

4. The Stillwater Mine, Nye, MT This underground mine opened in 1987. It is neither closed nor reclaimed. Note that the Final Environmental Impact Statement for this mine stated that it is not a high-sulfide mine and that "no indication exists that this mine would produce acid." CMC's own testing of its waste rock has already demonstrated a high capacity for acid production. CMC's own documents acknowledge that the ore body and subsequent wastes left behind are high-sulfide.

5. The Viburnum Mine No. 27, Viburnum, MO This mine closed in 1978 and is touted as a safely closed mine in that it serves as the primary drinking water source for the town of Viburnum. No tailings were milled at the mine site or backfilled into the mine. Milling and processing of the ore from the No. 27 was done at the mill in Viburnum-5 miles away from the mine. There are two tailings dumps at the Viburnum mill, one still receives milling wastes and the other is closed and only partially reclaimed.

An additional important difference between this closed mine and CMC's proposal is that there are multiple layers of dolomite and limestone bedrock throughout the Viburnum Trend that have likely helped to protect groundwater and surface water from acid mine drainage. These high-carbonate rock layers that help buffer acid production are not part of the geology of precambrian bedrock found throughout northern Wisconsin.¹ An amendment to SB 3 when it was passed in February, further precludes the use of this mine as a "successful" example due to its geologic setting unlike that of northern Wisconsin.

The use of the Viburnum No. 27 in this report still demonstrates a major flaw in the survey's methodology. The authors include an example, the Henderson mine in Colorado, where the operating mine itself is at least 15 miles away from the mill and waste dumps. Despite this, Henderson is touted by the authors to be a single successful mine. Contrast the use of the Henderson mine with the author's convenient "disconnect" of the Viburnum No. 27 mine from Doe Run's currently operating mill and tailings dumps in the city of Viburnum, Missouri-some 5 miles away from the mine site-in their effort to create a successful mine. By comparison, CMC's proposal is an integrated mine and mill complex, and waste dumps on one contiguous site. Additionally, Doe Run company officials confirm that milled ore from this mine was processed at their Herculaneum, MO smelter. This smelter processes lead concentrates and was cited in 1988 for 300 violations by the U.S. Occupational Safety and Health Administration².

6. The Flambeau Mine, Ladysmith, WI This mine is not yet reclaimed. This open-pit mine operated for an unusually short period of time-3 years. There was no milling or chemical processing on-site, therefore no potential acid producing wastes from milled tailings. Yet the Flambeau mine is considered high-sulfide and waste rock overburden has yet to be

¹Sources-Phone conversations with Don Horton, Ozark Mountain Center on 2/19/97, and with Doe Run Company officials, John Carter and Jim Stack, 2/24/97.

²Doug Hawes-Davis, *Mining the Ozark Highland-A Heavy Burden on the Future*, Focus, Summer 1993, American Geographical Society.

successfully placed back into the open pit. Re-flooding of the pit will take place in the years to come and it is unclear whether the burial of the high-sulfide waste rock will preclude the production of acid drainage and groundwater pollution. Unlike the proposed Crandon mine, Flambeau's operators essentially shipped their waste problems to Canada.

The survey attempts to describe the southwestern Wisconsin lead-zinc district as meeting the requirements of "successful reclamation." This characterization is highly misleading. This area of Wisconsin was never subject to mining on the scale proposed by CMC. CMC's proposal could produce in 7 years, as much zinc ore as was produced during the 117-year high production period of zinc mining in southwest Wisconsin³. Ultimately though, any consideration of the lead-zinc district for the purpose of satisfying the requirements of the Mining Moratorium Bill is inappropriate due to its dissimilar geology.

There are additional problems with the CMC survey's methodology that should be pointed out. It was not the product of an objective analysis by researchers unconnected with either CMC or the mining industry in general. One of the authors, Debra Struhsacker, is a geologist formerly connected with efforts by Noranda to develop the Lynne deposit in Oneida County and she is currently registered as lobbyist for Crandon Mining Company.

This survey cites as references only company officials from the mining companies cited. At minimum, regulators in the states where each project is located should have been identified for corroboration and asked to serve as objective contacts for verification. The survey did not include results from all the mines examined. And curiously, the authors failed to find a single example outside of the United States, despite research advertised as a survey of North American mines. Metallic sulfide ores found in northern Wisconsin are very similar geologically to those found in the Greenstone Belts of Canadian Shield bedrock.

Finally, Debra Struhsacker was asked during a 2/18/97 radio interview whether she had found examples of metallic sulfide mines that would fit the criteria called for in SB 3. She stated that, "we could find mines that meet the requirement but that's not the point." Struhsacker's statement completely dodges the question. The mining industry and Crandon Mining have been asked repeatedly to come up with a single example of a successfully reclaimed metallic sulfide mine; this survey fails to do so. Even the Wisconsin DNR had to acknowledge in a 1995 report, that they were unable to find an example. This survey does not demonstrate that new mining can be relied upon not to cause pollution. Ultimately, it is an indictment of the mining industry's track record in that it proves the original contention; that there has never been a successfully reclaimed metallic sulfide mine.

³ Estimates of total production of zinc metal from hundreds of mines in the district, from 1860 to 1971 is 1,500,000 tons. Exxon Minerals estimates of zinc metal production from the Crandon mine in 1986 were 210,000 tons annually or 1,470,000 tons produced in 7 years. CMC currently projects production at 200,000 tons annually. figures from: U.S. Bureau of Mines, Wisconsin DNR and Crandon Mining Company.

Attachment 1

Report on the Glimax Molybdenum Co. Henderson/Urad mine.

In our efforts to continue research on the question of "safe" metallic sulfide mining such as Exxon's proposal near Mole Lake, Mining Impact has been looking at the examples cited in the survey released by Exxon in February this year. One of the mines, the Henderson mine in Colorado, was cited by Exxon as an "environmentally responsible" mine and held up as an example for Wisconsin. Our investigation finds that this mine is not the environmentally safe mine described by the survey. In fact the Henderson mine's owners have been found responsible for water quality problems at the site and downstream. See the attached report from U.S. EPA for further documentation of water pollution problems caused by this company.

Henderson's owner, Climax Molybdenum Company (CMC), also owns the Urad Mine and Mill which closed in 1974. CMC identified additional ore at the site in the mid-'60's, but did not activate the "Henderson" project until 1976. CMC at Henderson, is mining the same ore body as they did at Urad. The two projects are separated only by an adit or tunnel. Dana Allen, EPA-Denver, said, "The mines are contiguous; one is active and the other abandoned and both produce acid," and, "they're basically mining the same ore."

In the 1980's acid mine drainage from several sources was found to be the cause of elevated levels of manganese, zinc, and cadmium in Woods Creek. The Urad mine portal and the abandoned tailings ponds were determined to be the sources. CMC plugged the Urad portal in 1989. Although this action stemmed the immediate flow of acid drainage from the mine itself, the tailings dumps continued to supply contaminants to Woods Creek and on into West Fork Clear Creek. Dana Allen of the EPA cited both surface and groundwater flow from the tailings and on-site reservoir as transporting contaminants to West Fork Clear Creek.

Because the discharges from Urad's tailings exceeded state water quality limits, this site was listed under Section 304(l) of the Clean Water Act as significantly contributing to impairment of water quality in Woods and West Fork Clear Creeks. After disapproving a state permit meant to satisfy requirements of Section 304(l), EPA issued a federal National Pollutant Discharge Elimination System (NPDES) permit requiring that the Urad discharges meet effluent limits. Note carefully that in EPA's analysis of the Urad mine (attached), they identify discharge from the Urad reservoir as one source of water contamination. EPA identifies the Henderson mine discharge into the Urad reservoir as a source of heavy metal contaminants detected above water quality standards. CMC has only recently built a waste water treatment plant at the site to deal with the contaminated tailings leachate.

Unfortunately, the Henderson/Urad mine is being touted by the authors of the Exxon/Rio Algom survey as a successful operation. This is simply not true. The "new" mine called Henderson is neither closed nor reclaimed. Milling and waste disposal of the ore is done at a site

Urad/Henderson continued

approximately 15 miles away. No mill waste rock or process wastes are being backfilled into the mine itself. The mining wastes are not impounded into the type of unproven waste dumps proposed to be used by the Crandon Mining Company proposal in Wisconsin.

Climax Molybdenum abandoned the Urad mine/mill site in 1974 and attempted to reclaim the tailings wastes, yet was eventually forced by state and federal officials to meet strict water quality requirements due to contamination from the tailings dumps and a reservoir at the site. CMC resumed mining at the same site in 1976, but renamed it the Henderson mine.

It is readily apparent that the Henderson/Urad mine is hardly an example of a successfully operating metallic sulfide mine. To disconnect the Henderson and Urad mines from each other is to ignore that one company, CMC, has mined essentially one ore body at the same site and has caused extensive water quality problems due to failure to handle and store its wastes carefully. Moreover, the "new" project (Henderson) is milling and dumping mine wastes without the kind of engineered impoundments being considered in Wisconsin. Henderson will have no experience with the technology proposed for use here. In fact, the Henderson mine wastes have already begun to seep leachate past the dam meant to hold them in a valley near the mill. If CMC's past experience with the Urad mine wastes is any indication, it appears that the wastes from the current project will likely cause more water quality problems.

Sources: U.S.EPA, *Human Health And Environmental Damages From Mining And Mineral Processing Wastes*, Dec. 1995, P.45; April 14, 1997 phone conversation with Dana Allen, U.S. EPA-Denver; Milwaukee Journal Sentinel, *Touted as Earth-friendly, a mine wins accolades*, April 13, 1997, Don Behm.

Attachment 2

Page 45 of Human Health and Environmental Damages from Mining and Mineral Processing Wastes, Office of Solid Waste, U.S. Environmental Protection Agency, December, 1995

Urad Mine and Mill: Tailings Contaminate Creek

Sector: Molybdenum

Facility: Urad Mine and Mill, Climax Molybdenum Company (CMC), Climax, CO

Facility Overview: The site was initially mined from 1914 to 1919. Mining and milling of molybdenum resumed from 1967 until 1974 when the ore body was exhausted. The mine had been inactive since then. CMC had revegetated roads and reservoir dam faces with fill from the upper and lower tailings areas. Tailing ponds and reservoirs overflowed seasonally.

Waste Stream(s): The inactive mine had three NPDES discharge points: Outfall 001, the discharge from the lower Urad reservoir; Outfall 002, the combined point discharge of all drainage from the upper tailings area; and Outfall 003, the combined point discharge of all drainage from the lower tailings area.

Waste Management Practices: Upon closure, waste rock from the Henderson mine, another CMC facility nearby, was used to reclaim the tailings areas, followed by application of sewage sludge and wood chips, and revegetation. Both the upper and lower tailings areas were equipped with drainage systems to direct infiltration to the creek. The systems were not connected and did not capture all of the drainage from the tailings areas. Discharge from the upper tailings area flowed to Ruby Creek and to the lower tailings area, where treated wastewater from the Henderson mine enters, and flows ultimately to West Fork Clear Creek.

Type of Impact/Media Affected: The discharge from the tailings areas and the mine portal, which were located in and near Woods Creek had caused the water quality standards in Woods Creek to be exceeded. Arsenic, cadmium, copper, iron, lead, manganese, silver, nickel, zinc, and hexavalent chromium had consistently been detected in the Henderson Mine discharge, which flowed into lower Urad reservoir, the tailings areas, underdrain discharges, and Outfall 001. Levels of manganese, zinc, and cadmium in Outfall 001 had exceeded applicable water quality standards. Several of these contaminants had been detected in Woods Creek below each of the tailings areas.

Regulatory Actions/Environmental Claims: The discharges mentioned above had caused state limits for many water quality parameters to be exceeded. As a result, the site was listed under Section 304(l) of the Clean Water Act (CWA) as significantly contributing to impairment of water quality in Woods and West Fork Clear Creeks. In response, the state issued Urad a permit that was intended to fulfill the requirements under Section 304(l). EPA, however, determined that the state permit did not satisfy these requirements and, therefore, disapproved the proposed permit in lieu of a federal permit. The federal NPDES permit issued for Urad in June 1991 served as the "individual control strategy" (ICS) to address the impacts on Woods and Clear Creek. The permit required that Urad meet final effluent limits based on applicable water quality standards and comply with all toxicity limits at Outfalls 002 and 003.

References: U.S. EPA. Draft. Mining Waste Releases and Environmental Effects Summary for the State of Colorado. March 1994.

