

State Representative  
**Spencer Black**



State Capitol  
P.O. Box 8952  
Madison, WI 53708  
(608) 266-7521

December 19, 1997

Senator Charles Chvala  
Room 101 MLK building  
Hand delivered

Dear Senator Chvala:

The Assembly is scheduled to debate Senate Bill 3 during January. I am currently evaluating engrossed Senate Bill 3 to determine whether any Assembly amendments are needed to ensure that SB3 as passed by the Senate is consistent with the intent of the legislation as initially introduced.

My intent in introducing Assembly Bill 70, the companion to Senate Bill 3, was to require, before a metallic mining permit is issued, a mining company to demonstrate by proven example that a sulfide mine can operate and close without pollution.

The Senate amended SB 3 by adopting Senate Amendment 1 (as affected by SA 1 and 2) and Senate Amendment 3. As you may know, some legislators have raised questions about the Senate action. Since you are the author of both amendments to SA1 and of SA3, it would be useful to know your view on the intent and effect of your amendments.

I thank you in advance for your response.

Sincerely,

A handwritten signature in cursive that reads "Spencer Black".  
Spencer Black  
State Representative



State Senator  
**Chuck Chvala**  
SENATE MAJORITY LEADER

January 5, 1998

Representative Spencer Black  
State Capitol  
219 North  
Madison, WI 53708

Dear Representative Black:

Thank you for your letter asking me to clarify the intent of the amendments I drafted for Senate Bill 3. I am happy to do so.

The purpose of SA1, and SA2 to SA 1, and SA3 was to ensure that Senate action maintained the original intent of the bill. The bill seeks to add an additional condition that must be met before a permit for metallic mining in a sulfide ore body can be issued. That condition is that the permit applicant demonstrate that a mine in a sulfide ore body has been operated and closed without pollution of the surface or ground water from acid mine drainage. The intention of the legislation is to subject sulfide ore mining to an empirical test of safe operation as a way of showing that the technology exists to do such mining without environmental pollution.

Since SA1 unamended would have weakened the bill, I asked the Senate to pass the three amendments that were adopted in order to maintain the original purpose of the legislation. The Senate amendments affect both the definition of pollution, and which mine could be used as the example mine to meet the permit condition. The original bill would have required that the mine used as an example be "of similar geological characteristics." This phrase was included to make sure that the mine used as an example would be capable of acid mine drainage which could damage the environment. This phrase was included to exclude mines in a carbonate rich environment in which the acid neutralizing capacity of the surrounding rock exceeds the acid generating capacity of the sulfide minerals.

Since mining advocates said that the term "of similar geological characteristics" was too vague and it could be construed to go beyond the intention of excluding mines in carbonate rich environments, the phrase was removed by SA 1. In order to maintain the intent of the original bill, the Senate instead passed SA 3 which is the language found in the engrossed bill. This amendment was drafted by Legislative Council staff scientist John Stolzenberg on the floor of the Senate at my request. As John Stolzenberg points out in his 3/13/97 memo reviewing Senate action, the purpose of this amendment was to ensure that the comparison mine is one that is located in an area where acid mine drainage is indeed a potential problem. The amendment seeks to exclude, as the example

State Capitol, Post Office Box 7882, Madison, WI 53707-7882 ■ Phone (608) 266-9170 ■ Fax (608) 266-5087  
Legislative Hotline (Toll Free) 1-800-362-WISCONSIN (9172) ■ E-Mail: [chuck.chvala@legis.state.wi.us](mailto:chuck.chvala@legis.state.wi.us)  
World Wide Web: [http://www.legis.state.wi.us/senate/sen16\\_sen16.html](http://www.legis.state.wi.us/senate/sen16_sen16.html)



mine, an ore body in which the rocks associated with that ore body have acid neutralizing capabilities. To include a mine in a carbonate rich environment as the example mine would negate the intent of the bill. The intent of SA3, based both on my instructions to John Stolzenberg, and on the Senate debate on the amendment, was to make sure that the example mine is not a mine where the ore body or the associated rocks can neutralize acid to the extent that acid mine drainage is not a problem. This amendment was specifically drafted to deal with the issue as raised in a report to the Natural Resources Board entitled *An Overview of Mining Waste Management Issues in Wisconsin* (July, 1995), the relevant section of which is cited in the Stolzenberg memo.

The definition of pollution was modified by SA1 which itself was modified by SA1 and SA2. SA1 as introduced would have inserted the following definition of pollution: "degradation that results in an adjudicated violation of an environmental law". However, by Senate action which adopted my two amendments, the definition was amended to "degradation that results in any violation of an environmental law". While SA1 unamended was clearly aimed at limiting what would be considered pollution, my intent in drafting the two amendments and the Senate's aim in adopting SA1 and SA2 to the amendment was to broaden greatly the definition of pollution. This is consistent with the intent of the bill which is to see if, by proven example, a mining company can demonstrate that it can operate without harming the environment, whether that harm results in an adjudicated violation of environmental standards or not. The intent of SA1 and SA2 to Senate Amendment 1 is to require a mining company to show that a mine has operated and closed without violating the environmental standards relating to pollution of the ground or surface water from acid mine drainage, whether adjudicated or not. The intent of the amendment is that the permitting agency should look to "any" violation of an environmental law including today's Wisconsin environmental standards and national standards. The intent of eliminating the word 'adjudicated' was to ensure that the permitting authority would look at the actual environmental impacts of the example mine and not simply at legal proceedings. The intent of substituting the word 'any' for 'an' was to ensure that the permitting authority would look at all laws, especially the standards in contemporary Wisconsin environmental law.

I hope this information is helpful to you.

Sincerely,

  
CHUCK CHVALA  
Senate Majority Leader



## **BILL SUMMARY**

### **SB 3: Issuance of Metallic Mining Permits For Sulfide Ore Bodies**

Date: January 21, 1998

#### **BACKGROUND**

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 Department of Natural Resources (DNR) makes a determination as to whether a mining permit may be granted. In addition to complying with Wisconsin's tough 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, a mining interest must maintain financial security for the operation and maintenance of the mining waste facility for at least 40 years following the closure of the mine.

The regulations and scrutiny applied by the DNR to the permitting process of the proposed Crandon Mine are the same as those applied to the 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 Crandon Mine is approximately halfway through the estimated four-year mining application process.

The Flambeau Mine ceased operations in early 1997. However, tough state regulations were 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 was 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.

In the 1997-99 biennial state budget, Republicans created a mining economic development grant and loan program that will be administered by the Department of Commerce. This program is designed to provide financial assistance to mining-impacted communities to develop and implement economic diversification plans and create long-term employment opportunities to reduce the dependence of the area on mining for economic growth. The program allows communities to establish an economic development infrastructure to achieve long-term growth by funding economic development diversification plans, early planning grants, revolving loan funds and business loans and grants. A total of \$200,000 was provided over the biennium for this program.

Additionally, during the summer of 1996, Assembly Republicans requested that DNR Secretary George Meyer strengthen current state regulations regarding water quality protections near mining operations. Republicans have been meeting with the DNR to ensure Wisconsin mining laws remain the toughest in the nation. The proposed rules would require mining companies to follow stricter rules than other businesses to protect surface and ground water (NR 182). In addition, the rules require mining companies to establish an irrevocable environmental protection trust (NR 132) to provide funding to maintain their environmental protection facilities. NR 132 has been adopted and approved by the DNR. NR 182 is still under review, but was addressed at a December, 1997, DNR board meeting.

Also, a petition (Assembly Petition 4) was signed by approximately 700 citizens of the State of Wisconsin in support of environmentally-responsible mining. On July 1, 1997, the petition was introduced by Rep. Duff and referred to the Assembly Committee on the Environment.

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 Act 377, 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. However, after the facility has been closed at least 40 years, if the owner proves to the DNR by a preponderance of the evidence that long-term care of the facility is no longer necessary, the obligation is terminated.

### **SUMMARY OF SENATE BILL 3 (ENGROSSED)**

Senate Bill 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. The DNR may only use a mine which naturally is "not capable of neutralizing acid mine drainage." The DNR would first be required to determine if the ore body of a mine is located within material not capable of naturally preventing acid mine drainage. Such an ore body would be similar to the Crandon ore deposit. 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 a "buffering" material which can naturally neutralize acid drainage.

The DNR must also determine whether the mine caused any degradation of groundwater or surface water resulting in a violation of an environmental law over a period of ten years of operation and ten years of closure. At the most extreme example, this test allows the DNR to use a mine similar to the Crandon ore deposit which existed prior to any environmental laws being in existence. For instance, a mine not capable of naturally preventing acid mine drainage could have been in operation for ten years and closed for ten years in the 1940s and 1950s, could have caused great degradation to surrounding surface water and would not have been in violation of any environmental laws because none existed at the time. Legal counsel for DNR states that the bill requires the department, when looking at mines similar to the Crandon mine, to apply the laws of the government with jurisdiction over that mine, e.g., a mine in Colorado would be subject to the laws of the state of Colorado and the United States. Few of those jurisdictions have laws as strict as Wisconsin's.

According to the non-partisan Wisconsin Legislative Council, Senate Bill 3 would not create a moratorium on mining in Wisconsin. The Legislative Council provides non-partisan legal counsel and policy research to legislative committees and individual legislators. According to the Legislative Council, "The DNR's interpretation that the laws in effect in the state or province where the (test) 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, a violation of an environmental law includes only those that have been taken to court and where a regulatory agency has made a final decision. If no agency violation order or no court action was taken, no recognized pollution would have officially occurred under Senate Bill 3. For example, the bill would approve a mine that operated in the 1870s and was closed in the 1880s under laws of that time, even though, by today's standards, pollution could have occurred. (Wisconsin Legislative Council Staff Memorandum, Bill Ford, Senior Staff Attorney, July 8, 1997; Testimony of Howard S. Druckenmiller, DNR, for Secretary George Meyer.)

