

POLYMET 14 YEARS OF BULLSHIT

A Blog Compilation From LeftMN

POLYMET14 YEARS OF BULLSHIT

A Blog Compilation From LeftMN

with stories by

Steve Timmer
Aaron Klemz
Jen Tuder
Tony Petrangelo

Cover photo: Brad Moore, Executive Vice President for Public Affairs at PolyMet, and former Commissioner of the Minnesota Pollution Control Agency, attends a coming out party for PolyMet thrown by the Department of Natural Resources, the U.S. Forest Service and the Army Corps of Engineers in January of 2014.

Photo by Steve Timmer

Introduction

Tony Petrangelo *November*, 2019

At this point I forget what the specific spark was that led to the creation of <u>LeftMN</u> in 2012 during what was, if not the golden age of blogging then at least the silver age. Seven years later and we are firmly in the dark ages of blogging. Facebook and Twitter and other assorted social media platforms consume too much of people's content diet for them to bother with blogs anymore and the good blogs that existed have mostly been <u>destroyed by petulant Capitalists</u>. Blogs are dead; long live the blog.

LeftMN still chugs on though, a small, flickering flame in the vastness of the modern take landscape. Over the life of the website there has been a few constants; Amy Klobuchar polling at 60%, my own inability to use apostrophes correctly, and PolyMet.

Before LeftMN was a thing Steve Timmer and Aaron Klemz were blogging on a blogspot blog called The Cucking Stool. In those early days it was Aaron Klemz who led the blogging charge against PolyMet. Aaron would go on to make fighting PolyMet part of his professional life through his work at Friends of the Boundary Waters Wilderness and now at the Minnesota Center for Environmental Advocacy.

With Aaron retired from the blogging scene Steve Timmer picked up the torch and kept the blogs coming. And he didn't disappoint. In July of 2013 alone, Steve published 15 blogs about PolyMet, and this was just the beginning. In all, from October of 2010 until now, November of 2019, there have been over 100 blogs about PolyMet published on LeftMN and The Cucking Stool (not all of them made it into this eBook). The vast majority of those were written by Steve.

In putting together this eBook I've divided the blogs into four categories, within each category the blogs are in chronological order. The blogs were not written with the idea of being placed into categories though, so some blogs could conceivably go in multiple categories.

What became evident to me when reading through these blogs again is that the fix has been in since the beginning. The permitting of PolyMet has been the only truly bipartisan effort in Minnesota over the past decade with both parties falling over themselves to be able to take the credit for opening the mine.

This is the story of calcified political power, captured regulation and the most important ingredient, wishful thinking. This is the story of PolyMet.

For all the latest PolyMet developments follow @stevetimmer and @aaronklemz on Twitter.

Prologue

Fourteen years of bullshit

by Steve Timmer *Aug 25, 2019*

In an opinion piece in the Star Tribune, Nancy McReady, president of Conservationists with Common Sense (a "charity" whose last 990 reported on Guidestar is from 1998, even though it participates in the GiveMN program) says that there have been fourteen years of transparency in the permitting of the PolyMet pit mine.

Governor Tim Walz <u>hummed a similar tune in his</u> <u>interview about mining</u> with Walker Orenstein at MinnPost.

Nonsense, says Paul Danicic, former Executive Director of the Friends of the Boundary Waters Wilderness, <u>in a letter</u> in the Star Tribune:

In 2009, PolyMet's opponents were asking for more specific plans regarding the processing of highly reactive sulfide ore, the same kind that has created toxic water pollution everywhere this type of mining has occurred. Later we visited PolyMet's site, met with its executives and asked how they would contain their highly toxic waste in the old, already leaking LTV tailings basin. We listened in good faith about their environmental reclamation plans and asked for a

damage deposit. We asked if they would guarantee using union labor. Then we asked them and the Minnesota Department of Natural Resources to conduct a health-impact analysis as is now done in other states that received perpetual toxic pollution to their lakes and streams. We asked if Glencore, or Antofagasta in Twin Metals' case, would put their name on the DNR permit, giving them the liability to clean up their nearly certain toxic mess.

In each and every case the answer was either "no" or crickets.

Danicic is absolutely correct. Perhaps Nancy was too busy filing her organization's 990 returns to notice what was really happening.

If you ask for information from the mining companies, they will tell you to go fish. I know this first hand. If you ask for information from the regulators, they will tell you to file a data practices request and charge you a quarter or more per page. I also know this first hand.

Transparency, my foot.

In his interview with MinnPost, Governor Walz also suggests that PolyMet has been at this so long that we "need to give a little." Kind of a permit to mine as a participation trophy, I guess. Make 'em feel special.

But the governor sounds a little transactional here, much like our president. What will you take for Greenland? As if we could bargain away environmental compliance.

Neither the environment nor the taxpayers has a lot to show for fourteen years of our regulators' negotiation skills so far: a water discharge permit that fails to regulate heavy metals, a tailings storage system that is now banned in Brazil (so much for the bromide that "we have the strongest environmental regulation in the world"), and a mine owner who isn't even on the permit to mine and thus evading environmental liability.

$\overline{}$			1	1
•	TA7	Δ	ı	
ı)	w	Г	ı	Ι.

"Bullshit" was introduced as an academic term by philosopher Harry G. Frankfurt in his little book <u>On</u> <u>Bullshit</u>, published by the Princeton University Press in 2005. Quoting from the book:

It is impossible for someone to lie unless he thinks he knows the truth. Producing bullshit requires no such conviction. A person who lies is thereby responding to the truth, and he is to that extent respectful of it. When an honest man speaks, he says only what he believes to be true; and for the liar, it is correspondingly indispensable that he considers his statements to be false. For the bullshitter, however, all these bets are off: he is neither on the side of the true nor on the side of the false. His eye is not on the facts at all, as the eyes of the honest man and of the liar are, except insofar as they may be pertinent to his interest in getting away with what he says. He does not care whether the things he says describe reality correctly. He just picks them out, or makes them up, to suit his purpose.

Anyone who has followed the fourteen years of the path to the issuance of the PolyMet permits recognizes that it was an epidemic of bullshit from PolyMet, the regulators, and the politicians.

Part I

The Economics

Mining Truth: About those jobs, jobs, jobs (Part 1)

Aaron Klemz May 23, 2012

Today, a coalition of environmental groups launched a campaign called **Mining Truth** to encourage Minnesotans to learn more about sulfide mining projects proposed in northeastern Minnesota. The environmental risks of mining copper, nickel and other metals from sulfide ores are well documented. There has never been a sulfide ore mine that operated and closed without environmental damage. But the battle over sulfide mining projects like those proposed by PolyMet and Twin Metals is almost always characterized as a battle between jobs and the environment, as if it is an accepted fact that opening a new mine will lead to economic prosperity. The truth is that there are substantial economic risks to opening Minnesota to a type of mining that we've never seen before, and the economic upside of opening a new mine isn't as great as portrayed by the multinational mining companies that want to exploit Minnesota's resources.

Overpromise and underdeliver

New proposals to open a mine always begin with fabulously rosy predictions about the number of jobs and

economic development that would be created by opening a new mine. We've seen this repeatedly in Minnesota. For example, the PolyMet mine originally predicted 450 permanent jobs, 1,000 construction jobs and projected over 3,600 indirect and induced jobs when it was proposed in 1999. These figures have shrunk to 360 permanent jobs and 500 construction jobs after PolyMet eliminated plans to process the copper on site in February 2011. You might respond: "so what? These are still a bunch of jobs." But even PolyMet states in their Draft Environmental Impact statement that only 25% of the jobs would go to local residents.

In the early stages of a mine proposal, the companies have every incentive to massively overclaim the number of jobs created by a project. Chilean mining company Antofagasta, which holds the option to own the Twin Metals project near Ely, has been playing fast and loose with their numbers. After meeting with Governor Tim Pawlenty in August 2010, Antofagasta Chairman John-Paul Luksic estimated that 2,000 to 2,500 workers would be hired as permanent operations staff for the project. This would make it one of the largest mines in the U.S. Subsequently, Twin Metals has pulled back their predictions to 1,000 to 1,500 jobs, but there is good reason to be skeptical of those numbers too. After all, we've seen it all before.

Iron Range Sen. Tom Bakk <u>argued in 2009</u> that PolyMet would create a "total new business model in industrial production. We have an opportunity in Minnesota to actually mine the ore, and process it, turn it into pipe, turn it into wire, build the distribution center, and to send the finished product directly to the retailer. Nowhere in the

world is that done." When PolyMet announced they would send the concentrated ore elsewhere to be finished, this fantasy was extinguished. The visionary zeal of remaking the entire industrial production model was always a ruse.

We've also seen this with the grand promises of Essar Steel to build a fully integrated mining-to-steel plant near Nashwauk. This pattern repeats over and over again — portray your mining project as a transformative, value-added enterprise, get the local politicians on your side, press for subsidies and changes to environmental laws, then whittle away to get back to the most profitable and lowest labor cost configuration.

Mitt Romney's ridiculous claim of creating jobs while at Bain Capital and the job creation claims of the mining industry share a similar deceit. Job creation has nothing to do with either of them. Job creation is an incidental effect of their business model. In fact, reducing the cost of labor is a key priority of both. They are not interested in creating jobs, they want to maximize profits.

And that's where I'll go in Part 2. If they open a PolyMet or Twin Metals mine, do you really think those will be good union jobs? I'll look into the labor history of the copper mining industry, their labor practices worldwide, and what that means for Minnesota.

Mining Truth: About those jobs, jobs, jobs (Part 2)

Aaron Klemz May 30, 2012

Organized labor and Iron Range DFL politicians have been very supportive of proposed sulfide mining projects in northeastern Minnesota. Taconite mining in Minnesota is an industry with a higher proportion of union membership than nearly any other in the private sector industry in Minnesota. Therefore, it follows that proposed projects to mine the sulfide ores of the Duluth Complex for copper and nickel will produce good union jobs too, right?

Don't count on it. If it happens it will take a tremendous fight.

The labor history of the Iron Range is deep, and marked by violent repression by mine owners. Nowadays, it appears that the Range has been a labor stronghold since time immemorial. In reality, the gains that organized labor made in the mines came only after decades of resistance and at great human cost. It's beyond the scope of this post to delve deeply into this history, but if you aren't familiar with it, this audio documentary that aired last week on MPR is a great place to start.

There are echoes of the labor history of the Iron Range in

the labor history of southeastern Arizona's copper mines.

The Morenci mine is the largest producing copper mine in the United States, as well as one of the oldest. Morenci began producing copper in the 1880's, and over a century later, its massive pit continues to grow. The history.of.organizing.the.Morenci mine is as complex and traumatic as the labor history of the Iron Range, with the Wobblies (International Workers of the World), Mine Mill (International Mine, Mill and Smelters Union), the AFL, and the CIO all playing a part. As in the iron mines of Minnesota, the mine owners used ethnic divisions and redbaiting to battle the unions. Once again, the full labor history of the Arizona copper industry is more than I can cover here, but here are a few good-resources if you are interested.

Unlike the taconite mines of Minnesota, the copper mining industry in the U.S. has almost completely demolished the unions that used to represent workers. The event that precipitated the destruction of the union happened in 1983, in the form of the Phelps Dodge Morenci strike. The recession of the early 1980's became a catalyst for owner Phelps Dodge to break the back of the Morenci unions. In 1982, Phelps Dodge announced plans to lay off over 3,000 miners in Arizona and Texas, which set of a series of negotiations with the unions. These negotiations failed, and in July 1983, the unions announced a strike. Phelps Dodge reacted with violent repression backed by the state of Arizona. After a 51 day picket, tanks, helicopters, and hundreds of National Guard troops and state police officers obliterated the picket and allowed scabs to enter the mines. One year later, these replacements voted to decertify the union. Reagan's National Labor Relations Board allowed

the decertification vote to stand in 1986.

The result of the Morenci strike was a tremendous blow to the American labor movement on the heels of the PATCO decertification in 1981. Things have never been the same. Arizona's copper mines are now almost entirely nonunion shops, and the power of the Steelworkers union in Arizona's copper triangle has <u>faded to almost nothing</u>.

While the two companies proposing copper-nickel mines in Minnesota (PolyMet and Twin Metals) don't have a direct connection to this labor history, that's because neither has ever opened or operated a mine. They are what the industry calls "junior mining companies," smaller companies that speculate on new ore deposits in the hopes of developing a producing mine. However, they are indirectly connected in two ways. First, as part of a global commodities market, proposed mines in Minnesota would compete with the non-union mines in Arizona and even cheaper labor in Chile, Indonesia, and Africa. Second, the large multinational corporations who are the financial backers of PolyMet and Twin Metals are no friends of labor.

The potential of organizing a new copper-nickel mine in Minnesota has been held out for years as a potential savior for dwindling membership in the United Steelworkers. But it could also deal a substantial blow to the union, should it fail to organize the workers at a new mine. And it will be very difficult. Many of the employees of any new copper mine will be imported from elsewhere. PolyMet estimates only 25% of their labor force will be local, and it's likely that they will depend heavily on contract and contingent labor.

Even if they initially succeed in organizing these mines, the Republicans and mining companies currently allied with labor against environmentalists could pursue right-towork or other anti-union legislation together, which could be a blow to all Minnesota unions.

The copper mining industry in the U.S. has shown its stripes when it comes to organized labor. The alliance between labor, mining companies, Iron Range DFLers and Republicans is unstable. If new mines open, this alliance will almost immediately collapse and all of the leverage will go to the corporate owners of the mines. Organized labor's embrace of copper mining companies is a high risk / reward play. But don't forget about the risk side of this equation.

In <u>Part 3</u>, I'll return to southeastern Arizona and look at the impact of the 2008 opening of a new copper mine in Safford on the local economy.

Mining Truth: About those jobs, jobs, jobs (Part 3)

Aaron Klemz

Jun 17, 2012

Representative Chip Cravaack, Iron Range DFL politicians, and local boosters of sulfide mining projects proposed by PolyMet and Twin Metals portray new mines as an economic panacea for beleaguered northeastern Minnesota. But promises are different than performance. The real economic picture is much more murky.

The most comparable example of a new copper mine opening in the United States over the past two decades, the Safford Mine in Arizona, demonstrates the complicated economic effects of opening a new mine in a traditional mining district. The bottom line is that opening a new mine can increase both employment and unemployment. How? The short-term boom of building a mine comes with both economic benefits and significant costs, and the long-term effect is an increase in the volatility in the local economy. The Safford mine, opened in 2007, was far from a source of stability during our most recent economic downturn. Instead, the increased dependence on mining caused a quadrupling in unemployment at the bottom of the recession.

In <u>Part One of this series</u>, I looked at the ever-shifting

promises of direct job creation from copper-nickel mine proposals in northeastern Minnesota. In Part Two, I examined the labor history of the copper mining industry in the United States, including the Morenci strike of 1983 that crushed the Steelworkers union in Arizona. In Parts Three and Four of this series, I'll examine the effects of constructing and opening the Safford Mine in Arizona on the economy of Graham and Greenlee counties in southeastern Arizona. This post looks at the effect of the Safford mine on employment and unemployment. Part Four will examine the impact of opening the Safford mine on the population, wages, and business income of the area.

The Safford area and the Safford mine

Similar to the Iron Range, the Safford area is an area that has risen and fallen with the mining industry. Graham and Greenlee counties are rural areas far removed from urban centers, with a high percentage of land owned by the U.S. federal government. They have a long mining history, dating back to the 1880s. The Morenci mine in Greenlee County, is one of the oldest and largest copper mines in the U.S., and employs over 2,000 workers. The Safford area population is aging and growing very slowly, in contrast to the booming populations in other parts of Arizona.

The U.S. Office of Management and Budget treats Graham and Greenlee counties as the Safford Micropolitan Statistical Area, since there is high degree of economic integration between the counties. The opening of a new mine should be reflected in the economic data of the MSA.

Safford mine is touted as the largest new copper mine opened in the U.S. in the last thirty years. This mine was

over fifty years in the making, with discovery of the ore body by prospectors in 1957, and drilling and exploration in the 1960's and 1970's to develop an underground mine. The plans for an underground mine were suspended in 1982. In the 1990's, exploration and development resumed, this time with an eye toward developing an open pit mine. Phelps Dodge began the permit process in 1995, faced a difficult land exchange with the Bureau of Land Management (BLM), and a contentious dispute over water usage with the Bureau of Indian Affairs. In July 2004, the BLM signed off on the land exchange, clearing the way for permitting. Air quality permits were approved by the state of Arizona in July 2006. As copper prices skyrocketed in 2006, and with permits in hand, construction began.

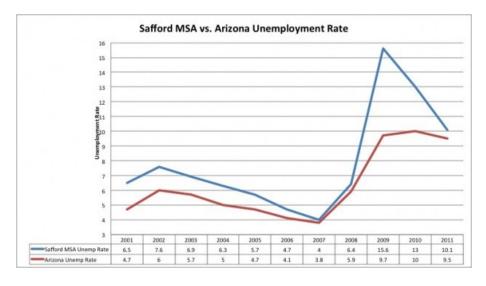
[This should all remind you of the recent history of the PolyMet permitting saga, *Ed*.]

The mine opens, the recession hits

In early 2008, at the height of a spike in copper prices, the Safford mine employed about 600 workers. But by the end of 2008, Safford's employment demonstrated the volatility associated with the copper mining industry. As the financial crisis caused copper prices to crater, the layoffs began. On November 17, 2008, Freeport-McMoran laid off workers at all of its Arizona mines, including 402 pink slips at Morenci and 59 layoffs at Safford. As metal prices collapsed, Freeport-McMoran laid off over 145 workers at the Safford mine and hundreds more at the Morenci mine, a total of over 600 layoffs in November 2008, just over a year after the opening of the mine. At the lowest point of production in 2009, over 2,000 miners were laid off between the Morenci and Safford mines.

Increased copper prices in late 2009 and 2010 led Freeport-McMoran to rehire workers and the Safford and Morenci mines returned to robust production. At the beginning of 2011, Safford mine operated near full capacity, employing approximately 600 people.

Nonetheless, unemployment in the surrounding area remains stubbornly high. In part, this can be attributed to a poor overall economic climate. But even with the additional jobs from the Safford mine, the unemployment rate of Graham and Greenlee counties remains higher than the average for the state of Arizona.

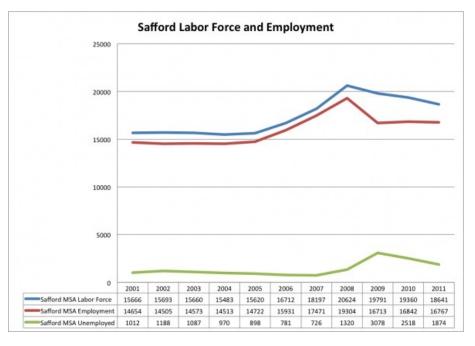


The Safford mine did not improve employment in the area $\frac{1}{2}$

The first five years of the Safford mine's life provide a useful comparison to the economic benefits and challenges that proposed copper mines are likely to pose in northeastern Minnesota. After the opening of the Safford mine, the following occurred:

• A significant influx of workers into the area during

- construction. While the size of the workforce shrank when temporary jobs ended, it remained higher than before the opening of the Safford mine.
- The number of mining jobs increased, but layoffs made employment more volatile compared to the lower but steadier level of jobs before the opening of the Safford mine.
- The unemployment rate and number of unemployed workers in the area spiked. This has persisted through 2011, despite the fact that both Safford and nearby Morenci mine are at high levels of production. The unemployment rate in the Safford MSA remains higher than the Arizona average. During the height of the recession, the Safford mine didn't reduce unemployment, it significantly increased it.



While the overall number of jobs increased, so did the labor force and the volatility $\frac{2}{}$

A March 28, 2009 article in the Arizona Republic summarized the effect on the local economy:

"We were in our own little bubble for a while," said David Kincaid, city manager of Safford, 170 miles east of Phoenix, where in 2007 copper giant Freeport-McMoran Copper & Gold Inc. opened a new mine. An unexpected drop in copper prices last fall prompted Freeport and other producers to cut operations and lay off thousands of workers. Now, Safford and neighboring towns are experiencing a reversal of fortunes. Occupancy at once-full hotels has been cut in half. Lunch and dinner crowds at restaurants have thinned. Local governments grapple with the double whammy of lower sales-tax revenue and cuts to state shared revenue.

Area residents are no strangers to the ups and downs. Employment levels at mines always have fluctuated with copper prices. "Anything that depends on the mining industry is either boom or bust," said Tammy Mayhew, a hotel manager in Safford who has lived in the community since 1976. This time, cuts are deeper and laid-off workers face a tougher job market."

Increased employment and increased unemployment

Safford has experienced, in a few short years, both sides of an employment boom and bust. The Safford MSA had a very stable workforce of approximately 15,600 workers from 2001 to 2005. Safford mine construction began in 2006, and the mine opened in late 2007. The construction phase and opening of the mine brought new jobs and an

influx of population to the area. At the height of construction, up to 1,500 construction workers flooded into the area, straining housing and driving up rents. One-bedroom apartments that used to rent for \$400 per month jumped to \$900 per month. This also created business opportunities in Safford. Hotels were built, and a Home Depot and Wal-Mart Supercenter opened in town.

But as the temporary construction jobs ended and the mine laid off workers in late 2008, the workforce shrank. The number of people seeking work didn't shrink as quickly as the available jobs, causing a spike in the unemployment rate. The influx of new workers and the strains placed on the local economy to accommodate rapid population growth caused the sudden loss of jobs to hit Safford particularly hard. The number of unemployed workers in the Safford MSA quadrupled from 2007 to 2009. In 2011, the number of unemployed workers in the Safford MSA remains more than twice that of 2007, despite the mines returning to robust production. *Paradoxically, the opening of the Safford mine has increased both employment and unemployment in the surrounding region*.

Keep in mind a couple of facts about Minnesota's Iron Range and the proposal to open copper-nickel mines like PolyMet. First, the size of the Safford mine is significantly larger than the PolyMet proposal, but probably smaller than the Twin Metals mine. Second, the crash in Safford happened at the same time as the crash in taconite mine employment associated with the 2008-2009 financial crisis. Third, there isn't a significant tourism industry in this area like there is in northeastern Minnesota. This means that Minnesota has more jobs to lose than Safford does.

There is much more to the story of Safford. I'll look at the changes in population, wages, and business income that came in the wake of Safford's boom and bust in the next installment of this series.

Mining Truth: About those jobs, jobs, jobs (Part 4)

Aaron Klemz Jul 10, 2012

Proponents of the proposals to develop copper-nickel sulfide mines in northern Minnesota love to talk about job creation. Beyond the puffed up promises of direct job creation, the terms "spinoff," "indirect," and "induced" jobs are used to inflate the job creation potential of proposed mines. The theory goes that a new job puts money in the pocket of the new employee, who will then go out and spend it in the community, creating new jobs for other folks as grocers, real estate agents, car dealers, and piano teachers. This often fuels wildly optimistic predictions of the local economic impact of sulfide mine proposals.

Usually, when politicians get going, they really like to play this card. For example, Rep. Chip Cravaack talks about thousands of high wage jobs being created by sulfide mining projects. While we can excuse a little hyperbole, looking at the track record of an actual community helps suss out the actual impact on a local economy.

This post looks at the effect on local income of opening a new copper mine in Safford, Arizona in 2006. You can read more of the story of Safford in a previous post that

looked at the impact of opening an new mine in 2006 on employment and unemployment in Safford. Earlier posts in this series discussed the match between job creation promises and performance, and the labor history of Arizona's copper mines and what that might portend for proposals to mine copper and nickel from the sulfide ores of northeastern Minnesota.

Income increases, earnings stagnate

One claim frequently made by mining supporters in Minnesota is that high wage mining jobs will add to the income of the area. But the track record in Safford suggests that we should be skeptical that increasing income dependence on the mining sector will increase the income of an area. In fact, Safford provides a case study of two trends. First, Safford has had a long-term stagnation in inflation-adjusted earnings, despite the presence of a large number of mining jobs and opening a new mine in 2006. Second, Safford has seen a significant increase in income, but nearly all of the increased income has come from increased transfer payments from the government.

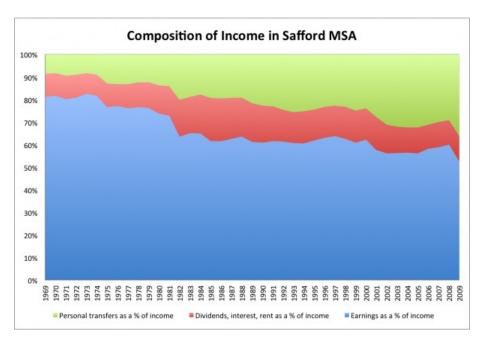


Despite claims to the contrary, mining jobs don't lead to increased earnings

This chart shows two lines. The blue one on the top shows a significant increase in per capita area income from 1969 to 2009. Over that 40 year period, per capita income grew from near \$15,000 to over \$25,000 in inflation adjusted dollars, an increase of over 70%. It looks like an economic success story for mining, but a closer look at the numbers suggests otherwise.

First, note when the spikes (up and down) in each line occurred. Real earnings peaked in 1973, at the height of a commodities boom, and again in 2008 at the height of another commodities boom. As the price of copper goes, so goes the local economy. This has the reverse effect in bad times. In 1982, as mines closed and as the disastrous Phelps Dodge strike eviscerated the Steelworkers union, earnings and income plummeted. The economic downturn and concomitant copper price collapse in 2008-9 had a similar effect.

The red line on the bottom is per capita earnings in inflation adjusted dollars. Over the same 40 year period, earnings in Safford have remained virtually flat. What's happening?



Mining jobs lead to an increased dependancy on government programs for income

The answer is that the amount of personal transfers as a percentage of income increased dramatically over the same 40 year period. In 1969, wages were 81% of income in the Safford MSA. In 2009, wages were less than 53% of income, an all-time low. There was a dramatic drop in the proportion of wages in 2009 due to layoffs and a significant increase in the amount of transfer receipts.

Personal transfers are income derived from Social Security, private pensions, unemployment insurance, and income support payments like TANF. Most of that comes from government programs. In part, this can be explained as the consequence of an aging population, and in part from significant increases in unemployment insurance after big layoffs in 2008. But this also reveals a long-term shift in this mining-dominated economy that opening a new mine in 2006 did not forestall. Earnings continue a

long term stagnation, despite the opening of the Safford mine in 2006.

Even at the height of the boom from construction and new mining jobs in 2008, the portion of income derived from earnings (60%) was no higher than in 2000 or 1990. This demonstrates a long-standing trend that an increase in mine employment did little to forestall. The health of the Safford economy and the income of Safford's residents is tied more to transfer payments than to earnings.

The implication for people considering the economic impact of opening a proposed copper-nickel mine like PolyMet is that economic diversification is better for the long-term health of northeastern Minnesota's economy than increasing dependence on mining. Safford's long-term earnings stagnation is in part the reflection of a broader national trend, but also shows that mining alone cannot sustain the local economy. Even the short-term boost to earnings provided by the temporary construction jobs building the mine quickly evaporated.

In my <u>next post</u>, I'll look at the impact of opening the Safford mine on population and area business income.

Mining Truth: About those jobs, jobs, jobs (Part 5)

Aaron Klemz Sep 26, 2012

Local Chambers of Commerce in northeastern Minnesota are some of the loudest voices in support of PolyMet's and Twin Metals's proposed copper-nickel sulfide mines. It's commonly believed that opening a new mine would help businesses, bring new workers and expand the population. In fact, these beliefs are so widely held that they are hardly ever examined. But these claims deserve scrutiny, and there is a way to judge their truth.

This series has delved deeply into the economic questions surrounding proposed copper-nickel sulfide mines in northeastern Minnesota, examining questions like:

- Will mining companies live up to their job promises?
 In Part One, we learned that company job estimates keep getting trimmed, and promised "value-added" jobs have been jettisoned.
- Will these jobs be good union jobs? In Part Two, I showed that the copper mining industry is virulently anti-union, and that they'll do their utmost to prevent workers from organizing any new mine.
- Will opening a new mine decrease unemployment in

- northeastern Minnesota? In Part Three, I introduced data from Safford, Arizona that shows that a new mine opening increased both employment and unemployment due to increased volatility.
- Will spinoff and indirect jobs increase local incomes?
 In Part Four, we looked at data from Safford that showed that wages have been flat for decades and that the share of local income from wages continued to fall despite the 2006 opening of the Safford mine.

With that, let's try to answer another important question: does opening a new mine improve business income and increase local population? In the Safford Micropolitan Statistical Area, comprised of Graham and Greenlee Counties in southeastern Arizona, the answer is no. The opening of the Safford mine in Arizona in 2006 demonstrates that adding a new mine to an existing mining district did not create significant population growth, nor did business income improve.

Population Growth

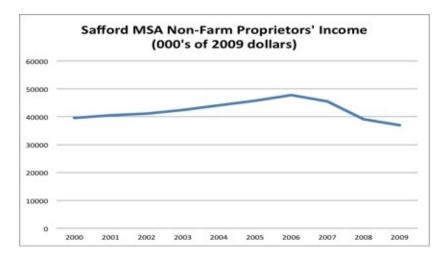
"I would not be the least bit surprised 10 years from now to wake up and see Safford and Graham County have one of the fastest percentage growth rates in the United States. There is no question that this mine is going to add to the population base."

– Safford Mayor Van Talley, December 23, 2003

Proprietors' income is business earnings from sole proprietorships and partnerships. According to the Morrison Institute for Public Policy's "Arizona Indicators," "average proprietors' income is the counterpart to the average wage as a measure of individual

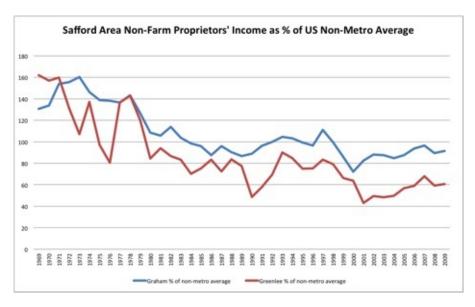
economic well-being." Since farm income shouldn't be affected by the opening of a nearby mine, it has been excluded from the following analysis.

Total Safford area non-farm proprietors' income is lower in 2009 than it was in 2000, and declined in 2007 and 2008 despite the opening of the Safford mine.



In Safford, AZ non-farm income was lower in 2009 than in 2000^{3}

This chart depicts the inflation adjusted total business income in the Safford area, but another way to express the health and strength of the business economy is to examine average income by dividing the total by the number of proprietors. Benchmarking that average income to the national average for non-metro counties shows that Graham and Greenlee counties remain significantly under the national non-metro average, even after the opening of the Safford mine.