TOWN OF AINSWORTH MEETING WITH DEPARTMENT OF NATURAL RESOURCES

Ainsworth Town Hall

April 28, 1997 at 6: 00 PM

We are here because we are concerned about the impacts the proposed Crandon mine would have on our waters, our air, our economics, our way of life. Since we have lost the Public Intervenor we look to the WDNR, the Army Corps of Engineers and the EPA to protect us from any negative impacts from the mining operation. The following is a partial list of questions which we have compiled by topic about the proposed Crandon mine. As more raw field data becomes available, we will have more questions.

WATER QUANTITY:

1. The water budget for Rolling Stone Lake is incomplete-- most particularly since the drawdown is going to affect its incoming streams. The water budget being used has been pieced together from various years in the 1980's and omits important data--e.g. all of the incoming waters are not included. Is the DNR planning to do a complete and coordinated study?
2. Crandon Mining Company's (CMC) drawdown contours map figure 4.2.7-3 in its Environmental Impact Report (EIR) shows one foot and two foot contour lines moving away from Rolling Stone Lake in a northeasterly direction. Everyone knows that water flows downhill. Rolling Stone Lake's elevation is 1534 ft. while the one foot contour line is at 1560 ft. What raw field data is there to support CMC's assumption that the water flows away from the lake?
3. Little Sand Lake has a down gradient on its south end. The north end has intermittent groundwater entering the lake plus an incoming stream. A control structure has been proposed at the outlet of Little Sand Lake, which is Creek 12-09, which flows into Rolling Stone Lake as one of its principal feeder streams. This control structure is supposed to maintain the lake level of Little Sand Lake and provide a water budget for Little Sand Lake. How can a water budget be determined by this structure when it can only measure the surface water overflow, and no raw field data has been collected for the down gradient into the groundwater?
4. Upper Pickerel Creek has a unique ecosystem which is a valuable resource to Rolling Stone Lake and the Town of Ainsworth. Not enough raw field data has been gathered for this unique resource. Will this data be gathered? If not, why not?
5. The project has inventoried 256 wetlands. It is our understanding from a recent DNR letter that wetlands will not receive the same mitigation as lakes and streams. How and how many of these wetlands are to be mitigated?
6. Natural reproduction areas for brook trout in Creek 12-09, Creek 11-04 and Upper Pickerel Creek are going to be affected by the drawdown. How will this be mitigated?
7. The March 17, 1997 update to the EIR shows an upgradient over the orebody on its west end. In previous data it was located on the east end of the orebody directly above Little Sand Lake. What raw field data has been obtained to change the location of the upgradient?
8. In the technical meetings with the DNR and all of the other experts, the bedrock hydraulic conductivity has not been resolved. CMC claims that the fractures in the bedrock at the orebody run east and west and are not contiguous. Down hole camera data analysis is available today which would prove or disprove this statement. The size of the fractures and the amount of flow

could also be determined. Will the DNR require this technology to be used? If not, why not?

9. Two crown pillar hydrological studies have been submitted by CMC. Both have been rejected by the DNR. What is the present status of the crown pillar hydrological studies?

10. The Early Wisconsin till/saprolite pump test completed in 1994 has had no review by the DNR or other interested parties at the technical meetings in Madison. When will a review be completed?

11. CMC's current plans do not include the monitoring of groundwater over the orebody. Will the DNR require continuous monitoring wells at this location? If not, why not?

12. Are the various studies cited and proposed for surface water analysis and mitigation available for examination? If not, when will they be available?

13. The October, 1984 water table map of the project has been reviewed and has been disagreed upon by the experts at many of the technical meetings in Madison. To date this has not been resolved. Will the DNR request a new water table map? If not, why not?

WATER QUALITY:

14. Waste characterization work is incomplete. Will the DNR know all of the reagents used in the flotation processes for zinc, copper, lead, gold and silver, including their quantities, and what goes into solution coming out of the TMA? In addition, will the DNR require a study that mimics the entire flotation process, simultaneously using the combination of all of the metals, reagents and chemicals that are coming from the Crandon orebody? If not, why not?

15. What about the backfilled mine which will contain 22 million tons of tailings plus all of the reagents, etc. that the TMA will contain? Are there any plans to remove the pore water from the reflooded area or to fill all of the passageways, shafts, working areas, etc.? In the EIR, CMC uses the term "tight filling." What is "tight filling?" Also, what equipment will be left in the mine?

16. Pyrite recovery studies have been done by CMC and found by them that pyrite recovery is unprofitable. Pyrite recovery studies should be reconsidered because of the long term problems associated with the tailings ponds and the unprotected backfilled mine. Currently there is no technology to prevent or control acid mine drainage. Will the DNR require additional pyrite recovery studies?

17. After researching volumes of data and confirming this with the Mineral Policy Center in Washington D.C., we have learned that there could be radioactive hotspots in this orebody. These hotspots will be treated the same as all other wastes. Why?

18. CMC's EIR shows that contaminant transport modeling over the orebody will not be performed. This is unacceptable. Will the DNR require this modeling?

19. The process which was used to determine the location of the proposed Tailings Management Area (TMA) needs to be re-evaluated. An explanation needs to be provided as to why this location was chosen when: a) this is the highest surface land in the Pickerel Basin; b) this is a recharge area for the basin; c) this is a groundwater divide which sends water in four different directions; d) this is the source of our drinking water and e) it is surrounded by Hemlock Creek, Swamp Creek and a burr oak swamp. We want to have raw field data provided to us as to why all of the other 40 plus locations were not chosen for the TMA.

20. The TMA cap and liner described in section 4.2.5.10 of the EIR (revised March 17, 1997) is as follows: "Geo/syntec (Dec. 1996) the HDPE geomembrane liner and cap at the TMA facility should function as designed for a long time (e.g. hundreds of years) without deterioration in performance." This is all that is said. The chemical nature and properties of the liner are never detailed. Also, what are the effects of subsiding over time, temperature and season on the composition of the liner?

21. The original plan for the TMA liner called for 3 feet of natural clay liner. We are now down to a GCL which is 1/4 inch of sodium bentonite plus 12 inches of screened Early Wisconsin till and a 60 ml. plastic sheet. This is supposed to last thousands of years, but no one can show us a single facility to date using this method which has not contaminated the groundwater. CMC is asking us to accept unproven technology to protect our groundwater, surface water and drinking water. Is this acceptable to the DNR?

22. Mercury level studies in groundwater and sediments of Little Sand Lake, Creek 12-09 and Rolling Stone Lake should be performed using the latest low level measurement technique. Is the DNR planning to do these studies? If not, why not?

23. There has been no collection of baseline data for the private wells in the Town of Ainsworth pertaining to heavy metals. Will such baseline data be collected? If not, why not? Also, some town residents have wells which are located on and in bedrock and produce low volumes of water. What measures will be taken to prevent impacts to these wells?

MOD FLOW MODELING:

24. The current Mod Flow model has been modified to the maximum without any corresponding peer review. We believe that this is not a proven way of modeling. Is the DNR willing to accept this unproven method of modeling?

25. In the geological cross section I-I, which is south of Swamp Creek, CMC made an assumption to change this cross section from coarse outwash to fine outwash based on drill hole No. RR-2, because the model was not converging. Additional raw field data with drillholes needs to be obtained to verify this assumption inasmuch as drill hole No. RR-2 is located considerably north of cross section I-I. Will the DNR request raw field data?

26. Creeks 13-15 and 13-02, which are trout reproducing creeks and springholes feeding Rolling Stone Lake, are not being used in the model. Why not? Is there raw field data which shows that these springholes will not be impacted?

27. CMC has calibrated the groundwater model in EIR Section 4.2.5.2 (revised March 13, 1997) based on the following data:

- a. Long term pump test-24 days at Duck Lake (1991-Golder)
- b. The drought in the late 1980's
- c. Early Wisconsin till/saprolite pump test of 1994 (Foth & Van Dyke)
- d. Bedrock pump test-1981 (Camp, Dresser & McKee)
- e. Water table map of 1984

This is the foundation of the model. This data has not been agreed upon or accepted by the DNR or the other interested parties at the technical meetings in Madison. When will the DNR revisit this issue?

28. CMC is using data in the model concerning precipitation which is being collected from the

North and South Pelican weather stations north of Rhinelander. The evaporation studies are from the Rainbow Flowage in the west central part of the state. In 1986 both Exxon and the DNR used the data from the Laona weather station. Why is the data from the Laona site not being used this time around? Better yet, why has a weather station not been located at the project site?

29. CMC shows in its contaminant transport model for particle tracking in the reflooded mine that the particle comes out of bedrock at the west end in approximately 600 years [Practical Worst Case (PWC) scenario]. The particle was placed at the bottom of layer 6. Why wasn't it placed at the top of layer 5 which is beneath the crown pillar? Is the DNR going to rerun the model with the particle at the top of layer 5?

AIR QUALITY:

30. The air quality in our community is pristine, per your DNR 1995 Air Quality Study. For example, particulate matter (total suspended particles or TSP) has a numerical reading of 9 according to the air monitor which was installed at the site where Creek 12-09 enters Rolling Stone Lake. This is the best in the state. CMC proposes in their Practical Worst Case (PWC) to bring this reading up to 116.5. At the Flambeau mine, which is basically a large gravel pit with no milling processes or tailings ponds, the particulate matter reading was 191 in December, 1995. The maximum allowable standard is 150. With a reading of 116.5, CMC will be permitted to contaminate our air by nearly 1200%! We are concerned about the health, safety and welfare of our people, our wildlife and our vegetation. What is the DNR's position on this issue?

31. Methyl/mercury air deposition studies have not been completed. When will they be?

SOCIOECONOMIC:

32. A socioeconomic study of our area must be performed before issuing the WDNR Draft Environmental Impact Statement (DEIS) and the results should be included in the DEIS. CMC's study in the EIR shows no impacts to our area, either environmentally or economically. This is not the case.

33. The Town of Ainsworth receives forest crop revenues. What happens to our forest lands with reduced air quality and water quality and groundwater drawdown in future years? The effect on these revenues is an indirect impact to the town which has not been addressed.

34. Property values in our area are a direct result of our clean air and water. The mine and its impacts will degrade both our air and water quality, and thus negatively affect our property values. Who will resolve this?

35. Our two main local industries are logging and tourism. These will be negatively affected with the degradation of our clean air and water and increased noise levels due to the mine. In addition to our concerns about water quality and quantity and air quality, we request that a four season 24 hour per day noise study be completed.

36. The mine and its inflow of people will have an effect on the Elcho School District, our volunteer fire department, our volunteer rescue squad and our local roads. How will this be addressed?

37. The mining project will require great volumes of reagents and chemicals to be transported to the mine site to be used in the mining and milling process. Is it known which mode of

transportation and routes will be used to transport these reagents and chemicals? Local communities will need to have personnel who are properly trained in the case of an accident en route. Who will be responsible for training these people?

So, in summary, we feel that the socioeconomic issue has not been addressed. Will the DNR require that a new and complete socioeconomic study of the Town of Ainsworth be performed? If not, why not?

GENERAL:

38. Currently Broken Hill Proprietary Co. Ltd of Australia (BHP) has been granted an exploration permit near Bishop Lake by the Town of Nashville. This location is approximately 1/2 mile north of the Town of Ainsworth and approximately one mile west of the proposed Crandon mine. Are there going to be any studies by the DNR as to the possible cumulative impacts?

39. The wastewater treatment plant will remove contaminants that cannot be transported to the Wisconsin River. These contaminants will be placed into the TMA. The TMA will leak forever into our groundwater. Why is it acceptable to put these contaminants into our groundwater and drinking water, but not acceptable to put them into the Wisconsin River?

40. In EIR Section 2.2 (revised September 29, 1995) CMC is requesting an exemption from testing for "organic substances, turbidity, radioactivity, asbestos, fluoride, bacteria, color, corrosivity, foaming agents and odor." Has any raw field data been submitted to verify that these items will not occur at the proposed Crandon project? Is this requested exemption valid?

41. Currently state groundwater quality protection standards allow a 1200 ft. compliance boundary in areas where mining wastes will be stored. No other activity or a private citizen is allowed this, including hazardous waste facilities. Does the DNR support this excessive compliance boundary?