## AMENDMENTS

Several Assembly amendments are expected to be offered to Senate Bill 3. These amendments have yet to be introduced.

## FISCAL EFFECT

According to the Department of Natural Resources, there is no fiscal effect associated with SB 3.

## PROS

1. Current mining laws are too weak to prevent mining activities from harming our economy, our environment and our drinking water supplies. Senate Bill 3 will help keep our communities free from contaminated wastewater.
2. The Wolf River, one of the last wild riverways in the Midwest and a component of the National Wild and Scenic Rivers System, faces imminent and potentially permanent ruin by a proposed zinc/copper sulfide mine.
3. Often called one of Wisconsin's most beautiful rivers, a mine could threaten the Wolf River with an estimated 44 million tons of mine waste laced with mercury, lead, zinc, arsenic and sulfuric acid. This pollution will likely find its way into the underlying groundwater and the surrounding wetlands.
4. More than 12,000 miles of river have already been ravaged by acid mine pollution in the United States, more miles than are protected in the National Wild and Scenic River System. The Wolf River remains one of the premier trout fishing rivers in the region, recognized for its high quality brown, brook and rainbow trout populations. At least seven endangered and threatened species depend on habitats provided by the Wolf River, including bald eagles and osprey.

## CONS

1. While opponents of SB3, in its current form, are not "pro-mining," they do recognize the rights of individuals and businesses to generate wealth from their property in accordance with all local, state and federal environmental, health and safety regulations.
2. Senate Bill 3 disregards the science applied by DNR scientists and engineers during the permitting process and uses arbitrary standards to determine whether a mine is safe or not. For example, a polluting mine following weaker environmental laws in another state where the pollution would be legal would meet the test of Senate Bill 3.
3. The Crandon Mine could create 800 jobs over the life of the mine.
4. The Crandon Mine could generate between \$29 and \$233 million in taxes submitted to local government for economic development.

5. The Crandon Mine will not discharge wastewater into the Wolf River, but will instead discharge into the Wisconsin River. This discharge is required by law to be cleaner (i.e., be less polluted) than the river into which it is discharged.
6. Why create different sets of environmental standards for different environmental activities? The state must maintain uniformity within environmental regulations.
7. By creating a vague standard which the DNR must meet before permitting a mine, Senate Bill 3 invites litigation by both opponents and proponents of proposed mining operations.
8. The intention of the supporters of Senate Bill 3 is not to ensure safe mining. Rather, Senate Bill 3 is a delaying tactic, with the ultimate hope of banning mining in Wisconsin.
9. As we approach our state's sesquicentennial celebration, it is important to remember that our state's economy was first rooted in mining. A miner is even featured prominently in our state seal.
10. It is true that twenty years ago it would have been very difficult to find a mine which did not violate some environmental laws. Nonetheless, today's mines must comply with strict environmental laws and are using technology which ensures compliance.
11. Republicans do not believe the myth that economic development and environmental enhancement cannot go hand-in-hand.
12. Wisconsin's environmental laws which regulate mining are the toughest in the nation and will protect this state's natural resources.

### **SUPPORT**

Rep. Black; Dunn County Mining Study Group; Northern Thunder, Chippewa Falls; Wisconsin Indian Education Association, Chippewa Falls; Forest County Potawatomi, Crandon; Rock Dam Lake Association, Willard; Concerned Citizens of Trempealeau County, Eleva; Mississippi River Revival & Down River Alliance, Galesville; Adams Township; Jackson County; River Alliance of Wisconsin, Madison; Wisconsin Environmental Decade, Madison; Sierra Club - John Muir Chapter, Madison; Pentenwell Castle Rock Property Owners Association, Arkdale; Wolf River Watershed Alliance, White Lake; Chequamegon Area Organic Farmers, Bayfield; Northwood Alliance/ECCOLA, McNaughton; Wisconsin Citizen Action, Oconomowoc; Parents in Manitowish Waters, Middleton; Coulee Region Group of the Sierra Club, LaCrosse; Region Wisconsin Trout Unlimited, Shawano; Servite Center for Life, Ladysmith

## OPPOSITION

Sen. Zien; Crandon Mining Company; Flambeau Mining Company; Industrial Development Corporation, Ladysmith; Foth&VanDyke, Green Bay; Environmental Compliance Consult, Black Creek; DeWitt Ross & Stevens, Madison; Forest County Board, Crandon; Manufacturers and Commerce (WMC), Madison; People for Wisconsin Coalition; Towns of Dairyland & Blaine; Exxon Mine, Gresham; Ladysmith community Industrial Development Corporation; Ladysmith City Council; Forest County Potawatomi; Harnischfeger Industries, Milwaukee; Northern Thunder, Chippewa Falls; Wisconsin Indian Education Association, Chippewa Falls; Foth&VanDyke, Green Bay and Kewaunee; Chippewa Valley Group – Sierra Club, Mondovi; City of Ladysmith District Council.

## HISTORY

On March 11, 1997, the Senate passed SB 3 on a 29-3 vote (Sens. Buettner, Huelsman, and Farrow, no) Senate Bill 3 was referred to the Assembly Committee on Environment. Rep. Duff held two public hearings on the bill: one in Ladysmith, Wisconsin on May 12, 1997, and one in Milwaukee, Wisconsin on October 14, 1997. The committee held an executive session on SB 3 on November 11, 1997, and voted 6-4 (Reps. Duff, Hoven, Seratti and Kedzie, no) to recommend SB 3, as received by the Senate, for passage.

**CONTACT:** Nicole Anderson, ARC



MICHAEL G. ELLIS  
SENATE REPUBLICAN LEADER



Wisconsin State Senate

19TH SENATE DISTRICT

January 21, 1998

*TO =  
REP. DUFF*

Representative Scott Jensen  
Speaker of the Assembly  
211 West  
State Capitol

Representative Steve Foti  
Assembly Majority Leader  
215 West  
State Capitol

Dear Speaker Jensen and Majority Leader Foti,

For your information, it is the intent of the Republican Senators to address Senate Bill 3, the mining moratorium, if your House decides to amend the bill. Press reports and others have erroneously reported Senate Republican opposition to bringing the bill up on the floor of the State Senate. The bill passed the State Senate by a strong 29-3 vote on March 11, 1997.

In fact, if you finish your deliberations today, it is the intent of the Senate Republicans to bring the bill up immediately. If your deliberations take longer, we hope to schedule the bill, as amended, for our next session day on February 3, 1998.

I hope this clarifies the Senate Republican position regarding Senate Bill 3.

Your Friend

A handwritten signature in cursive script that reads "Michael G. Ellis".

Michael G. Ellis  
19<sup>th</sup> Senate District  
Senate Republican Leader

cc: All Representatives  
All Senators



WISCONSIN ASSEMBLY ROLL CALL  
1997-98 SESSION  
SPEAKER JENSEN

SEQUENCE NO. 231  
JANUARY 21, 1998  
5:44 PM

SB 3  
SHIBILSKI, K. SB 3  
AA 2

ADOPT AMENDMENT  
MORATORIUM ON SULFIDE  
MINERAL MINING

AYES - 52      NAYS - 46      NOT VOTING - 0      PAIRED - 0

A	N	NV	NAME	A	N	NV	NAME	A	N	NV	NAME
A			AINSWORTH, J. (R)	A			JESKEWITZ, S. (R)			N	POTTER, R. (D)
A			ALBERS, S. (R)	A			JOHNSRUD, D. (R)	A			POWERS, M. (R)
	N		BALDWIN, T. (D)	A			KAUFERT, D. (R)		N		REYNOLDS, M. (D)
	N		BAUMGART, J. (D)	A			KEDZIE, N. (R)		N		RILEY, A. (D)
	N		BLACK, S. (D)	A			KELSO, C. (R)		N		ROBSON, J. (D)
	N		BOCK, P. (D)	A			KLUSMAN, J. (R)		N		RYBA, J. (D)
	N		BOYLE, F. (D)	A			KREIBICH, R. (R)	A			SCHAFFER, C. (R)
A			BRANDEMUEHL, D. (R)		N		KREUSER, J. (D)		N		SCHNEIDER, M. (D)
	N		CARPENTER, T. (D)		N		KRUG, S. (D)	A			SERATTI, L. (R)
	N		COGGS, S. (D)		N		KRUSICK, M. (D)	A			SKINDRUD, R. (R)
	N		CULLEN, D. (D)		N		KUNICKI, W. (D)	A			SPILLNER, J. (R)
A			DOBYNS, J. (R)		N		LA FAVE, J. (D)		N		SPRINGER, T. (D)
	N		DUEHOLM, R. (D)	A			LADWIG, B. (R)		N		STASKUNAS, T. (D)
A			DUFF, M. (R)	A			LASEE, F. (R)		N		STEINBRINK, J. (D)
A			FOTI, S. (R)	A			LAZICH, M. (R)	A			SYKORA, T. (R)
A			FREESE, S. (R)		N		LEHMAN, J. (D)		N		TRAVIS, D. (D)
A			GARD, J. (R)	A			LEHMAN, M. (R)		N		TURNER, R. (D)
A			GOETSCH, R. (R)		N		LINTON, B. (D)	A			UNDERHEIM, G. (R)
A			GREEN, M. (R)		N		LORGE, W. (R)	A			URBAN, F. (R)
	N		GRONEMUS, B. (D)		N		MEYER, M. (D)		N		VANDER LOOP, W. (D)
A			GROTHMAN, G. (R)		N		MORRIS-TATUM J. (D)	A			VRAKAS, D. (R)
A			GUNDERSON, S. (R)		N		MURAT, W. (D)	A			WALKER, S. (R)
A			HAHN, E. (R)	A			MUSSER, T. (R)	A			WARD, D. (R)
A			HANDRICK, J. (R)	A			NASS, S. (R)		N		WASSERMAN, S. (D)
	N		HANSON, D. (D)		N		NOTESTEIN, B. (D)	A			WIECKERT, S. (R)
A			HARSDORF, S. (R)	A			OLSEN, L. (R)		N		WILLIAMS, A. (D)
	N		HASENOHRL, D. (D)	A			OTT, A. (R)		N		WOOD, W. (D)
	N		HEBL, T. (D)	A			OTTE, C. (R)		N		YOUNG, L. (D)
A			HOVEN, T. (R)	A			OURADA, T. (R)		N		YOUNG, R. (D)
	N		HUBER, G. (D)	A			OWENS, C. (R)		N		ZIEGELBAUER, R. (D)
	N		HUBLER, M. (D)	A			PLALE, J. (D)	A			ZUKOWSKI, R. (R)
A			HUEBSCH, M. (R)		N		PLOUFF, J. (D)	A			SPEAKER (R)
A			HUTCHISON, D. (R)	A			PORTER, C. (R)				

VACANT DISTRICT(S) - 82.