Average Income in Graham and Greenlee counties continues to lag the national non-metro average after the opening of the Safford mine $\frac{4}{3}$

Graham and Greenlee counties have experienced a long-term decline in proprietors' income and are both under the national average for non-metro counties. The Morrison Institute for Public Policy indicates that "[r]easonable targets for Arizona are for [...] the nonmetro counties to have a figure within 5 percent of the [U.S.] nonmetro average." In 2009, Graham County proprietors' income was 91.6% of the national average, and Greenlee County was at 60.6% of the average. Greenlee County has the lowest average proprietors' income in Arizona.

The long-term trend in the Safford area is also important to keep in mind. Like the Iron Range, the Safford area was once a prosperous mining area, with above average business income. Then labor strife, low metal prices, and mine closures in the late 1970's and early 1980's radically reshaped the economy, and led to a long-term decline in business income. Despite a momentary uptick, the opening

of the Safford mine hasn't changed that overall trend.

This is an important lesson for those who would pin their economic development hopes on new mines in northeastern Minnesota. The lack of diversification in the Safford area bodes poorly for sustainable economic and population growth. The sugar high of a new mine development quickly faded into a headache of lower business income, higher unemployment, and continued population stagnation.

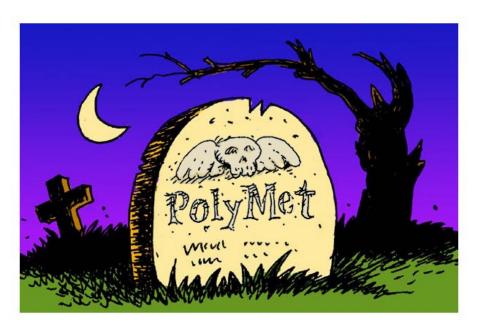
This is the likely outcome from opening a new coppernickel sulfide mine or two in northeastern Minnesota, even assuming there is no significant economic downside from lost tourism jobs. And somehow, nobody ever thinks about those jobs.

Perpetual Care

It's not just for cemeteries anymore!

Steve Timmer

July 17, 2013



Ploymet Gravestone Illustration by Ken Avidor.

There are stories on stories about pollution from sulfide mines, such as the ones currently proposed in northern Minnesota, that continues long — really long — after the mines themselves close. The continued monitoring, prevention, and cleanup of pollution from sulfide mines is a substantial expense that has to be considered in assessing

the true cost, and value, of a mine.

At the risk of mixing some imagery here, when you host a big meal, afterwards some people will say, "Let us help you clean up," and some will say they're paying for a babysitter (even if the kids are in their 20s) and head for the the door.

Guess which category mining companies fall into? They want to chow down, but they want somebody else to do the dishes. And that, kids, is you and me.

There is a term I heard recently for washing up the mining companies' dishes: *perpetual care*. It is like the dirty dishes that never end.

When a mine is played out or becomes uneconomical to operate, the revenue stops, but from an environmental problems standpoint, it is just a gift that keep on giving. Sometimes, in fact, it takes a while after a mine is closed and its "reclamation" is finished that the problems start to show up.

An example of that is a mine that has been touted by the mining industry as a model of extraction without environmental harm, the Flambeau mine in Wisconsin. That seemed to be true shortly after the mine was closed but a few short years later, levels of copper and zinc toxic to aquatic life were found in half the samples of surface water surrounding the mine.

The Flambeau mine, operated for only five years, was tiny (32 acres, I think), dwarfed by the proposals of PolyMet and Twin Metals Minnesota. Yet, the Flambeau Mine, the industry's poster child, was found by a federal court in July, 2012 to have violated the Clean Water Act several

times.

How often do water quality problems exceed the estimates contained in Environmental Impact Statements? <u>Almost always</u>.

When you open a sulfide mine, certainly the ones proposed in Minnesota, perhaps 99 percent of what you extract is waste, either just waste rock or tailings. Tailings are ground up waste from processing ore into a concentrate to send to the smelters, the real shit holes in our story.

Anyway, where was I? Oh, yes: after you dig up all this rock and pulverize some of it, well, it doesn't go away. Sadly, for everybody concerned. So what do you do with it?

Well, you might construct Brimstone Mountain, as Polymet proposes to do with the waste rock from the Great Sulphur Hole it proposes to dig at Hoyt Lakes. Even Polymet says that Brimstone Mountain will <u>leach sulphuric acid and heavy metals into the water for 200 years</u>.

A common approach to dealing with tailings, which PolyMet also proposes, is to construct a tailings basin and — I'm not kidding here — cover the tailings with water. I truly could not believe that somebody would take rock that only requires water and a little air to make sulphuric acid and, yes, *cover it with water*. This is genius.

But this is what our *Neighbors To The North* do at Lake Shebandowan for an abandoned underground sulfide mine there. Scroll down to page 141 of this report to see. And they are by no means the only ones. When water gets too high in the tailings basin, when it rains a lot or you have some snow melt, the excess flows into the *spillway* —

which is a wonderful term, don't you think — where it is carefully monitored by Ontario's Industrial Sewage Works — I'm not making this up; I couldn't — on its way to Lake Superior. No mention is made in the report about the sulphuric acid that leaks directly into the groundwater. I guess that never happens. They did line the basin with plastic, after all.

If the water gets too low, I suppose they pump some out of Lake Shebandowan to fill it up! Well, they have to, because exposing wet tailings to air will make sulphuric acid extra fast. Sorry smallmouth bass in Lake Shebandowan!

All in all, a great solution. Just think, maybe someday, Birch Lake can have its own spillway, too!

But, I digress. The subject is perpetual care. Lake Shebandowan is an example of the efforts that are required after a mine shuts down, regardless of whether you think these efforts are adequate. And unsurprisingly, mine owners can't or won't do it.

In Minnesota, when an operator closes up and walks away from a mine, it is supposed to be" maintenance free."

But I suspect that we'll all be mowing the lawn over PolyMet's — or Twin Metals Minnesota's — grave for a long time.

Update

Why do you suppose the Shebandowan tailings containment basin spillway is to a stream leading to Lake Superior? Because, it is just like flushing the toilet. Which is why a tailings containment basin spillway for the Twin

Metals Minnesota project would probably really be to the Kawishiwi River, not Birch Lake.

Glencore: Corporate Citizen (Part 1)

The sound you hear is scales falling

Steve Timmer

July 29, 2013

Glencore, the Swiss company, as many of you know, is the largest shareholder in <u>Polymet</u>, the Canadian company that has applied to <u>Commissioner Tom Landwehr and the Minnesota DNR</u> for a permit to dig the Great Sulphur Hole — and build <u>Brimstone Mountain</u>, too — near Hoyt Lakes.

Wouldn't you know it, Glencore's been in the news in Montana lately: a little dust up over a Superfund site designation. Nothing serious, I'm sure!

Glencore owns the CFAC aluminum plant along the Flathead River in Columbia Falls, MT (CFAC stands for Columbia Falls Aluminum Company).

The plant has been shuttered for some time — probably having to do with the price of aluminum or the price of power; it all your fault people, for recycling all those pop cans — and a lot of people in and around Columbia Falls think it's an environmental mess, and that the site cannot be used for anything else (since Glencore doesn't seem to want it) unless it's cleaned up. In fact, they think it should be a Superfund site.

To which Glencore replies, "What aluminum?"

The Flathead Beacon had a <u>story about the situation</u> recently that included this:

But while the possibility of reopening the plant is not officially dead, at least one of the two senators appears completely fed up with Glencore – a feeling shared by local officials, state lawmakers and hundreds of former workers who were laid off without a severance package, some after decades of service to the aluminum company.

In an interview, Tester said he was not aware of the Iran report [that Glencore sold aluminum to Iran, which you can also read about in the linked story] nor was he aware of some of the other allegations against Glencore, which include human rights violations in Africa, pollution and tax evasion. But, after his dealings with Glencore over the last three-plus years, the senator said he wasn't surprised the company has been involved in controversy.

A frustrated Tester said last week he can no longer take Glencore at its word. He said the company strung him and BPA [Bonneville Power Association] along during power contract negotiations and has proven to only care about maximizing profit, not providing jobs in a depressed area of Montana that needs them.

The scales have fallen from Sen. Tester's eyes. It would be nice if they fell from Commissioner Landwehr and the Governor's eyes, too.

Glencore is like your drunken brother-in-law that your wife invited to stay with you, and now you can't get rid of him or even talk to him about leaving.

P.S. I personally have no drunken brothers-in-law. It's just a figure of speech.

Update

Montana's <u>Senator John Tester is not the only one</u> who finds Glencore and its new merger partner Xstra's labor practices to be odious. How about Canada, South Africa, Argentina, Australia, the Democratic Republic of the Congo, Colombia, Equatorial Guinea, Ivory Coast and Zambia, among others.

According to the linked post:

Recent research published in the journal Foreign Policy shows that Glencore's fundamental business model relies on operations in weak governance zones where public scrutiny and transparency are frequently absent.

When the mainstream *Foreign Policy* is on your case, you know you are an outlier.

But we will shortly find out whether Minnesota is one of those "weak governance zones," won't we?

Glencore: Corporate Citizen (Part 2)

Burger flippers with picks and shovels

Steve Timmer

July 29, 2013

The <u>first part of this series</u> had a <u>pithy quote</u> from Senator John Tester of Montana about a Glencore aluminum plant in Montana:

A frustrated Tester said last week he can no longer take Glencore at its word. He said the company strung him and BPA [Bonneville Power Association] along during power contract negotiations and has proven to only care about maximizing profit, not providing jobs in a depressed area of Montana that needs them.

Glencore is the largest investor in PolyMet Mining Corp. (a Canadian company) which through its wholly-owned environmental liability-dodging subsidiary, PolyMet Mining, Inc., wants to dig an open pit sulfide mine near Hoyt Lakes, Minnesota. The Wall Street Journal's Market Watch recently described Glencore as PolyMet Mining Corp.'s strategic investor. Everyone else is "non-strategic" and just along for the ride. There is another term for strategic investor: "shot caller."

In the linked story, Market Watch reports that PolyMet's

CFO Douglas Newby said PolyMet is "well financed (it just borrowed another \$60 million) to complete the permitting process and pre-construction engineering necessary to move the project rapidly into the construction phase." Translation: We don't have the money to actually run a mine.

But there you have it kids. No need for those <u>troublesome</u> <u>dog-and-pony shows</u> that DNR Commissioner Tom Landwehr said he wants to call. It's a done deal!

PolyMet (Inc. or Corp.?) says that the mine will provide 360 permanent jobs, and "600 indirect ones." (This is down substantially from earlier wild and optimistic exaggeration, but is hardly an impressive number for the havoc a sulfide mine would bring.) But as the Tester quote from the story about the Columbia Falls Aluminum Company illustrates, employment in a commodities-related business is hardly "permanent." You could ask the taconite miners in northern Minnesota for confirmation of that.

But these will be good union jobs, right? Not subject to being cashiered on a moment's notice without any severance after decades of service, as Glencore did with the Columbia Falls Aluminum Company! Surely not!

Well, here's <u>Reuters describing the situation at a coal mine</u> in Australia recently acquired by Glencore:

Thiess, a unit of Leighton Holdings, said it gave pink slips to 321 workers at the mine on Wednesday. The mine currently has a workforce of about 420, of which 400 are Thiess [the mine operator] employees, according to Glencore.

Key in determining whether or not workers will be re-

hired is whether or not they agree to new terms of employment under Glencore.

"Under the current workplace agreement, it is going to be very difficult for the mine to be viable in the future," Glencore spokesman Francis Derosa said.

Sad, but entirely predictable.

Pathological liars

Glencore/Xstrata? Never heard of 'em!

Steve Timmer

November 26, 2013

In a great case of anticipatory whining, the PR wizards at PolyMet decided to get out in front of what they figured would be a negative story. And they created an even more negative one on their own.

PolyMet was concerned about being tied to its largest shareholder, Glencore/Xstrata — probably the biggest blackguard in the mining industry, and maybe in mining history — in a story that ran on KARE – 11 TV.

So the wizards <u>wrote a press release</u> that said: *Hey! We're minding our own business. Glencore/Xstrata? Never heard of 'em. Who's Glencore?* Here's a bit from that release:

Unfortunately, based on questions Ms. Volpe [the KARE reporter] asked in interviews with us and others and on the promotional teasers the television station is running for tonight's story (also scheduled for 10 p.m.), we worry that the series may lose its balance and fairness.

By all indications, tonight's story will attempt to raise doubts about PolyMet's stewardship of the

environment by drawing links, through our largest shareholder, to events that are unrelated and irrelevant to our project.

* * *

The stock of publicly held companies such as PolyMet Mining is traded on the open market; companies have no control over who buys shares or the volume purchased. Shareholders and the boards they elect do not control or manage the day-to-day operations of companies. They leave this responsibility to the CEOs and presidents and their management teams.

The press release, available at the link, never once mentions Glencore/Xstrata.

Yes, sadly, the KARE story might tie the virginal PolyMet to Glencore/Xstrata, the union-busting, earth-despoiling mining behemoth.

This would be a regrettable veering into the truth.

PolyMet already has an agreement with Glencore/Xstrata to purchase the ore mined at Hoyt Lakes, a so called "offtake" agreement. Brad Moore, the executive president of PolyMet, said so in a presentation he made in September of this year at a Canada Minnesota Business Council breakfast (I was there). Moreover, PolyMet has said the same thing in press releases to potential investors.

Glencore/Xstrata did not simply acquire its shares on the open market, in spite of what PolyMet says. PolyMet is really a "junior mining company" to Glencore. That means, in the vernacular, that it is Glencore's lap dog. You don't need to believe me. <u>But believe Edison Investment</u>

Research. Since PolyMet is a customer of Edison, you know it is reliable. Here's what it says about the mindingits-own-business Polymet:

Glencore Xstrata relationship – a strategic advantage

PolyMet's relationship with Glencore is a major strategic plus for PolyMet. Glencore back stopped PolyMet's recent rights offering, has made a series of equity investments following the initial convertible debt investment and has signed an offtake agreement. We believe Glencore will be very helpful to PolyMet when PolyMet is raising money to fund the NorthMet project. To date Glencore has invested \$140m in PolyMet.

Since 31 October 2008 PolyMet and Glencore have entered into a series of financial transactions and negotiated a marketing agreement whereby Glencore Xstrata committed to purchase all of PolyMet's production of concentrates, metal or intermediate products on market terms at the time of delivery, for at least the first five years of production. This will involve shipping copper concentrate to Japanese smelters [yes, we dig it up, send the ore concentrate to Japan, and live with the pollution; swell] and PolyMet being paid on an LME basis on the date of delivery.

As part of the 2013 financing, PolyMet and Glencore entered into a corporate governance agreement. From 1 January 2014, as long as Glencore holds 10% or more of PolyMet's shares, Glencore has the right, but not the obligation, to designate at least one director and not more than the number of directors

proportionate to Glencore's fully diluted ownership of PolyMet. Glencore is not to exceed 49% of PolyMet's board members.

Glencore currently owns 78.7m shares or 28.6% of PolyMet's issued shares. It also owns US\$25m of floating-rate secured debentures due 20 September 2014, or US\$31m including capitalised interest [meaning that the interest tab is currently 6 million dollars]. Including capitalised interest as of 31 July 2013, these debentures are exchangeable at US\$1.292 per share into 24.18m shares of PolyMet when PolyMet receives the permits necessary to start construction of NorthMet. Glencore also holds warrants to purchase 6.46m common shares at US\$1.30 per share at any time until 31 December 2015, subject to mandatory exercise if the 20-day value weighted average price of PolyMet common shares is equal to or or greater than 150% of the exercise price and PolyMet provides notice to Glencore that it has received environmental permits. If Glencore exercised all its rights and obligations under these agreements, it would own 109.4m common shares of PolyMet, representing 33.9% on a fully-diluted basis.

In addition to the "dilution" that would occur if Glencore exercised its options and warrants is the dilution from the exercise of stock options of people like public affairs VP Brad Moore and the rest of the bunch who wrote the press release, if the deal is a go.

But this isn't all of it, by any means. PolyMet mouthpieces like Brad Moore have told the story far and wide (as, for

example, at the CMBC breakfast that I mentioned above) that a small copper mine in Wisconsin on the Flambeau River was closed successfully and didn't pollute, and that it is a perfect example of what PolyMet is going to do. The proposed PolyMet mine(s) are orders of magnitude larger and hardly provide a direct comparison.

But never mind. Brad Moore is flat wrong:

After a victory in a recent lawsuit, mining advocates have been pointing to the Flambeau mine in Wisconsin as an example of the ability of the coppermining industry to protect water.

But is the water really unpolluted?

The federal court of appeals did not breach this issue, deciding instead it would be unfair to hold Flambeau to the legal standards because the Wisconsin Department of Natural Resources had told the company it did not need a permit for its discharge.

The stream is clearly polluted; it contains levels of copper and zinc that exceed the acute toxicity standards for aquatic life and is included on the state's "impaired waters" list. The district court looked at the evidence and found that the pollution came from Flambeau's discharge. The court of appeals did not revisit these facts; it simply held that no lawsuit could be brought to enforce the standards.

So much for help from the EPA or the Wisconsin equivalent. Would Minnesota do better?

If PolyMet will serially lie about things that are ineffably easy to check, what about when they aren't? PolyMet

obviously cannot be trusted.

The virginal PolyMet's problem is that credibility is really like virginity: easy to lose (for both sexes; don't bother to write in) and impossible to recover.

Puppet on a string

I'm Your Puppet! sings PolyMet

Steve Timmer

December 3, 2013

Pull the string and I'll wink at you I'm your puppet I'll do funny things if you want me to I'm your puppet

Mm. I'm yours to have and to hold Darling, you've got full control of your puppet

Pull them little strings and I'll kiss your lips I'm your puppet Snap your fingers and I'll turn you some flips I'm your puppet

Mm, your every wish is my command All you got to do is wiggle your little hand

I'm your puppet I'm your puppet

Some of you — well, I hope many of you — will recall a story I wrote last week about how PolyMet was saying that it didn't have anything to do with who owned its shares — it being a public company, and all — and gosh, PolyMet and Glencore/Xstrata were *practically* strangers.

Glencore/Xstrata is the major shareholder of PolyMet and one of the badboys of mining around the world. So you can see why PolyMet was concerned when a KARE-11 reporter starting asking about Glencore.

But here are just a few words about the Polymet/Glencore casual acquaintance from PolyMet's most recent annual report (at about page 37) to the Securities and Exchange Commission (there is more story below this tome):

Glencore AG ("Glencore") Financing

Since October 31, 2008 Glencore has entered into a series of financing agreements with us and a marketing agreement with us whereby Glencore committed to purchase all of our production of concentrates, metal, or intermediate products on market terms at the time of delivery, for at least the first five years of production. We agreed to propose, and shareholders approved, the election of a Glencore senior executive as a director and also appointed a senior member of Glencore's technical team to our Technical Steering Committee. As a result of the series of financing transactions and the purchase by Glencore of our common shares previously owned by Cliffs, Glencore's current and potential ownership of PolyMet comprises:

- 46,967,842 shares representing 25.6% of our issued and outstanding common shares;
- \$25.0 million *initial principal floating rate* secured debentures due September 30, 2014. Including capitalized interest as at January 31, 2013, these debentures are exchangeable at

\$1.50 per share into 20,338,440 of our common shares upon us giving Glencore notice that we have received permits necessary to start construction of the NorthMet Project and availability of senior construction finance in a form reasonably acceptable to Glencore or are repayable on September 30, 2014. The exercise price of the exchange warrants and the number of warrants are subject to conventional anti-dilution provisions; and

• Glencore holds warrants to purchase 5,600,000 common shares at \$1.50 per share, subject to conventional anti-dilution provisions, at any time until December 31, 2015, subject to mandatory exercise if the 20-day Value Weighted Average Price ("VWAP") of PolyMet common shares is equal to or greater than 150% the exercise price and PolyMet provides notice to Glencore that it has received permits necessary to start construction of the NorthMet Project and availability of senior construction finance, in a form reasonably acceptable to Glencore.

If Glencore were to exercise all of its rights and obligations under these agreements, it would own 72,906,282 of our common shares, representing 34.9% on a partially diluted basis, that is, if no other options or warrants were exercised or 32.4% on a fully diluted basis.

On November 12, 2010, Glencore entered into a definitive agreement with us ("2010 Agreement") to:

- Sell in a private placement to Glencore, 15,000,000 common shares at \$2.00 per share for gross proceeds of \$30 million (before deducting estimated offering expenses).
 Completion of the sale of these shares and funding occurred in the following three tranches:
 - Tranche 1 of \$10 million (closed on January 17, 2011);
 - Tranche 2 of \$10 million (closed on July 15, 2011); and
 - Tranche 3 of \$10 million (closed on October 15, 2012).
- The maturity date of the \$25 million in outstanding debentures, plus interest, was extended from September 30, 2011 to September 30, 2012 (subsequently extended under the 2011 Agreement described below). The Issued Debentures continued to be exchangeable into our common shares, as agreed to in 2008 and the 2011 Agreement described below;
- Cancellation of Glencore's commitment to purchase, and our commitment to issue, \$25 million of Tranche E Debentures, as agreed to in 2008;
- Cancellation of warrants to purchase 6,250,000
 of our common shares at \$3.00 per share at any
 time until September 30, 2011 issued to
 Glencore in connection with the 2008
 Debentures;
- Issuance of warrants (the "2010 Warrants") to

purchase 3,000,000 of our common shares at \$2.00 per share at any time until December 31, 2015, issued to Glencore in consideration of the amendments listed above. The terms of these warrants were amended under the 2011 Agreement described below; and

• Glencore was also granted a right of first refusal to provide all non-equity material financings, subject to regulatory approval as long as it owns 10% or more of our issued and outstanding shares. As long as Glencore owns more than 5% of our issued and outstanding shares, it has the right to participate in any equity-related financing to maintain its partially diluted ownership interest (currently 25.6% of issued and outstanding shares and 32.4% on a fully diluted ownership interest basis).

On November 30, 2011, Glencore entered into a definitive agreement with us ("2011 Agreement") to:

• Sell in a private placement to Glencore, 13,333,333 common shares at \$1.50 per share for gross proceeds of \$20 million (before deducting offering expenses) and issue to Glencore warrants (the 2011 Warrants) to purchase 2,600,000 of our common shares at \$1.50 per share at any time until December 31, 2015, subject to mandatory exercise if the 20-day Value Weighted Average Price ("VWAP") of our shares is equal to or greater than 150% the exercise price and we provide notice to Glencore that we have received permits necessary to start

construction of NorthMet and availability of senior construction finance, in a form reasonably acceptable to Glencore. Approximately \$7.0 million of the proceeds from the sale of these shares was used to repay outstanding notes (including interest) to Cliffs Natural Resources Inc.;

- Extend the term of the \$25 million initial principal debentures to the earlier of i) us giving Glencore ten days notice that we have received permits necessary to start construction of NorthMet and availability of senior construction finance, in a form reasonably acceptable to Glencore (the "Early Maturity Event"), and ii) September 30, 2014, on which date all principal and interest accrued to such date will be due and payable. Upon occurrence of the Early Maturity Event, the initial principal and capitalized interest would be exchangeable into common shares of PolyMet at \$1.50 per share. Alternatively, Glencore has the right to exchange some or all of the debentures at any time under the same conversion terms; and
- Amend the terms of the warrants issued to Glencore in 2010 (the "2010 Warrants") to conform to the 2011 Warrants, giving Glencore the right to acquire 3,000,000 of our common shares at \$1.50 per share at any time until December 31, 2015, subject to mandatory exercise if the 20-day VWAP of PolyMet shares is equal to or greater than 150% the exercise price and we provide notice to Glencore that we

have received permits necessary to start construction of NorthMet and availability of senior construction finance, in a form reasonably acceptable to Glencore.

On April 10, 2013, PMI agreed to issue a debenture with the principal amount of US\$20,000,000 to Glencore and Glencore agreed to a Standby Purchase Agreement related to a \$60,000,000 rights offering by us. The US\$20,000,000 debenture is payable on the earlier of (i) a US\$60,000,000 rights offering by us or (ii) May 1, 2014. The sale of the debenture was consummated on April 11, 2013 [sounds like a marriage, doesn't it?]. The debenture is guaranteed by us and is secured by the assets of us and our whollyowned subsidiary. The debenture carried a fixed interest rate of 4.721% per annum. The debenture contains certain events of default that are customarily included in financings of this nature. In the event of default, Glencore may declare all of the then outstanding principal amount of the debenture, including any accrued and unpaid interest, to be due and payable immediately. [emphasis added]

You know, PolyMet, you're right; I can see how people might be confused that there is a close relationship between you and Glencore/Xstratra.

Now, I know this is not gripping reading. But it is also not a casual conversation between strangers while waiting for the bus. In the <u>Edison Investment Research</u> report described in the earlier story, Edison described PolyMet a "junior mining company" to Glencore.

Really, though, PolyMet is Glencore's "we can squash you like a bug" mining company. Glencore is PolyMet's principal shareholder and its first secured creditor. PolyMet execs can't take a leak without a hall pass from Glencore.

But back to the point of the earlier story. When PolyMet tells such a transparent fabrication about its relationship with Glencore, who is going to believe a word of the 1,800 page PolyMet EIS due out later this week?

My God, we'll be complete chumps if we do.

Company Men

Jennifer Tuder January 30, 2013



A Polymet supporter yields his time to State Senator David Tomassoni.

My family tree is littered with black lung and union politics. My grandmother grew up in a West Virginia hollow (pronounced "holler"), and watched her brothers and male cousins' lives go down that mine. My grandfather grew up in central Missouri, a center of "soft" coal mining. When he was ten, his father died in a mining accident. My grandpa went to work at the mine at that tender age.

My grandmother can't speak of "the company" without venom in her voice. My grandfather fought to organize the Kansas City firefighters when he made it out of coal country. I grew up listening to my dad belt out Tennessee Ernie Ford's hit, "Sixteen Tons," with real feeling. My mother explained credit cards to me by saying, "Jenny, those are nothing but the company store." I grew up the daughter of bookkeepers, but mining was part of our family history.

So it is with great perplexity that I encounter the yearning for mining on the Iron Range. "You trust the company?" I want to ask, "Since when?" The labor fights on the Range were every bit as hard and bitter as they were in the Appalachians. Every single benefit that came with those mining jobs had to be pried out of the mining corporations' greedy maws. In these days of waning union power, why do some Rangers seem to assume that it is those secure, well-paying jobs that are on offer from the likes of Twin Metals and PolyMet? If I learned one lesson from my family's history, it is that the company will squeeze your community dry and skip off with the profits. You're left with a ruined mountain, a dead "crick," and a blighted economy while the Rockefellers go build things in New York City. It's a bad deal.

Unfortunately, it's the deal American men—mostly white, working- and middle-class men—made with the captains of industry: we will follow your rules, divorce ourselves from affect and intellect, and turn ourselves into productive machines for your industries. In return, American men expected to become breadwinners and providers, capable of bringing him home enough "bacon" to support the nuclear family⁵. What's now become

glaringly apparent is that the captains of industry never had any intention of sticking to this bargain. As soon as they found cheaper, more exploitable labor, they were gone daddy gone.

At the January 28th hearing on Polymet's mining proposal, you could see this bad deal embodied again and again: union leaders (virtually all of them white, working-class men) proudly announced their union memberships and then ceded their time and their voices to multinational corporations, chambers of commerce, and mining lobbyists Iron Range politicians. One after another, those blue collar men in hardhats stepped aside for white collar men in suits who are betraying them through a combination of strategic bankruptcies⁶, right-to-work-for-less laws⁷, and tax kickbacks rebates⁸. As a metaphor, it's beautiful. As a reality, it's heart-breaking.

Those men have stepped aside for the very forces which are stepping on them. Yet they seem unable to recognize the source of their oppression. Instead, they blame environmentalists, feminists, "Twin Citiots," and everyone else who refuses to dance with the company men.

The pro-extraction crowd keeps insisting that it is environmentalists who are being "too emotional," even as they roar their anger, shout about jobs, and shake their empty brown paper bags (again, a metaphor that is almost too-perfect for all that unions have lost to the company men)⁹. Where they see emotion, I see cold, clear-eyed, rational analysis. The company doesn't want to create jobs, improve the economy, or protect the environment. The company wants to make money and it will use any means at its disposal to do so. I hope the men in hard hats turn

around soon, because the company men behind them are sharpening their cost-cutting measures.

When the going gets tough

The senior mining companies take a powder

Steve Timmer

July 11, 2014

It was announced in recent days that Chilean mining giant Antofagasta PLC, the big mining company to little mining company Duluth Metals, doesn't want to take its relationship to the next level. The announcement came on the eve of the publication of a Pre-Feasibility Technical Report on Twin Metals' mineral holdings next door to the Boundary Waters Canoe Area Wilderness.

A suspicious person might conclude the events were related.

But Duluth Metals, taking over the management of the joint venture, says it is as happy as it can be. *To infinity and beyond!* Right.

What happened was, Antofagasta PLC, "ANTO" to its friends, decided that it didn't want to ratchet up its interest in the Twin Metals joint venture into majority ownership. It just isn't that into Twin Metals, or the other joint venture partner, Duluth Metals, any more.

But it rather leaves the Duluth Metals (which, despite its name, is actually headquartered in Toronto, Canada) in the lurch, with about \$12 million Canadian in the bank, and

about \$38 million Canadian in liabilities. And a burn rate that will eat \$12 million in no time. Duluth Metals, and the joint venture, are as liquid as a brick.

Here's the key, though to our friend **ANTO**'s thinking:

Twin Metals, our project based in Minnesota, in the United States remains on track for completion of the pre-feasibility study during this year. The project has significant reserves and is a world class deposit in terms of size. It also faces technical and environmental challenges which we believe will be overcome, but not until at least the end of this decade.

In other words, We don't see the upside.

Duluth Metals, the junior mining company partner here, now must find another suitor or well, die. It isn't bankable on it own. It couldn't borrow the money to buy a used car.

Now, while this is excellent news for the Boundary Waters, wild rice, fish, and water everywhere, it is also an important lesson for consideration by regulators, and the public, of the current proposal by PolyMet Mining and its largest shareholder, commodities giant and international bad boy, Glencore PLC.

Why?