LANGLADE COUNTY ZONING ORDINANCES AND TOWN OF AINSWORTH
METALLIC MINING REGULATIONS:

42. Little Sand Lake is located partially in Langlade County and the Town of Ainsworth. This section of the lake as well as the Town of Ainsworth are covered by Langlade County zoning ordinances and the Town of Ainsworth Metallic Mining Regulations concerning the degradation of ground and surface waters, wetlands and air quality. In addition, noise pollution, lake levels and stream levels are covered. How can this project conform to the Langlade County zoning ordinances and the Town of Ainsworth Metallic Mining Regulations?

43. What plans of mitigation for the loss of aquatic habitat and fish in Creek 12-09, Creek 11-04, Upper Pickerel Creek and Martin Springs and the reduction in dissolved oxygen levels in Rolling Stone Lake due to the drawdown are being contemplated? How will these mitigation efforts be coordinated with our current non degradation standards in our mining ordinances and regulations?

The Ainsworth Town Board by a unanimous vote requests that the DNR respond to these written questions and to any additional oral questions in writing.

AINSWORTH MINING IMPACT COMMITTEE & ROLLING STONE LAKE PROTECTION &
REHABILITATION DISTRICT ENVIRONMENTAL IMPACT COMMITTEE

cc: U.S. Army Corps of Engineers
U.S. Environmental Protection Agency (EPA)

Resolved, That

- 1) The name of Eau Claire Area Ecology Action, Inc., a Wisconsin corporation without stock and not for profit, is hereby changed to and shall hereafter be identified as "Northern Thunder, ~~Inc.~~"
- 2) The purposes for which Northern Thunder is organized are hereby amended to the following: "to promote programs, especially in Wisconsin, for the preservation and enhancement of the natural and human environments, with particular emphasis on replacing profit-oriented institutions with community owned and controlled resources, utilities, factories and stores."

The undersigned officers of Eau Claire Area Ecology Action, Inc. (now changed to Northern Thunder, Inc.)
(The name of a Wisconsin corporation must be stated) certify:

1. The foregoing amendment of the articles of incorporation of said corporation was adopted by the members on the 12th day of September, 1977, by the following vote:

Number of Members having voting rights	Number present in person or by proxy	Number voting	
		For	Against
55	22	22	0

2. Instructions 2 and 3)

Executed in duplicate and seal (if any) affixed this 4th day of November, 1977

(Affix seal or state that there is none)

NO SEAL

Willard E. Firth, III
President
Louis Paul Desprez
Secretary

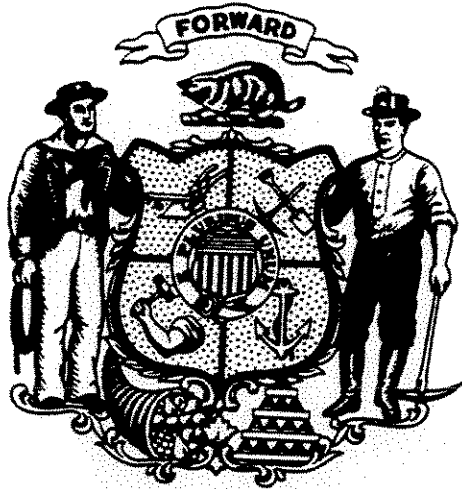
This document was drafted by

Thomas Salzen

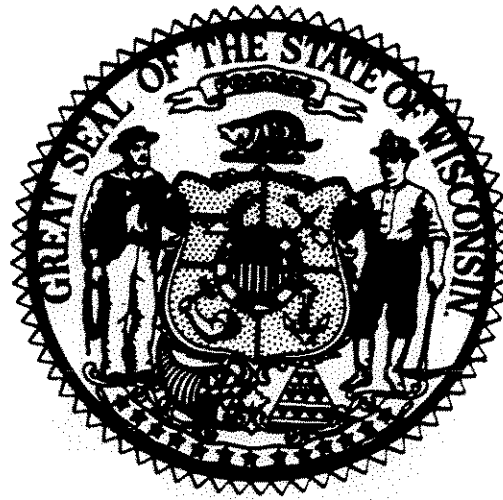
(Name)

Please print or type

WISCONSIN STATE SYMBOLS



The Coat of Arms



The Great Seal

(See other symbol illustrations on front and back endpapers.)

Over the years the Wisconsin Legislature has officially recognized a wide variety of items as state symbols. In order of adoption, Wisconsin has designated an official seal, coat of arms, motto, flag, song, tree, flower, bird, symbol of peace, fish, state animal, wildlife animal, domestic animal, mineral, rock, insect, soil, fossil, dog, beverage, grain, and dance. (The "Badger State" nickname, however, remains unofficial.) These symbols provide a focus for expanding public awareness of Wisconsin's history and diversity.

Seal. Article XIII, Section 4, of the Wisconsin Constitution requires the legislature to provide a "great seal" to be used by the secretary of state to authenticate all official acts of the governor except laws. The seal consists of the coat of arms with the words "Great Seal of the State of Wisconsin" centered above and a curved line of 13 stars representing the 13 original U.S. states centered below, surrounded by an ornamental border. A modified "lesser seal" serves as the seal of the secretary of state.

The history of the seal is inextricably entwined with that of the coat of arms. An official seal was created in 1836, when Wisconsin became a territory, and was revised in 1839. When Wisconsin achieved statehood in 1848, a new seal was prepared. This seal was changed in 1851 at the instigation of Governor Nelson Dewey and slightly modified to its current design in 1881 when Dewey's seal wore out and had to be recast. Chapter 280, Laws of 1881, provided the first precise statutory description of the great seal (and coat of arms) in what ultimately became Sections 1.07 and 14.45 of the statutes.

Coat of arms. The coat of arms, described in Section 1.07 of the statutes, is an integral part of the state seal and also appears on the state flag. Its history parallels that of the seal.

On the coat of arms is a sailor with a coil of rope and a "yeoman" (usually considered a miner) with a pick, who jointly represent labor on water and land. These 2 figures support a quartered shield with symbols for agriculture (plow), mining (pick and shovel), manufacturing (arm and hammer), and navigation (anchor). Centered on the shield is a small U.S. coat of arms and the

U.S. motto, "E pluribus unum" ("One out of many" referring to the union of U.S. states), to symbolize Wisconsin's loyalty to the Union. At the base, a cornucopia, or horn of plenty, stands for prosperity and abundance, while a pyramid of 13 lead ingots represents mineral wealth and the 13 original U.S. states. Centered over the shield is a badger, the state animal, and the state motto "Forward" appears on a banner above the badger.

Petenwell-Castle Rock Property Owners Association, Inc.
1797 Badger Ct., Arkdale, WI 54613

FRANK J. LUEDTKE
President
JOE MORRO
Vice President
JOYCE ROBB
Vice President
GERI PARKS-Luedtke
Secretary
CLEO ANDERSON
Treasurer

TOMAHAWK, WI HEARING

May 20, 1996

DIRECTORS:
HERB DAMRON
MARGARET ELSBURY
BARRY MAY
JIM RAY
BILL SCHERMERHORN
LENNY THOMPSON
FRANCIS R. BANNEN
Past Chief Counsel (1976-1983)
WILLIAM KEIFER
Past Director (1976-1981)

The Petenwell-Castle Rock Property Owners Association, Inc. (PCPOA) is a Wisconsin not for profit organization founded in 1976. The PCPOA is recognized by the Federal government as a not for profit association under Section 501(c)(4) of the code.

RESOLUTION

Whereas, The Crandon Mine Company (CMC) is planning on mining ore in Wisconsin's Crandon area.

Whereas, The CMC is planning on discharging toxic material into the Wisconsin River via a pipeline some 30 plus miles long.

Whereas, CMC proposes to only monitor the toxic waste piles for only 40 years which piles have a lifetime polluting expectancy of over 9,000 years.

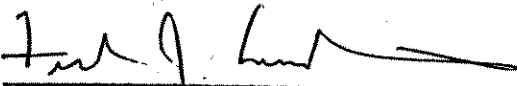
Whereas, it appears that the major owners of CMC (Exxon Minerals and Rio Algon) have had and are presently having environmental problems of great concern to the people of North America.


Whereas, there is sufficient information and proof concerning the kill of fish and wildlife caused by metallic sulphide dumpings into rivers and streams.

Whereas, there is no reliable information to support or negate what will take place when the toxic pollutants from the proposed mine enters the Wisconsin River and mixes with the already polluted Wisconsin River.

Whereas, there is no reliable information to justify a position that there will be great economic growth and advantage to the area where the mine will be located.

NOW THEREFORE BE IT RESOLVED that the PCPOA strenuously objects to the dumping of any toxic or nontoxic materials from the proposed mine into the Wisconsin River or any other body of water, the PCPOA objects to any mining license being issued to any party or parties until a guarantee can be made that the environment will not suffer.


Frank J. Luedtke, President


Joyce Robb, Vice President


Geri Parks-Luedtke, Secretary


Joe Morro, Vice President

Attachment

OVER 15 YEARS OF SERVICE TO THE LAKES

To: Chuck Sleeter, Pickerel Lake	Fax No.: 715-484-4501	Date: 12/6/96
Subject: WAL Position on the signing of local agreements.	From: Mary L. Platner, President Wisconsin Association of Lakes, Inc. Telephone: 414-367-5341 Fax: 414-367-5258 E-Mail: mlplatner @ aol.com	
Number of Pages: <u> 1 </u> (including this page) (If number of pages transmitted not received, please call 414-367-5341)		

Message:

The WAL Board of Directors, at their December 6 Board of Directors Meeting in Stevens Point, passed the following motion:

The WAL Board reaffirms the sense of the resolution approved by the Association at the WAL annual meeting on 3/22/94 and further strongly opposes any signing of local agreements until all applicable environmental impact statements have been completed and reviewed.

The 1994 resolution as adopted is as follows:

Whereas the Wisconsin Association of Lakes is dedicated to preserve and protect inland waterways, their watersheds and ecosystems;

Whereas members of the Wisconsin Association of Lakes are most concerned about the potential environmental impacts of the proposed Exxon Rio Algom mine, in a watershed that impacts the headwaters of the Wolf river, which has been designated by the state of Wisconsin as an Outstanding Resource Water, and;

Whereas members of the Wisconsin Association of Lakes are most concerned about the ability of Exxon Rio Algom to conduct this project with no degradation of the groundwater, surface water and air quality in the environmentally sensitive area of the proposed Crandon Mine project;

Whereas there appears to be a significant potential for negative impacts on both the lakes, rivers and groundwater of the region if mining permits are granted to Exxon Rio Algom for the Crandon Mine Project;

Therefore be it resolved that the Wisconsin Association of Lakes opposes the granting of permits to Exxon Rio Algom to extract minerals at the proposed Crandon mine site unless the protection of the quality, recreational and biological values of the area's surface and groundwater resources can be absolutely assured.

Free

Resource Roundup

Covering the Black Hills Region
Volume 1, Issue 5, June 1996

Acid Mine Drainage

Acid Mine Drainage (AMD) can result when certain 'sulfide' rocks are mined and brought to the surface of the earth, where they react with water. Although several Black Hills mines have battled problems with AMD, the most publicized was drainage at the Richmond Hill mine, which proved a major challenge to the mine and the South Dakota Department of Energy and Natural Resources (DENR).

The waste dump at the Richmond Hill mine became acid in 1992 and contaminated surface and ground water below the mine. Generally, such a problem necessitates the installation of water treatment plants which must operate well into the future. Richmond Hill, however, initiated water treatment processes and moved all 3-1/2 million tons of waste back into the pit from which it was originally mined, which is a 'high and dry' location. In addition, the mine installed a low-permeability cover to eliminate acid runoff, negating the need for long-term, active water treatment. A limited amount of monitoring during the mine's post-closure period will be required. Richmond Hill mine was able to mitigate the effects of AMD and reclaim the area.

Although the AMD problem was of major significance to many Black Hills residents, it was relatively minor on a world scale. Problems faced at a (formerly East) German mine, for example, after unrestrained mining to support Communist cold-war efforts, involve 100 times more material and is anticipated to cost 1000 times as much and take 10 times as long to reclaim as did Richmond Hill.

Techniques used to reclaim and prevent AMD in South Dakota are being closely followed by other regulatory agencies, including the Germans, and implemented where appropriate. Tom Durkin, hydrologist with the DENR, believes that the Richmond Hill approach toward long-term reclamation offers the best chance of a 'walk away' situation, or as close to it as is technically and economically feasible. "The cleanup was quick and efficient, and our experience here will help to avoid these types of problems in the future," he stated.

