over \$220,000 for the mining and various other permits required. The second application (withdrawn in 2003) generated fee revenues of almost \$6.7 million. Costs included over \$4.5 million for DNR to hire consultants, gather and analyze data, and begin to develop the EIS. Fees for regulatory review activities related to the mining permit and all other DNR approvals that would be required totaled over \$2.1 million.

The Flambeau mine was located on an approximately 181 acre site near the Flambeau River

in Rusk County approximately one mile south of Ladysmith. The mining company began the permitting process in 1987, with all state permits being issued by January, 1991. In July, 1991, construction began on an approximately 35-acre open pit that reached 2,600 feet long, 550 feet wide, and up to 220 feet deep. The mine produced approximately 1.9 million tons of ore and produced marketable copper (181,000 tons), gold and silver. The Flambeau mine permitting process generated DNR fee revenues of approximately \$371,000. Costs included \$189,000 for DNR to develop the EIS and approximately \$182,000 for regulatory review of mining related permits. Reclamation of the mine site was substantially completed in 1999, though groundwater and other monitoring continues at the site.

DNR Staff and Costs. Under the bill, as passed by the Assembly, DNR would receive a \$100,000 payment from the mining applicant with the bulk sampling or pre-application notice and could then receive up to seven additional \$250,000 payments from the applicant as each prior payment has been fully allocated against actual costs, with a final payment of \$150,000 if the \$2 million cap is reached.

The DNR fiscal note for the bill indicates that mining project review costs could vary substantially, and could total approximately \$1 million for a small mining proposal to over \$6.2 million for a large mining proposal over several years. DNR's fiscal note includes a description of three cost categories, including approximately: (a) a total of \$600,000 for a small mining proposal to \$3.2 million for a large mining proposal for pre-application and permitting activity costs over four years; (b) \$50,000 for a small mining proposal to \$300,000 for a large mining proposal for DNR total staff costs related to the development of an environmental impact statement; and (c) \$350,000 for a small mining proposal to \$2,700,000 or more for a large mining proposal for contract costs to hire a consultant to develop an EIS.

The DNR fiscal note indicates the Department's total costs of \$600,000 to \$3.2 million related to pre-application and permitting activities would include three components, and would require approximately 1.5 to 8.0 staff, at a cost of \$100,000 per employee per year, for approximately four years. First, DNR estimates it would need 0.5 to 2.0 staff for project management, oversight and coordination, including for: (a) overall management and oversight of the DNR mining permit development; (b) coordination with the U.S. Army Corps of Engineers and other affected governments (federal, tribal, state, and local units of government); and (c) oversight of environmental performance after the mine operation begins. Second, the Department estimates it would need 0.5 to 4.0 staff for permitting and plan review, including for: (a) reclamation plan development, review and approval; (b) plan review and approval for waste management facilities, wastewater treatment, storm water management, and water supply; and (c) environmental permitting for air, waste, wastewater, storm water, high capacity well, water use, waterway and wetland permitting needs. Third, DNR estimates it would need 0.5 to 2.0 staff for technical review of specialized data needed to support groundwater modeling and analysis of surface water impacts.

DNR's fiscal note indicates the Department's staff costs related to development of the environmental impact statement would total approximately \$50,000 to \$300,000 and would require 0.5 to 3.0 staff. The DNR positions would provide assessment of the impact of a mining proposal

on threatened and endangered species, fish, wildlife and forestry resources, groundwater and surface water.

The DNR fiscal note estimated the \$350,000 to over \$2.7 million cost to contract with a consultant to develop an EIS is based on past costs ranging from \$370,000 for the 200 acre Flambeau Mine to \$2.4 million for the recently completed Keetac Mine expansion in Minnesota. The Department's fiscal note indicates the most cost effective approach is to have one contractor develop an EIS for both the state and the U.S. Army Corps of Engineers.

The bill would limit application fees to the lesser of DNR's actual costs or \$2 million for evaluating all aspects of the mining project (the mining application, all other related permits, and the EIS). The bill would create a program revenue continuing appropriation for receipt of the fees to be used for ferrous mining operations. No staff would be provided under the bill. The bill does not specify how costs in excess of the \$2 million cap would be addressed. Absent an appropriation by the Legislature, DNR would be required to absorb any costs in excess of \$2 million within its existing budget authority to the extent allowable. However, DNR may have some difficulty in finding state program revenue (fee) or segregated revenue (such as the environmental fund) appropriations that would allow expenditures for such purposes. Federal appropriations might also be considered by DNR, but federal restrictions may prevent their utilization. Further, to the extent existing appropriations could be utilized for ferrous mining related costs, staff and resources would be diverted from current functions. If a large and complex iron mining project were proposed, the \$2 million cap would be expected to require a substantial supplemental appropriation, a substantial diversion of existing state resources, or both. Staff resources for the PR appropriation created under the bill could be provided through separate legislation, or through a section 16.505 passive review request to the Joint Committee on Finance when a mining proposal was received by DNR.

To the extent DNR is able to coordinate its review and EIS development with the federal government, costs may be reduced for both the state and federal government as the associated costs would also be shared. However, to the extent the timelines under the bill may make it more difficult to jointly perform certain tasks, including the EIS, state costs may be higher. Further, the timelines under the bill would likely require a higher level of DNR staff (and consultant contracts) in a shorter period of time. While the DNR fiscal note suggests costs might be incurred over an approximately four-year period, the bill would establish a timeframe that could be as short as two years. Further the relevance and quality of data provided by the mining applicant to DNR would affect state costs of review. That is, to the extent the mining company application is well documented and supported by high-quality testing, sampling and baseline data, DNR may have less of a need to perform independent testing, or may be able to verify information with more limited sampling.

The DNR fiscal note did not include long-term costs to the Department after a mine permit has been issued. The Department indicated long-term costs could be incurred for ongoing project oversight and monitoring after a mine permit is issued and for oversight of reclamation and environmental monitoring after a mine has been closed. As discussed earlier, ongoing costs of monitoring the iron mining during the operating phase may be fully or partially offset by the 2¢ per

ton mining waste disposal fee that would be deposited in the environmental management account of the environmental fund under the bill. However, this revenue would not be realized until the year after mining operations began, nor after active mining ceased.

BL/lb