You will recall that PolyMet recently published a Supplemental Environmental Impact statement for the giant sulfurous hole in the ground it wants to dig near Hoyt Lakes; well that, and the Great Sulphur Mountain it wants to build next door. And I almost forgot the Great Sulphur Lake (the tailings "pond") that is part of this resort development, too.

Presently, the DNR and other regulators are busy with front-end loaders dealing with the comments received to the SEIS, the vast majority of which were negative, many intensely negative, and unfortunately for PolyMet, rather technical.



Tweet from <u>@FriendsBWCAW</u>

But when they make their way through the comments, if they ever do, one of the giant-yawning-maw issues not so far addressed in a meaningful way is the financial assurances to be made for when (and not if) PolyMet makes a dog's breakfast of the whole thing and pollutes our Minnesota patrimony of clean water.

PolyMet is just as creditworthy as Duluth Metals. Which is to say, it isn't. Every time PolyMet runs out of money, it goes, hat in hand to Glencore, which gives it a little, in exchange for another pound of PolyMet flesh. The last time it happened was <u>April of this year</u>.

Brad Moore, the Executive Song and Dance Man for Polymet [really, Moore is the VP of public affairs, which means applying the grease to government, while Bruce Richardson is the official song and dance man, *Ed.*], said recently and memorably, "We're a real company!" (At a House hearing on financial assurances this past session.)

Yes, and I'm Louis the Sun King.

PolyMet, the Canadian high-plains drifter parent of the subsidiary that owns the mining rights in Minnesota, was incorporated in 1981. Guess how much money it has earned since its formation? Guess how many mines of any kind it has ever operated?

The answer to both questions is the same. *Zero*, *zip*, *zilch*, *nada*. But that astute investor and distaff side of <u>Team Naif</u> for Governor is a believer:



Tweet from <u>@KarinHousley</u>

Jeebus, Karin, you need better financial advisers. Maybe Scott can give you a referral.

On the plus side, PolyMet probably has a tax net loss

carryforward to the moon, Karin. These are the things on which dreams are built.

Given the dissolute nature of the thirty-three-year old ne'er-do-well PolyMet, and given the evidence of the faithless nature of the senior mining companies in general, you'd think that the regulators at the DNR would be screaming and demanding a guarantee of the environmental liability obligations of PolyMet by Glencore, wouldn't you?

Well, my friends, you'd be sadly mistaken if you thought that. At the hearing on financial assurances in the Minnesota House last session that I mentioned earlier, representatives from the Minnesota Department of Natural Resources said they would not seek guaranties of environmental liability obligations from shareholders of PolyMet, even a large shareholder like Glencore, which is in practical control of PolyMet.

You can bet your bottom dollar that the moment that Glencore decides, *We don't see the upside*, that the State of Minnesota, its citizens, its environment, and even PolyMet, itself, will be holding a potentially very large bag. That is an especial concern when the mine closes, in say twenty years, and there is no more revenue coming from it.

If this is the best deal that the DNR can manage, it is staffed either by callow fools, or in the words of John Oliver, dingos as babysitters.

Update

That PolyMet headquarters building behind Housley is really impressive, isn't it? The air conditioner hanging out of the window (must be the president's office) is an especially nice touch. You have to wonder what Housley toured: the curling linoleum and the gray metal filing cabinets? The only other thing she might have toured was the shuttered crushing plant ("Karin the big rocks come in here, and the little rocks go out there.") PolyMet bought the processing plant indirectly out of LTV's 2001 bankruptcy.

Marshall Helmberger on Minnesota's dystopian future

Steve Timmer

November 20, 2015

Marshall Helmberger is — bar none — the best editorialist on the Range. Marshall is the publisher of the Timberjay newspapers. He is the best example of a courageous small-town newspaperman that I know of.

In a piece that was <u>published on November 18th</u>, Helmberger writes:

[O]fficials from the Bureau of Land Management received a crash course in two very different visions of the future for the North Country during a recent visit to Ely. It probably won't be the last such visit as the BLM and the U.S. Forest Service determine how to respond to a request by Twin Metals to renew the only two federal mineral leases that have ever been issued on the Superior National Forest.

He then lays out a meticulous and visionary explanation of what the "snowplow" PolyMet mine really means, irrespective of the short term question of the renewal of the two federal leases:

The recent release of the Final Environmental Impact

Statement on PolyMet's proposed NorthMet mine has given fresh urgency to both sides in what has become a pitched political battle. And while it was not specifically on the agenda during the BLM's visit, it's clear that many sulfide mining opponents see potential approval of PolyMet as the beginning of the end for a lifestyle that has drawn a remarkably diverse mix of people and talents to the Ely area in recent decades.

Many, but not all, sulfide mining opponents see that potential. Helmberger continues:

[Mining], without question, would fundamentally change the character of this region, taking what is today the crown jewel of the national forest system in the eastern two-thirds of the country, and converting its heart into an almost continuous industrialized zone. And this is, perhaps, the biggest flaw in the just-released FEIS on PolyMet. When the DNR opted not to examine the cumulative impacts of this scale of development on the Superior, they chose to ignore the elephant in the room. They opted not to take the hard, scientific look they promised and produced a political document, instead.

When mining supporters talk of the Duluth Complex as rivaling the Mesabi Iron Range, or employing thousands of miners, and generating billions in state and local revenues, they don't mean PolyMet with its projected 350 workers, on its own. They mean a half dozen mines or more comprising 50-to-80 miles of open pits, wasterock piles, rail lines, roads, power corridors and concentrator plants cutting through the

heart of the Superior. [Marshall did forget tailings impoundments. *ed*.]

The problem with an economic model based on mining, after all, is that it doesn't work unless you keep on mining until every last ton of ore has been blasted, processed, and shipped out. That means once mining of the Duluth Complex begins, the pressure to keep mining will be intense, at least until the ore is all gone or is no longer valuable enough to extract.

Helmberger recognizes this is what we're signing up for if the PolyMet mine is approved.

The economic and political pressure on the region, including the BWCA, to mine it until it's unrecognizable, would be inexorable. I believe it is unrealistic to expect federal regulators to appreciate the North Country the way Minnesotans do. Which is why sulfide mining will be stopped here, not in Washington, if it is to be stopped.

Let us hope and pray that the governor and our legislators can be made to understand that. Unremitting pressure to make sure they do understand it is required by everybody. Letters to our political leaders, phone calls to them, letters to the editor, and statements at town halls are all ways to make your feelings about sulfide mining known. Mining supporters will be doing it. You can be sure of that.

It is time, truly, for the environmental community to stand on its hind legs and roar.

When a mining company shuffles off its mortal coil

Who is left behind to mourn?

Steve Timmer *January 21, 2016*

Here's the <u>lede from from a story in the International</u>
<u>Business Times</u> about yet another coal company
bankruptcy:

The gloomier outlook for U.S. coal companies is raising questions about who will pay to clean up shuttered strip mines and open pits across coal country. With financial woes piling up for coal producers, environmental groups are warning that taxpayers could be on the hook for millions in restoration costs if mining companies can't pick up the bill.

Arch Coal Inc. this week became the latest U.S. coal operator to seek Chapter 11 bankruptcy protection in a bid to cut its long-term debt by more than \$4.5 billion. Plunging coal prices, sluggish demand and competition from cheaper natural gas are eroding revenues across the industry. The filing Monday arrives after Walter Energy, Patriot Coal and another large producer, Alpha Natural Resources, filed for

bankruptcy last year.

Substitute "copper nickel sulfide mines" for "coal mines" and it's still a perfect fit. Demand for copper is also "sluggish;" the <u>price of copper fell below \$2.00/pound</u> recently. You could get a copper quarter pounder at Mickey D's for less than one made of beef. You could get one made of steel for even less.

Just think, Superman, the "man of steel," would fetch, say, \$120 on the market, if you melted him down for scrap (assuming he weighed about 200 pounds). Sad, really.

But that's reality, friends.

The question remains: who is going to clean all this stuff up?

Cast your vote — into the abyss — now, if you think it's the mining companies.

And cast another vote into the abyss if you think that state regulators in Minnesota will make sure that the mining companies keep things clean.

They don't now for the iron mines.

From a recent AP article:

The federal Environmental Protection Agency has agreed to investigate allegations by an environmental advocacy group that a state agency is failing to meet its responsibility to regulate iron mining companies, the advocacy group said.

The environmental group WaterLegacy filed the petition with the EPA in July, saying the Minnesota Pollution Control Agency failed to meet the

responsibilities that the EPA has delegated to it for enforcing the Clean Water Act when it comes to iron mining companies. The EPA recently sent WaterLegacy attorney Paula Maccabee and MPCA Assistant Commissioner Rebecca Flood a draft protocol for its investigation. The EPA has also started a web page for documents pertaining to the investigation.

If PolyMet Mining gets a permit, and the negotiations over adequate assurances are taken behind closed doors, we'll be engaging in a long, continuous retreat from clean water, in the St. Louis watershed, and the Boundary Waters, too.

Minnesota's investment follies

Steve Timmer

August 2, 2019

Word comes <u>via the Star Tribune</u> that Minnesota's investment board has invested in Glencore, Antofagasta, and Enbridge. Swell. In addition to the teensy conflict of interest it presents (all are supplicants to Minnesota agencies), this makes some members of the environmental community, well, gag, on a general level. Some people are asking for divestiture. As the article notes, Minnesota *is* capable of gagging, as in the case of Iran and Sudan, but the reflex is muted. Perhaps the state needs a moral swallowing study.

Our new State Auditor, who seems to have gone Capitolcomplex native quickly, says:

[Julie] Blaha said she is open to a divestment conversation if there is a way to backfill the dropped stocks and bonds. However, she said the board needs a clear understanding about potentially reduced returns.

"Our job is to keep our promise" to retirees, Blaha said. "To give them what they earned."

If we don't invest in the fossil fuel industry, which is in the sunset of its life, or the cyclical mining industry, why, it will be like throwing our money into a hole! Julie Blaha sits on the state's Investment Board. And the new AG, Keith Ellison, who does, too, says:

Their dual responsibilities [investment board and regulators] create an "optics issue," Ellison said, but noted that professional portfolio managers do 99% of the investment work.

This is politician speak for, "Gee, it looks bad, doesn't it?"

This is no such thing as a moral dodge, Keith, my friend. Just as Honeywell couldn't say, at least with a morally-straight face, "We just make the bombs; we don't drop them," you can't pass off investment decisions to the staff. We elect *you*, not them. They take instruction from you. Please correct me if I am wrong.

"Dual responsibilities" screams conflict of interest.

It is also a worthwhile exercise to examine the judgment that went into the investments that the state thinks are A-OK.

Enbridge – Enbridge is in the news because <u>one of its</u> <u>pipelines just blew up in Louisiana</u>. The good news, I suppose, is that it was a natural gas pipeline, so there wasn't a bunch of icky stuff to penetrate the soil and water. I am sure that provides solace to the dead and injured.

Enbridge has the icky stuff pipeline "accidents" too, of course. Memorably, Enbridge also featured prominently in the worst inland pipeline accident in US history, in Michigan. This pipeline carried Canadian tar sand oil which is almost impossible to clean up, "tar" being the operative word here. It's hard to make tar flow through a

pipe (try it at home at your own risk); it must be diluted with benzene and other carcinogens to make it go. When a pipeline ruptures, all this stuff winds up in the surface and ground water. In the case of Michigan, that means into your Bell's Two Hearted IPA, too.

Guess what the proposed Enbridge pipeline through Minnesota would carry? If you said Canadian tar sand oil, go get yourself a cookie.

What kind of a position does the state have in coal? We'd probably think that was stupid, but only marginally more so than other fossil fuels.

Buggy whip manufacturers were undoubtedly blue chip in 1900.

Glencore and Antofagasta. In addition to being, well, evil, the mining business is notoriously cyclical. It surprises me, really, that the state is invested in companies that flirt with junk status from time to time. It wasn't so long ago that Glencore's status as PolyMet's sugar daddy was in peril. And times haven't changed.



Tweet from @aaronklemz

The people who have been skinned by miners, including PolyMet, are legion.



Tweet from <u>@KarinHousley</u>

Please ask Karin Housley how she did on her investment in PolyMet, now that she has been diluted into oblivion by Glencore. You should have come to me in, oh, about 2012, Karin, and I would have explained the facts of life to you.

It is sad to say, but the state seems to be an especial sucker for mining. We put a half a million dollars into Twin Metals, between the IRRRB and DEED, then a joint venture with Antofagasta, and then Angofagasta said it really was no longer interested in Twin Metals and wouldn't put any more money into it. Twin Metals tanked instantly, of course. You will never guess who bought the carcass.

If you guessed Antofagasta, go get yourself another

cookie.

And who could forget about the time that the governor and others were reduced to having a video conference with a debtor in Bombay to beg for repayment of some \$70 million in state funds paid to Essar Steel? Good times.

I would love to sell these people a used car. Seriously.

And along the way, Minnesota Power and Light wants to <u>lighten the burden on the poor mining companies</u> and raise rates to residential customers.

This would all be funny if it weren't so tragic.

Part IIThe Environment

How would you like this guy gurgling through your campsite?

The babbling brooks of Spruce Road

Steve Timmer *July 22, 2013*



Spruce Road runoff 10

Here's the <u>lede of the Friends of the Boundary Waters</u> <u>story</u> from which this photo is taken:

Oct. 2, 2010 — The Friends of the Boundary Waters Wilderness has discovered that a sulfide mining exploration site just two miles from the Boundary Waters Canoe Area Wilderness is creating acid mine drainage 36 years after a mining company dug up ore as part of exploration efforts. The research is the focus of a story in today's Minneapolis *Star Tribune*.

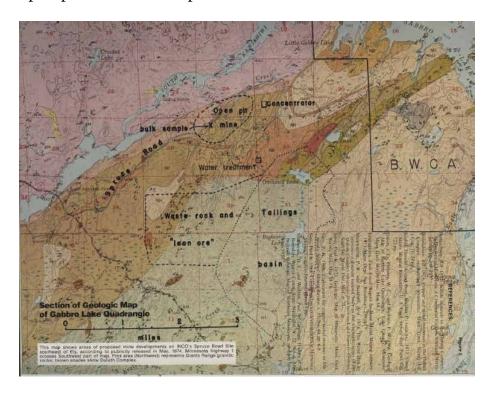
Drainage from the site contains copper, arsenic [arsenic?] and other metals at levels which are harmful to aquatic life and human health [See Arsenic and Old Lace]. It is located on the Spruce Road, approximately 15 miles southeast of Ely and about two miles from the South Kawishiwi River and Little Gabbro Lake BWCAW entry points.

Polluted runoff like this is a consequence of a little *aperitief* exploration and mining by INCO (succeeded by our pals at Duluth Metals and Twin Metals Minnesota) in 1974. You can imagine the potential pollution from a real hole in the ground, such as the one INCO was proposing at the time, not to mention the waste rock and tailings it would leave behind.

And don't forget the sulphurous tailings basin with its "spillway" into some body of water that runs into the BWCAW, because all the water runs that way, north of the Laurentian Divide. South of the divide? Lake Superior. Waste rock and tailings are problems even in the case of underground mines.

This is a map of the same area where the polluted runoff

was found. It's a map of INCO's hopes and dreams for an open pit mine in the Spruce Road area from 1974.



But the really instructive part of this episode is the reaction by the Department of Natural Resources and the Minnesota Pollution Control Agency:

Really? Copper? Nickel? Arsenic?

Well, we knew that.

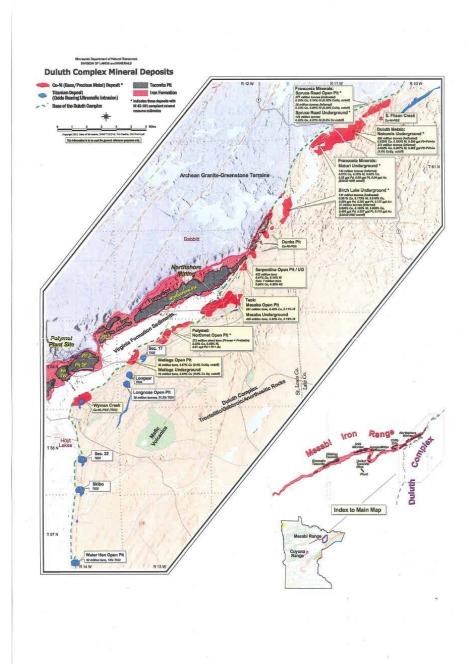
Really, we did. [Riiiiight!]

But it doesn't reach the threshold of a problem, so we don't plan to do anything about it (or make INCO do anything about it, either).

This should make you really feel good about the job the DNR and the MPCA are likely to do if Twin Metals and

PolyMet really get going. Katie, bar the door.

In fact, you'd be silly if you thought the Lands and Minerals Division of the DNR cared a whit about the problem or the BWCAW. Here's a *2010* DNR map of its gleam in the eye for the whole area.



This map has apparently been withdrawn from the DNR's

website. But you can plainly see the DNR's open pit mine aspiration for Spruce Road, as late as a couple of years ago.

The Lands and Minerals Division of the DNR is notably lacking in tree huggers, or perhaps even water drinkers; the Lands and Minerals Division has a miner's heart. If it can be torn out of the ground, it should be.

These are people who would sell their grandchildren into slavery — or worse — if they thought there was money in it. And maybe even if they didn't.

But if you have grandchildren, or hope to have them someday, and you want them to love the outdoors and the wild places as much as you do, the prospect of sulfide mining in northern Minnesota is inimical to your dreams. And you must do what you can to communicate your concerns to your political leaders.

Ask them four simple and really direct questions about sulfide mining: 1) Will Minnesota's waters stay safe and clean? 2) Are there safeguards in place for when things go wrong? [Because they will.] 3) Will the company leave the site clean and maintenance free? 4) Will Minnesota's taxpayers be protected?

And tell them not to accept the blandishments of the mining company lickspittles at the Land and Minerals Division of the DNR at face value.

From a gleam in a miner's eye

To Superfund site in eighteen short years

Steve Timmer

July 23, 2013

This is quick work, even for a mining company. In spite of the mine owner's name, Nevada Goldfields, Inc., this abandoned mine is in South Carolina. It operated from 1991 to 1995; Nevada Goldfields declared bankruptcy in 1999, and the EPA declared the site a Superfund site in 2009.

The plucky miners at the Barite Hill mine apparently didn't find much gold in the four years that the mine was in operation, but they did hit one kind of jackpot:

Site investigations found contamination in ground water, soil, sediment and surface water that could potentially harm people in the area. Contamination resulted from operations at the site. Contaminants of concern include, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc and cyanide.

I guess somebody did put up a sign telling people downstream not to eat the fish, probably until, well, forever. Swell. And gosh, the miners meant so well. They even had a spiffy reverse osmosis water treatment system by Siemens. [Like the one championed by Jess Richards, the Director of the Land and Minerals Division of the DNR, *Ed.*] <u>I can't resist quoting Siemans about the system</u>:

Challenge

In order to expand operations and maintain a water balance in South Carolina's wet climate, Nevada Goldfields' Barite Hills [sic] gold mining operation required a treatment plant to handle its wastewater. At this mining site, the company extracts gold from soil using a high pH cyanide leaching solution. The process generated large volumes of cyanide and metal laden wastewater, which they had been storing onsite. Nevada Goldfields needed to reduce the levels of many heavy metals to the part per billion (ppb) range.

Solution

Nevada Goldfields investigated several technologies that would reduce the metals to acceptable limits. Treatability testing showed that a combination of reverse osmosis and ion exchange reduced metal levels to meet the required limits for all parameters of concern. Installation includes a full-scale, 25 gpm system [based on the size of the polluted water pit at Barite, 25 gpm would be like emptying the ocean with a teaspoon] with two multimedia filters to remove metals and solids to less than 1 mg/L, two carbon adsorption filters to remove organic contaminants and finally, reverse osmosis and ion exchange equipment to remove salts, metals and dissolved solids before the water is discharged into the environment. The reverse

osmosis concentrate is rerouted to holding ponds at the site.

Results

The system has been operating since December 1994. Siemens Water Technologies, formerly USFilter, and Nevada Goldfields worked together to value engineer [the whole deal was "value engineered" all right] the treatment system, thus providing the necessary procurement flexibility to minimize capital expenditures. To best meet its financial objectives, Nevada Goldfields purchased the multimedia filtration and carbon adsorption equipment. They lease the reverse osmosis unit and buy the ion exchange canister services from Siemens.

Gee, I wonder what Siemans did when Nevada Goldfields quit making lease payments on the "reverse osmosis unit" after the mine came a cropper? And note that the system wasn't even installed until shortly before the mine *stopped* operation. The mine "stored" the "large volumes" of cyanide-laced water "on-site" before then.

If you read the EPA website at the link above, you'll see that the EPA doesn't even have a handle on how big the problem is yet.

But be sure not to eat the sunnies, sonny!

This entire preposterous and lamentable affair has a lesson for Minnesota, too. Minnesota mine operators are supposed to provide financial assurances, "satisfactory to the Commissioner of the Department of Natural Resources," that disasters like Barite Hill won't happen and that they will clean up their sites. But you can be sure that

PolyMet and Twin Metals Minnesota (each of whom have foreign ownership) will tell the Commish, *Hey*, *don't worry*; *we've got this*. *You don't need a bond. We won't go bankrupt*; *we promise*.

A little free legal advice Commissioner: get a guaranty from the ultimate parent corporations of the operators. If they balk, well, that tells you something, doesn't it?

Kiss the loons goodbye

Gavia immer, that is

Steve Timmer

July 25, 2013

When you're in the BWCAW or environs, the cry of the loons at dawn and dusk haunts your soul. It is one of the signature experiences of going there, and no recording does it justice. A <u>new study reveals how sensitive loons are</u> to their environment, particularly mercury and acidification of surface water they inhabit.

Although it doesn't look especially fearsome — unless you're a fish skewered on its bill, I suppose — the loon is at the top of its food chain (well, almost). They are an indicator species; they accumulate toxins from the little fish that are eaten by the bigger fish that are eaten by the loons. From the linked report:

[] Acids [from precipitation or from other sources, like mining], and the toxic metals they mobilize, interfere with fish gill function. This, in turn, reduces fish growth, reproduction, and survivorship, and results in lower fish abundance in more acidic lakes. As a result, Common Loons produce fewer young on lakes with low pH and produce more young on lakes with high pH (see box). Acid precipitation, like

mercury, directly impairs Common Loon reproductive success.

Loons are long-lived birds that winter in the ocean and migrate to places like the BWCAW and northern Minnesota (and Canada) to nest and raise their young. They often return to the same lake year after year.

Again, according to the report, loons are not exactly rabbits in the reproduction department. *Point four eight* (.48) chicks per pair that make it to six weeks old in a given year is good. That means, in round numbers, that it requires a pair of loon four years to reproduce themselves.

Lakes in and around the BWCAW are infertile and acidic, in other words, they already have a low pH. They have little or no capacity to "buffer" additional acid inputs from acid rain, or from acid-polluted runoff from, *inter alia*, a tailings basin leak or failure, or a waste rock or "lean ore" pile (Brimstone Mountain).

It wouldn't take much for Mr. and Mrs. Loon to fall off their .48 chicks per year target on your favorite little BWCAW lake (which are more vulnerable than big lakes) and before too many years, there aren't any loons.

The <u>first of the four questions</u> that Mining Truth wants our political leaders to answer about sulfide mining is: *Will Minnesota's water stay safe and clean?*

They're not only asking for you; they're asking for Mr. and Mrs. Loon, too.

Trouble in the Grotto

Believers in the Miracle of the Immaculate Extraction gnash teeth, rend garments

Steve Timmer

July 31, 2013

Immaculate Extraction — the <u>magic religious faith</u> <u>described here</u>, and to which DNR Commissioner Tom Landwehr is apparently an adherent — holds that it is possible to <u>mine minerals without mining sulfides</u>.

Evidence for the existence of the Immaculate Extraction has leaned on the slender reed of the Flambeau mine, on banks of the Flambeau River near Ladysmith, Wisconsin — The Grotto of the Miracle of the Immaculate Extraction. The mine was touted as "extraction without pollution."

As <u>reported here before</u>, however, the "reclaimed" mine is a polluter, just as every other sulfide mine there ever was, having been adjudged in 2012 of having violated the Clear Water Act several times.



The Grotto before it was filled and sodded over.

But now, there is even more trouble in the Grotto of the Miracle of the Immaculate Extraction. And more proof that this guy was the real prophet.



This is the late Roscoe Churchill, who served eight terms on Wisconsin's Rusk County Board, including while the Flambeau mine was proposed and permitted. He was an implacable foe of the mine. You can lay sod over a hole you filled up, but that doesn't mean it's harmless. And the hole is just a part of the footprint of the mining operation, anyway. It is principally waste rock, and tailings and "infiltration" basins that are the continuing menace.

Sulphuric acid and heavy metals leach out of waste rock, even little waste rock piles, like the ones off Spruce Road near Ely, Minnesota that were the product of some exploratory drilling over thirty years ago.



Spruce Road runoff¹

A common approach to try to address this problem is to catch the polluted runoff in an "infiltration basin" and treat it somehow. Here's what the ones at the Grotto were

supposed to look like. But surprise, surprise, surprise: they didn't get built correctly and were probably inadequately designed to begin with.

Both in 2012 and 2013, these basins nearly overtopped the retaining berms, which would have sent highly polluted water into the surface water surrounding the mine. (These events were not even part of the Clear Water Act lawsuit referred to above.)

Don't believe me? Here's a photo from the Wisconsin DNR. You can see more photos at the link.



You can believe me when I say this water would kill the aquatic species, not only fish, but the invertebrates (aquatic insects, crustaceans, etc. on which they feed) for a long way downstream.

You can read the panicked emails between the engineering

company and the Wisconsin DNR about the overtopping of the berm.

The excellent website <u>Flambeau Mine Exposed</u> has covered the Grotto extensively and it provides an excellent counter to Commissioner Landwehr's assurances that "There can be dangers of sulfides from treatment of waste rock in mining, if done poorly. But that can be done well, also."

Commissioner, it has never been done well.

Commissioner Landwehr is the hero in a Greek tragedy with the environmentalist chorus desperately trying to warn him. But he certainly sounds as though he's made up his mind and headed for disaster for all of us.

Little mine problems

Little mines, not little problems

Steve Timmer

August 5, 2013

I have written several times mentioning the Flambeau mine near Ladysmith, Wisconsin, the mine touted by the industry as an example of a sulfide mine that didn't pollute, most recently in <u>Trouble in the Grotto</u>. Here, though, is what reporter Bob Kelleher of Minnesota Public Radio wrote back in 2009:

Ladysmith, Wis. — A closed Wisconsin mine is playing a prominent role in the ongoing debate over mining for metals like copper and nickel, a debate that's currently raging in Northern Minnesota.

Depending on whom you talk to, the Flambeau mine near Ladysmith, Wisconsin, is either 1) a perfect example how metals like copper can be mined without harming the environment, or 2) it's a sad example of regulators ignoring serious problems.

I'd pick door number two.

Door number two is the smart choice because we know in hindsight that the operator of the Flambeau mine was found in a 2012 federal court judgement to be guilty of

several violations of the federal Clean Water Act.

Trouble in the Grotto describes risks to surface waters that were not even part of the lawsuit: the failure or overtopping of "infiltration basins" meant to collect the deadly mine runoff; I use the word "deadly" because that is exactly what it is: a killer of all things aquatic.

Water escapes from the infiltration basins at the Flambeau mine through a culvert. What's on the other side of the culvert, you ask? Well, it's Stream C:

In 2010, the Wisconsin Resources Protection Council (WRPC) petitioned the Wisconsin Department of Natural Resources (WDNR) to add Stream C at the Flambeau Mine site to the state's list of "impaired waters" due to copper and zinc contamination linked to the Flambeau Mine operation. Since at least 1998, Flambeau Mining Company (FMC) had been discharging contaminated stormwater runoff from an on-site biofilter to Stream C on a routine basis without a Clean Water Act permit. Stream C is a tributary of the Flambeau River. Click here to see photos and diagrams of the stream and biofilter.

Swell.

But the larger point is that the Flambeau mine is tiny, a 35 acre pit with a 181 acre "footprint." In comparison, the proposed PolyMet mine is a whopper, a 450 acre pit (over a half square mile) that will be as much as 840 feet deep, with a 3,000 acre footprint.

But there is another big difference between the two mines that makes PolyMet's proposal more dangerous by an order of magnitude or two. At Flambeau, there is no tailings basin or containment, because the mine operator hauled everything away for processing. PolyMet proposes a "concentrator" operation that will produce tailings — ground up sulfide rock that is begging to turn itself into sulphuric acid. Tailings are typically "stored" in ponds or basins to keep them from blowing around. Tailing basins dams and berms get overtopped and fail, too.

The Flambeau deposit was 10% copper; the PolyMet site is less than 1% copper.

Guess which one will be a bigger producer of mining waste, and therefore acid and heavy metals runoff?

If you have big problems from little mines, what do you get from a big mine?

Mining poll shows Minnesotans like the environment

Tony Petrangelo September 23, 2013

Last week Mining Truth, a coalition of Minnesota environmental groups, released the results of a poll they had Public Policy Polling commission concerning Minnesota's feelings about issues around sulfide mining. They released the results of two polls, one of the entire state of Minnesota, one of just the eighth congressional district.

These are the results of the first two questions of the statewide poll:

PPP (9/19):

Two companies, PolyMet and Twin Metals, are proposing to operate sulfide mines in northern Minnesota. Have you heard or seen anything about these new mines in Minnesota, or not?

Have 39

Have not 56

Not sure 6

Do you favor or oppose sulfide mining in Minnesota?

Favor 28

Oppose 32

Not sure 40

 $(MoE: \pm 4\%)$

The first question is an issue awareness question, asking Minnesotan's if they have heard about the two proposed mining projects. The follow up is an approval-disapproval question.

Roughly 40%, two-fifths, of Minnesotans have heard about the proposed mines with the largest demographic splits being among respondents of different genders and political affiliations.

While 44% of men answered that they have heard of the projects, only 34% of women have. Likewise 48% of men say they have not heard of the projects while that number jumps to 62% for women.

And Republicans are like women on this issue. Only 24% of Republicans are aware of the issue while 67% are not. Among Democrats and independents it's an almost 50-50 split.

While I don't have a well articulated explanation for why this is the case among women, aside from the normal demographic differences between the sexes, I do think there is an explanation for this dynamic among partisans. At least partisans of the Democratic persuasion.