WISCONSIN ASSEMBLY ROLL CALL  
1997-98 SESSION  
SPEAKER JENSEN

SEQUENCE NO. 239  
JANUARY 22, 1998  
5:01 PM

SB 3  
SHIBILSKI, K.

SB 3 CONCURRENCE  
MORATORIUM ON SULFIDE  
MINERAL MINING

AYES - 75      NAYS - 21      NOT VOTING - 2      PAIRED - 0

A	N	NV	NAME	A	N	NV	NAME	A	N	NV	NAME
A			AINSWORTH, J. (R)		N		JESKEWITZ, S. (R)	A			POTTER, R. (D)
	N		ALBERS, S. (R)	A			JOHNSRUD, D. (R)	A			POWERS, M. (R)
A			BALDWIN, T. (D)	A			KAUFERT, D. (R)	A			REYNOLDS, M. (D)
A			BAUMGART, J. (D)	A			KEDZIE, N. (R)	A			RILEY, A. (D)
A			BLACK, S. (D)	A			KELSO, C. (R)	A			ROBSON, J. (D)
A			BOCK, P. (D)	A			KLUSMAN, J. (R)	A			RYBA, J. (D)
	N		BOYLE, F. (D)	A			KREIBICH, R. (R)	A	X		SCHAFFER, C. (R)
A			BRANDEMUEHL, D. (R)	A			KREUSER, J. (D)	A			SCHNEIDER, M. (D)
A			CARPENTER, T. (D)		N		KRUG, S. (D)		N		SERATTI, L. (R)
A			COGGS, S. (D)	A			KRUSICK, M. (D)	A			SKINDRUD, R. (R)
A			CULLEN, D. (D)		N		KUNICKI, W. (D)	A			SPILLNER, J. (R)
A			DOBYNS, J. (R)	A			LA FAVE, J. (D)	A			SPRINGER, T. (D)
	N		DUEHOLM, R. (D)	A			LADWIG, B. (R)	A			STASKUNAS, T. (D)
	N		DUFF, M. (R)	A			LASEE, F. (R)	A			STEINBRINK, J. (D)
	N		FOTI, S. (R)	A			LAZICH, M. (R)	A			SYKORA, T. (R)
A			FREESE, S. (R)	A			LEHMAN, J. (D)	A			TRAVIS, D. (D)
A			GARD, J. (R)	A			LEHMAN, M. (R)	A			TURNER, R. (D)
A			GOETSCH, R. (R)		N		LINTON, B. (D)	A			UNDERHEIM, G. (R)
A			GREEN, M. (R)	A			LORGE, W. (R)		N		URBAN, F. (R)
A			GRONEMUS, B. (D)	A			MEYER, M. (D)	A			VANDER LOOP, W. (D)
	N		GROTHMAN, G. (R)	A			MORRIS-TATUM J. (D)		N		VRAKAS, D. (R)
A			GUNDERSON, S. (R)	A			MURAT, W. (D)		N		WALKER, S. (R)
A			HAHN, E. (R)	A			MUSSER, T. (R)		N		WARD, D. (R)
	N		HANDRICK, J. (R)	A			NASS, S. (R)	A			WASSERMAN, S. (D)
A			HANSON, D. (D)	A			NOTESTEIN, B. (D)	A			WIECKERT, S. (R)
A			HARSDORF, S. (R)	A			OLSEN, L. (R)		X		WILLIAMS, A. (D)
A			HASENOHRL, D. (D)	A			OTT, A. (R)	A			WOOD, W. (D)
A			HEBL, T. (D)	A			OTTE, C. (R)	A			YOUNG, L. (D)
A			HOVEN, T. (R)	A			OURADA, T. (R)	A			YOUNG, R. (D)
A			HUBER, G. (D)		N		OWENS, C. (R)	A			ZIEGELBAUER, R. (D)
	N		HUBLER, M. (D)	A			PLALE, J. (D)	A			ZUKOWSKI, R. (R)
A			HUEBSCH, M. (R)	A			PLOUFF, J. (D)		N		SPEAKER (R)
	N		HUTCHISON, D. (R)		N		PORTER, C. (R)				

VACANT DISTRICT(S) - 82.



5-1 1998 Letter / Asking  
Legal Opin. 2nd Letter

January 29, 1998

Representative Spencer Black  
Room 219 North  
State Capitol  
HAND DELIVER

Dear Representative Black:

Thank you for responding to my request for copies of legal opinions pertaining to SB 3.

In my letter of January 27<sup>th</sup>, I specifically asked for copies of any legal opinions you have pertaining to Assembly amendments to SB 3. In a January 23<sup>rd</sup> article in the *Milwaukee Journal Sentinel*, you state that AA 4 to SB3—which, incidentally was drafted to meet *your* requirements—“makes the bill meaningless.” The article also states that, “Black said he had legal opinions to back up his contention...” I have enclosed a copy of the article, in case you do not have one.

It is *these* legal opinions I am interested in seeing, not the analysis of the version of SB 3 passed by the Senate which you distributed to members of the Assembly during the floor debate on SB 3. While Mr. Reynolds' memo does not provide me with the answers I seek, I would still be interested in learning who paid for his services in the drafting this opinion.

I once again ask that you provide me with a copy of *any* legal opinion in your possession or in your office which claims that amendments added to SB 3 by the Assembly render the bill meaningless. If I do not receive a copy of these legal opinions in response to this letter, I will assume that such a document does not exist.

I am confident that, in the spirit of the full disclosure and accountability that you demand of others, you will promptly respond to this request and provide myself and others who are interested in this issue with this important information before the Senate takes up SB 3 next week.

Sincerely,

mwp/MCD  
enclosure

Marc C. Duff  
State Representative  
Chair, Assembly Committee on Environment

# Memorandum

February 2, 1998

TO: Senate Majority Leader Chuck Chvala  
Senate Minority Leader Mike Ellis  
All Members of the Wisconsin State Senate

FR: Bruce Deucher, Brown County Conservation Alliance  
Bill Sherer, State Council—Trout Unlimited  
Ted Lind, Wisconsin Council of Sport Fishing Organizations  
Jeanne Agneessens, Wisconsin Izaak Walton League of America  
Steve Verkuilen, Twin Cities Rod & Gun Club  
Bill Kasper, Sturgeon For Tomorrow  
Scott Engle, Otter Street Fishing Club  
George Kerstyn, Black Wolf Rifle Club  
Tom Faucher, Mid Wisconsin Fishing Club  
Denny Conrad, Shadows on the Wolf Inc.  
Marv Samson, New London Fish and Game Club  
Wes Pommerening, Upper Lakes Fishing Club  
Ron Bell, Van Dyne Sportsmen  
Tom Soles, Walleyes for Tomorrow  
Sara Johnson, Wisconsin River Alliance  
Keith Reopelle, Wisconsin's Environmental Decade  
Caryl Terrell, John Muir Chapter of the Sierra Club  
Lisanne Nelson Brandon, Wisconsin Citizen Action

RE: Senate Bill 3, the Mining Moratorium Bill

As the leaders of the State Senate we are requesting that you take up Senate Bill 3 expeditiously (February 12<sup>th</sup>) and restore the intent of the bill to require that mining technologies used in Wisconsin are proven safe and will not cause the type of environmental destruction so commonly caused by sulfide mines elsewhere. In other words, restore the integrity of the bill as it was originally passed in the Senate.

Unfortunately, before the Mining Moratorium Bill was passed by the Assembly last week, an amendment (Assembly Amendment 4) was attached which creates a significant loophole; and one loophole is all that is needed to gut this bill. By changing the definition of pollution, the amendment would allow mines which have caused serious pollution of drinking water, lakes and rivers to meet the standards in the bill.

Sulfide mines across this nation have contaminated over 12,000 miles of streams. We are not willing to take a chance with a world class fishery like the Wolf River and its associated lakes. We look to your leadership to close this loophole, and restore the intent of the Mining Moratorium Bill. Thank you for your time and consideration of this critical issue for the future of Wisconsin's natural resources.

SB 3 HEARING - GREEN BAY FEB. 17, 1997, 3:00 PM

MY NAME IS STAN DRUCKENMILLER, AND I AM APPEARING TO DAY REPRESENTING DEPARTMENT OF NATURAL RESOURCES SECRETARY GEORGE MEYER. I AM SPEAKING IN OPPOSITION TO SENATE BILL 3

I THINK EVERYONE INVOLVED IN THE MINING ISSUE AND WHO IS INTERESTED IN PROTECTING WISCONSIN'S ENVIRONMENT WANT TO BE SURE THAT ANY MINING PROPOSAL THAT MAKES IT THROUGH WISCONSIN'S RIGOROUS PERMIT PROCESS WILL, IN FACT, BE DONE IN A WAY THAT DOES NOT POLLUTE OUR GROUND OR SURFACE WATERS. THE ISSUE HERE IS NOT WEATHER TO PROTECT OUR NATURAL RESOURCES. THE DISAGREEMENT IS HOW TO DO IT.