RESOURCE ROUNDUP

P.O. Box 790

Spearfish, SD 57783

SOUTH DAKOTA

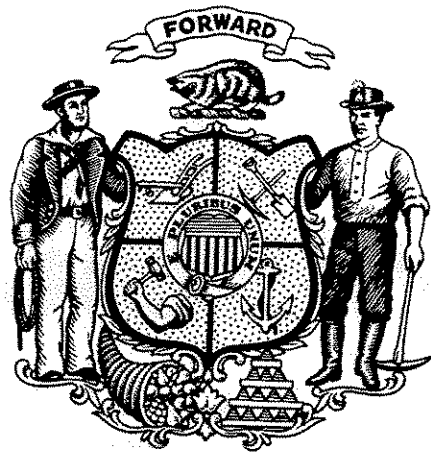
DEPT OF ENERGY AND NATURAL RESOURCES (DENR)

605-773-3151

TOM DURKIN
ERIC HOLM

Wisconsin State Assembly
Environmental Policy Update

MINING IN WISCONSIN



An analysis provided as a public service
by the Assembly Republican Caucus

January 1998

Background

The Crandon Mining Company was a partnership comprising subsidiaries of the Exxon Corporation of Dallas, Texas and Rio Algom, Ltd., of Toronto, Canada. Rio Algom, Ltd., recently announced it is now the sole owner of the Crandon Mining Company. The Crandon Mining Company is seeking state and federal permits to construct and operate a metallic sulfide mine. The mine would be located near Crandon, Wisconsin in Forest County. The site is roughly five miles from Crandon and totals 550 acres. Actual mining would be done in an area measuring 4,900 feet by 100 feet. According to company officials, the zinc and copper mine would operate for 28 years and is expected to produce 5,500 tons of ore per day. In addition, the mine would take three years to construct and it would take four years to restore the site back to its natural state. The Crandon Mine is approximately halfway through the estimated four-year mining application process.

The regulations and scrutiny currently being applied by the Department of Natural Resources (DNR) to the permitting process of the proposed Crandon Mine are the same as those applied to the closed Flambeau Mine in Ladysmith, Wisconsin. The Flambeau Mine was the first new mine operating in Wisconsin after the state's mining laws were enacted in the 1970s.

The Flambeau Mine ceased operations in early 1997. State regulations proved successful in preventing environmental degradation to the Flambeau River. According to the DNR, when the Flambeau Mine was operational, the pollutant levels in the wastewater discharge were well below allowable limits. In fact, the pollutant levels in the mine discharge were sometimes lower than the levels already found in the Flambeau River. Additionally, total tax revenues, grants and private investments to the local community totaled over \$29 million since the mine opened in 1992.¹

¹ Data on file with Larry Lynch, Mining Team Leader, Department of Natural Resources.

Current Law

Before a mine may operate in Wisconsin, an organization interested in opening a mine must prove its ability to effectively operate without adversely affecting the environment. By conducting a series of public hearings and reviewing technical and scientific application materials provided by a mining interest, the DNR makes a determination as to whether a mining permit may be granted. In addition to complying with Wisconsin's mining laws created in the 1970s, a mining interest must comply with all federal, state, and local air, water, and solid waste regulations.

A mining interest is perpetually liable for any environmental damage caused by the mining facility or the mining waste site. In addition, under 1995 Wisconsin Act 377, the owner of a mining waste disposal facility is required to provide proof of financial responsibility ensuring the availability of adequate funds for the costs of closing the facility and for long-term care of the facility following its closure, such as monitoring groundwater. Under this act, the owner must maintain proof of financial responsibility for a minimum period of 40 years after the facility is closed, but the period may be extended if the DNR determines that additional long-term care is necessary to protect human health or the environment.

Additionally, during the summer of 1996, DNR Secretary George Meyer strengthened current state regulations regarding water quality protections near mining operations. New administrative rules (NR 132) now require mining companies to establish an irrevocable environmental protection trust fund to maintain their environmental protection facilities. A proposed rule (NR 182) will require mining companies to follow stricter rules than other businesses to protect surface water and groundwater.

Senate Bill 3

Senate Bill 3 (SB 3) bans the DNR from issuing a mining permit to a mining interest until the DNR can prove that a mine in the United States or Canada has operated for ten years and has been closed for ten years without polluting surface water or groundwater. Before action by the State Assembly, the DNR had serious reservations regarding the language of SB 3. In testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant to DNR Secretary George Meyer, stated, “[d]espite the changes made by the Senate in SB 3, there remain significant uncertainties in the bill. However, I think it will be clear to all that this bill, if it becomes law, would likely not be a significant impediment to mining in Wisconsin. Moreover, *this bill will add nothing to our understanding of the environmental safety of a mine proposed in this state, and provide no additional level of knowledge or environmental protection.*”² Three specific areas of concern were raised: information verification, acid neutralization, and the definition of pollution.

² Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997)(emphasis added).

Information Verification

Information Verification: The Problem

According to the DNR, SB 3, before action by the State Assembly, "would require the department to make a determination, as worded in the bill, *based solely on information provided by the applicant* for a mining permit. There is no provision for the department to verify the information.³" In other words, the DNR interpreted SB 3 to mean the DNR would take information supplied by a mining interest at face value. While the nonpartisan Legislative Council staff said that the DNR *may* already have the authority to independently verify submitted information, they agreed "the Bill could be amended to explicitly authorize DNR to verify the information."⁴

Information Verification: The Solution

To address this concern, Assembly Amendment 2 was authored by Representatives Tom Ourada (R-Antigo) and Jeff Plale (D-South Milwaukee). It requires the DNR to double-check the information provided by a mining company. According to the Wisconsin Legislative Council staff, "the amendment *explicitly states* that the DNR is required to independently verify the information submitted by the mining applicant that the two preconditions have been satisfied."⁵ Assembly Amendment 2 was adopted on a bipartisan vote of 52-46.

³ Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997)(emphasis added).

⁴ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Representative Marc Duff, Chairperson, Assembly Committee on the Environment, page 6 (July 8, 1997)(attached).

⁵ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Representative Tom Ourada, page 2 (January 20, 1998)(emphasis added)(attached).

Acid Neutralization

Acid Neutralization: The Problem

Senate Bill 3 bans the DNR from issuing a mining permit to a mining interest until the applicant can provide an example of a mine in the United States or Canada that has operated for ten years and has been closed for ten years without polluting surface water or groundwater. Before Assembly action, the mining operation used as an example must be in an *ore body* which naturally is "not capable of neutralizing acid mine drainage." Such an ore body would be similar to the Crandon ore deposits. Examples of mines capable of neutralizing acid mine drainage include former lead mines in southwest Wisconsin. The ore bodies in these mines were located in limestone host rock which can naturally neutralize acid drainage.

The DNR was concerned that the intent of the Senate bill was not accomplished by its language because it is the *host rock*, along with the *ore body*, rather than the ore body itself, that is important in determining whether acid drainage is a potential problem at a mine site. According to the DNR, "[t]herefore, as we would interpret the engrossed version of SB 3, any sulfide mine in which the ore body itself is not capable of neutralizing acid mine drainage would qualify for use as an example by a mining applicant. *But this is a serious problem because the host rock in which the ore body lies is a far more important factor in determining if there is the potential for a mine to generate levels of acid that may impact surface or groundwaters.*"⁶ The Senate bill does not address this concern regarding composition of the host rock. Therefore, some of the southwest Wisconsin lead mines could potentially be used to satisfy the preconditions established under the Senate bill, even though the DNR would not find them appropriate tools for comparison, since these lead mines were contained in a host rock that was naturally capable of neutralizing all of the acid mine drainage generated by the mine or tailings facility. In short, an important issue is whether the mine as a whole, ore body along with host rock, has a net potential for generating acid drainage.

According to the nonpartisan Legislative Council staff, "[t]he concern expressed by the DNR that the two preconditions established by the Bill should include the host rock in determining whether the mine could generate acid also appears reasonable and should be addressed in any amendments to the Bill."⁷

Acid Neutralization: The Solution

Assembly Amendment 3 was authored by Representatives Tom Ourada (R-Antigo) and Jeff Plale (D-South Milwaukee). It allows the DNR to compare "apples to

⁶ Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997)(emphasis added).

⁷ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Representative Marc Duff, Chairperson, Assembly Committee on the Environment, page 6 (July 8, 1997)(attached).

apples” when determining the acceptability of mining operations offered as examples of successful mining operations. The amendment provides that the preconditions of SB 3 must be satisfied with respect to mines operated in a sulfide ore body that “together with the host rock, has a net acid generating potential.” This amendment resolves a problem with the Senate version of the bill, by requiring that only mines operated in a sulfide ore body that has a “net acid generating potential” be used to satisfy both preconditions of the bill. Assembly Amendment 3 was adopted on a bipartisan vote of 55-43.

According to the nonpartisan Legislative Council staff, “it can be argued that this amendment strengthens the Bill by requiring the applicant for a mining permit to show that *technology* has successfully been used to control acid drainage at a mine site where the absence of acid neutralizing minerals made acid drainage a potential danger to the environment.⁸”

⁸ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Speaker Scott Jensen and Representative Marc Duff, page 2 (January 21, 1998)(emphasis in original)(attached).

Definition of Pollution

Definition of Pollution: The Problem

The DNR had two concerns regarding how SB 3, as passed by the Senate, used the term "pollution." As passed by the State Senate, both preconditions in SB 3 require that the mine operated for ten years and has been closed for ten years "without the pollution of groundwater or surface water . . ."⁹ "Pollution" was defined as "degradation that results in any violation of any environmental law."¹⁰

First, the DNR questioned what would be a "violation" of an environmental law under SB 3. The DNR interpreted the language to mean ". . . fairness and reason would require, short of adjudication in court, that an alleged violation would have to be formally determined by the agency that has jurisdiction over the environmental laws to which the mine is subject."¹¹

Second, the DNR questioned what environmental laws were relevant under SB 3. "The open ended language would make it relatively easy for a mining company to find a mine which would meet the test of amended SB 3 [as passed by the Senate]. The fatal flaw with this is simply that most environmental laws have only been enacted within the last 30 years, and are constantly being improved. If a mine was operated in the 1870's [sic], and was closed during the 1880's [sic], and no violation had been issued during that period, then the test will have been met. But what has been proved? Nothing!"¹² Moreover, a mine may meet the test due to weak environmental laws where the mine is located or simply because no violation has been detected. In short, the DNR concluded "[t]he fact that a mine meets the test of no violation does not necessarily mean that the mine is environmentally safe."¹³

According to the nonpartisan Legislative Council staff, "[t]he DNR's interpretation that the laws in effect in the state or province where the mine is located are to be used for this determination appears reasonable given that DNR has no effective way of enforcing and monitoring environmental regulations for mines that may be located far away or may have been operated years ago. In addition, the DNR's interpretation that a violation of an environmental law under the Bill includes a violation adjudicated by a

⁹ Engrossed SB 3, page 2, line 8.

¹⁰ Engrossed SB 3, page 2, lines 8-9.

¹¹ Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997).

¹² Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997).

¹³ Testimony before the Assembly Committee on the Environment, Howard Druckenmiller, Executive Assistant, Department of Natural Resources (May 12, 1997).

court and a final determination by an administrative agency that can be legally reviewed appears reasonable.¹⁴

Definition of Pollution: The Solution

Assembly Amendment 4 corrects this problem. The bulk of this amendment was written by Representatives Spencer Black (D-Madison) and Peter Bock (D-Milwaukee), during a three-hour closed-door session with Representatives Duff (R-New Berlin) and Tom Ourada (R-Antigo), in an amendment to Assembly Amendment 4. Assembly Amendment 4 was authored by Representatives Tom Ourada (R-Antigo) and Jeff Plale (D-South Milwaukee).

First, Assembly Amendment 4 specifies that violation of any environmental law includes a determination by an administrative proceeding, a civil action, a criminal action or other legal proceeding.

Second, Assembly Amendment 4 provides that a stipulated fine, forfeiture or other penalty is considered a determination of a violation of an environmental law, regardless of whether there is a finding or admission of liability.

Third, Assembly Amendment 4 specifies "issuance of an order or acceptance of an agreement requiring corrective action" would qualify as a violation of an environmental law. This means, for example, if a person agrees to clean up a site in exchange for not being charged with breaking the law, it is still considered pollution under SB 3.

Fourth, Assembly Amendment 4 ensures the DNR cannot use an old or abandoned mine as an example of a mine which has "safely" operated.

Finally, Assembly Amendment 4 prevents the DNR from using a Superfund site, or the like, as an example of a "safe" mine. These are very polluted, environmental-disaster sites and should not be used as an example of a "safe" mine.