For Minnesota Democrats this issue has been long simmering just beneath the surface since the disastrous 1978 elections in which the DFL lost both US Senate seats, the Governorship and even the Auditor's office to some guy named Carlson. Now, 35 years later and with the DFL again occupying the entirety of state government, many similar issues seem poised to re-emerge.

This is why Democrats are familiar with, a better term might be scared of, the mining issue, because it threatens to once again undo the party like it did in 1978. Although, it doesn't quite explain why indies are as familiar with the issue as Democrats are.

After the two baseline questions, questions three through five were more specific issue related questions:

PPP (9/19):

Some people say it's difficult for businesses, such as mining and farming companies, to create jobs unless we exempt them from some state environmental laws. I'm going to read two statements, and ask you which you agree with more. Here's the first statement: 'The state should relax or repeal current environmental laws if they interfere with businesses creating jobs.' Here's the second statement: 'Our current state environmental laws must be enforced for everyone.' Which statement do you agree with more? The state should relax or repeal current

environmental laws if they interfere with businesses creating jobs 28 Our current state environmental laws must be enforced for everyone 65

Not sure 7

Earlier this year, new mining was prohibited in an area around the Grand Canyon to protect its waters from pollution. Some people say that mining should be prohibited in areas where polluted runoff could enter the Boundary Waters Canoe Area Wilderness. *Do you agree or disagree with that statement?* Agree 75

Disagree 17 **Not sure** 8

One proposed sulfide mine would operate for twenty years, but would require ongoing treatment of polluted water and maintenance of the site for hundreds of years after it closed. Based on this information, do you support or oppose this proposal?

Support 25 Oppose 48 Not sure 27

(MoE: ±4%)

What you see in these three questions is that when given the choice, Minnesotans choose to protect the environment. Even Minnesotans who consider themselves to be Republicans.

The first question (of those above, third question in the poll) explicitly asks if state environmental laws should be eased for the sake of jobs, a seemingly bread and butter Republican talking point these days. Well, according to this poll even 51% of Republicans in Minnesota think that existing environmental laws should be enforced, even at the expense of jobs.

The same dynamic is at play in the next question. When asked if mining should be prohibited where run-off water *could* reach the BWCAW, everyone says yes, yes it should.

What's interesting is the third question. And the third question is a great example of why the mining companies are so eager to make it seem like they can operate these mines in an environmentally friendly way. While the third

question talks about treating polluted water and ongoing maintenance for hundreds of years, when there's no mention of possible environmental degradation, opposition to the mining projects softens quite a bit.

Support doesn't really go up that much mind you, but opposition certainly softens.

But the inverse also seems to be true, that when Minnesotans are informed about the environmental realities of the mines being proposed, as in the first two questions above, they will be strongly opposed to any such project.

Who will keep PolyMet's grave clean?

Because it sure won't be PolyMet

Steve Timmer

October 5, 2013

There was an article in the <u>Star Tribune</u> and one in the Duluth Tribune on October 5th about the <u>perpetual care</u> that a PolyMet open pit sulfide mine would require after it closed, filtering water runoff from the site for *500 years*. This should sober you, kids, or maybe your kids' kids' kids' kids but since they are not here yet, it is up to you to look after them.

Here's the lede from the Star Tribune story:

A proposed copper-nickel mine in northeast Minnesota would generate water pollution for up to 500 years and require billions of dollars in long-term cleanup costs, state regulators have concluded as they near a key stage in the project's review.

That's *billions* with a "B." Here's more from the article about PolyMet's draft environmental statement:

The DNR says in the environmental review that PolyMet would be required to operate the reverse osmosis water treatment systems for as long as necessary. PolyMet would also work on developing

so-called passive water treatment systems, typically wetlands or other natural features, that at some point could replace the water treatment plants.

Computer projections in the environmental impact statement say that either active or passive water treatment will be needed for 200 years for the mine site, and up to 500 years for the metallurgical site. The document says water treatment would cost between \$3.5 and \$6 million per year after the mine closes.

"While long term," the document reads, "These time frames for water treatment are not necessarily perpetual."

"Not necessarily perpetual?" That's over twice as long as it's been since we sued King George for divorce. Heck, we'd barely started stealing the place from the Indians 500 years ago. It's close enough to perpetual for me. And you don't suppose PolyMet's "computer projections" low balled the estimates, do you? Those darn computers are always so optimistic! And I'd confess to being leery of anybody who said that 500 years was "not necessarily perpetual."

Let us assume for a moment that PolyMet manages against the odds — and they are really long odds — to contain all the sulphuric acid that it produces during mine operation. What happens when the mine closes?

"Well, we run the pumps for 500 years, of course," says PolyMet. [hysterical laughter]

Just imagine it, in the year 2540, PolyMet is still standing by, guarding the water supply! The fidelity is inspiring.

It is far more likely, though, that after the mine is played

out and it's no longer producing any revenue, and a little while after that, PolyMet, or its practical parent corporation, Glencore Plc., a charming international mining consortium started by Marc Rich, will tire of pumping water and will just abandon the mine. We have a name for orphan mines like this — and there are many of them around the country — Superfund sites. That when our kids' kids' kids' kids' kids — or maybe just our kids — get a new name, too: *stuckees*.

The Star Tribune article tells us about this:

Hard rock mines have a long history of environmental damage, according to the EPA. Agency documents show that sulfide rock mining of various kinds have polluted 10,000 miles of rivers and streams, mostly in the western United States. Between 1998 and 2007, the federal government spent at least \$2.6 billion to clean up polluted hard-rock mines, some of which are now Superfund sites.

The Duluth Tribune reports about one of them:

[C]ritics of any copper mine that requires perpetual treatment say there are far more examples of copper mines that have gone horribly bad, often after the company has left town, leaving residents and taxpayers to foot the cleanup bill.

For most of the 20th century, until 1993, a Canadian company operated the Formosa copper and zinc mine near Riddle, Ore. The company abandoned the site in 1994. Within a few years, the mitigation system left behind intended to contain polluted runoff began to fail. State officials said that, since then, 18 miles of

river have been heavily polluted by copper, cadmium, lead and zinc that "severely harmed the ecosystem of these streams, including protected coho and steelhead salmon populations."

And LeftMN featured another one, the <u>Barite Hill mine in</u> <u>South Carolina</u> that went from first shovel in the ground to Superfund site in eighteen years which, I will admit, is fast work, even for a mining company.

At a recent presentation on PolyMet's proposal, I asked Executive VP Brad Moore — one of those revolving-door-regulator-to-regulated types you hear so much about — whether the State of Minnesota should get Glencore's guaranty of PolyMet's environmental obligations. Bankers will tell you there is nothing like a cheerful guarantor to make one feel secure about a project.

Moore replied, "Oh, you don't want that."

Brad, I think we do.

Update

Commenter Joe observes:

Thanks for the update. It is totally illogical that this is happening. There is no upside. If these corporations think there is, they are self-deluded. Ya know, there is a just an incredible amount to bizarre illogical thinking going on in our world. But anyway, thanks.

The upside for the corporations comes if they can extract the metal without paying the true cost of getting it. The environmental degradation and clean up costs are massive externalities to the extraction business. "Externalities" means "somebody else pays."

Forever is a really long time

It's even longer than 500 years

Steve Timmer

August 11, 2014

Our friends in British Columbia have delivered a very important object lesson to us in Minnesota. It is just too bad that so much flora and fauna, including salmon and other fish, fish-eating raptors like eagles and osprey, marine mammals, and even the pelagic fish that feed on salmon have to perish to provide it.

The enormity of a sulfide mine tailings dam failure and how long its effects will last are just beginning to be understood.

It's probably, practically speaking, forever. (That's even longer than the 500 year water treatment window that was bandied about in the discussions about PolyMet Mining's proposal!)

That's the grim prognosis of an ocean pollution researcher from Vancouver regarding the Mount Polley mine's tailings dam failure:

The massive release of materials from a mine tailings pond near Quesnel, B.C. is "virtually impossible to clean up," according to a marine researcher — and

may have already damaged salmon habitat beyond repair.

Dr. Peter Ross heads Vancouver Aquarium's ocean pollution research program and said on Wednesday the spill likely spells death for the fish that use the affected waterways.

"That means, sudden, lethal injury to any fish or their feed ... we expect that to be occurring now," he said, referring to a large "pulse of toxic materials" washing downstream that heralds environmental impact to come.

Then comes the longer-term impact of silt and debris suffocating fish and their habitats.

"There have been cases where we've seen breaches of dams in the past that have filled in, essentially buried the gravel where different species of sockeye will spawn, and we've not seen a recovery," Ross said.

Finally, anything that doesn't get washed down can stay in riverbeds and be consumed by wildlife for generations [my link] to come.

According to Fisheries and Oceans Canada, which has banned fishing in affected waters, 1.52 million sockeye are expected to return to the Quesnel area this year.

When you look at Hazeltine Creek, a stream inundated by toxic sludge from the tailings basin, you can see why this is probably true.



Meanwhile the B.C. Energy and Mines Minister (like our Director of the Land and Minerals Division of the DNR) said recently:

Energy and Mines Minister Bill Bennett said an investigation is underway that would interview current and former employees at the Mount Polley mine.

He said the mine operator was warned once in May 2014 of rising levels at its tailings pond, but came into compliance afterwards by moving water into an empty pit. [Where the toxins could seep harmlessly into the groundwater, *Ed.*]

"The company has indicated they're confident the levels of metals in the tailings are safe," Bennett said.

"We obviously hope that they're correct about that."

Hope is such a wonderful thing in a regulator. One is

reminded of **Dusty Springfield**:

Wishin' and hopin' and thinkin' and prayin'

Minister Bennett was AWOL for several days after the dam failed, and yet this is the best that he and his comm flaks could come up with.

Wishin' and hopin' and thinkin' and prayin' are apparently all the regulators have got, or ever had. Here's the Vancouver Sun's op-ed columnist Stephen Hume:

[The Mount Polley dam failure] would be bad enough if this was an isolated incident, but it's not. Spills like this are not uncommon in the regulatory culture championed by the current Liberal government in Victoria.

The University of Victoria's Environmental Law Centre warned in 2012 that environmental assessment certificates for mines issued by government are often "vague and unenforceable."

It said that by 2008 the number of mine inspections had fallen to half what they were in 2001. Small wonder — Ministry of Environment staff shrank by 25 per cent. The chief mining inspector said he had insufficient staff to complete the annual mine monitoring reports required.

"This ramshackle enforcement regime is not good enough for an industry that can create environmental and financial catastrophes," the study said.

Regulatory Lickspittleism

The BC government <u>allowed a dangerous condition at</u> <u>Mount Polley to fester</u>. Article after article, and speaker after speaker, have bemoaned the lickspittle regulatory culture in B.C. which seems, frankly, like a bunch of cheerleaders for the mining industry.

What is this to us? you ask.

Probably quite a lot. Some of you will remember way back to March when the Chicago office of the EPA awarded the PolyMet SEIS an "E-2" rating and the Minnesota DNR broke out the pom-poms and chanted:

P-A-S-S-I-N-G G-R-A-D-E!

Here's a spox from the DNR:

While the federal Environmental Protection Agency has lingering concerns about potential impacts from a proposed copper-nickel mining operation in northern Minnesota, the agency boosted the project's environmental review rating Thursday.

"This is what you'd consider a passing grade and moves us toward the final EIS (environmental impact statement) preparation. This is the rating that the DNR was hoping to achieve," said Minnesota Department of Natural Resources spokesman Chris Niskanen.

The article continues (emphasis added):

The EPA doesn't have an official veto over the PolyMet Mining Corp. project, Niskanen said, but its voice is important.

Four years ago, the EPA gave the Draft Environmental Impact Statement on the project its lowest rating — "Environmentally Unsatisfactory – Inadequate" — which sent the company and the DNR back to the drawing board.

...

Mining Truth, a coalition of environmental groups, issued a statement Thursday saying PolyMet has gone from an F grade to "incomplete." Getting an "insufficient information" rating after four years of remedial work is "shocking," the group said.

The group said it shares concerns raised by the EPA related to treatment of polluted water, capture of discharge, wetland protection and financial assurance for long-term water treatment.

Only in the world of <u>Candide's Dr. Pangloss</u> did the SEIS get a passing grade.

And notice that Niskanen seems to think it is the *DNR* that got the passing grade. This bunch is falling all over itself to issue a permit.

I think they are, in Dusty's words, Wishin' and hopin' and thinkin' and prayin'.

Looking upstream

Steve Timmer *April 14, 2015*

A group of friends is enjoying a picnic on the bank of a pleasant river surrounded by woods. Birds are singing and there is a faint whisper from the breeze in the trees.

The idyll is shattered when one of the friends shouts, "There's a baby in the river!" He jumps in the river and wades out to the still-struggling infant. As he is wading back to shore with the infant, another baby floats down toward the group. A second person jumps in to rescue it. But there is another one, and another one, and soon the whole group of picnic-ers is in the river, rescuing babies, bringing them to shore and wading out to catch the next one.

A woman, hiking by on the shore, stops to survey the scene, and then continues upstream.

"Please help us! We're exhausted," shouts one of the group.

"I am," shouts the woman back, "I'm going upstream to stop whoever is throwing all these babies in the river."

Okay, that's a little dark. You've probably heard the story

before in other contexts, too. But it's a great metaphor for the <u>efforts to clean up the St. Louis River estuary</u> while potentially permitting new sources — potentially catastrophic sources — of pollution of the St. Louis upstream.

I'm referring, of course, to PolyMet Mining and its proposal to open a copper nickel sulfide mine near Hoyt Lakes and dump its toxic tailings on top of an alreadyleaking orphan tailings dam from a played out iron mine. (Twin Metals may want to put its tailings there, too.)

What could possibly go wrong? Well, a lot.

We ought to ask the residents downstream of the Mount Polley mine and tailings dam in British Columbia. They probably have a useful perspective. You know the Mount Polley story: a state-of-the-art mine with a state-of-the-art tailings dam that dumped a state-of-the-art load of toxic heavy metals into the Fraser River, one of the Pacific Ocean's most prolific salmon fisheries.

"It was a loaded gun," said the B.C. Mines Minister. You'd probably be interested to know that the same firm of bright lights who designed the dam at Mount Polley are consulting with Minnesota on the design and safety of the tailings dam and basin that PolyMet wants to use. Interested, and maybe alarmed, too.

As Anne Stewart wrote in an op-ed piece at MinnPost in 2014, speaking of clean up efforts in the St. Louis estuary, "However, cleaning up polluting sources at its mouth will not save the river unless the entire watershed is protected."

The environmental group American Rivers had designated the St. Louis River, the largest tributary to Lake Superior, one of the ten most endangered rivers in the country.

In the article, a PolyMet flak is quoted as saying:

PolyMet Mining's vice president of corporate communications and external affairs, Bruce Richardson, said the project "will meet all applicable state and federal water quality standards."

Imagine a company so magisterial that it has external affairs. A little big for its britches, perhaps, when one recognizes that PolyMet was organized (or maybe "organised" in this case) as Fleck Resources, in 1981, and has never turned a spoonful of dirt or made a dime since.

We are poised to permit this bunch of high plains drifters to put enormous natural resources of the state at risk.

But Glen Maxham of Duluth is skeptical. And Glen has a memory, a useful thing, and often in short supply when considering the blandishments of the latest corporate pitch man to come down the pike:

In the 1970s we listened to Reserve's corporate promises that it wasn't necessary to quit dumping millions of tons of taconite tailings into Lake Superior. This waste disposal was, we were assured, not a threat to the environment. And did not the company provide many good jobs?

Glen recalls specifically a little demonstration right out of the kids' television show, Mr. Science:

I was among those who attended a company news conference. Researchers were supposed to prove "no harm" would come from the plant's refuse being dumped into the deep water next to the plant. The demonstration included small, aquarium-like, water-filled tanks. Dramatically, tailings were dropped into the glass-sided containers. We were told to note that all the particles sank to the bottom. It was proof, they said, that pesky environmentalists were wrong and should back off. Though suffering derision and verbal abuse, even veiled threats to their safety, they persisted and won.

Glen did not report that the Reserve people drank the water.

Put your best mine forward

Steve Timmer

October 26, 2015

In order to help him figure out whether copper-nickel sulfide mining is the cat's pajamas or the worst idea in the history of ideas, Governor Dayton is going to visit two mines: one chosen by the mining romantics, and one by the people who choose to plan more than six weeks into the future, the environmentalists.

The environmentalists had a cornucopia of mines to choose from: essentially every hard rock sulfide mine opened (or closed) since the beginning of mining. All over the US and the world.

There were some really extra good ones, of course, like the Berkeley Pit, where swans land and die. Or Barite Hill, a mine that went from shovel in the ground to Superfund site in eighteen years. And how about the Formosa copper and zinc mine near Riddle, Oregon? Acid drainage there "killed all life in the south fork of Middle Creek." Or even Cement Creek in Colorado, where a plug was breached, regrettably and inadvertently by a contractor for the EPA, spilling millions of gallons of toxic water into the creek. It was a bomb, and unfortunately it went off in the bomb squad's face.



The former Mount Polley tailings dam. (via www.vancouverobserver.com)

But the one that environmentalists really wanted the governor to see was Mount Polley (it even sounds a little like PolyMet) in British Columbia, where PolyMet is from, by the way; the mine suffered a catastrophic failure of a wet tailings impoundment last year that polluted the headwaters of the Fraser River, the most prolific sockeye salmon fishery on the planet. The civil engineers who are advising the state about PolyMet are the same band of schlubs who designed the Mount Polley tailings dam, by the way.

And if that doesn't make you feel confident, realize that PolyMet proposes to put its sulfide tailing in wet storage on top of taconite tailings in an already leaky impoundment that's available because a previous owner, LTV Steel, went bankrupt. PolyMet — and Lee Schafer — tout this as a great advantage, but it sounds like catastrophe

waiting to happen to me.

But the governor said, "That one is so big we can see it from here," so <u>he's going to a Superfund site in South Dakota</u>:

The governor's tour starts Tuesday at a failed gold mine near Deadwood, S.D., that has cost taxpayers more than \$105 million for pollution cleanup and continues to cost more than \$2 million per year. The Gilt Edge Mine — a large, deep open-pit operation — was abandoned by its owner in a 1999 bankruptcy and became a Superfund site under the U.S. Environmental Protection Agency. Superfund managers will give Dayton a guided tour.

And the costs identified here are just clean up costs, not the losses of the public for loss of drinking water, damage to local flora and fauna, loss of recreational activities, the cost of private filtration of water, *etc*.

PolyMet Mining and its supporters have decidedly fewer options to bring for show and tell. Essentially, they had to find a mine that hadn't been open long enough to do much damage yet. They seized on the new Eagle Mine in the Upper Peninsula of Michigan. Sure, it doesn't have much in common with PolyMet, but at least it hasn't already come a cropper. From the same linked Star Tribune article:

Eagle Mine, which was opened last September by Toronto-based Lundin Mining Corp., has high-grade deposits of nickel and copper, but it differs from the PolyMet proposal in several ways. While PolyMet's project will be an open-pit mine, the Eagle operation is underground. It will produce less waste rock and

fewer tailings than the mine proposed by PolyMet [because the PolyMet mine will be 99% waste], Kuipers said. And unlike PolyMet, Eagle is not likely to be saddled with long-term water treatment to fight acid mine drainage, he said.

Some of you may be saying — maybe you, Frank [Ongaro] — "What about the Flambeau Mine, the <u>Grotto of the Miracle of the Immaculate Extraction?</u>" That one dodged a bullet (on appeal) for now, but sulfides are clearly leaching out of the now closed mine, and will only get worse, probably for a long time, before they get better. Mining supporters used to talk a lot about the Flambeau Mine, not so much any more.

Funny.

To my fellow tail-end Charlies

Steve Timmer *August 10, 2019*

If you had any question where you, the St. Louis River watershed, Ojibwe tribe members and landowners, City of Duluth, and environmentalists stood in the eyes of Glencore plc, well now, there is no doubt. If you had any before. Glencore met with Governor Walz and I guess he was bold enough to suggest that Glencore ought to sign on to the PolyMet mining permit and assume its environmental responsibilities.

Not so fast, says Glencore:

Ultimately, the DNR can add Glencore to the permit under a longstanding operating principle, Walz said. Glencore was not a majority shareholder when the DNR granted PolyMet a permit to mine and other permits last year. [It's clear that Glencore has been in practical control of PolyMet for a long time, *Ed.*]

Walz said Glencore was not particularly warm to the idea of adding its name to the permit because the company said it could affect financing option in the eyes of banks and lenders. PolyMet still needs to raise almost \$1 billion in project financing to build its facilities.

"(Glencore) did not immediately acknowledge that it would be Glencore's name," Walz said. "We made it very clear to us there's some conversations that need to happen here."

The Governor's remarks were short of saying, *This is the way it has to be*, which was disappointing.

But the money quote is this:

Walz said Glencore was not particularly warm to the idea of adding its name to the permit because the company said it could affect financing option [*sic*] in the eyes of banks and lenders.

Loosely translated, that means, *Our bankers aren't* interested in the project if we have to be responsible for all the mayhem we may cause.

We've all known for a long time that <u>PolyMet has never</u> <u>had a toilet to call its own</u>. PolyMet is still penniless; if the mine is built, it will be because of Glencore and <u>not Karin Housley</u>.

Frankly, a promise by PolyMet to fix any messes it makes is worthless. Perhaps it'll promise to pay off the national debt while it is at it. Both promises are equally likely to be fulfilled.

Really, Glencore is saying, Look, if you don't make the citizens and the environment of the state the tail-end Charlies, this thing is not going to get done.

To which I would respond, *Hallelujah*, *somebody* is *finally* being honest. When the mining industry bankers say, *This* is a bottomless pit (so to speak), we ought to pay attention.

Not that the apple-cheeked *Pollyannas* at the Land and Minerals Division of the DNR or the mining section of the MPCA are likely to pay attention. Really, they have already demonstrated they won't.

I am hoping that Governor Walz is the *not*-industry-captured lickspittle in the room. We already have plenty of those.

It still stuns me that we would invite a stranger into the house to shit on the living room rug.

Environmental justice in sulfide mining

Steve Timmer *August 16, 2019*

Environmental justice was the subject of a <u>Community</u> <u>Voices piece I wrote that was published in MinnPost</u>.

I sent a letter to Governor Tim Walz today making several points about unanswered regulatory, environmental, and financial concerns that I have about PolyMet's proposed pit mine. I will link to it, but first there is an issue that I want to highlight.

At the conclusion of the letter, I said that environmental justice for the Ojibwe and the protection of their *manoomin* was just as important as the Boundary Waters. Here's what I wrote:

There is an enormous environmental justice subtext to the PolyMet project. There are a lot of people trying to distinguish between PolyMet and Twin Metals projects, including Tom Landwehr, who signed the PolyMet permit to mine when he was the DNR Commissioner, but who now argues against a sulfide mine perhaps ten [twelve, *Ed.*] miles away from PolyMet's proposed mine at Hoyt Lakes. Landwehr correctly identifies the ills associated with a sulfide mine, but his attempts to distinguish PolyMet and

Twin Metals are entirely specious.

The supposed difference between PolyMet and Twin Metals is the Laurentian Divide. The two proposed projects are on opposite sides of the divide; PolyMet on the St. Louis River watershed side, flowing to Lake Superior, and Twin Metals on the Rainy River basin side, flowing through the BWCAW to Hudson's Bay. The Laurentian Divide only describes what happens to the surface water, however.

The Laurentian Divide does not explain what happens to groundwater.

According to the Great Lakes Indian Fish and Wildlife Commission, in a 2015 report, groundwater pollution from a PolyMet mine operation would also flow north into the Boundary Waters. It is reported in the linked Timber Jay article that the DNR acknowledged that the GLIFWC could be right.

But to me, this is all beside the point. I find this divide-the-baby *faux* environmentalism to be distasteful. I submit that it is just as important to protect the waters of the St. Louis River watershed as it is the Rainy River Basin. I place the interests of outdoor enthusiasts who enjoy the Boundary Waters and the Ojibwe who revere and rely on their wild rice waters for the *manoomin* on an equal footing. I think it is racist not to do so. Perhaps the *manoomin* is even more important.

Copper mining kills wild rice.

Here is a <u>link to the entire letter</u>.

Part III

The Enablers: Regulators

Sulfide mining: water quality baseline data needed

Aaron Klemz August 17, 2012

This week, researchers from the Minnesota Pollution Control Agency were gathering data on the Minnesota River. In 1988, at a time of similarly low flow for the river, researchers recorded the dissolved oxygen levels and now are going back to see if reductions in phosphorus have helped. You can only do this kind of research of the positive impact on water quality from stronger regulation if you have a good set of baseline data.

There is another place where there is a pressing need for baseline water quality data. As the Minnesota Department of Natural Resources works on the second draft environmental impact statement (EIS) for the proposed PolyMet mine, it has become clear that there is a lack of baseline data about water quality in the region.

There have been at least three waves of interest in coppernickel sulfide mining in Minnesota, all coinciding with commodities price bubbles. In the 1970's, burgeoning interest in copper mining led the State of Minnesota to conduct a number of studies and look at environmental and tax laws that would be needed if copper mines were opened. There are a host of documents from that period that are still relevant today. I checked one out entitled "Proposed Regional Environmental Monitoring System for Potential Copper-Nickel Mining in Northeastern Minnesota," a 1974 study commissioned by the Minnesota State Planning Agency.

The actual document isn't the best thing I've ever read. It's missing essential data, isn't very well written at times, and comments about the study included in the document are rather critical. However, the core of the study is this very important argument (emphasis is mine):

At the present time, the state of Minnesota has an opportunity to allow a copper-nickel mining industry to develop or not develop based on sound environmental analyses as called for by both NEPA and recent state environmental legislation. This is a unique opportunity, in that there are no previous environmental problems which can be attributed to this industry in Minnesota. Therefore, the State has the responsibility to determine precisely what the existing environmental baseline is, in order to provide a point of departure for future development. This baseline determination becomes even more important in the light of disturbances which have already occurred in the region such as iron mining and logging.

Nearly 40 years later, we still don't have a lot of this essential baseline data, nor do we have a well-developed system to monitor changes in water quality. We've made some progress, though.

The White Iron Chain of Lakes Association (WICOLA)

represents users and stakeholders who rely on the water quality of White Iron, Farm, South Farm, and Garden Lakes. These lakes are downstream of Twin Metals's proposed mine, and upstream of the Kawishiwi River, which flows into the heart of the Boundary Waters Canoe Area Wilderness. They've initiated the Kawishiwi River Watershed Clean Water Project, which has begun to gather baseline data on water quality using funds from the Legacy Amendment and the MPCA. Many of the concerns about water quality in the White Iron Chain have nothing to do with mining, specifically, aquatic invasive species and septic systems. But the data gathered will help to establish a baseline for impacts on water quality if Twin Metals ever receives a permit to mine.

There is a need for a more comprehensive system of environmental monitoring if Minnesota moves toward permitting a copper-nickel sulfide mine. While pH, dissolved oxygen, and turbidity are good things to measure, we'll need to continually monitor other aspects of water quality. Specifically, sulfates and dissolved metals are two damaging components of mining runoff that need to be included in any monitoring regime.

The insistence by mining proponents that we can "do it right" and avoid environmental impact is a nice sentiment, but as Reagan said "trust, but verify." Legislation to create a comprehensive environmental baseline study for northeastern Minnesota is needed, as well as legislation to establish the infrastructure for ongoing environmental monitoring. If a company receives a permit to mine copper-nickel sulfide ore, they should also be responsible for funding the ongoing data collection and analysis. This should be included in the permit and factored into the

financial assurance (damage deposit) required of a mine.

Not only is this good policy and a wise precaution, the response to the proposal itself is a good test of the sincerity of promises made by the mining companies. A mining company that wants to be a good environmental steward and good citizen will back this scientific approach. On the other hand, opposition to gathering baseline data and creating the infrastructure to verify mining company promises would be a clear signal that these are hollow pledges.

Mining regulator revolving door continues to spin

Aaron Klemz

September 6, 2012

One troubling aspect of the State of Minnesota's approach to regulating mining companies is the movement of former state regulators into positions with the industry that they used to regulate. With a little-noticed personnel move last week, yet another former top-level state mining regulator has moved into a position as a consultant for the mining industry.

The revolving door of the office of Director of DNR Lands and Minerals division continues to spin with the departure of Larry Kramka, former head of Lands and Minerals. Kramka left in August to take a position with Houston Engineering. His new position at Houston Engineering involves "leading the firms environmental sciences, environmental review, mining, regulatory and permitting efforts." Kramka replaced Marty Vadis, who left in 2011 to join IDEA Drilling. IDEA Drilling is a subcontractor for several mining companies in northern Minnesota, and has been embroiled in the controversy over mineral leases underlying private land. In fact, IDEA President Bill Travis touted the hire of Vadis as a reason that you can trust the company to protect the environment.

Even more brazen is the fact that a former head of the Minnesota Pollution Control Agency, Brad Moore is now Executive Vice President of PolyMet after a brief stop at another Minnesota mining industry subcontractor, Barr Engineering. Moore now is in charge of navigating regulations instead of enforcing them, and stands to benefit handsomely since he holds 200,000 shares of PolyMet stock. His VP counterpart at Twin Metals, Bob McFarlin, the former Minnesota Department of Transportation head, was hired for "his firm understanding of the political environment in Minnesota."

Let me translate that for you: these hires are all about access and regulatory capture. The integrity of the regulatory process can't be maintained when all of the former referees are being hired to work the current refs, oftentimes their former subordinates. But the saddest fact is this: to "serious" observers of the Minnesota Capitol, none of what I've said here will shock. It's just business as usual in St. Paul.

The Commish mines him some bullshit (Part 1)

Along with the sulfides

Steve Timmer *July 26, 2013*

In a <u>story published about his July 25th interview with the Mesabi Daily News</u>, the paper reported (emphasis added):

In a wide-ranging interview Thursday at the Mesabi Daily News, the head of the Minnesota Department of Natural Resources [Tom Landwehr] talked about issues ranging from mineral leasing delays to bear researcher Lynn Rogers. He was visiting several places on the Range and was giving a number of interviews as well.

One topic was on PolyMet.

Critics of non-ferrous mining point to what they say are dangers of sulfides getting in to watersheds, Landwehr explained.

His answer was quick. "We don't mine sulfides," he said. "We mine minerals."

There can be dangers of sulfides from treatment of waste rock in mining, if done poorly. But that can be done well, also, he said.