WE HAVE CONSISTENTLY OPPOSED MORATORIUMS ON MINING OVER THE YEARS BECAUSE THEY ARE OVERLY RESTRICTIVE. SB 3 IS, IN EFFECT, A MORATORIUM ON MINING. THE BILL WOULD REQUIRE, BEFORE ISSUING A MINING PERMIT, THAT THE DEPARTMENT FIND THAT ANOTHER MINE SOMEWHERE IN THIS COUNTRY OR CANADA IDENTIFIED BY THE APPLICANT IS SIMILAR TO THE WISCONSIN PROJECT IN THAT IT HAS OPERATED IN A SULFIDE ORE BODY OF SIMILAR GEOLOGICAL CHARACTERISTICS, AND THAT IT HAS OPERATED FOR AT LEAST 10 YEARS WITHOUT GROUND OR SURFACE WATER POLLUTION FROM ACID DRAINAGE, OR FROM THE RELEASE OF HEAVY METALS. FURTHERMORE, THE DEPARTMENT WOULD HAVE TO DETERMINE THAT SUCH A MINE MEETING THESE REQUIREMENTS HAS BEEN CLOSED FOR AT LEAST 10 YEARS WITHOUT CAUSING GROUND OR SURFACE WATER POLLUTION. HAD THIS PROVISION BEEN IN PLACE 6 OR 7 YEARS AGO, THE LADYSMITH MINE WOULD NOT HAVE BEEN PERMITTED. YET OUR EXPERIENCE WITH THIS MINE SO FAR HAS BEEN THAT IT HAS BEEN ABLE TO OPERATE WITHIN THE STRICT ENVIRONMENTAL STANDARDS WE IMPOSED, AND WE ARE CONFIDENT THAT THE RECLAMATION WHICH IS ABOUT TO BEGIN WILL BE DONE IN AN ENVIRONMENTALLY SOUND MANNER.

ONE OF THE DEPARTMENT'S CONCERN WITH SB 3 IS THAT THE CRITERIA ARE VERY VAGUE, AND DIFFICULT TO INTERPRET. THE BILL DOES NOT INDICATE WHAT CONSTITUTES POLLUTION. DO EXISTING REGULATORY STANDARDS HAVE ANY APPLICATION? IF SO, ARE THEY THE STATE OR PROVINCE REGULATIONS COVERING THE IDENTIFIED MINE, CANADIAN OR U.S. NATIONAL STANDARDS, OR WISCONSIN STATE STANDARDS? THE BILL ALSO DOES NOT DEFINE SIMILAR GEOLOGICAL CHARACTERISTICS. DOES THE ORE BODY AT THE IDENTIFIED MINE HAVE TO HAVE A SIMILAR GEOLOGICAL HISTORY AS THE PROPOSED MINE - INCLUDING METHOD OF FORMATION, TECTONIC DEFORMATION, WEATHERING, ETC.? DOES THE ORE BODY HAVE TO EXIST IN A SIMILAR GEOLOGIC SETTING TODAY AS THE PROPOSED MINE - INCLUDING CLIMATE, VEGETATION, WEATHERING, ETC.?

OUR READING OF SB 3 WOULD IMPLY THAT A REQUIREMENT FOR A TEN YEAR OPERATING MINIMUM, AND AT LEAST A TEN YEAR EXPERIENCE AFTER CLOSURE, MEANS THAT THE APPLICANT WOULD HAVE TO FIND, AND THE DEPARTMENT WOULD HAVE TO EVALUATE, A MINE AT LEAST 20 YEARS OLD THAT WAS OPERATED WITH A COMPARABLE TECHNOLOGY PROPOSED BY THE APPLICANT. EVEN MORE OF CONCERN IS THE IMPLICATION THAT SITE CONDITIONS AT ANOTHER SITE SOMEHOW HAVE DIRECT APPLICABILITY TO A SPECIFIC SITE HERE IN WISCONSIN. THE FACT A TECHNOLOGY WAS SUCCEEDED OR FAILED AT A GIVEN LOCATION IN ANOTHER STATE OR PROVINCE DOES NOT GUARANTEE THAT THE SAME RESULT WILL BE ACHIEVED FOR A PROPOSED SITE HERE IN WISCONSIN.

WE BELIEVE THAT THE MORE LOGICAL WAY TO APPROACH A MINING DECISION IS TO APPLY OUR STANDARDS TO THE SPECIFIC SITE, AND DO A THROUGH EVALUATION TO DETERMINE THE POTENTIAL FOR ENVIRONMENTAL DEGRADATION. ONE FURTHER CONCERN IS THAT SB 3 WOULD, IN EFFECT, DISCOURAGE THE DEVELOPMENT OR USE OF NEW TECHNOLOGY IF STATE LAW WOULD REQUIRE AT LEAST 20 YEARS

EXPERIENCE WITH THAT TECHNOLOGY AT ANOTHER MINE. HOW COULD A MINING COMPANY USE THE MOST ADVANCED TECHNOLOGY IF ONLY 20 PLUS YEAR OLD TECHNOLOGY WILL MEET WISCONSIN'S LAW? ONE OF THE MAJOR CONCERNS WITH RESPECT TO MINE PROJECTS IS TAILINGS MANAGEMENT. MINE TAILINGS SITES ARE NOT FUNDAMENTALLY DIFFERENT FROM OTHER MAJOR WASTE SITES. WE ARE SUCCESSFULLY MANAGING THE ENVIRONMENTAL CONSEQUENCES OF THESE OTHER WASTE SITES WITH OUR CURRENT REGULATORY APPROACH. THE EXTENSIVE PROOF REQUIRED IN SB 3 APPEARS UNNECESSARY TO US. THESE OTHER TYPES OF WASTE FACILITIES MUST, OF COURSE, MEET STRINGENT ENV. CRITERIA., AND ARE JUDGED ON A CASE BY CASE BASIS AND SITE BY SITE BASIS. OUR EXPERIENCE DEMONSTRATES TO US THAT THIS IS THE BEST WAY TO DETERMINE THE RISK INVOLVED IN SUCH PROJECTS.

I WOULD LIKE TO BE CLEAR ABOUT ONE THING. DEPARTMENT STAFF WILL USE AVAILABLE INFORMATION ABOUT OTHER MINES AROUND THE WORLD IN MAKING OUR DETERMINATION ON ANY MINE PROPOSAL. FURTHER, SINCE ANY PROPOSED MINE HAS SIMILARITIES WITH MANY OTHER LARGE INDUSTRIAL OPERATIONS, WE WILL USE OUR EXPERIENCE WITH THESE FACILITIES AS WELL.

I WANT TO EMPHASIZE THAT WE DO NOT KNOW TODAY IF THE CRANDON MINE, OR ANY OTHER MINE THAT MAY BE PROPOSED, WILL BE ABLE TO MEET THE TOUGH ENVIRONMENTAL STANDARDS WE HAVE IN WISCONSIN. THAT HAS NOT BEEN DETERMINED YET. I CAN TELL YOU THAT THE DEPARTMENT WILL NOT - PERMIT ANY MINE UNLESS WE ARE FULLY ASSURED THAT THE MINE WILL MEET ALL ENVIRONMENTAL CRITERIA. THOSE STANDARDS ARE TOUGH, AND THEY WILL PROTECT OUR GROUND AND SURFACE WATERS. IN ADDITION THIS MONTH, THE N R B WILL BE BRIEFED ON A PROPOSED RULE CHANGE DEVELOPED BY DEPARTMENT STAFF THAT WILL MAKE IT CLEAR THAT MINES WILL HAVE TO COMPLY WITH THE



SAME GROUNDWATER STANDARDS AS OTHER INDUSTRIAL SITES. THE RULE WILL ALSO ASSURE THAT THERE ARE ADEQUATE FUNDS AVAILABLE TO PROVIDE SPILL RESPONSE AND PREVENTATIVE MAINTENANCE AT MINE SITES IN PERPETUITY. THESE CHANGES WILL BE ANOTHER STEP IN ASSURING US THAT A MINE WILL NOT IMPACT OUR WATER RESOURCES.

AN ADDITIONAL PROPOSAL IS CONTAINED IN THE GOVERNOR'S BUDGET BILL. THIS WOULD REQUIRE THAT PROVEN TECHNOLOGY MUST EXIST WHICH ENSURES THAT A PROPOSED MINING OPERATION WILL OPERATE WITHOUT VIOLATING STATE GROUNDWATER OR SURFACE WATER STATUTES AND RULES. THIS LANGUAGE IS SPECIFIC TO ACID DRAINAGE AT THE TAILINGS SITE AND MINING SITE, AND THE RELEASE OF HEAVY METALS.

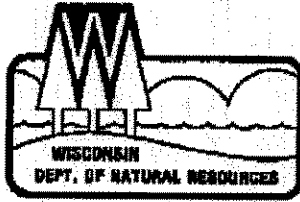
THIS NEW PROVISION WILL CLARIFY THAT A MINING APPLICANT MUST PROVE THAT THE TECHNOLOGY THEY PLAN TO USE IS TESTED AND PROVEN TO WORK, AND THAT THE TECHNOLOGY WILL MEET THE STANDARDS. THIS PROVISION WILL ADDRESS MANY OF THE CONCERNS REFLECTED IN SB 3.

FINALLY, WE WILL BE APPOINT A PANEL OF RECOGNIZED SCIENTIFIC EXPERTS WHOSE JOB IT WILL BE TO REVIEW THE SPECIFICS OF THE CRANDON MINE PROPOSAL AND ADVISE THE DEPARTMENT ON WHETHER THE STATE'S TOUGH ENVIRONMENTAL STANDARDS WILL BE MET. I CAN PROMISE THIS COMMITTEE THAT THIS PANEL WILL BE CREDIBLE AND BALANCED. WE WILL BE ASKING FOR YOUR RECOMMENDATIONS ON NOMINEES FOR THIS PANEL IN THE NEAR FUTURE..