Without adoption of Assembly Amendment 4, the DNR could have used a mine from the early 1800s as an example of a mine which operated for ten years and has been closed for ten years as an example of a mine which did not pollute, simply because the mine conformed to the laws of the time. Assembly Amendment 4 was adopted on a bipartisan vote of 51-44.

According to nonpartisan Wisconsin Legislative Council staff, "this amendment specifies what constitutes the violation of an environmental law and is intended to clarify

¹⁴ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Representative Marc Duff, Chairperson, Assembly Committee on the Environment, page 5 (July 8, 1997)(attached).

the definition of 'pollution' under the Bill.¹⁵ In addition, this nonpartisan staff concludes ". . . [i]t can be argued that the amendment strengthens the Bill by providing that a stipulated fine, forfeiture or other penalty is a determination of a violation, regardless of whether there is any finding or admission of liability on the part of the mining company."¹⁶

¹⁵ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Speaker Scott Jensen and Representative Marc Duff, page 1 (January 21, 1998)(attached).

¹⁶ Wisconsin Legislative Council Staff Memorandum from William Ford, Senior Staff Attorney, to Speaker Scott Jensen and Representative Marc Duff, page 2 (January 21, 1998)(attached).

Overall

SB 3, before Assembly action, was vague and of uncertain legal significance. After studying the actual language contained in the bill, the DNR concluded that "SB 3, as passed by the Senate, will not serve to create a moratorium on mining.¹⁷" The Assembly adopted amendments to SB 3 addressing the department's concerns, thereby strengthening and clarifying the bill.

¹⁷ Department of Natural Resources Memorandum from George E. Meyer, Secretary, to Representative Marc Duff, Chair, Assembly Committee on the Environment, page 1 (June 6, 1997).

Mining Industry Reaction

The Crandon Mining Company is unhappy SB 3 passed the Senate and the Assembly and will be on the Governor's desk in February. Dale Alberts, Manager, Government Relations, for the Crandon Mining Company, stated "The Crandon Mining Company is disappointed with the passage of the moratorium bill.¹⁸" Additionally, the Exxon Corporation sold its 50 percent interest in the Crandon Mining Company to Rio Algom, Ltd., shortly after the Assembly passed SB 3. Rio Algom, Ltd., is now the sole owner and operator of the Crandon mining project.¹⁹

¹⁸ Statement from the Crandon Mining Company (January 23, 1998)(attached).

¹⁹ Statement from Rio Algom, Ltd. (January 23, 1998)(attached).



WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

One East Main Street, Suite 401; P.O. Box 2536; Madison, WI 53701-2536
Telephone (608) 266-1304
Fax (608) 266-3830

DATE: July 8, 1997

TO: REPRESENTATIVE MARC DUFF, CHAIRPERSON, ASSEMBLY COMMITTEE ON ENVIRONMENT

FROM: William Ford, Senior Staff Attorney

SUBJECT: 1997 Senate Bill 3, Relating to Issuance of Metallic Mining Permits for the Mining of Sulfide Ore Bodies

A. INTRODUCTION

This memorandum is in response to your request for an analyses of 1997 Engrossed Senate Bill 3 ("the Bill") relating to issuance of metallic mining permits for the mining of sulfide ore bodies. The memorandum first explains current state law relating to the issuance of metallic mining permits and then describes the Bill. The memorandum next summarizes the interpretations of the Bill by the Department of Natural Resources (DNR), particularly with respect to key phrases in the Bill as they would affect the administration of the process for issuing metallic mining permits by the DNR. The memorandum finally discusses the interpretation of the Bill by the DNR.

B. CURRENT LAW PERTAINING TO THE ISSUANCE OF A METALLIC MINING PERMIT

Under s. 293.49 (1), Stats., the DNR is directed to issue a metallic mining permit if it finds:

1. The mining plan and reclamation plan are reasonably certain to result in reclamation of the mining site and the DNR has approved the mining plan. "Reclamation" is defined in s. 293.01 (23), Stats., to mean the process by which an area physically or environmentally affected by mining is rehabilitated to either its original state or, if this is shown to be physically or economically impracticable or environmentally or socially undesirable, to a state that provides long-term environmental stability.

2. The proposed operation will comply with all applicable air, groundwater, surface water and solid and hazardous waste management laws and rules of the DNR.

3. In the case of a surface mine, the site is not unsuitable for mining. "Unsuitability" is defined in s. 293.01 (28), Stats., to mean that the land proposed for surface mining is not suitable for such activity because the surface mining activity itself may reasonably be expected to destroy or irreparably damage either: (a) habitat required for survival of species of vegetation or wildlife designated as endangered in rules adopted by the DNR, if such endangered species cannot be firmly reestablished elsewhere; or (b) unique features of the land, as determined by state or federal designation and incorporated in rules adopted by the DNR, as wilderness areas, wild and scenic rivers, national or state parks, wildlife refuges and areas, archaeological areas, property registered in the National or State Register of Historic Places and other lands of a type designated as unique or unsuitable for surface mining.

4. The proposed mine will not endanger public health, safety or welfare.

5. The proposed mine will result in a net positive economic impact in the area reasonably expected to be most impacted by the activity.

6. The proposed mining operation conforms with all applicable zoning ordinances.

The DNR is required to *deny* a mining permit if any of the following situations may reasonably be expected to occur during or subsequent to mining [s. 293.13 (2) (d), Stats.]:

1. Landslides or substantial deposition from the proposed operation in stream or lake beds which cannot be feasibly prevented.

2. Significant surface subsidence which cannot be reclaimed because of the geologic characteristics present at the proposed site.

3. Hazards resulting in irreparable damage to various types of buildings or facilities which cannot be avoided by removal from the area of hazard or mitigated by purchase or by obtaining the consent of the owner.

4. Irreparable environmental damage to lake or stream bodies despite adherence to the requirements of ch. 293, Stats.

The DNR is also required to deny issuance of a mining permit if the person applying for the permit or certain related persons have engaged in activities specified in s. 293.49, Stats., which indicate that the person may be unsuitable to operate a mine. [s. 293.49 (2), Stats.]

The DNR is authorized to promulgate rules by which it may grant an exemption, modification or variance, either making a requirement more or less restrictive, from any rule promulgated under a variety of statutes authorizing environmental rule-making, if the exemption, modification or variance does not result in the violation of any federal or state environmental law or endanger public health, safety or welfare or the environment. [s. 293.15 (9), Stats.]

After a mining permit has been issued, but before mining can actually commence, the mine operator is required to file with the DNR a bond equal to the estimated cost to the state of fulfilling the reclamation plan. In lieu of a bond, the operator may deposit cash, certificates of

deposit or government securities with the DNR. The amount of the bond or other security required shall be equal to the estimated cost to the state of fulfilling the reclamation plan. [s. 293.51, Stats.]

C. DESCRIPTION OF 1997 SENATE BILL 3

The Bill would establish two preconditions for issuance of a mining permit by the DNR in addition to the requirements of current law. Under the Bill, the DNR may not issue a permit for the mining of a sulfide ore body until both of the following preconditions are satisfied:

1. The DNR determines, based on information provided by an applicant for a permit under s. 293.49, Stats., that a mining operation has operated in a sulfide ore body which is not capable of neutralizing acid mine drainage in the United States or Canada, for at least 10 years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals.

2. The DNR determines, based on information provided by an applicant for a permit under s. 293.49, Stats., that a mining operation that operated in a sulfide ore body which is not capable of neutralizing acid mine drainage in the United States or Canada, has been closed for at least 10 years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals.

The Bill defines "pollution" to mean "degradation that results in any violation of any environmental law" and defines "sulfide ore body" to mean a mineral deposit in which metals are mixed with sulfide minerals.

D. DNR INTERPRETATION OF THE BILL

In a letter to you as Chairperson of the Assembly Committee on Environment dated June 6, 1997, George E. Meyer, Secretary, DNR, states that the DNR is not opposed to the Bill but does not believe it will provide any additional assurances over current law that mining can be environmentally safe. In addition, Secretary Meyer states that the Bill will not serve to create a moratorium on mining. These statements are based upon DNR interpretations of a few key phrases in the Bill, which are explained in the material attached to Secretary Meyer's letter and which are summarized below.

1. Acid Neutralization

Both preconditions of the Bill must be satisfied with respect to mines operated "in a sulfide *ore body* which is not capable of neutralizing acid mine drainage." (Emphasis added.) Sulfide minerals, when exposed to oxygen and water, can progress through a series of chemical and biochemical reactions to produce acid. Other minerals (principally carbonate minerals such as calcite) have the capacity to *neutralize* acid. If sufficient neutralizing minerals are present at the mine site or mine waste site, the acid generating reactions will be counterbalanced by the neutralizing reactions with the net effect that the mine and mine waste drainage will not become more acidic.

The apparent intent of the quoted language of the Bill is to require the applicant for a mining permit to show that *technology* has successfully been used to control acid drainage at a mine site where the absence of acid neutralizing minerals made acid drainage a potential danger to the environment. (The proposed Crandon mine site is *not* located in an area where there are sufficient acid neutralizing minerals to control acid generation.) However, DNR expresses concern that this intent is not accomplished by the Bill because it is the *host rock*, rather than the ore body itself, that is important in determining whether acid drainage is a potential problem at a mine site.

For example, DNR suggests, some of the lead mines in Southwest Wisconsin could be used to satisfy the two preconditions under the Bill because the ore bodies containing the lead were sulfide ore bodies that were not, in themselves, capable of neutralizing acid generation. However, because these ore bodies were located in a limestone host rock that does neutralize acid generation, DNR believes that these mines would not be an appropriate example to determine whether environmentally safe mining can be conducted in an area where the ore body and host rock, together, would not neutralize all the acid that would be generated.

2. Definition of Pollution

The DNR also expresses concern about the definition of "pollution" in the Bill. Both preconditions in the Bill require that the mine have operated in the United States or Canada "without the pollution of groundwater or surface water . . ." "Pollution" is defined in the Bill to mean "degradation that results in any violation of any environmental law." The DNR has interpreted this language to mean that a mining permit applicant must show that a mine meeting the requirements of the Bill has operated or been closed for the applicable period in the United States or Canada without the determination by a court, or a determination by the relevant administrative agency with jurisdiction over the mine that could be administratively challenged or judicially appealed, that the mine has polluted groundwater or surface water from acid drainage or from the release of heavy metals and that a violation of a law has occurred.

The Bill does not place any time limits upon when the mine has operated or been closed nor does it address the stringency of any environmental laws under which the mine has operated. The DNR is concerned that most environmental laws have only been enacted within the last 30 years and have been constantly made more protective of the environment since that time. Therefore, the DNR believes that if a mine was operated or closed for the applicable period at a time or under a jurisdiction where mining laws were weak or nonexistent or enforcement of environmental laws was minimal, an applicant could meet both of the preconditions of the Bill without necessarily showing that the mine could be operated in an environmentally safe manner.

3. Verification

The Bill requires the DNR to determine that the two preconditions have been satisfied "based on information provided by an applicant for a mining permit." The DNR is concerned that this language of the Bill would not allow it to independently verify the information.

E. DISCUSSION

In reviewing the Bill, it is important to keep in mind that the Bill, as of the date of this memorandum, is still being reviewed by the Legislature and can be amended to address any concerns raised by ambiguities in language or inappropriate standards.

The Bill is ambiguous concerning what environmental laws are to be referred to in determining whether mines operated in the United States or Canada have been operated and closed in a manner that satisfies the two preconditions of the Bill. The lack of direction in the Bill for this determination is, in my opinion, the primary reason that such a wide range of opinion has been expressed at public hearings on the Bill before the Assembly Committee on Environment concerning what the effect of the Bill would be.

The DNR's interpretation that the laws in effect in the state or province where the mine is located are to be used for this determination appears reasonable given that DNR has no effective way of enforcing and monitoring environmental regulations for mines that may be located far away or may have been operated years ago. In addition, the DNR's interpretation that a violation of an environmental law under the Bill includes a violation adjudicated by a court and a final determination by an administrative agency that can be legally reviewed appears reasonable.