The environmental impact statement for PolyMet, which began in 2004, "was not well defined" by the company by 2009, when the U.S. Environmental Protection Agency criticized the work, Landwehr said.

Landwehr's identification with an industry he's supposed to be regulating is touching. And his comment could have been written by Polymet's PR flaks; perhaps it was. What he really should have said was this:

Polymet keeps the minerals — one percent or less, and leaves the rest — the ninety-nine percent sulfide rock — to us to worry about. Forever.

The barbarians are not only at the gate, they're inside the courtyard. Somebody let them in.

The Commish mines him some bullshit (Part 2)

The Miracle of the Immaculate Extraction

Steve Timmer

July 28, 2013

I refer to the <u>brief piece I wrote Friday</u> about DNR Commissioner Tom Landwehr's <u>remarks to the Mesabi Daily News</u> that, well, let's hear it from Tom:

His answer was quick. "We don't mine sulfides," he said. "We mine minerals."

The commissioner is apparently a believer in the magical religious doctrine called the *Miracle of the Immaculate Extraction*.

According to the Miracle, things can be removed from the midst of other things without disturbing these other things. Like pulling a tablecloth out from under dishes set on a table. Some adherents to this doctrine also seek out faith healers to have cancers removed from their bodies without surgery or chemotherapy.

The result is broken dishes and growing tumors. Well, that, and shattered faith. But the Commissioner does have faith at the present time; he also said in the interview:

There can be dangers of sulfides from treatment of waste rock in mining, if done poorly. But that can be done well, also, he said.

Now faith is the substance of things hoped for, the evidence of things not seen.

Believers in the Miracle of the Immaculate Extraction have their own holy grotto where they believe the miracle of Immaculate Extraction occurred. Quoting from an <u>earlier</u> <u>story here</u>:

An example of that is a mine that has been touted by the mining industry as a model of extraction without environmental harm, the Flambeau mine in Wisconsin. That seemed to be true shortly after the mine was closed but a few short years later, levels of copper and zinc toxic to aquatic life were found in half the samples of surface water surrounding the mine.

The Flambeau mine, operated for only five years, was tiny (32 acres, I think), dwarfed by the proposals of PolyMet and Twin Metals Minnesota. Yet, the Flambeau mine, the industry's poster child, was found by a federal court in July, 2012 to have violated the Clean Water Act several times.

The Commissioner's belief in the Immaculate Extraction ought to be of concern to you because of Minn. Stat. § 93.49 (2012). It says:

The commissioner shall require a bond or other security or other financial assurance satisfactory to the commissioner from an operator. The

commissioner shall review annually the extent of each operator's financial assurance under this section.

An operator's compliance with its permit and with environmental law is what is being "assured" here. And it is up to the commissioner to decide. Will a commissioner who believes in the Miracle of the Immaculate Extraction be tough on a mine operator to prove its compliance and back it up with financial assurances, or will he accept the blandishments of the mining company on faith?

It's a critical question that we'll explore more next time.

Begging your pardon, Tom

Says the Black Swan

Steve Timmer

December 17, 2013

Of the 2,200 page <u>Supplemental Environmental Impact</u> <u>Statement</u> issued on Friday last, DNR Commissioner Tom Landwehr said, it is "not a decision-making document."

The public might be confused into thinking it is, Commissioner, because it's the last one we're likely to see before the decision is made by you and others whether to issue permits to mine. It's the final document we'll be able to comment on before the whole thing gets taken private. [Comments were taken on the <u>Final Environmental Impact Statement</u>, *Ed.*]

And Commissioner, you seem to be a believer in the Miracle of the Immaculate Extraction, which concerns a lot of us, *um*, a lot.

So you can see why we're leery of your remarks. The <u>Star Tribune editorial writers swallowed it</u>, more or less, so good on you for that, I guess. That's also <u>the view of Frank Ongaro</u>, the executive director of <u>MiningMinnesota</u>, one of those no-visible-means-of-support Astroturf organizations you hear so much about.

Lee Schafer put his finger on it, though, in a recent column

in the Star Tribune. In 2,200 pages, <u>PolyMet says almost</u> nothing about how it is going to assure us that it will keep the place clean, especially after it leaves.

The issue is one of the most important in the whole decision, and I don't know about you, but I am not willing to leave it to backroom discussions between Tom Landwehr and the stock-optioned Brad Moore (Exec. VP of PolyMet and former MPCA Director under Tim Pawlenty).

The PolyMet company that holds the mine assets in Minnesota is what can, as I said before, charitably be called a shell. It could never, in its entire miserable life, put up an adequate financial surety for the 200 to 500 years of water clean up after the mine closes. Even AIG wouldn't do it. And that should tell you something.

PolyMet's water treatment plan relies on reverse osmosis, a fancy term for squirting water through a canister filled with media to catch the bad stuff. And by all accounts, it works pretty well *if*, and it is a really big *if*, you catch all the water and run it through the process.

And as long as the pumps are running.

And nothing goes unexpectedly wrong.

One thing you can count on in any human endeavor, though: things will go wrong, sometimes in catastrophic and and unpredicted ways. Just ask the Black Swan.

Even discounting the Black Swan, there are lot of entirely predictable ways things can and — let's be direct — will go wrong. The tailings basin that PolyMet is relying on may fail, catastrophically, or incrementally, as it is already doing. Sulfides that leach from rainfall on Brimstone

Mountain may enter the water either directly on the surface or though fissures in the bedrock.

But here's the one you can count on: when the mine closes in 20 years, after a decent interval, PolyMet will just turn off the pumps. It has happened many times around the country. One of my favorite stories about shutting off the pumps happened in South Carolina, not that long ago. A company called Nevada Goldfields, Inc. opened an open pit mine, and before long the whole thing became a cropper. The mine operator, undoubtedly a junior mining company, just like PolyMet, went bankrupt. It had a spiffy reverse osmosis water-cleaner-upper, too. The manufacturer Siemans was really proud of it:

Challenge

In order to expand operations and maintain a water balance in South Carolina's wet climate, Nevada Goldfields' Barite Hills [sic] gold mining operation required a treatment plant to handle its wastewater. At this mining site, the company extracts gold from soil using a high pH cyanide leaching solution. The process generated large volumes of cyanide and metal laden wastewater, which they had been storing onsite. Nevada Goldfields needed to reduce the levels of many heavy metals to the part per billion (ppb) range.

Solution

Nevada Goldfields investigated several technologies that would reduce the metals to acceptable limits. Treatability testing showed that a combination of reverse osmosis and ion exchange reduced metal levels to meet the required limits for all parameters of

concern. Installation includes a full-scale, 25 gpm system with two multimedia filters to remove metals and solids to less than 1 mg/L, two carbon adsorption filters to remove organic contaminants and finally, reverse osmosis and ion exchange equipment to remove salts, metals and dissolved solids before the water is discharged into the environment. The reverse osmosis concentrate is rerouted to holding ponds at the site.

Results

The system has been operating since December 1994. Siemens Water Technologies, formerly USFilter, and Nevada Goldfields worked together to value engineer [the whole deal was "value engineered" all right] the treatment system, thus providing the necessary procurement flexibility to minimize capital expenditures. To best meet its financial objectives, Nevada Goldfields purchased the multimedia filtration and carbon adsorption equipment. They lease the reverse osmosis unit and buy the ion exchange canister services from Siemens.

Siemans wasn't so proud of of its reverse osmosis system that it continued to run it after Nevada Goldfields went bankrupt. Oh no. A few years later, the mine got a new name: Superfund site.

PolyMet will go bankrupt, too. After the mine closes and all the precious financial fluids have been drained out of it, there is no reason for its parent, and its real parent, Glencore/Xstrata to keep it alive.

Then it will probably get a new name, too!

Talk to the experts!

Steve Timmer

January 25, 2014

The Star Tribune reports that it was revealed by the Minnesota DNR that the "water model" of the flow of water onto and off of the proposed PolyMet mine site is based on thin data. So thin that it is only one year's data, 1984, and it is being used to predict 200 to 500 years of runoff into the future.

Outrageous.

The data isn't only thin, it is apparently inaccurate by a factor of three in terms of recent water flow measurement. 1984 was a low-flow year. (Which is suspiciously convenient, for reasons that will be apparent.) Even the DNR admits it's a big deal.

New data on the flow of the nearby Partridge River indicate that some of the major assumptions used in the analysis may be three times too low, which would throw off many of the conclusions about the mine's potential impact on water. Fixing it could require redoing the complex computer model the entire analysis is based on, officials said.

It may be safely assumed, friends, that "throw off" means "seriously underestimate."

Environmentalists have been raising alarms over the adequacy of the data for, well, *years*.

"We have tried to raise a red flag on it for a long time," said Nancy Schultz, environmental specialist for the Fond du Lac Tribe of Chippewa, which has been a participant on the environmental analysis along with other tribes and state and federal agencies. "This is one of the key parameters that you build a model on."

But never fear, the DNR's ramrod for the project says the DNR is *on it*!

Steve Colvin, who has headed the environmental review for the Minnesota Department of Natural Resources, said state scientists are now reviewing the analysis to determine whether it needs to be redone.

"That's one of the things our experts will have to evaluate," he said. "Do they think there is likely to be a sufficient difference such that we would remodel it?" He said that building a model with the new data could take "some months. I don't know if it's a few or several."

The glitch *came to light* [a curious statement in light of Nancy Schultz's remarks above] just as thousands of people are weighing in on it during the legally required public comment period now underway for the \$650 million project.

But here's the best part: Colvin says that the same "experts" who missed the issue in the first place will be tasked with deciding how big a problem it is. Swell. This

should fill you with confidence, friends. It certainly fills PolyMet with nonchalance.

Bruce Richardson, a spokesman for PolyMet Mining Corp., which has proposed the mine, said, "It's premature for us to speculate on what the DNR might or might not do with the information they are gathering."

No biggie. It'll be handled. Yeah, right.

But according to Aaron Klemz, the Communications Director for the Friends of the Boundary Waters (and formerly a writer at LeftMN), a coalition partner in Mining Truth, here's why the model is critical.

PolyMet's model assumes that there is little groundwater moving through the site. As a result, the model shows water moving very slowly, and pollutants sticking to soil instead of moving with the water. Sources of polluted water at PolyMet's site include the mine pits, the piles of waste rock, and the tailings basin. PolyMet's current model shows polluted water taking decades, if not centuries, to reach nearby rivers from these sources.

If PolyMet's model is wrong, and there is more groundwater flowing through the site than the model assumes, the polluted water from the pits and waste rock will move more easily through the soil, and reach lakes and rivers more quickly. The water could also carry more pollutants than the model predicts.

It will be a cold day you know where before we should permit somebody to flim flam us out of Minnesota's clean water patrimony.

Words designed for eating

Steve Timmer *January 28, 2014*

As many of you know, friends, word circulated last Thursday that PolyMet's "water model" for predicting pollution from its proposed open pit mine was, to put it charitably, bogus. To predict pollution for the next 200 to 500 years, a single dry year, 1984, was chosen as the data set. You don't have to be much of a statistician to see how this might be a problem.

Taking a single set of dodgy data and using it to explain what is going to happen for 200 years or more is engineering malpractice.

It is a gift she shares with the Minnesota DNR's Steve Colvin, who said, in response to receiving the news about the model, said, *Oh*, *what the hell*; *it ain't no big deal*.

"I doubt that it's a deal breaker at all," Steve Colvin, who heads the PolyMet review for the DNR, said Thursday. He said it's not yet clear what impact the flow data will have on the environmental review going forward "but it's something we'll have to look at and evaluate."

Steve is just the kind of public servant upon whom we can rely to protect Minnesota's patrimony of clean water from the rapacious grasp of the mining companies.

Bwahahahahahahahaha.

But maybe <u>Steve was just misunderstood</u>.

"I can understand where some of the confusion comes from. In fact, in one of the preliminary drafts we didn't have the wording quite right on this issue," said Steve Colvin, deputy director of the DNR's Division of Ecological and Water Resources who is overseeing the EIS.

They made the embarrassing mistake of telling the truth.

In court, there is a special kind of witness who will say anything — and everything — in the hopes of finding something pleasing to the judge or jury.

These people are known as liars and fools.

PolyMet spokester Jennifer Saran said, *Well, don't worry about the time frame; we'll be around to take care of it.*

"The real data [after the mine is dug] will give us a much better idea of what the future looks like," said Jennifer Saran, PolyMet's director of environmental permitting and compliance.

She said estimating how long water treatment will be needed is beside the point because the company will offer financial guarantees to treat polluted water — forever if necessary.

"We're prepared for treating the water for as long as it takes, and financially assuring the money that it would take to treat that water, and we know the treatment works to meet water quality standards so that the time frame is not really something that we have to know," she said.

And by the time we know the time frame, the PolyMet shell that owns the mining property will be deader than mackerel, or maybe a poisoned walleye or smallmouth bass.

Presently, PolyMet would have trouble guaranteeing a car loan without help from its practical parent, Glencore Xstrata. The idea that PolyMet has the financial strength to insure Minnesota's clean water into the future is preposterous and laughable. All of PolyMet's assets are pledged to Glencore for loans it made to PolyMet.

When deciding whether Colvin and Saran should be made to eat their words, consider this: Freedom Industries.

Named, apparently, for its ability to dodge environmental responsibilities, it did the only responsible thing when it dumped tens of thousands of gallons of toxic chemicals into the Elk River in West Virginia. It went bankrupt, leaving property owners and water users downstream holding the bag for, including, health problems of people who drink the water, or who have to buy drinking water for an unknown period of time.

And we have <u>another bankruptcy example right here</u>, too, LTV Steel. In fact, the crushing plant that PolyMet owns — and is mortgaged to Glencore — used to be an LTV facility.

LTV Steel Mining Company began operation in 1957 as the Erie Mining Company with strong ties to Cleveland Ohio steel milling interests. LTV is a

classic example of the multilayered corporate structures that have dominated the mineral extraction and milling industry. As a separate subsidiary it was designed specifically to run out the marginal iron ore beds lying south and slightly east of the rich deposits of iron ore in Mesabi Range. Once the quality of the ore had played its way out, LTV filed bankruptcy to avoid ongoing liability. Investors made their money and then, through bankruptcy, they were shielding their investments from future liabilities.

Just as PolyMet is designed to shield Glencore Xstrata. The PolyMets of the world even have a special, dismissive name: <u>junior mining companies</u>.

It is apparent that even at this late date, neither PolyMet, nor the people who are supposed to regulate it and keep our water safe, have any understanding of the Pandora's Box they are about to open.

Update:

At the DNR's comment session at RiverCentre on January 28th, a member of the DNR's communications staff pulled me aside and said that I was harsh and personal in my remarks here about Steve Colvin, and I acknowledged that both things were true.

But as I have watched this process unfold, I become less and less sure that the people charged with consideration of permits to mine have a complete understanding of, or a willingness to make a complete accounting of, the environmental, financial, and economic risks to the region and the state, of a sulfide mine. In fact, I am pretty sure they don't and won't. But they're the same people who will decide when PolyMet has provided sufficient "financial assurances" to protect the state from environmental disaster.

Well, lots luck, friends, lotsa luck.

The DNR's cold comfort

Steve Timmer

February 1, 2014

Here's the lede from a <u>Charlie Pierce post</u> Friday, January 31st.

It has been amusing to watch the local politicians and government officials in West Virginia try to comfort their constituents, while simultaneously keeping faith with the corporations to whom they have been whoring out the state for two centuries, including the hilariously named — and now conveniently bankrupt — Freedom Industries, which poisoned all the water in the state.

And as Pierce points out, <u>people as far downriver as</u>
<u>Cincinnati</u> (on the Ohio River which is, of course, a
tributary to the Mississippi) are leery of taking showers
because of the risk of aerosolized formaldehyde, a known
cancer risk.

"State officials" say, *Not to worry! Drink the water; it's fine!* But not everyone thinks so.

State officials in West Virginia say that in most areas, they can no longer detect any of the industrial chemical MCHM that spilled into the water supply

recently. They say the water is safe for people to drink and use — including most [*most?*] pregnant women. But other public health specialists say they don't trust these assurances.

"I think there's no way to know what the safe levels of the chemicals are at this point," says Dr. Rahul Gupta, director of the state's largest public health department. He's in charge of protecting 250,000 people whose water was affected by the spill.

No matter what federal and state officials say, Gupta says his own family doesn't trust the water supply. The water in his home still has a chemical smell like licorice, he says.

He and his wife, who is also a physician, have two teenage sons.

"They have decided not to drink the water at this time," Gupta says. "I have personally tried to drink the water. The smell just ... prevents me from drinking the water, unfortunately."

It's safe, just repellant! Hold your noses and drink it, people, because, well, freedom!

The chemical spilled by Freedom [!] Industries apparently breaks down into, including, formaldehyde. And guess what, formaldehyde has been in found in drinking water samples. "State officials" say, *Nah*, *couldn't be! It must be from something else!*

You really cannot make this up. But this is the state of regulatory America. But at least we're free! Free, that is, to go out and buy our own drinking water. Many — many — years ago, when I was fresh-faced student in college, a

professor described air and water as "free goods." I wonder if they do that anymore?

And I don't know about you, but this surely reminds me of the last week's events in Minnesota, too. It is pure, plain, and simple, a cautionary tale, if we only but pay attention to it.

It was recently reported that the "water model" on which the entire PolyMet SEIS is based, and on which we are are to figure out what is likely to happen in the next 200 to 500 years, is based on data from a *single*, *dry year*. Not only that, but the data from that year is junk, or we suspect that it is.

But we were told, *Hey, it's all good! Not to worry! Trust us!*

Trust the regulators! was a theme echoed by the slavering herd of <u>pro-mining pols</u> at the DNR's comment meeting at the RiverCentre (a loathsome word, but that's for another day) on January 28th.

At that meeting, a representative of the DNR complained to me that I was being direct, confrontational, and personal with my comments about DNR personnel's — specifically Steve Colvin — response to criticism of the water model.

All true. I have no personal beef with Mr. Colvin. But his dismissive attitude about obvious defects in the foundational model of the SEIS ought to call him in for criticism from some quarter, anyway. He's the project manager of the whole kit and kaboodle, not just some laborer in the vineyard at the DNR.

And just imagine it, a few years from now, the PolyMet mine and plant are humming along, and increased levels of

mercury or other heavy metals are found in river samples, or the pH of the Embarrass or the Partridge Rivers changes. What's the response from PolyMet and the DNR and the Minnesota Pollution Control Agency?

Of course, there will be a joint news conference to announce the closure of the mine until the problem is rectified, and permanently if it can't be.

Do you doubt that? Well, so do I.

Just like West Virginia's formaldehyde, the mining company's game will be to blame it on somebody else.

And with a bunch of regulators who smile with approval at a water model that would come in dead last at a junior high science fair, it'll probably work.

Brad Moore: We are not a shell!

Steve Timmer

February 13, 2014



Blessed Financial Assurance, PolyMet is Ours

On the afternoon of February 11th, Minn. House Rep. and Chair Jean Wagenius convened a hearing before the Environment, Natural Resources, and Agriculture Finance Committee on the topic of the "financial assurances" required of PolyMet Mining Corp./Inc. as a condition precedent to receiving a permit to mine. <u>As the linked story in the Star Tribune recounts</u>, the hearing was packed and rather testy.

According to the article:

If [state regulators] ask PolyMet to post too large a financial guarantee, the project may not attract the next \$450 million in investment PolyMet is seeking. If they ask for too little, then taxpayers [not only, even especially, taxpayers, as we'll see in a moment] someday may have to pay the price of polluting one of the most beautiful [and environmentally fragile] corners of the state.

So it has to be just right, just like Baby Bear's porridge! But by law, the financial assurances have to be adequate to do the job, regardless of their effect on investment. In other words, the regulators must not accept inadequate protection to encourage investment. Jess Richards, the director of the Land and Minerals Division of the DNR, at least seemed to recognize that:

[] They [the DNR] said the plans must be adequate enough to protect the state, regardless of the financial impact on the company.

"We assume PolyMet has done its homework on its profitability and the protections that need to be in place before mining," Richards said.

Which is interesting, of course, since in its most recent financial statement for its fiscal year ended January 31, 2013 (in other words, it's a year old), PolyMet lists less than \$10 million in cash or cash equivalents. That appears to be its approximate annual burn rate without mine operations.

Financial assurances have a couple of important components: assurance of land reclamation after mining and covering contingencies for mine maintenance and pollution. At the hearing, figures of \$200 million for each item was mentioned. [Later estimates put those figures much higher, *Ed*.]

PolyMet is presently a little, *um*, short, a fact that committee vice-chair Rep. Andrew Falk noted, which prompted EVP Brad Moore to say — rather huffily — that PolyMet is not a shell company.

Well, it sure ain't a mining company, either.

Director Richards said that the DNR was looking around the "western" part of the country for comparable mines to determine adequate financial assurances. (The article says "around the country," but omits the modifier "western" from Richards remarks. This is important. What is the difference, for example, between Butte, Montana (home of the Berkeley Pit, where swans land and die) and Hoyt Lakes, Minnesota? Hoyt Lakes is a lot wetter, meaning sulfides, heavy metals, and polluted water will move much more easily.)

One of the more ironic moments at the hearing to me was when Director Richards endorsed heartily reverse osmosis as a method of water cleanup. Why, I have a reverse osmosis system for drinking water in my own house! he says.

Swell. One of the guys in charge of whether PolyMet gets it good enough already can't drink the water out of his tap.

Maybe the aquatic invertebrates and the little fish in the Embarrass and Partridge Rivers can get their own personal reverse osmosis systems, too! Problem solved. And just think of the business potential for some ambitious entrepreneurs!

Director Richards also described a colorful and intricate ballet of "financial assurance tools" over the life of the project. They would come and go as necessary and as the need arose or became apparent. And if that's the way it works out, we are sheep to be shorn:

Ron Sternal, a retired Wall Street executive from St. Louis Park, urged the DNR to hire "sharks" to help them negotiate with the mining industry, and that the time to do it is now while the state still has leverage.

Get what we need in cash now was the refrain from several witnesses. And get a guaranty from PolyMet's principal shareholder while you're at it, added several others (<u>including me</u>). Let's be direct: PolyMet is Glencore's tame rabbit. It's an odds-on favorite to be acquired and run as a subsidiary if the mine is a go.

And be sure to get a cushion, too.

Once a permit to mine is issued, we'll have to go to hell and back to get it revoked if there's a problem. The DNR seems to be a complete *ingenue* about this.

But perhaps the most troublesome part of the hearing was what was not discussed.

In addition to massive contingent liability to the state, to which financial assurances are addressed, a PolyMet copper sulfide mine could cause massive damage to the environment, to wild rice and other aquatic vegetation, to aquatic invertebrates, to the little fish that eat those invertebrates and the big fish that eat the little fish, to waterfowl, to the martins, and muskrats and beaver, to riparian landowners, to people who depend on the watersheds for drinking water and who don't have — at

least yet — their own spiffy reverse osmosis water filtration systems: in other words, all of the flora and fauna in the Embarrass and Partridge River watersheds, which flow into the St. Louis River and thence into Lake Superior.

This is an extremely sobering proposition. And it isn't an idle concern. The country is littered with mining companies that went bust and "matured" into Superfund sites. (And all Superfund does is the cleanup, too, not compensating the public for its losses.)

What protection exists for these interests? I regret to say, my friends, none. They could be wiped out in a PolyMet bankruptcy, or after the company is liquidated after the mine closes, *in a moment*, *in the twinkling of an eye*, to quote the prophet Isaiah. The coal industry supplier and chemical company Freedom Industries is a recent and instructive example of how easy it is to shed environmental liability to the public.

This is the true meaning of the term "junior mining company." Or, as Rep. Falk called it, a shell.

Uh, Minnesota, about that bag you're holding (Part 1)

It's really two bags

Steve Timmer

February 24, 2014

There has been a lot of discussion of late — and an actual hearing at the Legislature — about the financial assurances that the DNR ought to be requiring of PolyMet Mining Corp./Inc. before it/they are permitted to dig the Great Sulphur Lagoon and build Brimstone Mountain. Oh, and pump sulphurous tailings into an already-creaky taconite tailings basin that Cleveland Cliffs was *really glad* to get rid of.

In recent days, the editorialists at the Star Tribune have said, in essence, <u>Don't be chumps about this, Minnesota</u>. PolyMet, and the mining companies in general, don't have our best interests in mind. They just want to mine the ore as cheaply as possible. Get all the assurance up front.

Since the ore is so low grade, the mining companies have extra incentive to do it on the cheap. And if we permit it — so to speak — we'll have nobody but ourselves to blame when it goes wrong, as human endeavors always do.

To err is human, but in this case, to forgive would be stupid. And to not be fully "assured" up front would be as

good as forgiving.

The liability for cleanup and reclamation is what is called, in economic terms, an "externality." An externality is a cost of an economic enterprise potentially borne by somebody other than the enterprise, typically the public. Acid rain, poisoned water from chemical spills, and industrially-fouled air are all examples of externalities.

The Minnesota law requiring adequate financial assurances is directed at trying to make sure that a sulfide mine pays its own freight and doesn't just walk away from liability to the State of Minnesota.

But it is only half of the picture. The other half of the picture is the West Virginians lining up to get potable water. "Adequate financial assurances" are only intended to protect the state itself against the cost of cleanup or reclamation if the mining company goes bankrupt or just walks away, especially after the mine closes.

Adequate financial assurances do nothing to protect the public from the consequences of environmental disaster. Nothing.

The recent case of Freedom Industries — clearly an ingenious name that makes the whole fiasco sound like a giant Orwellian joke — is very instructive. As the linked story relates, at a Charleston (W.Va.) Kroger, a police officer was posted as people scrambled for bottled water after the spill of a toxic chemical into the Elk River by Freedom Industries.

When it became clear that the economic consequences of the spill were widespread, not only to individuals, but to restaurants, hospitals, and other businesses downriver, Freedom Industries did the patriotic thing: it went bankrupt.

The prospect of a Freedom Industries scenario in Minnesota on the Partridge or Embarrass Rivers, or in the groundwater in the whole area, especially a stubborn, chronic, sulfates or heavy metal problem, ought to dampen your ardor for sulfide mining in Minnesota, especially if you aren't one of the people protected by "adequate financial assurances." And to repeat myself, that's everybody.

There are a couple of gaping holes in the regulatory framework for sulfide mining in Minnesota. I've just described one of them; more about both of these holes will be forthcoming in another story.

Uh, Minnesota, about that bag you're holding (Part 2)

It's really two bags

Steve Timmer

February 25, 2014



Lining up for water (www.dailymail.co.uk).

Last post, I promised more information about the State of Minnesota's gaping holes in its regulatory scheme for sulfide mining. I hinted at one of them: inadequate provision for protecting the public — not just the state — from the harm of mining activity.

Before continuing, however, I feel compelled to point out some of the vessels that West Virginia citizens shown above were lining up to carry water in after the Freedom Industries spill in the Elk River. There are several nonfood grade buckets (don't brine your turkey in one of these, either, or the orange one, for that matter), a couple of gasoline containers, and what looks like a kitty litter bucket. But don't laugh, my friends. How prepared would you be if suddenly you couldn't drink — or even touch — the water coming out of your tap?

It is pretty common to require public liability insurance for a hazardous activity (maybe not in W. Va., though), especially as a condition to the issuance of a permit to conduct that activity. Minnesota does, as a matter of fact, require a "certificate of insurance" as part of an application for a permit to open a sulfide mine. Here's the language from Minn. Rule 6132.1100 about what is required:

a certificate issued by an insurance company authorized to do business in the United States under Minnesota Statutes, section 93.481, subdivision 1, clause (2), confirming that the applicant has a public liability insurance policy in force for the mining operation for which the permit is sought or evidence that the applicant has satisfied other state or federal self-insurance requirements, to provide personal injury and property damage protection in an amount adequate to compensate persons who might be damaged as a result of the mining operation or any reclamation or restoration connected with the operation

In an amount "adequate to compensate," hmmm, how

much is that? The rule doesn't say. I will bet you a quarter that the DNR doesn't have a clue, either. Maybe it's just for slip and falls during school tours at the mining site!

Whatever this insurance is, it must be maintained, *yessiree Bob*. Proof of that has to been in the annual report, <u>filed in duplicate with the DNR</u> by March 31st of each year. I don't know about you, but I find the fact that the report must be in duplicate to be oddly reassuring.

If you follow the link to the rule, you'll see that the insurance required in the annual report is the same as the original insurance required in the permit application. There is no allowance, apparently, for inflation or the discovery of conditions unanticipated in the original permit application.

Significantly, and unlike the adequate financial assurances requirement for the state itself, there is no fund or other "assurance" that the mining company will maintain the insurance after the mine closes and the local mining subsidiary is liquidated, or is otherwise unwilling or unable to maintain the insurance.

Parenthetically, sulfide mining is different than a lot of other hazardous activities that require insurance, because of the long liability tails. If you tell a firecracker manufacturer to cease operations, and it does, the hazard diminishes rather quickly. In the case of a sulfide mine, the hazard probably increases after mine closes.

Even though the mining company permitee's requirement to file an annual report theoretically continues, *um*, annually, until all of the reclamation is done and the DNR is satisfied that the site is "maintenance free" (after 200 to 500 years in the case of PolyMet), it is frankly silly to

think that an operating subsidiary is going to be around that long to buy public liability insurance.

If the tailings basin at Hoyt Lakes gives way 20 years after the mine closes, chances are there won't be anybody around to buy you a kitty litter bucket, my friends.

Which bring us to the related hole in the regulatory scheme, and this one may be of the DNR's own making.

Since PolyMet Mining, Inc., the Minnesota company that would be the operating mining company, is a shell without the capital to open or run a mine, and its Canadian parent isn't really in any better shape, it seems only logical, reasonable, and well, *bankerly*, to require that the real financial strength behind the whole venture, Glencore/Xstrata, be responsible to the state, and to its citizens, too. In the <u>recent hearing on financial assurances</u>, though, the DNR said, *Nah*, *parents and subsidiaries are one thing*, *but shareholders are another*.

It was a curious remark, in light of the fact that a parent corporation *is* the shareholder of a subsidiary. The last time I looked, Glencore had invested, in debt and equity, about half of the market capitalization (what the company is worth on the stock exchanges) of PolyMet the parent company. [Glencore is PolyMet's majority shareholder now, of course, *Ed.*] Glencore also has an "off take" agreement for the output of any mine that is built.

The only reason anybody would ever buy shares of PolyMet Mining Corp. — assuming you are not Glencore — is the hope that Glencore acquires the rest of the company in a "strategic acquisition."