Note: I didn't get the say the last paragraph because of the time limit for all speakers. I did get a number of followup questions. One point I made in the followup questioning is that just because a mine doesn't leak after 10 years doesn't make it acceptable. The department needs to be able to use its judgement, recent technology, and good engineering practice in deciding if a mining technology is appropriate for a wisconsin mine. I was also asked if we

would have opposed the bill before becoming cabinet - I said we did oppose a similar bill before the change occurred, and that our opposition was a staff position. One committee member observed that the bill would be a field day for lawyers - I was forced to agree!

Updated note: Many of these comments are not relevant to the amended bill that actually passed the Senate. That bill appears to set a standard that can be easily met by the mining industry, and would NOT constitute an effective moratorium. (HSD - 4/15/97)



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 AR 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

Post-It™ brand fax transmittal memo 7671 # of pages = 9

To <i>Marc</i>	From <i>Naasha</i>
Co.	Co.
Dept.	Phone #
Fax #	Fax #

Quality Natural Resources Management  
Through Excellent Customer Service



State of Wisconsin

**CORRESPONDENCE/MEMORANDUM**

DATE: May 22, 1997

FILE REF: 2720

TO: George Meyer - AD/5 /

FROM: Larry Lynch - SW/3 *LL*

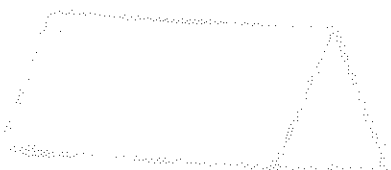
SUBJECT: Alternate Approach to SB-3

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 OUTRIGHT BAN ON MINING.

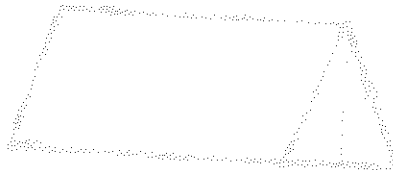
WE DO NOT BELIEVE IT WAS INTENDED THAT MINING BE BANNED, GIVEN THE DEBATE THAT OCCURRED IN THE SENATE. WE ALSO BELIEVE THAT THIS INTERPRETATION IS NOT LIKELY TO BE ACCEPTED BY A REVIEWING COURT. THE BETTER INTERPRETATION IS THAT THE CLAUSE APPLIES TO CIRCUMSTANCES IN WHICH THE "ORE BODY" IS INCAPABLE 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



Handwritten notes in the bottom right corner, including the words "DRAFT" and "REVISION" written multiple times in a light, cursive script.



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.

[Faint mirrored text bleed-through from the reverse side of the page, including phrases like "THANK YOU" and "I WOULD BE HAPPY TO RESPOND"]



## 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.

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 OUTRIGHT 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.

May 8, 1997

To: State Assembly Committee on Environment  
Marc Duff, Chairman  
Spencer Black            Peter Brock  
Eugene Hahn             Timothy Hoven  
DuWayne Johnsrud       Neal Kedzie  
John LaFave             Judy Robson  
Lorraine Seratti

Re: 1997 Senate Bill 3, May 12, 1997 Public Hearing  
Ladysmith, Wisconsin.

Ladies and Gentlemen:

I would like to provide some insight into the issues regarding the above referenced Senate Bill from the perspective of one who has spent his entire life in and around the mining industry and is proud of the overall legacy of mining history, technology and innovation in the United States. Mining is not some villain to be feared but is a means to an end whereby entrepreneurs create wealth both personally and for the Nation through the recovery of those valuable minerals from the Earth that must be produced in order to maintain and sustain our standard of living in this country.

I am an exploration geologist, born in the heart of the Zinc mining district of Tennessee in 1951. I am a professional geologist certified by the American Institute of Professional Geologists, a member of the Society for Mining, Metallurgy and Exploration, The Geological Society of America, and The American Association of Petroleum Geologists. I have also been on the regulatory side of the fence working in the Department of Mines and Minerals in the Commonwealth of Kentucky and the Kentucky Public Service Commission.. I give considerable time and effort to speaking in the public schools and other interested groups.

Let me say from the very beginning that I am very much opposed to the language and intent of Senate Bill 3 and would urge its defeat or withdrawal from the Legislative agenda. It is unnecessary as a vehicle to protect the citizens and the environment of the great state of Wisconsin from the perceived evils of the mining industry.

I am one of approximately 10,000 men and women who derive their livelihood directly from the mining industry in this state. My employer has approximately 1,500 men and women who directly depend upon mining for their wages. Their are also over 200 individuals who are either



professional geologists or affiliated with mining engineering who live and work in the state who support and depend on the mining industry for their livelihood. You probably have not heard much from any of these people whom I consider to be highly trained and educated professionals who expect rational decision making from those highly trained and educated elected representatives that are charged with making decisions that protect and serve the greater good of the great state of Wisconsin. These people are busy making a living and generally do not have the time to attend public meetings such as the one in Ladysmith. They are concerned however. They expect you to be fully informed and deal with facts and not hysteria.

### **Sulfide Mineral Deposits**

It must be understood that our 200 years of civilization and progress have used up practically all of the native elements (native copper, native gold, native platinum, native silver that is found in pure form) and we have used up nearly all of the oxide minerals which leaves the sulfide minerals for the present and the future. Nearly all of the Gold, Silver, Platinum, Copper, Lead, Zinc, Nickel, Arsenic, Mercury, Bismuth, Molybdenum, Cobalt and Antimony consumed in the United States is produced from sulfide mineral deposits.

You must also understand that no two mineral deposits are alike simply due to the complexities of the mineral bearing fluids that produced these mineral bodies in the first place. To compare one mine or mineral deposit or even the companies engaged in the mining and their level of expertise with some other mine, mineral deposit or company is not rational or even useful. However, you can draw certain conclusions about the nature of minerals, mineral deposits and the ways in which they can and have been mined both for the good and for the bad.

**For example:** my home town in Tennessee derives its sole source of drinking water from a closed, underground zinc sulfide mine and the water meets or exceeds safe drinking water standards. The same can be said of Viburnum, Missouri, where the sole source of drinking water for the town is from a closed, underground lead sulfide mine and the water meets or exceeds safe drinking water standards. The people in both of these Sulfide mining districts have no problem with the mining industry around which they live and breathe and prosper. Why then are we so concerned?

### **Crandon, Wisconsin vs Summitville, Colorado**

It is not at all rational or proper to compare the nightmare that the Summitville mine has become with the

proposed Crandon mine. Summittville is an old gold mining district started over 100 years ago and significant environmental damage was done before Galactic Resources began mining a few years ago. The elevation of the mine is around 11,000 feet above sea level and was mined into the mountain by way of adits or portals (horizontal tunnels into the mountain to gain access to the gold ore body). These adits are also drainage points for groundwater exiting the mountain and containing significant metal content. Galactic Resources also constructed heap leach pads for the extraction of gold from the ore by way of cyanide solutions.

Crandon on the other hand is at an elevation of around 1,600 feet above sea level. It will be underground mining where access to the ore body will be by vertical shaft. Groundwater cannot accidentally exit the mine, it must be pumped out and treated before discharge into any stream. The waste rock will be in the form of finely ground rock called tailings which will be stored on a surface site. One simply needs to protect this material from rainwater and snow by appropriate liners or seals both above and below the material. This waste (tailings) will have significant future value as technology is developed wherein the trace metal values within the tailings will one day be mined and metals recovered. Do not look at this material as a future liability but instead as a future resource.

Furthermore, if you want to provide the best longterm protection to the environment, the local socio-economic impact and the benefits to the state and the nation, then work on ways to keep mining operations open and on going for as many years as possible in order to recover more of the valuable minerals within the ore body. Instead of pushing to close them as soon as possible as in the case of the Flambeau mine where valuable metal values are being dumped back into the ground simply because of over zealous environmental requirements. If you do not prolong these ventures the mining companies will take the heart out of the mineral deposit as determined by cut-off grade points that are strictly based upon economic criteria. The environmental, regulatory, and labor costs have a direct impact upon those cut-off grade determinations. Do not shorten the life of these valuable resources.

#### What to Do?

The Crandon zinc-copper sulfide deposit is one of the largest unmined ore bodies left in the United States. It has an estimated 70,000,000 tons of metallic ore with an estimated value based upon today's metal prices of over 3 billion dollars (personal estimate). What a treasure for the state of Wisconsin and its citizens and the nation.

Withdraw Senate Bill 3!

Increase existing statutes dealing with metallic mining in the state by increasing waste water standards and increasing financial responsibility for the care and maintenance of closed mine sites but do not treat the mining industry more severely than you would any other major manufacturing concern!

Drop all talk of a 10 year moratorium based upon the deceptive notion that we want to wait for irrefutable proof that a sulfide mine can operate and ultimately be closed and reclaimed and never cause any environmental harm or damage. What an unrealistic demand. It is instead a clear attempt to stop any metallic sulfide mining in this state based upon limited facts and hysteria!

I was appalled at the negative attitude toward mining that exists in Wisconsin when we moved here three years ago. This state has a long and proud history of lead-zinc mining in the southwestern part of the state, iron mining in the central and northern regions and industrial minerals (quarries, sand & gravel pits, dimension stone, granite quarries) mine sites throughout the state. Lets push forward and not fall backwards. The nation and the mining companies are watching Wisconsin very closely to see if the door is open to mining or is about to swing shut.

I have worked in or visited over 100 open pit and underground metallic, non-metallic, sulfide, oxide and various other mineral mines as deep as 8,000 feet below the surface across the United States and I do not have a problem with the mining industry in this nation. If you have not visited modern mines then you do not have the facts to make your decisions.