It is also important to keep in mind how a court would be likely to approach its review of a legal challenge to an order by the DNR with respect to a mining permit application under the Bill. The DNR is given the statutory responsibility to serve as the "central unit of state government to ensure that the air, lands, waters, plants, fish and wildlife affected by prospecting or mining in this state will receive the greatest practicable degree of protection and reclamation." [s. 293.11, Stats.] In addition, the Bill gives the DNR authority to determine whether the two preconditions established by the Bill have been met and s. 293.49, Stats., gives the DNR authority to determine whether to issue a mining permit if other standards are met. Third, the decision of whether to issue a mining permit under the standards of ch. 293, Stats., necessarily involves a policy determination--a determination of whether the proposed mine can be operated and, after operation, closed, in a manner that protects the environment. These factors make it very likely that a court would defer to the DNR's interpretation of the Bill, particularly on issues where the language of the Bill is ambiguous.

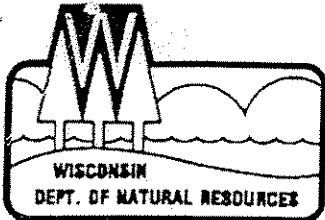
The interpretation of a statute by an administrative agency is a conclusion of law which may be independently reviewed by the appellate court "However, the construction and interpretation of a statute by the administrative agency which must apply the law is entitled to great weight and if several rules or applications of rules are equally consistent with the purpose of the statute, the court should defer to the agency's interpretation. In general, the reviewing court should not upset an administrative agency's interpretation of a statute if there exists a rational basis for that conclusion Even where an agency has established no body of precedent relating to its interpretation of a statute, we are still to defer to that agency's legal conclusions We should also defer

to an agency where the legal question is intertwined with policy determinations. [*Rotfeld v. Department of Natural Resources*, 434 N.W. 2d 617, 618 and 619 (Wis. App. 1988) (citations omitted).]

The concern expressed by the DNR that the two preconditions established by the Bill should include the host rock in determining whether the mine could generate acid also appears reasonable and should be addressed in any amendments to the Bill. The opinion of the DNR that the Bill only permits the DNR to consider information submitted by the applicant and does not authorize it to independently verify the information appears to be less well-founded. The Bill requires the DNR to determine whether the two preconditions have been met. Generally, administrative agencies are accorded such powers as are necessary to carry out the functions they are responsible for by statute. Therefore, it would appear reasonable to assume that the DNR could independently verify information submitted by an applicant to determine if the two preconditions are met, although the Bill could be amended to explicitly authorize DNR to verify the information.

Please contact me at the Legislative Council Staff offices if I can be of further assistance.

WF:ksm:kja:rav;ksm



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary

PO Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921
TELEPHONE 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

June 6, 1997

Honorable Marc Duff, Chair
Assembly Committee on the Environment
306 N, Capitol

Dear Representative Duff:

At the request of Rep. Lorraine Seratti, I am forwarding to your Committee the Testimony of my Executive Assistant, Howard Druckenmiller, on the engrossed version of SB 3 which was the subject of a Committee hearing in Ladysmith on May 12, 1997. This testimony accurately reflects the analysis of our staff, and concludes that SB 3, as passed by the Senate, will not serve to create a moratorium on mining. Because the language in the bill is vague, we felt it was important to point out to the Committee why we have come to this conclusion, and to offer information about our interpretation of the bill, should it become law. In addition to Mr. Druckenmiller's testimony, I am also enclosing a copy of a partial analysis of SB 3 developed by our staff. This is by no means an exhaustive evaluation, but it points out some of the key concerns we have with the bill, many of which are reflected in the hearing testimony.

I am aware that one member of your Committee felt it was inappropriate to testify "for information" while pointing out problems with the language in the Bill. I would like to clarify that the Department is not opposed to SB 3, as it passed the Senate, although we do not believe it will provide any additional assurance to our citizens that mining can be environmentally safe.

As you requested, I have also attached for your consideration language which would clarify the definition of "proven technology", as used in AB 236. I believe this clarification would further explain what I believe was intended by the term, and would indicate specific conditions which could be included in the bill to assure the objective of "proven technology" can be met, and provide the Department a better scientific basis for considering mining permit applications. My staff is available to work with you and your Committee to flesh out these concepts if you wish. Thank you for the opportunity to address your concerns about mining.

Sincerely,

George Meyer
George E. Meyer
Secretary

ATTACHMENTS

cc: Howard S. Druckenmiller - AD/5 Larry Lynch-WA/3 Paul Heinen-AD/5

Quality Natural Resources Management
Through Excellent Customer Service



CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: May 22, 1997

FILE REF: 2720

TO: George Meyer - AD/5

FROM: Larry Lynch - SW/3 *LL*

SUBJECT: Alternate Approach to SB-3

For your consideration, I have developed the following suggested alternate approach to that provided in SB-3. I believe that it addresses the fundamental philosophy of SB-3, specifically, that no mining project should be approved until the technology proposed has been demonstrated to be effective. The approach also brings in the concept of "proven technology" as referred to in AB-236 and tries to further define how a proposed technology is "proven".

An applicant for a mining permit shall submit proof to demonstrate that any mining waste facility proposed to contain potentially net acid-generating materials is designed using proven technology. Proven technology is technology which has been shown, through scientific study and evaluation of monitoring data, to be effective in controlling the generation and release of acidic drainage at mining waste facilities which contain potentially net acid-generating waste materials. If the technology proposed by the applicant has not been previously used at mining waste facilities or if specific monitoring data and related studies are not available, the applicant shall demonstrate that the proposed design will be effective in controlling the generation and release of acid drainage. Demonstration of the effectiveness of the proposed design shall be made through completion of specific laboratory studies or field demonstrations using waste materials representative of those to be generated by the mining operation, and presentation of scientific documentation of at least three case histories, from other types of waste facilities at which the technology was effectively implemented.

I feel that a concept similar to this would offer the following advantages over the approach taken in SB-3:

1. Requires use of "proven technology" and requires proof that the technology has been shown to be effective at other mining waste facilities.
2. Allows for the use of new or innovative designs, developed in relation to other fields of waste management, as long as the applicant can show that the design will be effective for mining waste management. Does not restrict the design to what has traditionally been used at mining facilities.

3. Has direct relevance to the specific mining proposal under consideration. It does not just require submittal of anecdotal information, which may have no pertinence to the proposed project.

4. Relies on "scientific" documentation of effectiveness.

Please feel free to contact me if you wish to discuss this further.

LJL:pc

cc: S. Druckenmiller - AD/5

May 12, 1997

Ladysmith

AB 70

TESTIMONY OF HOWARD S. DRUCKENMILLER, DEPARTMENT OF NATURAL
RESOURCES - FOR SECRETARY GEORGE MEYER

I AM TESTIFYING TODAY FOR INFORMATION ON AB 70. FIRST, LET ME SAY TO RESOLVE ANY CONFUSION, THAT AB 70, UNMODIFIED, IS THE SAME AS THE ORIGINAL SENATE BILL 3. IN OUR TESTIMONY ON SB 3, WE WERE IN OPPOSITION BECAUSE WE FELT THE BILL CONSTITUTED A MORATORIUM ON MINING, AND WE WOULD BE OPPOSED TO AB 70 IN ITS UNMODIFIED FORM FOR THE SAME REASON. UNLESS THE YEARS OF EFFORT BY THIS BODY, THE DEPARTMENT AND THOUSANDS OF INVOLVED CITIZENS HAVE BEEN MISDIRECTED, THEN WE SHOULD HAVE IN PLACE THE STATUTORY AUTHORITY AND TECHNICAL ABILITY TO FAIRLY JUDGE ANY MINING PROPOSAL ON ITS MERITS. WHETHER THE DECISION IS APPROVAL OR DENIAL, ALL PERMIT APPLICANTS, INCLUDING MINING COMPANIES DESERVE TO KNOW IF THEIR PROPOSALS ARE ACCEPTABLE.

OF COURSE, SB 3 WAS MODIFIED WHEN IT PASSED IN THE SENATE. MY TESTIMONY TODAY ADDRESSES THE ENGROSSED SENATE BILL 3, WHICH I UNDERSTAND WILL BE CONSIDERED AS AN AMENDMENT TO AB 70. WE ARE NOT OPPOSED TO THE ENGROSSED VERSION OF SB 3 BECAUSE WE BELIEVE IT IS NOT A MORATORIUM. HOWEVER THERE ARE ISSUES WE BELIEVE YOU SHOULD BE AWARE OF AS YOU CONSIDER ACTION ON AN ASSEMBLY VERSION OF ENGROSSED SB 3.

DESPITE THE CHANGES MADE BY THE SENATE IN SB 3, THERE REMAIN SIGNIFICANT UNCERTAINTIES IN THE BILL. HOWEVER, I THINK IT WILL BE CLEAR TO ALL THAT THIS BILL, IF IT BECOMES LAW, WOULD LIKELY NOT BE A SIGNIFICANT IMPEDIMENT TO MINING IN WISCONSIN. MOREOVER, THIS BILL WOULD ADD NOTHING TO OUR UNDERSTANDING OF THE ENVIRONMENTAL SAFETY OF A MINE PROPOSED IN THIS STATE, AND PROVIDE NO ADDITIONAL LEVEL OF KNOWLEDGE OR ENVIRONMENTAL PROTECTION. LET ME EXPLAIN:

THE FIRST CONCERN WE HAVE IS THE QUESTION OF WHICH OPERATING, AND CLOSED MINES QUALIFY FOR CONSIDERATION UNDER THE PROPOSAL. THE LANGUAGE IN ENGROSSED SB 3 FOCUSES ON MINES THAT HAVE OPERATED IN A "SULFIDE ORE BODY WHICH IS NOT CAPABLE OF NEUTRALIZING ACID MINE DRAINAGE...". IN LIGHT OF THE CHANGES TO THE BILL MADE BY THE SENATE, AND ACCORDING TO MY UNDERSTANDING OF THE DEBATE THEY HAD, IT IS CLEAR THAT THE INTENT WAS TO FOCUS ON MINES THAT ARE CAPABLE OF PRODUCING ENVIRONMENTALLY DAMAGING LEVELS OF ACID MINE WASTE, REGARDLESS OF WHETHER THE ACID WASTE COMES FROM MINE DRAINAGE, OR ACID GENERATED IN WASTE ROCK PILES OR FROM TAILINGS DISPOSAL SITES. THEN, FROM THIS SET OF MINES AN EVALUATION WOULD BE MADE REGARDING THE CAPABILITY TO ADEQUATELY CONTROL ACID DRAINAGE. BUT, GIVEN ITS WORDING THE BILL WOULD HAVE ONE OF TWO OPPOSITE RESULTS, NEITHER OF WHICH WOULD ACCOMPLISH THE INTENT AS WE UNDERSTAND IT TO BE. ON ONE HAND, IT COULD BE ARGUED THAT THIS PROVISION WOULD MAKE IT IMPOSSIBLE NOW, OR EVER, FOR ANY MINING PROPOSAL TO MEET THIS TEST SINCE ALL ORE BODIES HAVE SOME NEUTRALIZING CAPABILITY. THIS WOULD CONSTITUTE AN OUBRIGHT BAN ON MINING.

WE DO NOT BELIEVE IT WAS INTENDED THAT MINING BE BANNED, GIVEN THE DEBATE THAT OCCURRED IN THE SENATE. WE ALSO BELIEVE THAT THIS INTERPRETATION IS NOT LIKELY TO BE ACCEPTED BY A REVIEWING COURT. THE BETTER INTERPRETATION IS THAT THE CLAUSE APPLIES TO CIRCUMSTANCES IN WHICH THE "ORE BODY" IS INCAPABLE OF COMPLETING THE PROCESS OF NEUTRALIZING THE ACID PRODUCED. THEREFORE, AS WE WOULD INTERPRET THE ENGROSSED VERSION OF SB 3, ANY SULFIDE MINE IN WHICH THE ORE BODY ITSELF IS NOT CAPABLE OF NEUTRALIZING ACID MINE DRAINAGE WOULD QUALIFY FOR USE AS AN EXAMPLE BY A MINING APPLICANT. BUT THIS IS A SERIOUS PROBLEM BECAUSE THE HOST ROCK IN WHICH THE ORE BODY LIES IS A FAR MORE IMPORTANT FACTOR IN DETERMINING IF THERE IS THE POTENTIAL FOR A MINE TO GENERATE LEVELS OF ACID THAT MAY IMPACT SURFACE OR GROUND WATERS.