It is foolish and chump-like behavior not to acknowledge

the Glencore elephant in the room. Without Glencore, PolyMet would fold like a cheap umbrella. No banker would loan money to PolyMet without Glencore's guaranty; why should we? Pretty clearly, the DNR has the authority to make Glencore come to the table.

And if Glencore *is* brought to the permit table, it just might be obligated to maintain the insurance to buy you that kitty litter bucket.

Dr. Pangloss goes to work for PolyMet

And he's been lecturing the media

Steve Timmer *March 14, 2014*

According to some media reports, the PolyMet SEIS prepared and released (at the end of last year), four years after the first one flunked, <u>gets a passing grade!</u>

After four years and \$22 million, PolyMet Mining Corporation's proposed copper mine in northeastern Minnesota cleared a major hurdle Thursday, when the U.S. Environmental Protection Agency gave plans for the controversial project a passing grade.

But, no, it didn't.

The federal agency rated the original 2009 document as "environmentally unsatisfactory — inadequate," or "EU-3," the lowest possible grade. On Thursday the EPA gave the update released in December a substantially better rating of "environmental concerns — insufficient information," or "EC-2." That's just one notch below the best rating it realistically had a chance of getting, according to state and company officials.

But what's an EC-2, really?

According to the EPA, which we may take as the authority over say, PolyMet or even the DNR here, an EC-2 means "environmental concerns – incomplete."

Here's the "EC":

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preffered [sic] alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

And here's the "2:"

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Only in a green-sky world is this a "passing grade." Or the world of Voltaire's Dr. Pangloss. *Candide*, indeed.

The continuing concerns of the EPA, which you can read

in its letter at the link above, include water and the clean up thereof. So there is really nothing new under the sun here.

I will write more about those concerns in coming days, but I wanted to be sure that the pro-mining forces didn't take the news stories as a reason to get roaring drunk this weekend.

Hiring more dingoes as babysitters

Steve Timmer

August 7, 2014

Many of you already know about the catastrophic — which seems almost too mild a word, under the circumstances — copper/nickel/gold tailings dam collapse in British Columbia. But if you haven't, according to the *Vancouver Observer*, the Mount Polley mine's tailings dam failed, and "dumped five million cubic metres of toxic waste near the Quesnel and Cariboo Rivers."

Oh, how bad could that be? you say. It sounds as though it will wipe out a 1,500,000 fish sockeye run. But what's that in walleyes? you ask. I don't know the exact conversion rate, but it's probably a lot.

Here's a photo that you can imagine near Hoyt Lakes or Ely.



This is close to the town of Likely, British Columbia. Likely to be deserted soon, that is.

Frankly, it would be easy to burn a few hundred words gagging over this monstrosity. But we have bigger toxic fish to fry.

You see, one of the questions that is often asked *after* something like this happens is: *Jeebus*, *who's gonna pay for this?* The answer, my taxpaying friends, is that nature turns its lonely eyes to you.

Here's a couple of graphs from the *Vancouver Observer* article linked above:

Lastly, there is the question of whether Imperial Metals will have enough money to cover for the damage caused by the tailings pond breach. Although the mine was partially financed by Sumitomo, a large Japanese company, it remains uncertain if Sumitomo would be on the hook for any damage. [It does not

remain uncertain at all; Sumitomo will tell the citizens of BC to take an *effing* hike.] Imperial Metals' stock nosedived 40 per cent following the tailings pond collapse, which compromises the company's capacity to cover the financial damage of the disaster.

A critical problem pointed out in the 2001 report was that the liabilities of BC mines far outweighed the total amount available in reclamation bonds. The report put BC mine reclamation liabilities at \$400 million, but the total available in reclamation bonds was less than half that amount, at just \$172 million. Another question is what would happen if Imperial Metals went bankrupt [not really if, but when], as the Montreal, Maine and Atlantic did after the crude train explosion at Lac Megantic, leaving taxpayers on the hook.

A response from the BC government regarding reclamation bonds is pending.

One can hardly wait for the BC government response, eh? "Reclamation bonds" is Canadian for financial assurances, a matter mostly ignored by the regulators, particularly the Land and Minerals Division of the DNR in Minnesota, so far, in *L'Affaire Polymet*.

Just insert the Land and Minerals Division of the DNR for the BC government above. I hope that you are beginning to see the problem. The Land and Minerals Division is the bunch that said, at a hearing before a committee of the Minnesota House of Representatives earlier this year, that it couldn't *possibly* ask the principal shareholder of PolyMet Mining, the international mining consortium Glencore, to backstop PolyMet for its environmental liabilities.

Sumitomo, Glencore: let's call the whole thing off.

When you hire dingoes as babysitters, chances are the baby will be eaten. That's John Oliver's wonderful image for giving the wrong people a public charge.

There is another interesting bit in the *Observer* article, though, that deserves a quote:

Mount Polley was at one point at risk of closing during the late 1990s, due to low commodity prices. But the BC government stepped in via the Job Protection Commission in 1998, which helped keep Mount Polley and several other mines open by conducting studies and designing "an economic plan to allow the mine to continue operating." The move was said to have saved over 200 jobs at the time.

NDP MLA Mike Farnworth, who was employment and investment minister at the time, said he believes [but his recollection is hazy!] no environmental regulations were relaxed in order to keep Mount Polley open, however. "I believe the changes were more on the financial side," he said. The government had proposed to make some changes to regulations and tax policies to help some mines stay in business during a time of plunging copper prices and a recession in Asia.

Replace Mike Farnsworth with names like David Dill, Tom Rukavina, Tony Sertich, and Rick Nolan. These are people who will reliably bend over for the mining companies; the Mount Polley mine ought to telegraph to you the consequences. PolyMet wants to pour its toxic sulfide sludge into an already creaking and leaking tailing reservoir that it bought from LTV Steel's bankruptcy. And this is true, I swear it, although I wish it wasn't: the same firm of engineers who designed the Mount Polley tailings basin are expert consultants to the DNR on the PolyMet tailings basin.

Swell.

And you know, as well as you know your dog's name, there will come a time when PolyMet, or the mining company that bought *it* out of bankruptcy, comes hard hat in hand to the regulators, the IRRRB, and the legislators and says:

You must release us from some of this onerous red tape that Mike McFadden and <u>Dario Anselmo</u> used to talk about all the time on the campaign trail. If you don't, the miners get it.

Then the regulators, the IRRRB, and the legislators will line up — in a public ceremony full of pageantry — for their rogering. Well, not really; it'll be done behind closed doors, as I am sure you are all well aware.

It's happened before.

The entire permitting process for PolyMet has been done logically backwards. The first questions that ought to have been asked are:

How are you going to pay for the messes you make? How are you going to protect the government, the Fond du Lac Band, the landowners, the resort businesses, the water, the fish, the wild rice? And why are you telling us that the only party with an 800 FICO score isn't coming to the table?

But financial assurances have been consigned to afterthought. If a Mount Polley happens in Minnesota, though, somebody or some bodies better get ridden out of town on a rail.

How do you drown-proof a mine? (Part 1)

It's the question on everyone's lips

Steve Timmer

October 28, 2015



The Gilt Edge Mine

As a preliminary matter, you have to wonder who got rubbed off the sign in the photograph above. It seems that the EPA has trouble maintaining the sign for this Superfund site; you have to wonder about the mine itself.



DNR commissioner Landwehr says legacy issues of mines require a bankruptcy-proof reclamation plan for Polymet



5:07 PM · Oct 27, 2015 · Twitter for iPhone

Tweet from @JohnCroman

The tweet above is from a presser at the end of a field trip the Governor and the Commissioner, and MPCA Commissioner John Linc Stine took to the Gilt Edge Mine disaster in South Dakota on October 26th.

A "bankruptcy-proof reclamation plan" is a great idea, but it's harder than it looks. Let's just hope the Commissioner sticks to the sentiment.

Bankruptcy has always been a pesky problem for creditors or claimants of all kinds. The earliest way to deal with the problem was to require debtors to sign an agreement not to go bankrupt. That isn't enforceable, of course.

No loan agreement is complete, though, without a sheaf of paper dedicated to limiting or eliminating the ability of a debtor to go bankrupt or seek the protection of bankruptcy laws. It's all completely useless.

What else can be done?

One easy step would be to get the guarantee of the "senior" mining companies that the "junior" mining companies front for. In the case of the junior PolyMet Mining, that would be Glencore, PLC. Glencore is not a majority shareholder of PolyMet [It is now, *Ed.*], but between the capital it has invested, and the money it has loaned to PolyMet, Glencore's footprints are all over PolyMet's balance sheet.

At a hearing before a Minnesota House committee in early 2014, the chief of the Land and Minerals Division of the Department of Natural Resources, Jess Richards, dismissed the idea of a Glencore guaranty. Perhaps, based on the Commissioner's remarks, the DNR's thinking has evolved since then. Say, was Jess Richards on the field trip?

Not that a guaranty would be a panacea, given the near tanking of Glencore itself in the stock market recently. But it's a start.

In the private financial sector, another thing that's often done is to get a security interest in the assets of the debtor.

A security interest survives a bankruptcy, and it gives the creditor a resort to the assets of the debtor to satisfy the creditor's claims. Give the State of Minnesota a first lien in all the assets of the mine, real estate, equipment, inventory, and all intangibles, including cash, now owned, or hereafter acquired, as we say in the biz, to satisfy environmental claims.

Glencore has a first lien in all of PolyMet's assets right now, so it must think having one is pretty slick. If there was a mine disaster with the current capital structure, by the way, Glencore would get its loans back before the state got any reclamation money or anybody downstream got any money for their dead wild rice.

But you say, that would never work! No bank would ever loan money to PolyMet if the state had a first lien in everything. That's true, but it should tell you something, too.

It should tell you that unless the state and all the people with the dead wild rice are the tail-end Charlies, the mine won't work. This is a brutal, but simple truth.

So, who wants to be the stuckees? PolyMet and Glencore want it to be you, my resident and taxpaying Minnesota friends.

We could also treat PolyMet the way we treat insurance companies and banks, requiring it to establish liquid capital reserves sufficient to satisfy potential claims before operations commence, while they continue, and for so long thereafter as the threat of acid mine drainage continues after the mine closes.

The dinky little Gilt Edge mine that the Governor and the

Commissioner visited this week is about to get \$50 million to help clean it up. Think what might be required to treat water indefinitely and deal with a disaster like Mount Polley from the Great Sulphur Hole and tailing cesspool that PolyMet wants to create.

If the reserves fell below the required amount, mining stops and a liquidating receiver comes in to auction it off.

But just as the case of a lien for the state, if this is unworkable, it demonstrates that the mine is uneconomic when its true costs are accounted for.

I have some more ideas about this, but they'll have to wait until next time.

Update

Reader Alan suggests:

The state would be way better off to heavily subsidize some other non-polluting industry to locate on the range. At least if it failed or went bankrupt, we wouldn't be paying for cleanup for the next several dozen generations or be stuck with cleanup that couldn't be mitigated. Another option would be to do things like they do in the South and get our congress critters to pull strings to locate a giant job-creating military base up there.

I hear there may be a new blimp repair station needed soon. Get on this right away, Rick Nolan! Alan's right; it's much better than mining.

How do you drown-proof a mine? (Part 2)

It's still the question on everyone's lips

Steve Timmer

October 30, 2015

After touring the Gilt Edge Mine with Governor Dayton, DNR Commissioner Tom Landwehr said, *Boy, we need a bankruptcy-proof reclamation plan for PolyMet*. Or words to that effect.



DNR commissioner Landwehr says legacy issues of mines require a bankruptcy-proof reclamation plan for Polymet



5:07 PM · Oct 27, 2015 · Twitter for iPhone

Tweet from @JohnCroman

Amen, Commissioner, amen. Incidentally, "legacy issues" is a euphemism for "toxic sulfides" or "heavy metal pollution."

But saying it and getting it are two entirely different things. I suggested a few things in Part 1 that ought to be part of any reclamation plan: 1) a guaranty of PolyMet's environmental obligations by its effective parent, Glencore, PLC.; 2) a first lien for those obligations in favor of the state on all of PolyMet's assets; and 3) liquid asset reserves adequate to pay potential damage claims of the state and third parties.

But now, I am about to reveal the best idea yet for helping make sure that the state's taxpayers and citizens have some protection: the IRRRB ought to put the entire Doug Fund up as surety of PolyMet's performance of its environmental responsibilities.

Perfect, isn't it? The present balance in the Doug Fund is close to half of what <u>yesterday's SpottyTM winners</u> say is required to assure mine maintenance after closing (although it doesn't include anything for cleaning up of a major disaster, which also needs to be accounted for).

I think it's a wonderful *Put your money where you mouth is, Rangers*, idea.

For the uninitiated, the Doug Fund is actually the <u>Douglas J. Johnson Economic Protection Trust Fund</u>, named after the long-serving, log-rolling Senate tax chair, Doug Johnson. Doug's a <u>lobbyist</u> for, *inter alia*, mining companies now, of course.

First of all it, it isn't a trust fund, because the people who administer it, the IRRRB, are not *trustees* in any sense of word. They're entrenched and elected politicians, virtual Emirs of Northern Minnesota, patronage peddlers, not servants.

The Doug Fund is one of a half dozen funds that the IRRRB controls. It gets its money, as all the IRRRB funds do, from mining production taxes.

Instead of the taxes that ordinary mortals pay, or even ordinary corporations, the mining companies pay occupation and production taxes. The occupation tax is in lieu of the corporate income tax, and it doesn't bring in all that much money. The production tax is the bonanza, paid in lieu of property taxes — theoretically — and it brings in a lot of money, a portion of which is diverted to the Emirs at the IRRRB.

Believe me, it is great to be an Emir. There is a fantastic amount of ring kissing that goes on. (Some other thing kissing, too.) The IRRRB is a nifty little fiefdom that most people know little about.

All you have to do is fiddle with the per ton percentages a little bit, and the occupation tax gets a lot fatter, and the production tax less so. The tax committees in the Lege are the gates through which legislation to control the rates pass through.

Perhaps you are beginning to understand *why* it is named the Doug Fund.

Anyway, the Doug Fund has salted away about a *hundred and fifty million effing dollars*. One. Five. Zero. Million. Effing. Dollars. The Emirs are scared as hell that the Legislature is going to figure this scam out and conduct a de-Emirization of the entire enterprise.

The Doug Fund would be a great place to start.

If PolyMet and its 300 probably non-union jobs (Glencore hates unions; just ask the Steelworkers: Tommy Rukavina's old union, by the way) are such a great deal for the state, put your Doug Fund chips on the table, IRRRB. It would prove to the rest of us that you're willing to put

some skin in the game.

I have some more about performance bonds, suretyship, and insurance, but that will have to wait for the next installment.

How do you drown-proof a mine? (Part 3)

The denouement

Steve Timmer

November 5, 2015

And here's your trigger warning: this is hard on the DNR.

Here is the observation by DNR Commissioner Tom Landwehr that animates this three part series:



DNR commissioner Landwehr says legacy issues of mines require a bankruptcy-proof reclamation plan for Polymet



5:07 PM · Oct 27, 2015 · Twitter for iPhone

Tweet from @JohnCroman

"Legacy issues" is a euphemism for the poisoning of our wetlands, lakes, and rivers that won't go away. It's a legacy like the fact your great-grandfather, your grandfather, and your father all died of brain cancer, and you probably will, too.

But "legacy" sounds so benign!

Let's return to the thrilling days of yesteryear — or the dead of winter of 2014, anyway — and a hearing before the Environment, Natural Resources, and Agriculture Finance Committee where DNR Director of Land and Minerals, Jess Richards, described the intricate, sultry tango of bonds, hopes, and promises that would keep us all safe.

It was pretty naïve.

I asked the DNR just recently for the written testimony submitted by Director Richards to the committee. I was told he didn't submit any, but I was helpfully referred to a YouTube video. (The video was published by The UpTake.) Heck, even I offered written testimony.

The Environment, Natural Resources, and Agriculture Finance Committee is (or was; it's probably called the Natural Resources Reform and Entrepreneurship Committee — or the Dig It Up and Cut it Down Committee — under Republican leadership) the committee with a principal responsibility for the financial consequences of mining in Minnesota.

I think the failure of the principal agency official in charge of financial assurances to file written testimony before the committee is remarkable, and telling of the fact that financial assurances were — and perhaps still are — an afterthought for the DNR.

The <u>SpottyTM-winning numbers guys</u> were at the hearing, and they said, as they did in the op-ed that won the SpottyTM, "Get the financial assurances in cash, up front." That's the tenor of the first two parts of this story, too.

Why? Because once the mine is open, all bets are off.

Leverage disappears. If PolyMet closes the mine and walks away, there is really almost nothing the state can do to protect itself or its citizens, except dig into taxpayers's pockets.

The abandoned mine won't pay for cleanup, or a disaster, or reclamation. It can't be forced to buy performance bonds or insurance (liability insurance is how ordinary citizens would be protected); there would be no money to do it. Because the closed mine would be a water pollution hazard for up to 500 years — or "indefinitely" as PolyMet and the DNR later helpfully amended their remarks to say — there are no sureties or insurance company who would underwrite the risk, now that AIG is no longer around, anyway.

I fear we are embarked on a dangerous and unknown course, with little thought and no discussion of the specifics of how to prepare for the rainy day that will inevitably come.

Update

And my prediction comes true:



Let the sun shine in

Steve Timmer

September 8, 2016

There have been multiple calls recently for some sunshine on the PolyMet permitting process before the Department of Natural Resources. Sunshine would take the form of appointing an administrative law judge from the Office of Administrative Hearings who would hold hearings on the permit to mine. A record would be made — a public record — and the judge would make a recommendation to the Department of Natural Resources on issuance of the permit to mine.

We already do this on things like pipeline permits and electric transmission routes.

On Monday evening, September 12th, the Duluth City Council will consider a resolution urging OAH hearings on the permit to mine. There is a telephone <u>calling campaign</u> <u>ongoing at the moment</u> to urge the council to call for the OAH to become involved.

The City of Duluth and its citizens are the largest group of downstream interested parties on the issuance of mining permits for PolyMet. Well, and the Fond du Lac Ojibwe, too.

If the consideration of the issuance of the permit to mine

isn't out in the open, where will it be? Well, it will be in the bowels of the Land and Minerals Division of the Department of Natural Resources. When you think of the DNR, you think of protecting flora and fauna and idyllic scenes of fishing, hiking, and camping. But the Land and Minerals Division is of an entirely different sort: it's the *cut it down and dig it up* people.

From my perspective, Land and Minerals is entirely captured the by timber and mining industries that it is supposed to regulate.

I will give you a little anecdote.

In February of 2014, there was a hearing before House Environment, Natural Resources, and Agriculture Finance Committee on the subject of financial assurances that would be required of PolyMet as a condition to its opening of what everyone concedes is probably the most hazardous kind of mining to the environment, perhaps save gold mining. I attended that hearing, and I chronicled it in a story titled Brad Moore: We are not a shell! All in all, it was an illuminating piece of theater.

The first thing to notice about the hearing is that PolyMet's spokesman was its Executive Vice President, Brad Moore. Moore used to work at the DNR and the Minnesota Pollution Control Agency (he was its Commissioner), another state agency charged with being sure that PolyMet doesn't screw it up.

Moore's present job is to oil the waters for PolyMet.

Mr. Moore not the first industry executive who went to finishing school at the DNR or MPCA. Nor, more to the point, will he be the last. Which brings us to the specious remarks of the director of the Land and Minerals Division at the hearing I referred to. In discussing the appropriateness and adequacy of water treatment methods, I noted this:

One of the more ironic moments at the hearing to me was when Director [Jess] Richards endorsed heartily reverse osmosis as a method of water cleanup. Why, I have a reverse osmosis system for drinking water in my own house! he says.

Swell. One of the guys in charge of whether PolyMet gets it good enough, already can't drink the water out of his tap.

Perhaps I'm the only one — but I don't think so — who is unassured by having a Kinetico salesman in charge of the decision on issuing a permit to mine. Especially one who may be angling for an industry job — like Brad Moore's — when he "retires" from the DNR.

If all of the negotiations on the issuance of a permit to mine are buried in the Land and Minerals Division, there won't be a record, or whatever the record is will only — maybe — be available after a long and expensive data practices request. The DNR will only release information grudgingly, and at considerable expense to the person or organization asking for it. (I know this from personal experience.) This is why people like industry flak Frank Ongaro, quoted at the first link above, is so opposed to the idea of OAH hearings. It keeps the riff-raff out, and it keeps the record secret.

Frank also believes, correctly, that Land and Minerals is on his side.

But it is probably not on your side, my friends.

Trust us; we're good for it

Steve Timmer *May 14, 2017*

Minnesota's mining regulators at the Land and Minerals Division of the Department of Natural Resources face a stiff test of fidelity to the citizens of Minnesota as described in an article by Josephine Marcotty in the Star Tribune's paper edition on May 14th. The issue is: what are the financial reserves that must be set aside to assure the state that PolyMet's proposed mine will be cleaned up and closed properly, maintenance free, with no losses to the state?

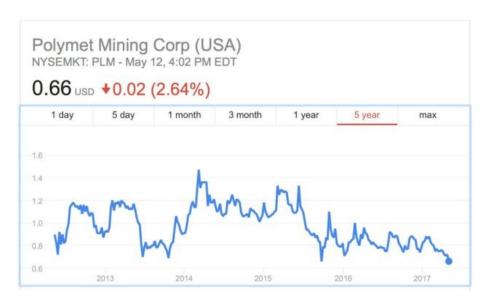
Two sets of experts have looked at the cost of pre-planning PolyMet Mining Corp.'s funeral, so to speak, and the numbers are grim. The state's own retained experts say it's in the neighborhood of \$650 million, while an independent expert, who delivered a presentation at the University of Minnesota recently, said it was more like \$934 million, up front. That is just shy of a billion dollars, people. That is three or four times PolyMet's market capitalization, let alone book value (which is a lot less).

Characteristically, PolyMet's spokesman, Brad Moore — a former DNR and MPCA employee, by the way — says, *Trust us; we're good for it*:

Brad Moore, PolyMet's vice president for governmental affairs, said small and large mining companies can and do find ways to fund financial assurance packages and project construction. PolyMet is in the process of doing that now, he said.

Really what he said was, We don't have the money.

As it stands right now, of course, even the <u>car salesman</u> from Crown couldn't get these guys a loan to buy a used car. PolyMet isn't bankable, and its prospects for raising money in the stock market are dim, too, because its stock is playing the limbo:



PolyMet 5 year stock chart

Understand that sums for financial assurances are in addition to those needed to construct and operate the mine.

The article suggests that the issue of financial assurances presents a balancing test: too little and the state is not protected, too much and the mine won't be built. It has to

be just right!

The DNR, though, is charged with determining what it costs to protect the state, to provide for cleanup, and to leave the site clean and maintenance free. It is not charged with deciding how much of the state's patrimony of clean water it is willing to trade to open a mine.

PolyMet protests that it will leave the site clean as a whistle. If it does, it will be the first time in sulfide mining history that a mining company did. "A mine is a hole in the ground with a liar standing next to it," is a quote attributed to Mark Twain.

Even the closed Flambeau mine in Wisconsin, touted by the industry as the Grotto of the Miracle of the Immaculate Extraction (okay, my term) is leaching toxic heavy metals into the ground water.

You can read about that, and PolyMet's finances, and how miners' hopes and dreams have a way of turning into Super Fund sites at the many <u>LeftMN stories</u> written about PolyMet.

You will read that the aforementioned Brad Moore, at a Minnesota House hearing in 2014, defended PolyMet, saying, "We are a real company." It was sort of like your ten-year-old son telling you, "I am a real man." It's charming, but it's not really true.

At the beginning of the story, I wrote that "mining regulators at the Land and Minerals Division of the Department of Natural Resources face a stiff test of fidelity." I also wrote that Brad Moore, a former Commissioner at the MPCA, is now a senior executive at PolyMet. Former website colleague Aaron Klemz wrote a

story about the exit of Minnesota regulators to the industries they once regulated.

I will tell you quite directly that I think that the Land and Minerals Division of the DNR is entirely captured by the industry it is supposed to regulate, and that it needs to be watched very, very carefully. Our state auditor, Rebecca Otto, summed it up pretty well in the video at this link.

Update

The Mount Polley mining disaster from a couple of years ago, in all of its horror story glory, is the best cautionary tale for what the Land and Minerals Division is playing with here. You can read a LeftMN story about it called "Hiring more dingoes as babysitters."

Former DNR Commish Tom Landwehr

The fate of the headwaters of the St. Louis
River is in Minnesota's hands

Steve Timmer *May 27, 2019*

We need tougher standards in order to protect the area from PolyMet/Glencore mining.

Our environmental laws limit any water pollution and air pollution, and regulate noise, motors, air traffic, roads, bottles and cans, and logging and mining.

But these laws won't prevent massive harm to the Partridge River, the Embarrass River, the St. Louis River, and to Lake Superior, if sulfide-ore copper mining [Landwehr said once, just as an aside, that, "We don't mine sulfides; we mine minerals."] is permitted on nearby lands along rivers and lakes that flow into Lake Superior. A direct and certain consequence of such mining would be water and air pollution; destruction of the forest and wetland habitat of fish, mammals and birds; noise and light pollution; and an array of other industrial impacts that would invade and irreparably damage these waters.

This is the slightest of edit to a couple of grafs from an opinion piece by the astonishingly self-unaware Tom Landwehr in the Star Tribune in the paper edition on May 25th. He wrote it from his new perch as the Executive Director of the Campaign to Save the Boundary Waters.

Landwehr writes (not my parody):

The fact is that Minnesota's state standards are not sufficient to protect the Boundary Waters. Minnesota's rules allow water and air pollution, light and noise pollution and the destruction of forests and wetlands. Minnesota's rules were developed for mines that are located in industrial mining districts, where society has accepted environmental degradation as a consequence of heavy industrial activity and the choice has been made to try to limit but not to prohibit pollution.

There are multiple things to unpack here. He's right about the inadequacy of Minnesota law to protect fragile environmental resources, including the Boundary Waters. But certainly not only the Boundary Waters. If you read carefully, Landwehr is trying to distinguish between the PolyMet project, which he signed off on as DNR Commissioner, and the Twin Metals project.

They are twelve miles apart.

To hear Tom Landwehr tell it, though, the Boundary Waters is a sacred, pristine, virginal jewel, and everywhere else is an industrial hellhole. If you go to the Boundary Waters, though, you will see the very occasional white pine that towers above the rest. They're the virgins; most of the Boundary Waters is second growth. The big trees were

just too little to mess with back when the area was logged off. Imagine what the place looked like with giant stands of white pine.

So, the Boundary Waters was an industrial hellhole once.

When it comes to comparing Twin Metals (really Antofagasta) and PolyMet (really Glencore), we have to compare apples to apples. The Embarrass River is part of Tom Landwehr's industrial hellhole. So is the Partridge River.



Embarrass River – Rob Levine photo

If there is a failure of the PolyMet tailings dam, the toxic sludge will inundate the Embarrass River. Three tailings dams of the type that PolyMet wants to use have catastrophically failed in the last handful of years. One of them was a tailings dam at Mount Polley in Canada,

where, you will be cheered to learn, the dam was designed by the same people who advised the State of Minnesota on PolyMet.

The Partridge River is adjacent to the south and east sides of the mine pit itself.

Both rivers are part of the Saint Louis River watershed, a major tributary to Lake Superior. We've been trying to <u>clean up the St. Louis River</u> for some time now. Polluting the Embarrass and Partridge Rivers isn't going to help.

From a purely ecological standpoint, there isn't a nickel's worth of difference between the projects. Well, maybe except for the fact there are a lot of wild rice wetlands in the St. Louis watershed, guaranteed to the Ojibwe by treaty.

Every word from the pen of Tom Landwehr in his op-ed applies with equal force to the St. Louis River watershed. His *sub rosa* effort to distinguish Twin Metals from PolyMet is disingenuous dissembling.

I submit if you cannot see that, you are not paying attention.

Skipping down Memory Lane with PolyMet

Steve Timmer *June 22, 2019*



PolyMet executive Brad Moore at a DNR (& other regulators) debutante ball for PolyMet in 2014

The basic outlines for the PolyMet and Twin Metals projects were set many years ago. They involved using local companies, which could be claimed with a more-orless straight face, were "real companies" for purposes of permitting and liability avoidance. It was a poorly-kept secret. Well, it wasn't even a secret, really. The façade in

the case of Twin Metals crumbled a little early; the Chilean landlord to our president's daughter and son-in-law in Washington, Antofagasta, owns the whole thing now. But let's focus on PolyMet, because it's further along, and well, it's in the news.

Way back in 2013, some nosy television reporter started, well, nosing around the relationship between PolyMet Mining that the shadowy mining bad boy, Glencore, known for a while as Glencore/Xstrata. Never heard of 'em, PolyMet's oily PR machine said. But that clearly wasn't true, as you'll know if you read the LeftMN story at the link.

In early 2014, PolyMet Executive Vice President Brad Moore, who before that *used to be* the Commissioner of the Minnesota Pollution Control Agency said, at a Minnesota House hearing on financial assurances to be put up before any mining activity could be permitted, "We're a real company." There was a titter of laughter around the room.

You see, the laughter was because PolyMet, although incorporated in Canada in 1981, has never operated a mine, and has never earned a dime (US or Canadian) from mine operations. That's over 35 years. If you had a 35 year-old kid who lived at home and had never earned a dime, you know what you would do with him, right?

PolyMet has an extremely impressive accounting loss carryback. But somehow – and this is impressive, too – PolyMet has managed to sell enough blue sky in public financial markets to continue to exist. In other words, chumps like Karin Housley keep buying its stock.



Tweet from <u>@KarinHousley</u>

At some point, though, the Swiss company Glencore identified PolyMet as a perfect junior mining company – sometimes known in the business as "useful idiots" – to develop Minnesota's first copper-nickel sulfide mine. It entered into a loan agreement with PolyMet in exchange for a first-lien security interest in all of PolyMet's assets, including Brad Moore's key to the executive washroom. And PolyMet became Glencore's <u>Puppet on a String</u>. Through a seat on PolyMet's board of directors, seats on technical committees, and by the all-important covenants in the loan agreement, nobody goes to the can at PolyMet without saying, "Glencore, May I?"

Glencore continued to loan money to PolyMet in drips and drabs, just enough to keep it on life support, and each time

taking more stock and stock rights. And miracle of miracles, people like Karin Housley continued to buy its stock. It's a good thing her spouse was a professional hockey player.