Feel free to contact me if you have any questions about this matter.

Respectfully submitted: Mark Hostetter, CPG.  
1972 Esther Drive  
Onalaska, Wisconsin 54650

# The Summitville Gold Mine And Heap Leach Part One: The Problems

James A. Pendleton, Ph.D., CPG-3768

## Introduction

On December 4, 1992, Summitville Consolidated Mining Company, Inc., a subsidiary of Galactic Resources, Ltd. of Vancouver, Canada, informed the State of Colorado of its intention to declare bankruptcy and to abandon its Summitville mine and heap leach after December 15, 1992. The heap leach was within five feet of overtopping the containment dike, and copper-acid water was discharging untreated from an adit drain. Having no emergency response capability, Colorado requested assistance from the U.S. Environmental Protection Agency. The Summitville mine site was placed on the National Priorities List on May 31, 1994. The lessons and legacy of the Summitville mine will probably influence the future operation, regulation and cleanup of mine sites in the U.S. for the foreseeable future.

## The Summitville Mine Site Problems

In 1984, Galactic leased the Summitville property and obtained a permit for a limited impact pit and test heap leach. The test was pronounced a success in the fall of 1984. Galactic obtained a mine permit for the full-scale open pit and heap leach in October of 1984. Construction commenced in the summer of 1985, continued through the winter, and concluded during the summer of 1986. Considerable difficulty was encountered due to the extreme winter conditions at 11,500-foot elevation, which resulted in damage to the heap leach liner. With the liner presumably repaired, the operation began heap leaching in early summer, 1986.

## The Heap Leach Problems

Cyanide processing solution was first applied to crushed ore on the heap leach in June of 1986. Within a month cyanide was detected in the leak detection layer beneath the primary fabric liner. The following month cyanide was detected in the underdrain beneath the secondary compacted clay liner. Galactic was allowed to construct a sump to capture and pump back contaminated fluids to the heap for containment.

The original permit application included a water balance calculation for the heap leach. This water balance projected an excess of evaporation over precipitation. However, this water balance was in error. Due to an excess of precipitation over evaporation, and the pump back of contaminated fluids to the heap leach, the heap accumulated water.

From mid-1987 through the late fall of 1990 the Summitville mine experienced a series of broken pump-back pipelines, broken pumps and erupting springs, resulting in releases of cyanide-contaminated fluids. The original design of the mine as a "zero-discharge" facility having proven incorrect, Galactic was required to install a treatment plant to treat and release the accumulating cyanide-contaminated heap solution. This water treatment plant was installed in 1989. The operator's prolonged attempts to perfect its water treatment plant failed. During 1989 and 1990 Galactic attempted land application to dispose of treated effluent. The land application project resulted in overland flow into Wightman Fork and Galactic was

## Karst Control

Advanced pressure grouting technology permanently terminates groundwater flow related to Quarries, Landfills, Mines, Shafts, Tunnels, Lakes, Dams, Lagoons, Underground Structures, and Contamination Plumes.

*"The Pressure Grouting Specialist"*

**STRATA**  
SERVICES

Contact: Dave Taylor 314-828-5858

again cited for water quality violations. The inefficient and hazardous heap leach apparently bankrupted the operator and led to an emergency response by the EPA. Between December 16, 1992 and June, 1994, the EPA expended approximately \$30 million treating water at the Summitville site. The majority of the treated water came from the heap.

#### **The Acid Waste Rock Drainage Problem**

Much of the regulatory attention has focused on the heap leach pad. However, significant additional environmental issues developed from acid and metals contamination from the site's waste rock piles. The waste rock was inadequately characterized during the permitting process. The original limited impact permit application stated that, because the ore and waste rock would come from the "oxide" zone they would have no acid-generating potential. This observation was grossly in error. Base metal sulfide minerals in the waste rock are now being weathered and acid and metals are being released to the ground and surface waters. Further, without permit approval, Galactic carelessly placed this waste material in a boggy area of the Cropsy Creek valley. The Cropsy waste pile subsequently became saturated with groundwater which drains down slope beneath the heap leach into the underdrain. In the underdrain, the approximately 2.5 pH waste pile effluent is contaminated by leaking heap solution and must be returned to the heap to contain contamination.

Based upon the 1993 water quality monitoring data, approximately 50% of the mine site's copper metal contaminant loading, as high as 9,000 pounds per day, comes from the various waste piles. These sources include the heap underdrain, the Cropsy waste pile and several other waste disposal areas, the Beaver mud dump, and the North waste rock dump. As of August, 1994, contracts had been issued to return two-thirds of the Cropsy waste pile to the mine pit at a cost of \$17.7 million.

#### **The Adit Drainage Problem**

At some point in the development of many historical mining districts in Colorado, some enterprising individual dug a dewatering tunnel to lower the water table and facilitate deeper mining. At Summitville the dewatering tunnel is the Reynolds Adit. The Reynolds Adit, which is located near the base of South Mountain and beneath the pit excavated by Galactic, was completed in 1897. The Adit flows continuously, varying from approximately 100 gallons per minute in the winter to an average annual high of approximately 800 gallons per minute during spring melt.

Because the Reynolds Adit drains both the ore body and the adjacent mineralized alteration zone, it historically contained relatively high metal contents. Prior to 1988, copper content typically reached approximately 30 milligrams per liter. Beginning in 1988, however, the metals concentration of the Reynolds Adit effluent began to

increase. By mid-1992 the effluent had reached about 130 milligrams of copper per liter. In 1993 the Reynolds adit effluent copper content peaked at 650 milligrams per liter.

While the mechanism is not completely known, it appears that excavation of the undrained open pit above the Reynolds Adit and associated underground workings stimulated increased infiltration, oxidation and flushing of the ore body and adjacent alteration zone. In turn, this resulted in the increased release of acid and metals from the pit and old underground workings to the Reynolds Adit. To compound the problem, the highest contaminant concentrations occur in conjunction with the highest seasonal flows. Based upon 1993 water quality monitoring data, it appears that approximately 50% of the site's copper contaminant loading, as high as 9,000 pounds per day, issued from South Mountain via the Reynolds Adit. During the winter of 1993/1994, in an attempt to stem this contaminant flow, EPA placed plugs in the Reynolds and associated Chandler adit at a cost of approximately \$1 million. It is too early to evaluate the success of this emergency response action.

#### **Cleanup Cost Projections**

Numerous individuals interested in the Summitville mine site controversy have volunteered projections of the possible cost of cleanup of the site. Estimates have ranged from an unrealistic high of \$1 billion by the Mineral Policy Institute to an overly conservative \$23.6 million by Galactic prior to its bankruptcy. As of June, 1994, \$40 million had been expended, of which \$30 million had been dedicated to water treatment. EPA has publicly projected the cleanup cost at \$120 million. None of these estimates have considered the costs of post-cleanup operation and maintenance, which would be borne by the State.

#### **Conclusion**

The Summitville Mine has been, and will be, unsatisfying for the State of Colorado, the mining industry, the EPA, the environment, and the public, unsatisfying in terms of impact to the natural environment, public expense, industry morale, and the conduct of business. It is unfortunate that any lesson must be learned at so extreme an expense. The Summitville Mine situation, portrayed as typical of the undesirable consequences of mining, has received intense scrutiny. This anomalous example of mining at its worst has become the environmental advocates "poster child" for mining-law reform. In Part Two I will summarize the lessons and legacy of the Summitville mine for mine operators, mine regulators, and the public.

---

*James A. Pendleton, Ph.D., CPG-3768, is the Technical and Scientific Coordinator for the Colorado Division of Minerals and Geology and represents the Division on the EPA Summitville Superfund Technical Advisory Team.*

# The Summitville Gold Mine And Heap Leach Part Two: The Lessons & Legacy

James A. Pendleton, PhD., CPG-3768

## Introduction

Many of these lessons were evolving prior to the Summitville bankruptcy. While I often disagree with the host of rapidly emerging Summitville "experts", many of whom imply these lessons evolved instantaneously from the Summitville situation, I believe it of value to summarize the lessons so graphically exemplified by the Summitville mine site. Further, I believe many of these lessons portend a legacy for the mining industry, regulatory agencies, and the public. Many of these legacies have already been manifested in Colorado through regulations adopted since the bankruptcy of Galactic Resources Limited. And many will be repeatedly cited during the on-going debates concerning the 1872 Mining Law and the CERCLA reauthorization.

## Comprehensive Baseline Data Collection

In the absence of baseline data, particularly water quality contaminant loading data, it is difficult to assess a mine's potential impacts to the environment. It is impossible to recreate pre-disturbance water quality for determination of cleanup targets. Lacking data with which to defend themselves, most potentially responsible parties (PRPs) may be hard pressed to limit their liability. Summitville baseline data was also inadequate to characterize the acid- and toxic-forming character of the waste rock. At the time Summitville was permitted, operators were not required to collect baseline data. As of July, 1994, Colorado regulations require that operators collect a minimum of five-quarters of surface water and ground water baseline data, and that they characterize the ore, waste and country rock that may be disturbed by the proposed mining. All operators will have to withstand the time and expense of baseline data collection, analysis and interpretation.

## Reliance on "Zero-Discharge" Classification

Operators are not statutorily required to obtain an NPDES for a "zero discharge" facility. Health Departments routinely recommend baseline data collection but most

cannot require it for "zero-discharge" facilities. If the Division of Minerals and Geology did not require collection of baseline data, little would be collected. The EPA also has no authority to deny a zero-discharge permit for lack of baseline data. EPA includes a warning in its permits. Realistically, if a violation occurs, the mine operator will be "enforced" into bankruptcy. Even though we continue to accept "zero discharge" design assumptions, five-quarters of baseline hydrologic data is now required to verify nil impact. Operators will be responsible for the baseline data collection.