FOR EXAMPLE SOME OF THE LEAD MINES IN SOUTHWEST WISCONSIN COULD QUALIFY BECAUSE THE ORE BODIES WHERE THE LEAD IS FOUND ARE SULFIDE ORE BODIES THAT ARE NOT, IN THEMSELVES, CAPABLE OF COMPLETING THE PROCESS OF NEUTRALIZING ACID. HOWEVER, THESE ORE BODIES EXIST IN A LIMESTONE HOST ROCK WHICH SERVES TO NEUTRALIZE ANY ACID THAT MAY BE GENERATED. WE WOULD EXPECT THAT IT WOULD BE RELATIVELY EASY TO DOCUMENT ONE OR MORE SOUTHWESTERN WISCONSIN LEAD MINES AS HAVING NO PROBLEMS WITH ACID MINE DRAINAGE, OR ACID CONTAMINATION FROM WASTE ROCK PILES OR MINE TAILINGS AREAS AND COULD THEREFORE WOULD QUALIFY TO BE USED AS AN EXAMPLE BY A MINING COMPANY. OBVIOUSLY THESE MINES WOULD NOT BE AN APPROPRIATE COMPARISON TO ANY MINE PROPOSED IN AN AREA WHERE THE ORE BODY AND HOST ROCK, TOGETHER, WOULD NOT NEUTRALIZE ALL THE ACID THAT WOULD BE GENERATED. YET IT APPEARS TO US THAT WISCONSIN LEAD MINES WOULD MEET THE TEST OF ENGROSSED SB 3.

AN OTHER SIGNIFICANT CONCERN FROM OUR PERSPECTIVE IS WITH THE TERM "POLLUTION" AS USED IN THE ENGROSSED VERSION OF SB 3. IN ORDER FOR AN EXISTING MINE TO MEET THE TEST OF THE PROPOSED LAW, IT WOULD HAVE TO BE OPERATED AND/OR CLOSED FOR 10 YEARS WITHOUT POLLUTION OF GROUND OR SURFACE WATER FROM ACID DRAINAGE. "POLLUTION" MEANS DEGRADATION THAT RESULTS IN ANY VIOLATION OF ANY ENVIRONMENTAL LAW. THERE ARE NO OTHER QUALIFIERS IN THE BILL. WE HAVE STRUGGLED WITH HOW WE WOULD IMPLEMENT THIS PROVISION, IF ENACTED, AND HAVE COME TO SEVERAL CONCLUSIONS ON A NUMBER OF RELEVANT QUESTIONS.

FIRST - WHAT IS A VIOLATION? I AM AWARE THAT THE SENATE DISCUSSED THIS ISSUE, AND DECLINED TO INCLUDE LANGUAGE THAT WOULD LIMIT VIOLATIONS TO CASES THAT WERE ADJUDICATED IN COURT. HOWEVER, WE BELIEVE THAT PRECEDENT, FAIRNESS AND REASON WOULD REQUIRE, SHORT OF ADJUDICATION IN COURT, THAT AN ALLEGED VIOLATION WOULD HAVE TO BE FORMALLY DETERMINED BY THE AGENCY THAT HAS JURISDICTION OVER THE ENVIRONMENTAL LAWS TO WHICH THE MINE IS SUBJECT. WE ALSO BELIEVE THIS MEANS THE AGENCY WITH JURISDICTION HAS MADE A FINAL DETERMINATION THAT COULD BE ADMINISTRATIVELY CHALLENGED OR JUDICIALLY APPEALED BY ANY PARTY. OTHERWISE, ANY ALLEGATION THAT A VIOLATION OCCURRED, TRUE OR NOT, COULD DISQUALIFY THE SUBJECT MINE FROM CONSIDERATION AS AN EXAMPLE UNDER THIS BILL.

THE PROCESS WE USE IN WISCONSIN TO ENFORCE ENVIRONMENTAL LAW, FOR EXAMPLE, ALLOWS THE DEPARTMENT TO SEND A "NOTICE OF VIOLATION" TO AN INDIVIDUAL OR A COMPANY WHEN WE BELIEVE THERE IS A VIOLATION OF AN ENVIRONMENTAL LAW. THIS IS NOT AN APPEALABLE DECISION. LATER IN THE PROCESS, AFTER CONSIDERING ALL THE FACTS, WE MAY ISSUE AN ORDER, OR REFER THE CASE TO THE ATTORNEY GENERAL. THIS IS A FINAL DETERMINATION BY THE DEPARTMENT, AND IT IS APPEALABLE. THE DETERMINATION MAY NOT BE ADJUDICATED OR APPEALED, BUT THE OPPORTUNITY TO DO SO EXISTS. WHILE DIFFERENT STATES OR PROVINCES MAY HAVE VARIATIONS OF THIS

PROCEDURE, WE WOULD LOOK FOR THE POINT IN THE ENFORCEMENT PROCESS WHERE THE RELEVANT AGENCY HAS MADE AN APPEALABLE DETERMINATION THAT A VIOLATION HAS OCCURRED.

A SECOND QUESTION IS WHAT ENVIRONMENTAL LAWS ARE RELEVANT? WE HAVE TO ASSUME THAT THE RELEVANT LAWS ARE THOSE ON THE BOOKS OF THE STATE OR PROVENCE, OR FEDERAL LAW WHERE APPROPRIATE, AT THE TIME THE MINE WAS OPERATING, AND/OR DURING THE 10 YEAR TIME FRAME DURING CLOSURE THE WISCONSIN APPLICANT CHOOSES. THE OPEN ENDED LANGUAGE WOULD MAKE IT RELATIVELY EASY FOR A MINING COMPANY TO FIND A MINE WHICH WOULD MEET THE TEST OF AMENDED SB 3. THE FATAL FLAW WITH THIS IS SIMPLY THAT MOST ENVIRONMENTAL LAWS HAVE ONLY BEEN ENACTED WITHIN THE LAST 30 YEARS, AND ARE CONSTANTLY BEING IMPROVED. IF A MINE WAS OPERATED IN THE 1870'S, AND WAS CLOSED DURING THE 1880'S, AND NO VIOLATION HAD BEEN ISSUED DURING THAT PERIOD, THEN THE TEST WILL HAVE BEEN MET. BUT WHAT HAS BEEN PROVED? NOTHING! EVEN IF WE LOOK AT A CONTEMPORARY MINE PROJECT, WHICH I BELIEVE IS THE INTENT OF THIS PROPOSED LAW, WE CAN STILL HAVE A SITUATION IN WHICH A MINE MEETS THE TEST EVEN THOUGH IT ACTUALLY IS POLLUTING, OR WILL POLLUTE, THE ENVIRONMENT. THIS CAN HAPPEN AS LONG AS THERE IS NO DOCUMENTED VIOLATION OF AN ENVIRONMENTAL LAW. A MINE MAY MEET THIS TEST BECAUSE THERE ARE WEAK LOCAL ENVIRONMENTAL LAWS. THEY MAY MEET THE TEST BECAUSE THE CONTAMINATION HAS NOT BEEN DETECTED FOR ANY NUMBER OF REASONS. THE MINE MAY MEET THE TEST BECAUSE THE RESPONSIBLE REGULATORY AGENCY IS UNDERSTAFFED. THE FACT THAT A MINE MEETS THE TEST OF NO VIOLATION DOES NOT NECESSARILY MEAN THAT THE MINE IS ENVIRONMENTALLY SAFE. THE TEST IN THE PROPOSED BILL ADDS NOTHING TO THE DEPARTMENT'S REVIEW OF A PERMIT FOR A MINING OPERATION IN WISCONSIN.

AN OTHER ISSUE IS VERIFICATION. THE BILL WOULD REQUIRE THE DEPARTMENT TO MAKE A DETERMINATION, AS WORDED IN THE BILL, BASED SOLELY ON INFORMATION PROVIDED BY THE APPLICANT FOR A MINING PERMIT. THERE IS NO PROVISION FOR THE DEPARTMENT TO VERIFY THE INFORMATION. IN LIGHT OF THE OTHER PROBLEMS WE'VE IDENTIFIED THIS MAY BE A MINOR ISSUE, BUT HAVING THE ABILITY TO VERIFY ANY APPLICANT PROVIDED DATA IS NECESSARY IN EVERY REGULATORY SETTING.

I WANT TO REITERATE, IN ORDER TO BE ABSOLUTELY CLEAR, THAT AS CURRENTLY WRITTEN, THE DEPARTMENT BELIEVES THE ENGROSSED VERSION OF SB 3 WOULD NOT CREATE A MORATORIUM ON MINING IN WISCONSIN.

AS I TESTIFIED ON AB 236, WE FEEL THAT A BETTER APPROACH TO MINING REGULATION WOULD BE TO SUPPORT THE DEPARTMENTS REVIEW OF THE NATIONAL EXPERIENCE WITH MINING AND WASTE DISPOSAL TECHNOLOGIES, AND TO ASSURE CITIZENS THROUGH THE MINING PERMIT PROCESS, THAT THERE IS TECHNOLOGY AVAILABLE WHICH WOULD ALLOW A MINE TO MEET ALL THE STRINGENT ENVIRONMENTAL STANDARDS WE HAVE IN THIS STATE BEFORE ANY PERMIT IS APPROVED. I QUESTION THE USEFULNESS OF THIS BILL SINCE WE DO NOT SEE HOW IT ADDS VALUE TO THE FINAL PERMIT DECISION, OR TO THE PROTECTION OF THE ENVIRONMENT.

I WOULD BE HAPPY TO RESPOND TO QUESTIONS. BECAUSE SOME OF YOUR QUESTIONS MAY DEAL WITH LEGAL INTERPRETATIONS, I HAVE ASKED CHUCK HAMMER, OUR ATTORNEY ASSIGNED TO MINING, TO HELP RESPOND.

THANK YOU.

Issues Regarding Senate Bill 3

(LRB-2929/1 Engrossed Senate Bill as amended)
May, 1997

This paper contains an analysis of issues and likely interpretations of proposed statutory language in SB 3.

Issue #1:

It's not explicit in the definition of "pollution" what would constitute a "violation". It's unclear whether Wis. DNR would be expected to determine what constituted a "violation" in another state or whether the state agency with jurisdiction in that state would make the determination.

Citation:

page 2, line 8 - definition of "pollution"

Interpretation:

A simple report or chemical analysis that a particular environmental standard has been exceeded is not considered by DNR staff to be a "violation". To be considered a violation, there must be an initial determination that a standard was exceeded and then the permittee or regulated entity must have a formal opportunity to contest the finding. A determination that there has been a violation is not made until that opportunity has been provided. For example, a permittee could present evidence that a sample result was based upon errors in sample collection methods, preservation techniques or analytical methods. Until there has been opportunity for the permittee to contest such findings, it is simply an alleged violation.

DNR staff do not believe that they could be familiar enough with the details of another state's laws to determine whether that state's environmental laws had been "violated" or not. Wis. DNR staff would have to rely upon the judgement of the responsible agency in the other state for such a determination. In posing the question to an agency in another state, Wis. DNR staff would provide the guidance that a "violation" should be interpreted as described above.

Issue #2:

It's unclear from the definition of "pollution" whether the performance of mines which have been operated and closed in the past is to be compared to environmental laws in effect at the time or compared to current environmental laws. It's also unclear whether it's the environmental laws of the other state or Wisconsin's environmental laws that performance is to be compared to.

Citation:

page 2, line 8 - definition of "pollution"

Interpretation:

As indicated in issue #1, DNR staff believe that they would have to rely upon the judgement of the responsible state to determine whether there had been a violation in that state. For historic operations, the only record of compliance of a mine would be in relationship to the environmental laws of that state in place at the time. Therefore, Wis. DNR staff would ask a mining applicant to submit information from the state in which the mine was located showing that the mine had not violated the environmental laws of that state in place at the time.

DNR staff would have to request information showing that another state had determined that the environmental laws in effect in that state at the time the mine was operated or closed weren't violated. From a pragmatic standpoint, however, because there were few environmental laws decades ago, it might be easy to find mines that operated and were closed for 10 years without violating non-existent or lax environmental laws.

Issue #3:

The bill requires that prior to issuing each mining permit for a proposed mine in Wisconsin, DNR must make determinations about the successful operation and closure of past mines in the United States or Canada. The DNR determinations are to be based on the information supplied by the applicant.

Citation:

page 2, lines 15-20 and page 3, line 1-6; - determinations made by the department

Interpretation:

As written, the bill requires that these determinations be made for each mining permit that's proposed and that the determinations be based solely upon the information supplied by the applicant for a permit in Wisconsin. If the Legislature wants the DNR to make such determinations before mining can proceed in Wisconsin, it's not clear why the information which is considered should be limited to that supplied by a particular permit applicant.