It was obvious back in 2014 when Brad Moore gave the House committee a laugh that PolyMet's financial position was so bad – so negative – and getting worse by the day, that the only party who would ever operate a sulfide mine at Hoyt Lakes was Glencore.

I even had a sidebar about that with Jess Richards, the Director of the Land and Minerals Division of the Minnesota DNR, at the hearing, urging that Glencore be brought in and bound by permit discussions and requirements, but he would have none of it.

PolyMet couldn't, and can't, get a loan for used car without Glencore. It isn't bankable and it really can't raise much capital in public markets anymore because of its astronomical negative book value. The only conceivable way out is for Glencore to recapitalize the company through the exercise of rights offerings or down streaming part of its debt into equity. This will naturally, dilute all the Karin Housleys out there.

Glencore wants to control the company, surely, but not own quite enough of it to be considered a parent for purposes of having to sign on to permits and financial assurance liabilities. There are a lot of great ways to suck money out of a company, but receiving dividends isn't one of them, especially when you have to share the dividends with other stockholders. Glencore was the only game in town for so long for PolyMet that it was obvious to even the casual observer that control and majority ownership

was the endgame all along.

Suspicious people might think Glencore had an ace – or perhaps a former regulator with friends – in the hole.

You know, it was all going so well for Glencore. PolyMet got the water permit from the MPCA, and then it got a permit to mine from the Land and Minerals Division of the DNR.

What a fairy tale!

It was a fairy tale, of course. You could say this was a Faustian bargain for PolyMet that went wrong, or it was the plan all along. I am inclined to believe the latter.

We know now about the corruption and infidelity of the Minnesota Pollution Control Agency – PolyMet Executive Vice President Moore's former outfit – in issuing the water permit. It's been in the papers. The water permit is unenforceable and permits the violation of the Clean Water Act. Other than that, I suppose it's fine.

Parenthetically, the water permit from the MPCA seems to be modeled after the one issued to the now-closed Flambeau mine near Ladysmith, Wisconsin. That mine was touted as an example of extraction without pollution, a fatuous claim that I called *The Miracle of the Immaculate Extraction*. Well, the former mine did and does pollute (see several LeftMN stories here), in amounts in violation of the Clean Water Act, but the miner's permit was so badly written that no enforcement is possible because of something called the "permit shield." The Seventh Circuit Court of Appeals can tell you why.

If you get the right pollution regulators, they are your defenders, not your regulators.

In response to the revelation that it is a mining industry-captured lickspittle, the MPCA has said, *Well*, *we can put new conditions in the permit if circumstances require*.

I invite anyone to cite examples to me of situations where Minnesota regulators (as opposed to the courts) have imposed more stringent conditions on miners after mining permits were issued. It doesn't happen. In fact, the typical post-permit scenario is inattention by the regulators or caving to miner demands for relief from existing limits. Relevant examples:

PolyMet bought the LTV Steel Hoyt Lakes plant and tailings basin for a song because LTV steel went bankrupt. The tailing basin has \$90 million in deferred maintenance because LTV Steel didn't maintain it.

Why didn't it maintain it? Partly because the lick-spittle regulators were asleep at the switch. One of the reasons why the regulators like the PolyMet deal is that PolyMet undertakes to fix the tailings basin. Or more likely, just kick the can down the road. Only now, the can will contain way more toxic stuff. Swell.

Almost more troubling is the recent example of the MPCA seriously considering <u>U.S. Steel's request that the MPCA</u> materially abandon the <u>Dark River</u>. The requested change would make it even easier for U.S. Steel's MinnTac tailings basin to discharge pollutants into the Dark River. The MinnTac permit, by the way, hasn't been updated (looked at?) since 1987, well, until now, with the proposal to weaken it.

Glencore is an order of magnitude bigger than U.S. Steel and probably at least an order of magnitude better at shoving already supine regulators around.

All things are revealed in the fullness of time and now Glencore's plan has been revealed. Let's just hope it's not too late.

Update

I'll just connect some dots a little more explicitly.

The water discharge permit issued by the Minnesota Pollution Control Agency was a simple case of "cut and paste" of the toothless water discharge permit issued by the Wisconsin regulators for the Flambeau mine discussed above. It was another case of the regulators becoming the defenders of the pollution.

The former EPA staffer who caught wind of what was going on and blew the whistle, Jeffry Fowley, undoubted had the "permit shield" and the Flambeau mine in mind. Here again is a memo he prepared on the subject.

It should be obvious to everyone the MPCA and EPA's efforts to avoid creating a record that would be discovered was not just a simple screw up. It was an effort that almost worked — and may still work if other parts of government and law enforcement don't get on the ball — to subvert the Clean Water Act. It was purely craven, dissembling, corruption.

It requires *waaaay* more than just the Legislative Auditor looking into it.

Never mind Denmark, there's something rotten in Minnesota

Steve Timmer

September 16, 2019

Another <u>revelation in the PolyMet scandal</u> came on Friday with the disclosure of another set of emails between the abysmally-named Minnesota Pollution Control Agency and the equally-inaptly-named federal Environmental Protection Agency. With friends like them, the environment needs no enemies. The hed for the article on the Star Tribune website is **New email deepens mystery over PolyMet water permit**. This would be funny if — well, no it wouldn't. But it isn't a mystery at all.

We've known for some time that personnel at the MPCA, including then-Assistant MPCA Commissioner Shannon Lotthammer – now an Assistant Commissioner at the Department of Natural Resources in the Walz administration! – worked on persuading EPA honchos to keep their mouths shut about criticism of the toothless water discharge permit that the MPCA proposed to issue. Documents just received by the environmental bulldog Water Legacy show that Lotthammer was carrying water for her boss, John Linc Stine, then the Commissioner of the MPCA.

The earlier Lotthammer email telegraphed the involvement

of others, which is why the new batch is more revelatory than mysterious.

Now we know with certainty that Commissioner Stine asked top Trump officials in Region 5 of the EPA *not* to make written comments about the water discharge permit.

The documents contain an e-mail from Stine to Cathy Stepp, President Donald Trump's appointed head of EPA Region 5 in Chicago, and her chief of staff, Kurt Thiede. In the e-mail, dated March 12, 2018, Stine thanks the two federal regulators for a phone conversation and says his assistant commissioner for water, Shannon Lotthammer, will follow up with Thiede regarding the "Region 5-MPCA agreement I mentioned on our call."

The next day, Lotthammer sent an e-mail to Thiede asking Region 5 not to send written comments on the draft permit during the public comment period and instead follow a 1974 Memorandum of Agreement in which the EPA delegated enforcement authority to Minnesota.

The memorandum referred to goes back to Reserve Mining dust up days to delegate permitting authority from the EPA to the MPCA under the Clean Water Act because the MPCA had such great fidelity to the law.

Hahaha. Well, it did. But it doesn't now. What was happening here was that Lotthammer and Stine were asking that the MPCA be allowed to slip the environment, the Ojibwe bands, and the citizens of Minnesota a mickey and issue an essentially worthless water discharge permit. Which is what they did.

The 1974 memorandum of agreement does not authorize the MPCA to ignore the Clean Water Act. Which is also what they did.

And no one would have been the wiser if some whistle blowers at the EPA hadn't, well, blown the whistle and disclosed their concerns. Minnesota owes them a debt of gratitude.

There have been some efforts to claw Minnesota back from this disaster. The Inspector General of the EPA commenced an investigation to find out *What The Hell Happened*, and the IG's office has <u>recently made the investigation nationwide</u>, so PolyMet may someday be known as the tip of the iceberg.

Minnesota's Legislative Auditor, Jim Nobles, has also <u>commenced an investigation</u> into "permitting irregularities." The scope of that inquiry seems to be limited, though.

The issue is most directly joined – at least for the moment – in a lawsuit brought by the Fond du Lac Band of Lake Superior Chippewa and others contesting the issuance of the water discharge permit by the MPCA. The suit was in the Minnesota Court of Appeals, but the court stayed the water discharge permit and sent the case to the district court in Ramsey County to make a record (that is, to take testimony and receive documents) on the permitting irregularities, which is great. (As an aside, cases of agency decisions are appealed directly to the Court of Appeals, and that's what happened here; it didn't pass through the district court first, so the procedural posture is a little unusual.)

Well, it is great, except that the district court has a

blinkered view of what the case is about. According to the district court, the parties objecting to the permit (the "Relators") can only ask a few "written deposition questions" of a few people — none of whom are the four MNPCA and EPA leaders identified above — and request a limited number of documents, which is odd because the Court of Appeals picked up on the fact that something was pretty seriously amiss just from reading the newspapers. No actual depositions of anybody are allowed.

It surprises me that a judge of a trial court in Minnesota would be so naïve as to think a real record could be made without the depositions of people like John Linc Stine, Shannon Lotthammer, Cathy Stepp, Kurt Thiede, and their factotums, and representatives of PolyMet, too. There is no substitute for Professor Wigmore's <u>Great Legal Engine of Truth</u>: cross-examination. Surely the judge knows that.

You can't cross examine a written answer.

Wouldn't you like to know what Commissioner Stine said to the EPA in the telephone conversation with the EPA that prompted Lotthammer's email? I would. But apparently the Ramsey County judge isn't interested.

Any "fact finding" in this case without the depositions of the relevant persons is a white wash and a joke.

It is apparent to me that this case is more like a RICO case than an administrative case about environmental regulation. It is high time that Governor Walz, Lieutenant Governor Flanagan — an Ojibwe whose fellow nation members are directly affected by this subterfuge — legislative leaders, and the judiciary, too, figure that out.

Readers here know that I have written several times about the importance of getting the water permit right the first time. The last time I wrote about it was in a <u>story that was published in MinnPost</u>.

Miners regard a permit as inviolate and irrevocable. When the Minnesota DNR reviewed the tailings dam permit it issued to PolyMet after the Vale dam collapsed in Brazil, PolyMet objected and said that the permit was irrevocable, like a property right. The DNR said, no, that's not right, but you can see where miners are coming from.

And by the way, the DNR reaffirmed the permit of a tailings dam type that has failed not once, but spectacularly three times in the last handful of years, twice in Brazil and once in Canada.

But a water discharge permit like the one issued to PolyMet *is* virtually written in stone; they never get made stronger, only weaker. And significantly, if a permit, improvidently weak or corruptly made is issued, the public cannot sue for pollution, regardless of how bad it is, because the miner can defend by saying, "We're in compliance with the permit." That is exactly what happened with the Flambeau mine near Ladysmith, Wisconsin. The permit shield is the miner's friend. As I have observed before: *if you have the right regulators, they are your defenders, not your regulators*.

This is why the actions of Stine, Lotthammer, Stepp, and Thiede, undoubtedly in concert with representatives of PolyMet, are so odious and corrupt. I called it "slipping a mickey," because that is exactly what it is.

It is stunningly irresponsible for Governor Walz <u>to tell</u> <u>MinnPost's Walker Orenstein</u> that, "I think we can do this

right," and that, "The water permit was not compromised." Holy shit, who does he think he's fooling?

Shannon Lotthammer: We don't know where all that mercury is coming from

Steve Timmer *October 27, 2019*

I wrote a Community Voices piece for MinnPost that was published on October 18th. It told the story of how after many years of fits and starts, and with the help of the U.S. Environmental Protection Agency, back when it was in the environmental protection business in 2012, a Total Maximum Daily Load (TMDL) study was begun for the St. Louis River. One of the important parties to the study was the Minnesota Pollution Control Agency. It is sometimes called "the mercury study," but it was intended to catalogue multiple pollutants to the St. Louis and figure out where they came from, both point sources, including NPDES permit holders and others, and nonpoint sources. All with a view to figuring out how to bring the stream as a whole into compliance with the Clean Water Act.

The St. Louis River, which runs through the Fond du Lac Band's reservation on its way to Lake Superior, has been an impaired stream for a very long time; in other words, it doesn't meet Clean Water Act standards. It has a fish advisory which severely limits fish consumption from the river, which is an especial problem for the Fond du Lac Band.

The TMDL was good news for the river, the Fond du Lac Band, the city of Duluth, and Lake Superior. But as the MinnPost story relates, the MPCA pulled out of the study in the spring of 2013. John Linc Stine, then the Commissioner of the MPCA (where have we heard his name before?) announced the decision, saying that the science just wasn't good enough to do the study. The Fond du Lac Band, and the rest of the environmental community as well, were stunned. And outraged.

According to the Congressional Research Service, even as of 2012, thousands of TMDLs were conducted every year, pursuant to Section 303 (d) of the Clean Water Act. And although the MPCA's TMDL file has never really been dusted for fingerprints (meaning, among other things, talking to a lot of people under oath in sweaty deposition rooms), many people suspected that there were things other than Commissioner Stine's "concern for science" at work here, and that other people were involved, too, namely the mining interests — including PolyMet — and Range legislators.

I personally think you'd be a *naif* to believe they weren't.

If you were following the PolyMet permitting story, you would also know that this was at about the same time that it really got cranking; the following winter, the permitting agencies, held a <u>series of debutante balls for PolyMet</u> that resembled the Boat Show more than anything else: regulators in plaid jackets hawking pontoon boats. I've never asked (I should have), but I've always wondered, who paid for these extravaganzas?

Was it PolyMet, with all the regulators appearing like so many <u>Billy Mays</u>, pitching PolyMet at the top of their

lungs? Or did we, the taxpayers, pay for these transparent sales conventions?

Let's see. Where was I?

With the TMDL project safely interred, it increased the range of freedom of the MPCA to issue a water discharge permit for PolyMet in 2018 that cared not a whit for the things that a TMDL study might – who are we kidding? would – have found. The mines that produce mercury and the Cohasset power plant that provides power for them, just for example. Or that the St. Louis watershed needed another mercury-producing mine, especially a copper mine, like it needed a hole in the head.

In fact, the MPCA felt so unfettered that it issued a water discharge permit that did not have any water-quality based limitation for several heavy metals (WQBELs), including mercury, according to the EPA whistleblower Jeffry Fowley:

The final permit continues to fail to have any water quality based permit limits for mercury, copper, arsenic, cadmium and zinc, or any other pollutants, [including, I suppose, sulfides] contrary to the April 2018 recommendations from the EPA.

These are the comments, of course, that Assistant MPCA Commissioner Shannon Lotthammer and Commissioner John Linc Stine persuaded Cathy Stepp, a Trump appointee and administrator at Region 5 of the EPA, to suppress.

What is extra annoying to me about all of this is that after the TMDL was *shivved* by the MPCA, people like Assistant MPCA Commissioner Shannon Lotthammer continued to express mystification about where all of this mercury was coming from and why you can't eat the fish out the St. Louis River. From a 2016 article at the Minnesota Public Radio website:

According to the state pollution control agency, that effort [to reduce coal-fired power plant mercury emissions], combined with international pollution reduction efforts — most of Minnesota's mercury comes from around the country and around the world — should eventually lower the level of mercury in most of Minnesota's water bodies enough so that fish in them can be eaten safely once a week. [Once a week! Swell. Catch and release fishing will still be a life-saving exercise.]

But in 10 percent of the state's waterways, including the St. Louis River, mercury levels in fish are so exceptionally high that they will fail to achieve lower mercury levels despite reduced air emissions.

Scientists still aren't exactly sure why mercury levels in waters like the St. Louis are so much higher than elsewhere.

It could be a lot of thing, fluctuating water levels, who knows? said Shannon Lotthammer.

If most of our mercury comes from around the country and around the world, how is it that the St. Louis River watershed won the mercury lottery? Just bad luck? Or

maybe a teeny, tiny jetstream that drops mercury just into the St. Louis? We all know, really, that it is because that watershed is mining's sewer.

This is the greatest case of studied, intentional ignorance I've ever seen.

I read a part of the record from the MPCA on the consideration of the TMDL study in preparation of the MinnPost story I referred to earlier. There were a couple of names that surfaced multiple times: the aforementioned Shannon Lotthammer and Steve Colvin, the project manager for PolyMet at the Land and Minerals Division of the Department of Natural Resources. (This Division sees itself explicitly as in the business of promoting mining.) Both Lotthammer and Colvin are at the DNR now; Lotthammer became an Assistant DNR Commissioner in the Walz administration, moving over from the MPCA.

I thought it would be great to talk to them about the story I wrote. So I sent an email to the DNR's chief spokesperson, Chris Niskanen:

Mr. Niskanen,

A <u>piece that I wrote for MinnPost</u> was published yesterday, Friday, October 18th. Perhaps you've seen it.

In examining the record to prepare this piece, two names cropped up multiple times: Shannon Lotthammer and Steve Colvin. I know that Ms. Lotthammer is currently employed at the DNR and Mr. Colvin probably continues to be as well.

I would like to interview these individuals and would be happy to come to the DNR offices to do it. Will you make them available for an interview?

Thanking you in advance for your anticipated cooperation, I remain, very truly yours, Steve

Here's the reply I got:

Hi Steve,

Thanks for your interest in this high-profile project. We receive many interview requests from commentators such as yourself and, unfortunately, we are not able to accommodate them. I'd be happy to point to any materials that might be useful to you on our website.

Thanks!

Chris

I should mention that I have fenced with Chris Niskanen multiple times about PolyMet. There is a seething undercurrent to this exchange, and you can only enjoy it if you know that.

But apparently, Lotthammer and Colvin are so busy giving interviews that they can't get their work done. As an aside, we aren't sure what Shannon Lotthammer's job at the DNR actually is; it may be the Assistant Commissioner for Staying Out of Trouble, or Staying out of Sight.

If you can find me a published interview given by Lotthammer or Colvin after say, March of 2019, though, I'll give you a cookie. In fact, I'll give you a box of cookies. Girl Scout cookies. The best kind.

The agencies have circled the wagons.

If there is the smallest amount of trial lawyer blood coursing through your veins, you dream about taking the depositions of people like Shannon Lotthammer, John Linc Stine, Steve Colvin and his boss Jess Richards, and their former boss Tom Landwehr. (And a few people at EPA, too.) None of them has faced the great engine of truth, cross examination, about PolyMet. And boy oh boy, they should.

It could happen, of course. It's up to the Court of Appeals. The Court is trying to figure out what to do with the cases it heard last Wednesday, concerning the still-stayed dam safety permits and the permit to mine. It has also stayed the odious water discharge permit issued earlier and sent that case to the Ramsey County District Court to make a record on "permitting irregularities." From an earlier story here:

Well, it is great [the district court hearing], except that the district court has a blinkered view of what the case is about. According to the district court, the parties objecting to the permit (the "Relators") can only ask a few "written deposition questions" of a few people — none of whom are the four MPCA and EPA leaders identified above — and request a limited number of documents, which is odd because the Court of Appeals picked up on the fact that something was pretty seriously amiss just from reading the newspapers. No actual depositions of anybody are allowed.

Exercising my jurisdiction as a non-voting, non-member of the Court of Appeals, I'd order plenary discovery in all the cases of all the stayed permits: document production and searching deposition of anybody anywhere near this fan dance of corruption, this <u>fourteen years of bullshit</u>.

Treating these cases remotely like cases of ordinary administrative law would be a titanic mistake.

Why did a Court of Appeals Judge ask if PolyMet's dam was a Hail Mary?

It's more of a Lazarus, really

Steve Timmer *October 29, 2019*

Is the tailings dam a Hail Mary? That's what a judge in the Court of Appeals asked the attorney for the DNR at the hearing on the 23rd. Before answering that question, though, let's go back to October of 2001 and this lede from a press release:

(Duluth, MN)–Minnesota Power, a business of ALLETE, Inc. (NYSE:ALE), and Cleveland-Cliffs Inc (NYSE: CLE) announce that they have executed an Asset Purchase Agreement with LTV to acquire all of the assets of LTV Steel Mining Co. (LTVSMC). The LTVSMC mining operation was closed on Jan. 5, 2001, after LTV initiated a Chapter 11 bankruptcy proceeding. The purchase agreement is subject to approval from the U.S. Bankruptcy Court and satisfaction of other closing conditions.

Cleveland-Cliffs bought the mining assets of LTV, including the taconite processing plant and tailings impoundment at Hoyt Lakes; Allete bought utility generation and distribution assets, including a coal-fired

power plant and associated "coal pile" at the late Taconite Harbor. That plant, one of the dirtiest in Minnesota, and the coal pile, too, are gone.

Cleveland-Cliffs is in the taconite mining business in Minnesota and Allete is the parent of Minnesota Power, a northern Minnesota electrical power generator and distributor. A lot of Minnesota Power's big customers are mining companies.

It became known that there was substantial deferred maintenance and environmental liability arising out of LTV's operation and (lack of) maintenance of the tailings impoundment – and the Minnesota DNR's neglect of same – that Cleveland-Cliffs bought, and it sought to discharge that liability in bankruptcy but it could not.

The sale of the crushing plant and tailings impoundment to PolyMet Mining for use in a non-ferrous mine was a godsend to Cleveland-Cliffs and, well, to the DNR, too. But Cleveland-Cliffs took a pretty big haircut. I haven't seen the agreement, but I believe PolyMet is supposed to take care of the tailings impoundment, or at least kick that can down the road, which is a load off the DNR's shoulders. It explains in part why the DNR is such a cheerleader for the most dangerous kind of tailings storage: an upstream tailings dam of the type that has suffered three major failures in a handful of years, two in Brazil, and one in Canada in British Columbia, PolyMet's home. [There was actually a fourth one, again in Brazil, Ed.]

The only real reason that the PolyMet project made sense

in the first place is because it bought a cheap crushing plant and leaky tailings basin, and the possibility of expansion of the mine: its "scalability." That according to Edison Investment; PolyMet was a client of Edison Investment. The quality of the "ore" is really very low.

If you want to know why Glencore/PolyMet, and the DNR, too, cling so tenaciously to the old LTV tailings dam, this is key. It's what PolyMet bought, and it is fundamental to the economics of PolyMet's operation.

The governor's musings that the old tailings dam has a "smaller environmental footprint" than other tailings storage methods are hogwash; they are a reduction sauce of hogwash, spooned generously over the public. Here's the governor in an August interview with MinnPost's Walker Orenstein:

And I think what we know is the environmental footprint on the NorthMet project being run by PolyMet, and of course Glencore being the main backer, it's an existing mine with an existing pit. And the reason for that is it's less environmental impact, less movement around, less impact on wetland. And the determination was made, and still supported by DNR in the permitting process, that in this instance in this piece of land, it makes more sense to use the tailings dam the way it is.

It only makes more sense if you have bet the farm on it, or you are the DNR looking for somebody to try to cover up your failure to make sure the dam was maintained by LTV.

But back to the question: Why is the Glencore/PolyMet tailings dam like a Hail Mary? Well, because a DNR consultant said it was. Here's consultant Donald Sutton describing the use of a clay liner (bentonite) for the tailings dam:

- 1. Item 3a. The bentonite seal is a hail Mary type of concept in my opinion. I believe it will exacerbate erosion and slope failure and will eventually fail, so I recommend that the stability analysis should assume the bentonite doesn't prevent seepage so far as stability is concerned.
 - a. What is the stability of the side slopes if a layer of tailings is placed above the bentonite and it becomes saturated? Will the bentonite slope fail?
 - b. What if the bentonite slope is saturated and there is an earthquake or a thunderstorm?
- 2. I am concerned about long term climate change and how it will affect the water balance in the tailings facility because this can affect the water level, the water head, the saturation, and most importantly, erosion.

Erosion can cause the shape of the embankments to change over time, it can cause erosion and gullying that can create a pathway for water to escape from the pond. This bothers me, because the proposed design is temporary and will fail unless it is perpetually maintained. I am surprised that the Minnesota statutes allow a temporary impoundment structure to be

permitted permanently. This wouldn't be allowed in other jurisdictions. I realize that this will be addressed during the permitting and financial assurance review. Estimating the liabilities will be contentious.

He is saying, essentially, that the clay liner would increase the potential for slope saturation and liquefaction of the dam. Sudden and unexpected liquefaction of a tailings dam, also one of the upstream variety, is what happened in Brazil in January and killed almost 250 people.

That was a BIG environmental footprint.

Donald Sutton had some other interesting things to say about the PolyMet tailings dam, which you can read about at the link above. Here's another quote:

In its simplest form, the proposed tailings basin will be a big pile of highly erosive loose sand and silt. The wet closure will include a pond of water on top that saturates the sand/silt making it less stable and more likely to fail than the dry option. For a wet closure to remain geotechnically and geochemically stable until 2900, the water level and infiltration rates must be perpetually regulated, and the embankments and water management controls must be perpetually inspected and repaired. In the Tailings Basin Reclamation summary in NorthMet Project Description, p73/115, the anticipated perpetual maintenance items include: maintaining the pond no closer than 625 feet from the interior edge of the dams, pumping water from Colby Lake to maintain the pool level, recycling seepage back to the pond or

sending it to a water treatment plant to reduce the sulfates to 10 ppm. It is assumed that eventually the pond water level will stabilize and the sulfate level will become less than 10ppm, but the document doesn't explain how they come to this conclusion. Surplus storm water will be directed through "clog resistant" lined/revegetated or riprapped channels ar pipe outfall structures. Oxidation of the tailings will be prevented by placing a layer of bentonite 30 inches below the surface of the dams and beaches. Bentonite will be placed on the pond bottom to minimize infiltration.

I envision that PolyMet's reclamation plan could work for a while, but don't see how it will function forever without falling apart unless it is continuously maintained; which is a major leap of faith. The wet closure will require perpetual maintenance and water Management to control the water level in the pond, to collect and treat seepage, and to maintain the dam embankments and the flood control structures, pipes, etc.

Hail Mary. Leap of faith. Mr. Sutton is a pretty Biblical guy. He's quotable, too, which I am sure the DNR regrets.

I remember my grandmother and my mother saying, when they believed somebody – including me – was engaged in an act of prevarication, "He's talking through his hat." The governor was talking through his hat, or as we would say nowadays, bullshitting.

Update

I should have mentioned that the governor's claim about

the mine plan having less impact on wetlands is baloney. With the land swap engineered by Amy Klobuchar and Tina Smith and Pete Stauber, it would be the largest single destruction of wetlands in Minnesota history. You won't be surprised to know that one is in litigation, too.

Part IV

The Enablers: Politicians and Media

Who can we trust to protect the Boundary Waters?

Aaron Klemz

October 3, 2010

During the DFL endorsement and primary season, one question consistently tied gubernatorial candidates in knots. This question was not about the budget, education, or the economy.

"What do you think about the development of coppernickel mines next to the Boundary Waters Canoe Area Wilderness?"

I posed this question to four DFL candidates for Governor. In each answer, there was bobbing and weaving, hemming and hawing, "howevers" and "of courses." Trapped between the desire to reassure people like me who care deeply about Minnesota's wilderness and the knowledge that the red roads of the Iron Range were the path to a primary victory, DFL'ers tried to have it both ways.

Spruce Road is one of these byways. It departs Highway 1 a few miles from the Ely Airport and runs parallel to the South Kawishiwi River flowing toward the Boundary Waters. Over the last 50 years, it's seen a procession of prospectors seeking copper in the rocks of the Duluth Complex. Companies like American Nickel, International

Nickel Company (INCO), and Amax Exploration combed the area in the 1960's and 1970's, drilling for underground ore and scraping the surface for "bulk samples." In 2010, the companies have changed to Antofagasta, Duluth Metals, Polymet, and Franconia Minerals, but their activities are similar. Unlike the 1970's, metal prices, investment capital, technology, and political support are aligning behind these mines. Minnesotans will soon face the same uncomfortable question I posed to DFL candidates, and more:

- Is there *any place* we shouldn't mine because the environment is just too precious to damage?
- If we build these mines, how will we limit the environmental damage to our most pristine wilderness?
- Who can we trust to do this job?

On Friday, Tom Meersman's <u>last story on the environment</u> <u>beat</u> for the Star Tribune <u>uncovered one of these forgotten</u> <u>sites</u>. In 1974, INCO chose a spot three miles upstream of the BWCA along Spruce Road to conduct a bulk sample. They created a miniature strip mine where copper-nickel ore was extracted and tested. Ten thousand tons of waste rock from the sample was left behind, unmitigated and unmonitored for over 30 years. Acting on a tip from a local resident, Friends of the Boundary Waters Wilderness tested runoff from the site and independent <u>lab results</u> found <u>toxic levels</u> of heavy metals.

What INCO left behind is the same kind of ore that Antofagasta plans to extract. But the scale is incredibly different; instead of 10,000 tons of ore from one test pit,

Antofagasta plans to produce 40,000 tons of ore per day. They've pledged hundreds of millions of dollars to develop this mine, while Polymet Mining seeks to develop a gigantic open-pit mine on the other end of the Duluth Complex near Hoyt Lakes.

Reaction to the discovery of this pollution has been dangerously blase. The Minnesota Pollution Control Agency considers the seepage "minor," not meeting "our threshold for monitoring." The problem is that while this is a small site, it is a microcosm of the environmental risks posed by these mines. It's also a telling example of the casual attitude of the MPCA under Tim Pawlenty's leadership.

With minor exceptions, there has been tri-partisan acceptance of the notions that new technology makes these mines safe, and that environmental regulations are just nanny-state job killers. Republican Tom Emmer and Independence Party candidate Tom Horner fall all over themselves to make promises they know they cannot keep about streamlining, even eliminating environmental review of these projects. Demonstrating ignorance of the complex, vital and largely federal process, Emmer's implied that mines could open in as little as six months. The hunger for *jobs, any jobs, at any price*, led Horner and Emmer to pander extensively on this issue during a September debate in Duluth. While the DFL candidates at least showed discomfort at the difficult choices ahead, Emmer and Horner are getting out their pom-poms.

Regrettably, DFL'er Mark Dayton has joined in the cheerleading at times. What gives me hope is his belief that the Department of Natural Resources and the MPCA need to be aggressive in protecting water quality and the

environment. [We've had cause to be disappointed about that in the intervening years, *Ed*.] Tom Emmer would eviscerate environmental regulations and slash the budget of regulatory agencies. Tom Horner may conceal his iron fist in a velvet glove of moderation, but the results would be similar.

Campaign pandering will eventually yield to governing, and whoever wins the race for Governor will confront the following truths about copper mining. First, there is potential for widespread environmental damage to the Boundary Waters from these mines. Second, the involvement of multinational mining companies like Antofagasta and high metal prices will increase the pace of development.

The next Governor and Legislature will be forced to consider what reasonable restrictions ought to be placed on mining near our most precious wilderness. That leaves only one question:

Who can we trust to do this job?