## Increased Scrutiny of Environmentally Sensitive Mines

The Colorado Mined Land Reclamation Board adopted a new model for issuing permits for "Chemical Processing and Designated Mining Operations" (DMOs). These permits now include requirements for environmental protection plans, including detailed emergency response plans. Operators are subject to the expense of plan preparation and the risk of mounting an emergency response.

## Phased Building-Permit-Type Inspections

Operators of DMOs are subject to phased inspections during construction of the facility. The facility can be operated only after construction has been completed in

### **RHODES** & ASSOCIATES, INC.

- Geoenvironmental Drilling
- Monitoring Well Installation
- Site Assessments
- UST Management
- Geologic Studies
- Laboratory Testing
- Geotechnical Investigations

P.O. Box 24080  
Lexington, KY 40524

(606) 887-5700  
FAX(606) 887-5703



compliance with the approved plan and regulatory standards. All DMOs will suffer this additional uncertainty and scrutiny.

### **Strict Third-Party Certification**

Summitville's liner was the subject of an engineer's certification which exempted portions of the facility. All environmentally sensitive facilities, such as liners, will require a detailed certification by a third party professional. No exemptions for lapse in observation will be tolerated. All operators will have to accept the expense and delay of certification.

### **Increased Monitoring and Self Reporting**

The Division requires that critical operational and environmental monitoring data be evaluated periodically and reported promptly. Colorado statutes now require an operator to immediately self-report potential threats to the environment or the public health.

### **The Maintenance of Adequate Surety**

Until July, 1994, Colorado operators enjoyed the protection of a grandfather clause which exempted them from compliance with regulations adopted subsequent to approval of their permits. The Mined Land Reclamation Board now has the authority to increase the bond for any mine site if it is determined that the site is insufficiently bonded. An inflation indexing factor is also included in all existing and new permit bond determinations. Bonds are periodically re-evaluated. Previously bonds could be increased only in the event of a violation. Operators are now subject to the prospect of escalating surety requirements.

### **Restriction of Surety Forms**

Prior to July, 1994, Colorado statute and regulations allowed surety to be submitted in a selection of forms, including cash, certificates of deposit, treasury certificates, insurance bonds, equipment salvage credit, corporate self surety, and real estate deeds of trust. Recent experiences at mines such as Summitville and Mid-Continent Resources have caused a significant restriction of acceptable surety forms and increasingly stringent methods for surety evaluation. Many operators will suffer increasing cost in providing acceptable surety.

### **Compliance with Evolving Regulations**

By statute, the Board used to issue permits for the "life-of-mine". The Board now has the authority to apply new permitting requirements to existing permits, if demonstrated necessary to prevent environmental impact.

### **Comprehensive Review of Permit Applications**

As of July, 1994, the Mined Land Reclamation Board received authority to extend the current automatic permitting provision requirement from 120 days to 180 days, when necessary to allow a thorough review of a complex

application. The Board also granted the Division authority to hire outside contractors, paid by the applicant, to assist in evaluating complex permitting issues for which the Division had inadequate manpower. The operator must accept the delay and additional cost represented by extended and comprehensive permit scrutiny.

### **Extended Reclamation Success / Liability Period**

To prevent unforeseen environmental complications, Colorado statute now allows an extended five-year reclamation liability period after the completion of all reclamation requirements. A portion of the bond is retained until all reasonable concerns have been satisfied. Operators will risk the increased uncertainty and carrying expense of lengthened surety liability periods.

### **More Deliberate Enforcement**

Summitville Consolidated Mining Company, Inc. was cited for loss of containment within one month following application of processing solution. However, the operator's impressive selection of professional consultants postured innumerable scenarios to explain the problems. The Board elected not to shutdown the operation, rather SCMCI was directed to institute remedial measures, all of which failed. The Board has directed the Division to be much more deliberate in pursuing enforcement of potential violations at DMOs. Future enforcement actions will err in the interest of preventing environmental impact. Operators will experience more stringent and deliberate enforcement with its attendant risk of increased cost and operational delays.

### **Creation of State Emergency Response Fund**

Finally, the Colorado Legislature authorized creation of a State emergency response fund to allow the State to react in situations where operators are unwilling or incapable of correcting hazardous environmental conditions.

### **Conclusion**

The Summitville Mine has been, and will be, unsatisfying for the State of Colorado, the mining industry, the EPA, the environment, and the public. Unsatisfying in terms of impact to the natural environment, public expense, morale, and the conduct of business. It is unfortunate that any lesson must be learned at so extreme an expense. The lessons learned from the Summitville experience portend a significant legacy for mining operators and regulatory agencies. Realistically, that legacy involves increased risk, expense, and prolonged project startup and operation.

---

*James A. Pendleton, PhD., CPG-3768, is the Technical and Scientific Coordinator for the Colorado Division of Minerals and Geology and represents the Division on the EPA Summitville Technical Advisory Team. •*

*Testimony of:*

◆ PAUL G. KENT ◆  
DEWITT ROSS & STEVENS, S. C.  
MADISON, WISCONSIN

*Submitted to:*

THE WISCONSIN ASSEMBLY COMMITTEE ON ENVIRONMENT  
PUBLIC HEARING

Ladysmith, Wisconsin  
May 12, 1997

My name is Paul Kent. I am an attorney with the Madison law firm of DeWitt Ross & Stevens. Our firm has served as legal counsel for Kennecott and Flambeau Mining Company since the initiation of the permitting process for the Flambeau Mine in the mid-1980's. From the beginning, all of us involved in the permitting process were committed to ensuring that the proposed mine would be constructed, operated and reclaimed in an environmentally sound manner. As we progressed through the permitting process, again and again I was impressed with the commitment of the Company, not just to do the minimum that we required, but to make this project an example of how modern metallic mining can be done in a way which fully protects our environmental resources.

During the permitting process, opponents of the mine argued that regardless of the merits of this project, mining should not be permitted in Wisconsin because it could not be done in a way that would adequately protect the environment. Concerns were expressed about the proximity of the mine to the Flambeau River, the potential for groundwater and surface water contamination, draw down of wells, fugitive dust from the crushing, and noise from the blasting. We heard that these impacts would be so severe that the mine would damage tourism and leave the Ladysmith community with a legacy of environmental problems. These fears were bolstered by horror stories from mines in other parts of the world which historically had problems.



We argued, however, that given Wisconsin's mining laws, the commitment of the Department of Natural Resources to vigorously monitor and oversee the mining operation and the ongoing responsibility imposed on mining companies by Wisconsin law, that there was no basis for such fears here. We argued that each mining operation should have the chance to be evaluated on its own merits. Where the Company can demonstrate that a mine can proceed in an environmentally sound manner and protect the local community, a mining permit should be granted. At the very least, the local citizens and the state should have the opportunity to make an informed choice about whether to grant or not grant permits.

The bill that is presently before the Legislature, Senate Bill 3 and its counterpart Assembly Bill 70 effectively preclude the citizens from having an opportunity to make those choices. Although portrayed as additional requirements in the state permitting process, the bill effectively bans mining by employing criteria that are arbitrary and irrelevant to the permitting process.

First, the bill requires that an applicant cite examples of successful sulfide mining facilities in the country. While there are such examples, the experiences of how mining has or has not worked in other jurisdictions is substantially less relevant than how it has worked here. Ironically, the bill is specifically structured to exclude consideration of the Flambeau Mine which is the best example of how metallic mining can be done safely in Wisconsin. Wisconsin has some of the toughest mining laws in the country if not the toughest. Under Wisconsin law, mining is regulated more thoroughly than any other industry.

Second, while there are numerous examples of successful sulfide mining operations in the country, the bill is unclear whether any of those examples can be considered. This is because legislation in its present form contains a number of terms which are ambiguous and undefined. For example, the current language as adopted by the Senate provides that a mining company can only cite to sulfide mines which are "not capable of neutralizing

acid mine drainage.” Just what is a deposit that is capable of neutralizing acid mine drainage? A deposit with 10% neutralizing capability, 20%, 80%? These kinds of ambiguous terms may provide full employment for lawyers but they do little to protect the environment.

Third, an even more basic problem with the bill is that the terms are irrelevant to the stated purpose of the bill. If the purpose of the bill is to protect our waters from acid drainage our current laws already provide that protection. Discharges into the Flambeau River from the Flambeau Mine have throughout the history of the mine been cleaner than the river water and have been far cleaner than required by state permits. Moreover, it is not the nature of the ore deposit itself which is relevant in determining a mine’s potential for generating acid drainage. Rather, it is how one handles mining waste and how it is managed and treated. Those considerations are fully accounted for under Wisconsin’s mining laws. And the proof that the mining laws have worked in protecting the environment is here in this community at the Flambeau Mine.

Ultimately, the issue in permitting any future mining facility is whether that facility will be constructed, operated and reclaimed in an environmentally sound manner. The Flambeau Mine and other mines throughout the country have clearly demonstrated that it can be done — that is not the issue. The issue is whether it can be done in a context of a specific proposal for a new mine under the unique geological and environmental setting in which the deposit is located. Our current mining laws are fully adequate to address that question.

*Testimony of:*

◆ JEFFREY W. TODD ◆  
MINING ENVIRONMENTAL CONSULTANT  
SCHAFFER & ASSOCIATES  
BOZEMAN, MONTANA

*Submitted to:*

THE WISCONSIN ASSEMBLY COMMITTEE ON ENVIRONMENT  
PUBLIC HEARING

Ladysmith, Wisconsin  
May 12, 1997

Good afternoon. Representative Duff, Members of the Committee.

My name is Jeff Todd. I'm a consultant to the metallic minerals industry in matters pertaining to the environment.

Presently, I am employed by Schaffer & Associates, a small consulting firm with offices in Bozeman, Montana and Golden, Colorado.

I spent my 16th year to the north in Hayward, and 10 summers of my youth in the Three Lakes/Eagle River area where I quickly became a compulsive fisherman. To this day, my family still thanks Wisconsin for the personality disorder.