Issue #4:

The language in the bill specifies that determinations must be made based upon mines which have operated in a sulfide ore body which is not capable of neutralizing acid mine drainage. From a scientific standpoint, however, it would seem that the characteristics of the host rock might be more important than the characteristics of the sulfide ore body in comparing past mine sites with conditions in Wisconsin.

Citation:

page 2, lines 16-17 and page 3, lines 2-3

Interpretation:

Whereas the term "sulfide ore body" is defined in the bill, it would seem that a more appropriate test would be to base the DNR's determination on a mine site where the host rock or the geologic formation was similar to sites of concern in Wisconsin. In comparing to conditions in Wisconsin, the concern should not be whether or not the ore body is capable of neutralizing acid, but whether or not the host rock has that capability.

Issue #5:

The language in the bill specifies that determinations must be made regarding pollution "from acid drainage ... or from the release of heavy metals". Pollution of groundwater or surface waters at mine site or tailings site would not be of concern for this determination if the pollution were not the result of acid drainage or release of heavy metals.

Citation:

page 2, lines 19-20 and page 3, lines 5-6

Interpretation:

The language in the bill clearly limits the types of pollution that are to be considered. Brines, for example, that were not the result of acid mine drainage and did not contain heavy metals would not be a covered concern with respect to these determinations.



WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

One East Main Street, Suite 401; P.O. Box 2536; Madison, WI 53701-2536
Telephone (608) 266-1304
Fax (608) 266-3830

DATE: January 20, 1998
TO: REPRESENTATIVE THOMAS D. OURADA
FROM: William Ford, Senior Staff Attorney
SUBJECT: Engrossed 1997 Senate Bill 3, Relating to Issuance of Metallic Mining Permits for Mining of Sulfide Ore Bodies, and Unintroduced Assembly Amendments to the Bill

A. INTRODUCTION

This memorandum is in response to your request for a description of five un-introduced amendments ("the amendments") to Engrossed 1997 Senate Bill 3 ("the Bill"), relating to issuance of metallic mining permits for the mining of sulfide ore bodies.

The memorandum first describes the Bill and then describes the five amendments to the Bill.

B. ENGROSSED 1997 SENATE BILL 3

The Bill establishes two preconditions that must be met before the Department of Natural Resources (DNR) may issue a mining permit for the mining of a sulfide ore body. These two preconditions are in addition to all of the other requirements of current mining law. Before the DNR may issue a mining permit for mining of a sulfide ore body, the DNR must determine, based on information provided by a mining permit applicant, that both of the following have occurred:

1. A mining operation has operated in a sulfide ore body which is not capable of neutralizing acid mine drainage in the United States or Canada for at least 10 years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals.
2. A mining operation that operated in a sulfide ore body which is not capable of neutralizing acid mine drainage in the United States or Canada has been closed for at least 10

years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals.

The Bill defines "pollution" to mean "degradation that results in any violation of any environmental law" and defines "sulfide ore body" to mean "a mineral deposit in which metals are mixed with sulfide minerals."

C. AMENDMENTS TO THE BILL

1. LRB-1359/1

This amendment specifies what constitutes the violation of an environmental law and is intended to clarify the definition of "pollution" under the Bill.

Both preconditions in the Bill require that the mine have been operated or have been closed for the applicable period in the United States or Canada "without the pollution of groundwater or surface water . . ." "Pollution" is defined in the Bill to mean "degradation that results in any violation of any environmental law." However, the Bill does not state what is included in the phrase "violation of any environmental law."

The amendment specifies that violation of an environmental law includes a determination by an administrative proceeding, a civil action, a criminal action or other legal proceeding which affords the alleged violator due process right of notice and an opportunity for a contested hearing. In addition, the amendment provides that a stipulated fine, forfeiture or other penalty is considered a determination of a violation of an environmental law, regardless of whether there is a finding or admission of liability.

2. LRB-1360/1

This amendment explicitly requires the DNR to independently verify information submitted by a mining applicant that the two preconditions established in the Bill have been satisfied.

The Bill requires the DNR to determine that the two preconditions have been satisfied "based on information provided by an applicant for a mining permit." The amendment explicitly states that the DNR is required to independently verify the information submitted by the mining applicant that the two preconditions have been satisfied.

3. LRB-1361/2

This amendment revises the type of mine that may be used by a mining applicant to show that the two preconditions established by the Bill have been satisfied.

Under the Bill, both preconditions must be satisfied with respect to mines operated "in a sulfide ore body which is not capable of neutralizing acid mine drainage." Sulfide minerals, when exposed to oxygen and water, can progress through a series of chemical and biochemical

reactions to produce acid. Other minerals (principally, carbonate minerals such as calcite) have the capacity to neutralize acid. If sufficient neutralizing minerals are present at the mine site or mine waste site, the acid generating reactions will be counterbalanced by the neutralizing reactions with the net effect that the mine waste drainage will not become more acidic.

The amendment would provide that both preconditions of the Bill must be satisfied with respect to mines operated in a sulfide ore body that has a net acid generating potential.

4. LRB-1368/1

This amendment provides that the Bill does not apply until the Secretary of Natural Resources determines that all lands within the boundaries of this state are subject to ch. 293, relating to metallic mining and to a number of other statutes as they apply to metallic mining operations. Currently, the only lands that do not appear to be subject to all of these regulations as they relate to metallic mining are lands owned by or held in trust for Indian tribes and tribal members and lands owned by the federal government.

5. LRB-1403/1

This amendment authorizes the DNR, under certain circumstances, to determine that the second precondition established by the Bill has been satisfied if a *part* of an operating mine has been closed and has not caused the pollution of groundwater or surface water for the applicable period.

The second precondition established by the Bill requires that a mining operation has been closed for at least 10 years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals.

The amendment provides that the DNR can determine that this precondition has been satisfied if a part of an operating mine has been closed for at least 10 years without the pollution of groundwater or surface water from acid drainage at the tailings site or at the mine site or from the release of heavy metals. The determination can be made only if the DNR determines that the part of the mining operation that is closed can properly be evaluated apart from the rest of the mining operation.

Please contact me at the Legislative Council Staff offices if I can be of further assistance.

WF:wu:kjfrv;wu



WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

One East Main Street, Suite 401; P.O. Box 2536; Madison, WI 53701-2536
Telephone (608) 266-1304
Fax (608) 266-3830

DATE: January 21, 1998
TO: SPEAKER SCOTT JENSEN AND REPRESENTATIVE MARC DUFF
FROM: William Ford, Senior Staff Attorney
SUBJECT: The Affect of Two Unintroduced Amendments to 1997 Senate Bill 3, Relating to Issuance of Metallic Mining Permits for the Mining of Sulfide Ore Bodies

This memorandum, which was prepared at your request, explains how two unIntroduced amendments ("the amendments") to Engrossed 1997 Senate Bill 3 ("the Bill") would affect the Bill. The two amendments you have inquired about are LRB-1359/1 and LRB-1361/2.

A. LRB-1359/1

This amendment specifies what constitutes the violation of an environmental law and is intended to clarify the definition of "pollution" under the Bill.

Both preconditions in the Bill require that the mine have been operated or have been closed for the applicable period in the United States or Canada "without the pollution of ground-water or surface water . . ." "Pollution" is defined in the Bill to mean "degradation that results in any violation of any environmental law." However, the Bill does not state what is included in the phrase "violation of any environmental law."

The amendment specifies that violation of an environmental law includes a determination by an administrative proceeding, a civil action, a criminal action or other legal proceeding which affords the alleged violator due process right of notice and an opportunity for a contested hearing. In addition, the amendment provides that a stipulated fine, forfeiture or other penalty is considered a determination of a violation of an environmental law, regardless of whether there is a finding or admission of liability.

It can be argued that this amendment clarifies the Bill by stating in the statutes what is intended by the Legislature and making it less likely that a court would come to a different interpretation. For example, it is possible that a court would interpret the Bill to mean that violation of an environmental law means a violation of a law as determined by a court. If a court interpreted this Bill in this manner, a determination by an administrative agency, such as

the Department of Natural Resources (DNR) that a mining company violated an environmental law, would not count as a violation under the Bill. This would make it more likely that a mining permit applicant could satisfy the conditions imposed by the Bill by showing that a mine operated and was closed for the applicable period without a determination by a court that an environmental law was violated, even though an administrative agency had made such a determination. In addition, it can be argued that the amendment strengthens the Bill by providing that a stipulated fine, forfeiture or other penalty is a determination of a violation, regardless of whether there is any finding or admission of liability on the part of the mining company. This provision of the amendment is not an obvious interpretation of the language in the Bill as drafted, because a stipulated agreement often does not involve an admission of liability for a violation of law.

B. LRB-1361/2

This amendment revises the type of mine that may be used by a mining applicant to show that the two preconditions established by the Bill have been satisfied.

Under the Bill, both preconditions must be satisfied with respect to mines operated "in a sulfide ore body which is not capable of neutralizing acid mine drainage." Sulfide minerals, when exposed to oxygen and water, can progress through a series of chemical and biochemical reactions to produce acid. Other minerals (principally, carbonate minerals such as calcite) have the capacity to neutralize acid. If sufficient neutralizing minerals are present at the mine site or mine waste site, the acid generating reactions will be counterbalanced by the neutralizing reactions with the net effect that the mine waste drainage will not become more acidic.

The amendment would provide that both preconditions of the Bill must be satisfied with respect to mines operated in a sulfide ore body that has a net acid generating potential.

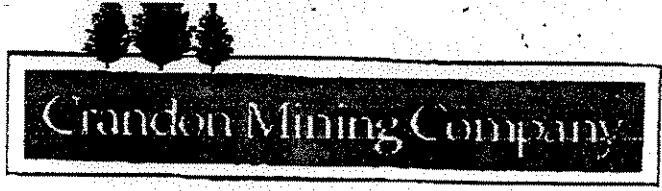
It can be argued that this amendment strengthens the Bill by requiring the applicant for a mining permit to show that *technology* has successfully been used to control acid drainage at a mine site where the absence of acid neutralizing minerals made acid drainage a potential danger to the environment. (The proposed Crandon Mine is *not* located in an area where there are sufficient acid neutralizing minerals to control acid generation.)

The DNR has expressed concern that the intent of the Bill is not accomplished by the language of the Bill because it is the *host rock*, rather than the ore body itself, that it is important in determining whether acid drainage is a potential problem at a mine site. For example, DNR has suggested, in its testimony before the Assembly Environment Committee, that some of the lead mines in Southwest Wisconsin could be used to satisfy the two preconditions under the Bill because the ore bodies containing the lead were sulfide ore bodies that were not, in themselves, capable of neutralizing acid generation. However, because these ore bodies were located in a limestone host rock that does neutralize acid generation, DNR believes that these mines would not be an appropriate example to determine whether environmentally safe mining can be conducted in an area where the ore body and host rock, together, would not neutralize all the acid that would be generated.

The amendment resolves this problem in the Bill by requiring that only mines operated in a sulfide ore body that has a "net acid generating potential" be used to satisfy both of the preconditions of the Bill. Thus, the amendment provides that if there is not sufficient acid neutralizing material in an ore body so that the ore body has a net acid generating potential, the mine can be used to satisfy the preconditions established by the Bill. In addition, Chuck Hammer, Attorney, DNR, has informed me that if the amendment were adopted, the DNR would also consider the acid neutralizing capacity of the host rock in which the ore body is located and in which refuse is deposited in determining whether the mine has a net acid generating potential.

Please contact me at the Legislative Council offices if I can be of further assistance.

WF:kjf,lah



16 N. CARROLL STREET, SUITE 530
MADISON, WI 53703-2716
TEL: (608) 251-6420 FAX: (608) 251-6421

Crandon Mining Company Response to Moratorium Vote

The following statement was released by Dale Alberts, Manager, Government Relations:

"The Crandon Mining Company is disappointed with the passage of the moratorium bill".

"The moratorium does nothing to improve the existing rigorous environmental regulatory framework. In fact, it is an ambiguous piece of legislation that is not applied to any other industry in this state and sets a bad precedent for business in Wisconsin".

"The concept of forcing the DNR to make regulatory decisions today based upon the technology and practices of 20 years ago is fundamentally flawed. By forcing the DNR to look backward 20 years, this excludes current mining operations which are operating in an environmentally sound manner".

"The company will continue to evaluate the requirements of the legislation while proceeding with the normal permitting process, which still has a long way to go. We continue to believe that reason, facts and science will prevail".

For comments:

Dale Alberts
Manager, Government Relations
(608) 251-6420