I have been involved with environmental issues in the mining industry for more than 23 years.....my entire career.

I was the principal investigator for the project that was presented in the now well-traveled paper entitled, "Environmentally Responsible Mining: Results and Thoughts Regarding a Survey of North American Metallic Mineral Mines." The co-author of that paper and my colleague, Ms. Debra Struhsacker, also will present testimony this afternoon. I would like to be sure that this paper is included as part of your record on Senate Bill 3.

The investigation leading to this paper was designed with several goals:

- to locate examples of active and closed metallic mines which met the criteria of the previous version of Senate Bill 3.
- to evaluate environmental practices and control technologies being used at modern mining operations; and
- to document examples of environmentally responsible mining.

While we did not then, nor do we now, believe that those criteria are relevant or appropriate in any way to the protection of the environment, we, nevertheless, initiated our search along those lines.

We screened hundreds of potential sites, talked with state and federal regulators, corporate environmental directors, and site environmental managers during the course of the survey.

What did we find? Since time is very limited, I will try to be very brief:

- We found that there are active sulfide mines in operation for 10 years or more that have not caused surface or ground water pollution.
- We found closed sulfide operations that, while not closed the full 10 years, nonetheless meet the criteria of not causing surface or groundwater pollution. Monitoring at these sites indicates that there is no data to indicate that they will ever cause any problems.
- We found old lead-zinc mines in southwestern Wisconsin, closed or abandoned for more than 10 years, which meet the arbitrary 10 year criteria.

- We found that modern mines are in no way similar to the old historic operations which, indeed, were the cause of pollution and environmental contamination in many instances. Modern mines are strictly and comprehensively regulated from birth to post-death. Every state and province with past or present metallic mining operations has in place very stringent and environmentally protective laws, rules, and regulations to protect the environment. Presently, there are at least 30 states and 11 Canadian provinces or territories with such rules. Wisconsin's rules and regulations may be the most stringent of them all. They certainly rank high on the list.

Simply put: Modern mines are designed, by law and regulation, to be closed and reclaimed. Historic mines were not. Historic mine operators were not accountable for environmental practices or, more precisely, lack thereof. The burden of proof lies with the operators of modern mines. They are forever accountable. Period.

But, I'm digressing a bit.

- We also found during the survey that environmentally responsible mining operations were the norm. Obtaining permits for today's mines, by definition, requires environmental responsibility. We found that many operations are going far beyond the letter and intent of their permits and the letter of the laws regulating them. Those operations are not only environmentally responsible, but responsible members of the communities in which they operate. Employees of those operations are people...Living and raising families in the communities surrounding their work place. Do they wish to live in a polluted environment?? I think not.

Does this mean that we did not encounter operations with environmental problems? That the industry is all blue skies, singing birds and Miller time??

No. Let me repeat that....NO. While every active operation that we visited had some positive environmental story to tell, Some also had environmental problems; particularly older mines which were being retrofit to modern environmental standards. However, in every case where such problems were in evidence, it was equally evident that management was working to resolve those problems. That is also environmental responsibility.

- Lastly, we found the Flambeau Mine. The Flambeau Mine speaks for itself and stands on its own merits. It has operated flawlessly in a sensitive environment since its inception. The dire predictions and presumptions made by its opponents were wrong. Flambeau has exceeded expectations in every way and has become a model of the highest order within the metallic mining industry in North America. Would Flambeau be allowed today under the meaningless criteria of SB-3? Quite probably not.

The criteria of SB 3 are arbitrary and meaningless and do nothing to increase environmental protection. Examples of environmentally responsible mining abound in North America. I challenge this committee to see for yourselves. Take a fact-finding mission. Other elected officials in other states with concerns similar to Wisconsin's have done just that. Their demeanor toward the mining industry and their state regulations reflect what they saw.

So, in closing, I leave you with the simple statement: See for yourself.

You've started with one of the best at Flambeau.

*Testimony of:*

◆ DEBRA W. STRUHSACKER ◆  
ENVIRONMENTAL AND GOVERNMENT RELATIONS CONSULTANT  
RENO, NEVADA

*Submitted to:*

THE WISCONSIN ASSEMBLY COMMITTEE ON ENVIRONMENT  
PUBLIC HEARING

Ladysmith, Wisconsin  
May 12, 1997

Good afternoon. My name is Debra Struhsacker and I am a co-author of the recently published paper on Environmentally Responsible Mining that my colleague Jeff Todd just described to you. I have both a bachelor's and a master's degree in geology and over 20 years of experience working in the mining industry. I am an independent environmental and government relations consultant, and have been involved with mining projects throughout the country. I am here today on behalf of the flambeau mine, one of the examples of environmentally responsible mining that we singled out for distinction in our paper.

Today, I would like to spend a few minutes discussing the results of the survey on environmentally responsible mining that Mr. Todd and I conducted, and explain to you why Senate bill 3 will not provide any meaningful information about the environmental suitability of a proposed mining project in Wisconsin, nor furnish any extra measure of environmental protection at Wisconsin mine sites.

Our research, which consisted of a survey in which we contacted over 150 people, including mine regulators, demonstrates that Environmentally Responsible Mining is the norm throughout the country, and examples of Environmentally Responsible Mines can be found from coast to coast. Our study also shows that the criteria in the Wisconsin bill to ban sulfide mining are arbitrary, meaningless and inappropriate tools with which to measure the environmental performance of modern mines.

In support of legislation to ban sulfide mines in Wisconsin, mining opponents have pointed to environmental problems at old and abandoned mines - sites where mining took place in many cases more than 100 years ago, and said that's what will happen if we allow mining to occur here in Wisconsin. Using this premise, they have concocted the flawed and meaningless criteria in Senate Bill 3 and tried to convince everyone that these criteria would provide useful information about mining in Wisconsin.

Our research shows that their characterization of the modern mining industry and the usefulness of these criteria are wrong for the following reasons:

1. The modern mining industry is governed by comprehensive, stringent and recently enacted environmental regulations. There were no environmental regulations when old mines were built;
2. The modern mining industry makes extensive use of sound science and state-of-the-art pollution prevention and environmental protection technologies. Environmental protection technology did not exist when old mines were built and operated; and
3. The bill's criteria of 10 years of operation and 10 years of closure take us back to the 1970's when environmental laws and regulations affecting mining were just being enacted. Of course opponents to mining know that by choosing this time frame, and restricting the analysis to pre-1970's vintage mines, a number of modern exemplary mines built under today's environmental regulatory regime using state-of-the-art environmental protection technologies are excluded from consideration because they are not old enough.

Some opponents to mining have tried to dismiss the relevance of our survey by saying that the mines in our study are different than Wisconsin mines. But they are wrong. All of the environmentally responsible sulfide mines described in our paper are relevant to the



discussion of mining in Wisconsin. With the exception of Flambeau, they all have tailings, and at least two of the mines have very large tailings disposal facilities. Several of the mines, including Flambeau, produce acid, either from tailings or waste rocks, and each of these mines is an example of how acid generation can be appropriately managed using modern technology in a way that fully protects the environment. And the mines described in our study in limestone host rocks that are capable of neutralizing acid (the mines that Senate Bill 3 excludes from consideration) prove that adding lime to acid-generating mine wastes is an effective way to control acid generation.

Let's look more closely at the Flambeau Mine, one of the acid generating mines in our study. The scientific baseline studies that were performed at this mine as part of Wisconsin's rigorous environmental permitting process identified the high-sulfur waste rocks, known as Type II waste rocks, as acid-generating material. These materials are managed in an environmentally responsible manner to protect groundwater and surface water quality by storing them on an impervious liner, and collecting and treating all of the contact water from the Type II stockpile in a state-of-the-art water quality treatment system. Ultimately, the Type II material will be backfilled into the mined-out pit and returned to an environment similar to the pre-mining setting. Today on the committee's mine tour you saw the cloudy and muddy contact water from this stockpile and traced the path of this water through the mine's water treatment system and to the outfall where crystal-clear water that is better than drinking water standards is discharged into the Flambeau River.

It is important to understand that many types of mineral deposits generate acid, and a mine doesn't have to be developed in a volcanogenic massive sulfide deposit, the type of mineral deposit here in northern Wisconsin, to be a significant acid producer. Because iron sulfide minerals like pyrite are such a common component of most ore deposits, many sulfide mineral deposits have the potential to generate acid. What's important is how the acid-generating wastes are managed — not what type of deposit is being mined. Two of the other mines in our survey, Henderson and McLaughlin, are examples of acid generating

mines in two very different deposit types, neither of which is a volcanogenic massive sulfide.

The acid generating wastes at both Henderson and McLaughlin are managed in ways that provide comprehensive groundwater and surface water protection using techniques tailored to each site, and in ways different than what is used here at Flambeau. And that is precisely the point. Each mine site is different and the management of acid-generating materials must be designed to fit the needs of a specific mine in a specific environment. We can learn the following from the acid-generating mines in our survey:

1. Modern mines use appropriate environmental control technology to manage acid-generating wastes;
2. The environmental and mining conditions at each mine site are unique and require a site-specific, custom-tailored application of technology; and
3. Acid generation is not uniquely associated with volcanogenic massive sulfides (i.e., northern Wisconsin-type mines). Acid generation can be a significant issue at many mineral deposit types.

The arbitrary time criteria in Senate Bill 3 restrict the analysis to older mines that used little or no technology to protect the environment and that were developed before today's comprehensive state and federal environmental regulations were enacted. Looking at old, unregulated mines is not a fair or accurate indicator of modern mining because today, mining, like all other industries, is highly regulated and must comply with a whole host of fairly new environmental regulations. Most of the state and federal environmental statutes and regulations affecting mining, and other industries, have been enacted within the last 25 years. In evaluating the environmental performance of modern mining, we need to focus on the current regulatory framework and ask