Chip's play for the Range

Aaron Klemz

December 13, 2010

Let's say you've just won election to the U.S. Congress. In fact, let's say you've just pulled off the improbable upset of an eighteen-term incumbent in Minnesota's Eighth District. Who do you meet with first?

Speaking to Republican donors in Minneapolis, Cravaack outlined his strategy for staying in office past 2012: frequent appearances in the 8th District and support for the proposed mines near Hoyt Lakes and Ely. The incoming member of Congress said his first meeting after the election was with Polymet Mining Corp. CEO Joe Scipioni.

This is a canny choice, but fraught with risk for Chip Cravaack. It's also a choice that puts Iron Range DFL politicians into a very uncomfortable position.

Polymet has proposed a large open-pit copper mine near Hoyt Lakes, and purchased the shuttered LTV Steel facility previously used to process taconite ore. Polymet has a powerful partner in Glencore, a Swiss commodities firm which owns about 20% [now just under 80%, *Ed.*] of Polymet stock, and who's sunk tens of millions into the company. The Polymet proposal has stumbled through the

regulatory process, most recently failing to produce an adequate draft environmental impact statement (EIS). After the EIS was given the EPA's lowest possible rating, Polymet has gone back to the drawing board and is preparing another draft that will likely be completed by the end of 2011. It's been a long and winding road for this project, which has been in some form of environmental review since 2005.

Polymet's frustrated supporters clamor for immediate action. Cravaack made a point of throwing red meat to mine supporters during the campaign, and now appears to be going all-in behind Polymet. What he will find is that his influence is limited, the regulatory and legal process will be slow, and that he'll get little movement on this issue over the next 24 months. In no case will a mine be opened during that time. Cravaack's sloganeering on the issue betrays his ignorance of the process.

Railing against slow progress toward regulatory compliance is a great strategy for a challenger, but a poor one for an incumbent. Eighteen months from now, with still not a single copper mining job to his credit, Cravaack will be forced to run against the government again. Only this time, the frustrated folks who shouted "Chip, Chip, Hooray" will not be at his side.

Even more intriguing is that the Polymet proposal has the support of virtually every DFL politician in northern Minnesota and Senators Franken and Klobuchar. Oberstar was also a big supporter. The heavy DFL support for the project previously put Minnesota Republicans in a tricky spot despite that it's something that they would usually want to support. Now that Cravaack champions the project, DFL Polymet supporters who want to make

Cravaack a one-term congressman have a real dilemma on their hands. Do you do the heavy lifting at the state level if it means Cravaack can take credit?

The reality is that the political posturing on Polymet will be the only real action by politicians of either party. The regulatory process that Polymet is navigating is well beyond the influence of a freshman Representative. Hitching himself to Polymet's prospects is a high-risk, high-reward play for Cravaack, just like buying their stock. [We now know that a PolyMet stock play was low reward, since Glencore has diluted everybody else into oblivion, *Ed.*]

Court decision raises stakes in mineral lease standoff

Aaron Klemz

October 23, 2011

The controversy over the sale of 77 state mineral leases underlying private property in northeastern Minnesota has put a spotlight on Minnesota's byzantine mining laws which favor the holder of mineral rights over the surface property owner. But a 3rd Circuit Court of Appeals decision in *Minard Run Oil Company vs. U.S. Forest Service* (*Minard Run II*) has created an even more ominous situation. The court's decision in *Minard Run II* gives holders of mineral rights the ability to force the U.S. Forest Service to allow prospecting and mining of privately held mineral rights. This could affect PolyMet's mine proposal, proposals to prospect for minerals in the Superior National Forest, and could potentially open vast swaths of the forest to mining.

Many Minnesotans were surprised to learn that private property owners have very little recourse when the state sells a lease to prospect and develop a mine on their property. Minnesota law heavily favors the owners of mineral rights, deemed the "dominant estate" in Minnesota law. Between the heavy bias in Minnesota laws and the direction the federal courts are taking, it will take action by

policy makers to prevent widespread copper-nickel mining around, and perhaps even in, the Boundary Waters Wilderness.

The Alleghany National Forest in Pennsylvania was created in 1923, and is in the oil and gas producing area known as the Marcellus Shale. Over 9,000 oil and gas wells are operating in the forest, and 93% of the land area in the forest has mineral rights that are owned by private parties. Much of this area is comprised of "reserved mineral rights" which were created when a landowner sold the surface rights to property but reserved the mineral rights for themselves. This was a common practice in the acquisition of National Forest land, since it allowed the U.S. Government to buy more land with less money. The mining regulations which were in place at the time of the reservation applied to Forest Service decisions made about permitting mineral development. This meant that 1911 era regulations applied to many of the applications to place oil and gas wells on Forest Service land in the Alleghany. These 1911 regulations require only that the applicant inform the Forest Service 60 days in advance, attempt to minimize the surface impact, and remove buildings when drilling or mining is complete.

In 2009, the Forest Service changed its policy, and decided a completed Environmental Impact Statement (EIS) was required before it would approve additional oil and gas wells. Minard Run Oil Company sued, arguing the new policy deprived them of access to their mineral rights. A district court agreed, and the 3rd Circuit upheld this decision. The takeaway, according to law firm K and L Gates, is that "the mineral owner retains the right to use as much surface land as reasonably necessary to extract

minerals, and the mineral owner need not obtain consent or approval before entering land to mine for minerals." If courts here used the same logic it would have wideranging effects for mineral exploration and development in the Superior National Forest.

First, large areas of the Superior National Forest are comprised of similar lands, where the surface rights are held by the U.S. Government or private landowners, but the mineral rights are held by someone else. The current conflict over the state mineral lease sale is just a small example of the conflicts created by severed mineral rights. Public notices for mineral prospecting permits make specific reference to the 1911 rules when they apply. Since much of the land in the forest was acquired between 1909 and 1936, these rules apply for a significant portion of the forest. If the logic in *Minard Run II* applied here, mining companies could sue, claiming additional conditions violate their inherent right to access privately held mineral rights.

Second, the largest existing mining issue in front of the Forest Service is the PolyMet Supplemental Draft Environmental Impact Statement, which includes a complicated land swap. PolyMet leases privately held mineral rights on the mine site, but the Forest Service owns the surface rights. If the logic of *Minard Run II* applied to PolyMet, then there would be no need for a land swap, since PolyMet could assert their inherent right to access their mineral rights. It's highly unlikely that PolyMet would now change their position on a land swap, since they've received a \$4 million loan from the Iron Range Resources board to pay for it. However, it could impact future negotiations with mining companies about

the need for surface land swaps.

Third, and perhaps most disturbing, is the presence of a vast area of privately held mineral rights underlying the Boundary Waters Canoe Area Wilderness itself. A 1984 report by the General Accounting Office identified the presence of privately held mineral rights in the BWCAW as a significant issue. There are over 600,000 acres of privately held mineral rights underlying federally owned surface land in the BWCAW. A 1967 report estimated the cost of acquiring these mineral interests at over \$100 million.

The BWCAW Act of 1978 provides additional protections regarding mining than are enjoyed by other wilderness areas. But even these protections may be tested by the logic in the *Minard Run II* decision.

Since *Minard Run II* is not binding precedent in Minnesota (which is in the 8th Circuit), it is not already in force here. But it should serve as a warning that federal courts are limiting the ability of the Forest Service to regulate mining on land on which it owns the surface rights.

Reliance on regulators applying existing laws may prove to be ineffective at curbing the environmental damage that widespread copper-nickel mining could do to the Quetico-Superior ecosystem. Mark Dayton's call for the Legislature to revisit Minnesota's laws regarding mineral leases is timely, but given the makeup of the Legislature changes that enhance environmental protection seem like a remote prospect. Only heavy pressure from an engaged citizenry can force politicians to do the right thing.

Destroying wilderness for the children

Aaron Klemz

April 18, 2012

Of all of the anti-environmental provisions being floated by this year's Legislature, the most cynical might be the proposal to create "Children's State Forest."

What's that you say? How could creating a State Forest for children be against the environment?

Let me explain.

Going back to the time when Minnesota was surveyed and platted, sections in each township were designated as school sections (usually sections 16 and 36 in Minnesota). The intent was to provide land and money to establish schools as European settlement expanded across the West. Since the area that is now the Boundary Waters Wilderness and the Superior National Forest was never completely homesteaded and subdivided, state school trust land remains in the wilderness boundaries. Since this land is wilderness, it cannot be developed.

Politicians have long desired to either sell or exchange these in-holdings for other federal land. In Minnesota, the negotiations have been tedious and contentious. Now, a group of pro-mining politicians, including Iron Range DFL'ers and Republican Congressman Chip Cravaack, seek to force a trade of state land in the BWCA for land that sulfide mining companies covet in the Superior National Forest.

This battle is being fought on two fronts. First, Rep. Cravaack announced in December 2011 that he would introduce federal legislation that would require the Forest Service to exchange all 86,000 acres of state land in the Boundary Waters with land outside of the Boundary Waters. This would shrink the Superior National Forest and place that land under state control.

Second, the Minnesota legislature's <u>omnibus environment</u> <u>bill</u> designates the creation of "Children's State Forest." The emphasis here is acquiring land coveted by multinational mining corporations:

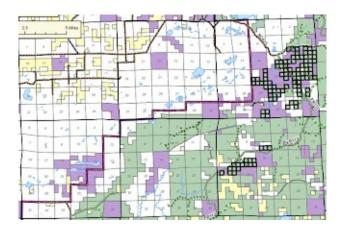
Subd. 3. Priority. An exchange of state land under this section shall give priority to exchanges that provide the most opportunity for revenue generation for the permanent school fund, and priority shall be given to lands within the Superior National Forest in the Mesabi Purchase Unit in St. Louis County and in the following townships in St. Louis County:

- (1) Township 59 North, Range 14 West;
- (2) Township 59 North, Range 13 West;
- (3) Township 60 North, Range 13 West; and
- (4) Township 60 North, Range 12 West.

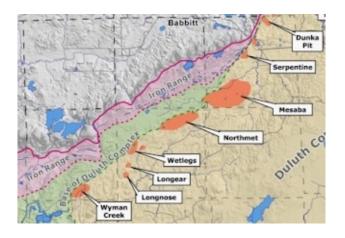
These townships are adjacent to two proposed sulfide mining operations - PolyMet's NorthMet project and Teck Cominco's Mesaba project. You've probably heard of the first one, but maybe you haven't heard of the second mine proposal. Here are some maps to orient you: First, this is the area of "Children's State Forest" 11:



Second, a map of federal parcels that being considered for an exchange $\frac{12}{2}$:



Third, a map of proposed sulfide mining projects in the area $\frac{13}{2}$:



There have seemingly been two major players (PolyMet and Twin Metals) at the Capitol working on thwarting environmental protections and preventing legislation that would force sulfide mining companies to put a damage deposit down sufficient for mine clean up. But Teck, a huge multinational mining company, quietly spent \$100,000 lobbying the Minnesota Legislature in 2011. In 2002, Teck pushed for a \$20 million state loan to develop the Mesaba project. But they scrapped their plans when PolyMet scooped up the old LTV Steel facility that Teck wanted for their processing facility. The spike in Teck's lobbying signals a new interest in developing Mesaba, and the land exchange would be for land right next door.

"Children's State Forest" would be a strange place, a moonscape designated for destruction, exchanged for pristine wilderness land. It would give mining-friendly state agencies and politicians control over the surface and mineral rights for the Mesaba project. It would help develop a mining industry that threaten the environment and water quality of one the greatest wilderness areas in the world. As DFL Rep. David Dill stated:

"That land in the wilderness should belong to the

federal government," Dill said. "We should do it in accordance with the constitution, and then we should mine, log, and lease the hell out of that land that we get in the exchange."

If you had any doubts about the what the plan is for "Children's State Forest," it's right there.

"Mine, log, and lease the hell out of that land"

Aaron Klemz

September 5, 2012

Tuesday, the Minnesota Department of Natural Resources (DNR) announced the hiring of Aaron Vande Linde as the new School Trust Land administrator. Previously, Vande Linde served as transactions manager in charge of the DNR's mineral lease program. The move signals that the same aggressive approach to selling mineral exploration leases is coming to school trust lands in northeastern Minnesota. Vande Linde was hired into a position created by the school trust land law that passed with wide bipartisan margins in April. In this new position, he'll be responsible for implementing the vision of the Legislature in managing these lands. Or as Rep. David Dill (DFL – Crane Lake) so delicately put it, to "mine, log, and lease the hell out of that land that we get in the exchange."

While the school trust land law was hustled through the legislature under the cover of rhetoric claiming it was about funding education, the changes to the law and the subsequent hiring of DNR's mineral leasing chief demonstrates it's just another giveaway to mining companies. Vande Linde's charge according to the new school trust land law is to maximize the long-term

economic return from school trust lands, and not to preserve land for its recreational or ecological value. As the law states:

When the commissioner finds an irresolvable conflict between maximizing the long-term economic return and protecting natural resources and recreational values on school trust lands, the commissioner shall give precedence to the long-term economic return in managing school trust lands.

Rep. Chip Cravaack's attempt to force the US Forest Service to exchange school trust lands held inside of the Boundary Waters Canoe Area Wilderness with land coveted by mining companies elsewhere in the Superior National Forest adds to the risk of these decisions. Mining companies stand to gain preferential access to a wide swath of northern Minnesota, free from some restraints placed on them by federal land ownership (such as prohibitions against open pit mining in Weeks Act.)

Once again, it's disappointing to note that the areas of bipartisan agreement in Minnesota seem to be a) build a stadium, b) build an obscene mega-bridge over a national Wild and Scenic River and c) mine the hell out of everything.

Shrinking the Superior National Forest

Aaron Klemz

September 20, 2012

Senator Al Franken sent constituent correspondence on Wednesday that announces he and Sen. Amy Klobuchar plan to introduce a Senate companion to Rep. Chip Cravaack's BWCA land exchange bill. The letter states:

...I support a land exchange that protects the Boundary Waters while helping to create jobs in the region and generating much-needed revenue for Minnesota's schools from lands outside the Boundary Waters. I am working closely with my friend and colleague, Senator Klobuchar, to draft similar legislation that creates jobs, funds our schools, and keeps our enduring promise to be good stewards of our natural resources. This legislation must be crafted in a way that addresses concerns that would hinder its passage by the Senate.

The "concerns" the companion bill would address are left undefined. But the biggest objection to the Cravaack bill cannot be addressed. This bill was excoriated on the floor of the House by Reps. Betty McCollum and Keith Ellison for being unnecessary, vague, and for interfering in existing land exchange negotiations.

McCollum's objection is the most salient: where's the map? On the floor of the House on September 12th, McCollum stated, "this is the first time in the history of Congress that a land exchange bill is being debated without a map ... Nobody can tell me how many trails, lakes and hunting areas will be closed by this bill, because there is no map." This objection would apply equally to whatever companion Franken and Klobuchar would introduce.

Franken's letter also contains this paragraph:

For years, Minnesotans have been working together to identify a possible solution. Earlier this year, the Minnesota state legislature passed, and Governor Dayton signed, a law calling for the transfer of 86,329 acres scattered throughout the Boundary Waters and owned by the Minnesota School Trust to the federal government. In exchange, the same amount of land in the Superior National Forest would be transferred to the state. Any economic activity on this land would therefore generate revenue for Minnesota's schools. This would ensure the continued protection of our pristine and unique Boundary Waters from any development.

Legislation passed by the Minnesota legislature sets a goal of a one-to-one exchange of school trust land in the BWCA with land outside the BWCA. But the state does not get to dictate the terms of a land exchange, nor is shrinking the Superior National Forest by 86,000 acres good public policy. Previous negotiations have involved a compromise approach of exchanging a portion of the land and purchasing part of the land. Remember, school trust

land was meant to be sold. This is why there's very little school trust land remaining in more developed areas of the state, it was sold to build and fund schools in the 19th and 20th centuries.

The BWCA does not need protection from the state inholdings. They are not being developed, logged or mined, nor would it be legal to do so. If anyone was really concerned about property interests being held in the BWCA that represent a threat, they'd be talking about buying the private mineral rights that underlie a significant portion of the BWCA. But I digress.

As I've noted earlier, the land exchange bill is a giveaway to mining companies. Specifically, Teck Cominco's interest in the Mesaba deposit would be aided by the land exchange, since the Minnesota legislature actually specified the preferred location of exchanged lands. That area, dubbed "Children's State Forest" in another version, would surround the Mesaba deposit, just north and east of PolyMet's proposed mine. Teck Cominco spent \$100,000 lobbying the Minnesota legislature in 2011.

It's incredibly disappointing to see Franken and Klobuchar rush to sign on to a bill that would *shrink the Superior National Forest by 134 square miles, especially when we don't even know what parts would be exchanged.*

The forces of grievance and resentment weigh in

Steve Timmer

September 1, 2013

An Ely area resident named Joe Baltich wrote a <u>commentary that ran in the Star Tribune</u> on September 1st. It dripped with contempt for the latte-sipping, chardonnay-swilling, brie-eating Twin Citians — apparently Joe's customers, since he is an outfitter — those truculent juveniles who are so unwilling to let Joe crap in his own nest. Why, says Joe, we know a lot more about this than you do!

Despite what the "environmental" detractors are spewing, we can have clean water and a mine 3,000 to 4,000 feet underground. (I'll bet you didn't know that it is not going to be an open-pit mine.)

So, Joe, what is done with the stuff that is "mined?" It's brought to the surface using mine shafts, kind of like this one. Right Joe?



Then what's done with it? It's sorted into a pile of sulfidebearing waste rock — most of it — and the rest is crushed and chemically treated to extract the good stuff. The bad stuff, called tailings, goes into a basin that is continuously covered with water to keep it from blowing away.

Both the waste rock pile — the <u>Brimstone Mountain</u> — and the tailings basin are sources of heavy metal and sulphuric acid runoff.

Let's focus on the tailings basin for a moment. Too little water in the basin? Then the tailings are exposed to air (and the oxygen in it) and create sulphuric acid. Too much water in the basin? Then the basin dam or berm is overtopped and the polluted water becomes regular old groundwater and runs, you guessed it, downhill. Downhill, in this case, is into the Boundary Waters. As has been discussed here before, the BWCAW's waters cannot buffer much acid.

Guess where the water would come from the keep the

tailings wet if rainfall wasn't sufficient to do it?

We won't even discuss a dam or berm failure, because that never happens. (Kidding; it does with alarming frequency.)

Anyway, the mine shaft tower in the photo above is from a copper nickel mine at Lake Shebandowan that operated for a while, and now is in <u>perpetual care</u>. In a post about the other potential despoiler of the wilderness, PolyMet, I wrote this about Shebandowan:

A common approach to dealing with tailings, which PolyMet also proposes, is to construct a tailings basin and — I'm not kidding here — cover the tailings with water. I truly could not believe that somebody would take rock that only requires water and a little air to make sulphuric acid and, yes, *cover it with water*. This is genius.

But this is what our *Neighbors To The North* do at Lake Shebandowan for an abandoned underground sulfide mine there. Scroll down to page 141 of this report to see. And they are by no means the only ones. When water gets too high in the tailings basin, when it rains a lot or you have some snow melt, the excess flows into the *spillway* — which is a wonderful term, don't you think — where it is carefully monitored by Ontario's Industrial Sewage Works — I'm not making this up; I couldn't — on its way to Lake Superior. No mention is made in the report about the sulphuric acid that leaks directly into the groundwater. I guess that never happens. (Again, kidding.) They did line the basin with plastic, after all.

If the water gets too low, I suppose they pump some out of Lake Shebandowan to fill it up! Well, they have to, because exposing wet tailings to air will make sulphuric acid extra fast. Sorry smallmouth bass in Lake Shebandowan!

So where does the spillway for Twin Metals underground mine but above ground tailings basin go? Birch Lake? You can see that the environmental danger here is much greater than even Shebandowan; at least Lake Superior is a big toilet. Birch Lake and the BWCA? Not so much.

We should ring up the Ontario Industrial Sewage Works to see how it's done. Nah, probably not. <u>It's even more supine</u> than our DNR.

One last point: Baltich wrote, "We mined this very same rock for 88 years before the BWCAW."

Not true. It isn't the same rock. The stuff coming out of the ground from an iron mine is much different than a copper nickel mine.

Update

Our pal Joe got a spanking about the state of the Ely economy in the Star Tribune, Friday, September 6th (it will be in the September 7th paper edition).

Lee Schafer looks at PolyMet

Notices a hole, and it isn't the mine

Steve Timmer

December 9, 2013

Lee Schafer, a business writer at the Star Tribune, wrote a column on Sunday, December 8th about the recently issued supplemental environmental impact statement by PolyMet Mining. Here's the lede:

Mark Twain's explanation that "a mine is just a hole in the ground with a liar standing next to it" is a quote so brilliant and so often repeated that it's a shame he may never have said it.

You know, somehow, on reading the lede, that the column isn't going to be pro-PolyMet.

Schafer goes on to describe the hole:

Mining for copper and nickel typically requires monitoring and cleaning of water. The draft environmental report said there could be a need to monitor and treat the water for a minimum of 200 years at the site where PolyMet plans to be digging and a minimum of 500 years at the nearby processing plant site.

At the risk of stating the obvious, 500 years is a very long time. It was 500 years ago when the Italian diplomat Niccolò Machiavelli sat down and wrote a little how-to book for political leaders called "The Prince." [I wrote that we'd barely begun stealing the place from the Indians 500 years ago, but why quibble?]

The task of providing financial assurance begins with estimating what it will cost to shut down operations, contain the waste, monitor the water quality and treat the water that becomes polluted. With that cost estimate in hand, the mine operator then arranges for enough money to be available, such as through a trust account, to pay for all the costs more or less forever.

The big environmental report just released, called the supplemental draft environmental impact statement, has just a small section on financial assurance that says next to nothing.

Whistling past the PolyMet graveyard, so to speak.

Perhaps it's just as well, given PolyMet's propensity to, um, dissemble.

A promise from PolyMet is irrelevant, anyway

Why? Let's be direct. PolyMet doesn't have a pot to piss in. But don't believe me; believe PolyMet itself. From its most recent annual filing with the Securities and Exchange Commission:

We will need to seek additional financing to complete our development and construction of the NorthMet Project. Sources of such external financing include future equity and debt offerings, advance payments by potential customers to secure long-term supply contracts, grants and low-cost debt from certain state financial institutions, and commercial debt secured by the NorthMet Project. If we cannot raise the money necessary to continue to explore and develop our property, we will have to suspend or cease operations.

That's a quote from page seven. It would be nice if the candor (or candour for you Canucks), offered to investors would be afforded to regulators and Minnesota citizens and taxpayers, too.

But I suppose saying, *Gosh*, we don't have the money to open or operate the mine, let alone close it down and treat the toxic water, would be, well, kind of a non-starter, wouldn't it?

Permitting PolyMet's mine without a guaranty of environmental responsibilities from Glencore/Xstrata would be utter folly

Who's Glencore/Xstrata? Funny you should ask. You know, <u>PolyMet itself has been asking the same question</u>. But most of you already know that Glencore/Xstrata is <u>PolyMet's puppet master</u>.

The corporate structure of PolyMet is what can charitably be called a shell corporation in Minnesota (or maybe a "front"), owned by a publicly-traded Canadian corporation, which in turn has one principal shareholder, which did not acquire its shares of PolyMet on the open market. This shareholder, Glencore/Xstrata, the Swiss mining conglomerate, which owns about a third of PolyMet [almost 80% now, *Ed.*], is also its secured lender.

It also is entitled to buy all of the ore and concentrate from the mine, a so-called "offtake" agreement. The legal, financial, and practical control of PolyMet by Glencore/Xstrata is absolute.

If the State of Minnesota was a bank, and the street urchin PolyMet came in for loan, the bankers would say, *Come back and talk to us when you've got a credit-worthy guarantor*, *Junior*.

In looking at the application of PolyMet to open a sulfide mine in Minnesota, the governor and the DNR ought to do the same thing regarding PolyMet's environmental responsibilities. *Come back and talk to us when you've got senior mining company Glencore/Xstrata's guaranty in your pocket, Junior mining company.*

Even then, it's an *iffy* proposition. Glencore already has a track record of dodging environmental and labor obligations all over the world. Just for example, Glencore is trying to <u>avoid Super Fund responsibility for an aluminum plant</u> in Montana. Here's a little from the linked story here at LeftMN last July:

Montana's <u>Senator John Tester is not the only one</u> who finds Glencore and its new merger partner Xstrata's labor practices to be odious. How about Canada, South Africa, Argentina, Australia, the Democratic Republic of the Congo, Colombia, Equatorial Guinea, Ivory Coast and Zambia, among others.

According to the linked post:

Recent research published in the journal Foreign Policy shows that Glencore's fundamental

business model relies on operations in weak governance zones where public scrutiny and transparency are frequently absent.

When the mainstream *Foreign Policy* is on your case, you know you are an outlier.

But we will shortly find out whether Minnesota is one of those "weak governance zones," won't we?

With the publication of the supplemental EIS and the upcoming opening of the public comment period, we're coming close to finding out what kind of "governance zone" we really live in, aren't we?

Given DNR Commissioner Tom Landwehr's sputtering explanation of how 500 years really isn't 500 years on Almanac on Friday, December 6th, your confidence may be waning.

Even genial host Cathy Wurzer said, *Gee*, it sounds like there is a lot of uncertainty.

You said it, Cathy.

Mining fun with numbers!

Steve Timmer *January 31, 2015*

The events of the past couple of weeks regarding Sen. David Tomassoni and his piggy-back gig at the Range Association of Municipalities and Schools ("RAMS") have piqued the attention of a lot of people, including <u>Aaron Brown</u>, <u>Michael Brodkorb</u>, well, and me, too. They have both done excellent reporting on this for Your Voices in the Star Tribune, which you can read at the links.

Here is the briefest summary of the action:

Senator David Tomassoni, a state senator from Chisholm, who served a handful of terms in the Minnesota House and is now in, I believe, his fourth term in the Minnesota Senate, announced recently that he was taking a job as the executive director of RAMS, a paid position, while continuing to serve in the Senate. RAMS is an organization designed to represent the interest of the Range at the Capitol: to influence legislation, in other words.

Representing District 6 in the Senate, Sen. Tomassoni also has a seat as a director on the <u>Iron Range</u> <u>Resources and Rehabilitation Board</u>, the "IRRRB," where the senator was, and maybe still is, the chair.

The Board is essentially stocked with Iron Range legislators, including Tom Bakk, the current Majority Leader in the Minnesota Senate.

RAMS gets its funding from the IRRRB and dues from member organizations (Range cities and school districts). In the last report available, <u>RAMS received</u> a grant of \$55,000 from the IRRRB. (RAMS also gets a direct allocation of production taxes.) The Board that Sen. Tomassoni sits on passes on grants to the organization that will pay him a salary.

At the moment, RAMS does not have a lobbyist; <u>it</u> <u>used to have one</u>: its former executive director. Currently, <u>it only has Sen. Tomassoni</u>. Good thing, eh?

The fly in the ointment, perhaps obviously, is that it presents a clear conflict of interest. People are talking mostly about the conflict between a sitting Senator and the lobbying organization RAMS (which the Campaign Finance Board focused on), but I think the conflict of more concern is the one between Sen. Tomassoni, the IRRRB member and chair — a position of considerable influence — and a principal funder of RAMS, and his role as a paid employee of RAMS.

Okay, that's all you get from me. If you want to know more, you will have to read Aaron Brown and Michael Brodkorb.

My question to RAMS: wasn't there a single person on the entire Iron Range, other than David Tomassoni, who could do this job? There must be at least one. I don't think you

looked very hard, to be honest. Maybe RAMS even wanted the chair of the IRRRB in its corner.

The IRRRB is one of the greatest slush funds, like *evah*. Again, according to its most recent report to the Legislature, it handed out \$21,000,000 in round numbers, in 2013. The list of supplicants is truly amazing, ranging from youth hockey associations, to chambers of commerce, to large and established mining companies. It's nine Range legislators who get to be the candy men — well, and woman, too.

The members of the IRRRB (it's hard to stop at three "r" 's) also administer the Douglas J. Johnson Economic Protection Trust Fund, a slush fund's slush fund, so to speak. Note that it is not the Douglas J. Johnson *Memorial* Economic Protection Trust Fund. Doug is still very much around, and you'd never guess: he's a lobbyist these days.

I knew you'd never guess. Among Doug's clients, by the way, are Twin Metals, which is pronounced *Antofagasta*, as in the Chilean sulfide mining giant that wants to bore holes in the earth around Ely to bring a sulphurous Hades to the surface. It wouldn't have hired Doug if it didn't believe he had some pull.

If you look at the <u>IRRRB site</u>, though, you won't find any reference to Doug or his fund. That's because the IRRRRRRR is hiding it. It is hard to hide \$140,000,000, though, even if you are Willie Sutton.

Doug Johnson? Never heard of him.

The IRRRB wants to bury the DJJEPTF so deep that even the Legislature can't find it, and make it even less accountable to the Legislature than it presently is. It proposes to do that by <u>burying Doug and his fund in a</u> <u>separate non-profit corporation</u>, a vault to which only the IRRRB has the key.

After all, says the IRRRB, it's only mining production taxes that we're talking about, which are collected *in lieu* of local property taxes.

Regrettably, my friends, we have to go into the weeds on this one. I know we're already nearly 800 words into this, but it can't be helped. I'm sorry.

If you are an operating mining company, instead of paying local *ad valorem* property taxes, you will pay a production tax, based on the tonnage of ore that you mine. The tax is collected by the state, just like the general sales tax. Unlike the sales tax, however, which the state just puts into the general fund, the mining production tax collections have several ready-made homes. These homes on the Range include cities and townships, schools districts, counties, and, *tra la*, the IRRRB. Oh, and the Douglas J. Johnson Not-Memorial Economic Protection Trust Fund. Just rolls off the tongue, doesn't it?

You would not be mistaken if you thought this sounds like an economic fiefdom administered by the IRRRB.

But it's just local property taxes! you say; what's it to us? The production tax only for operating mining companies, though, not the three-bedroom rambler you own in Hibbing, or even the Bob Dylan Museum. On top of that, the production tax distributions get topped off by the general fund. You and I are the general fund, my friends.

For example, in <u>2013</u>, the general fund contributed \$8,428,275 to taconite production tax distributions to the

parties identified above, and \$5,017,442 was contributed to Doug's fund. The state's general fund contributed about 8% of the funds distributed as "production tax" distributions.

For 2012, the general fund kicked in \$6,684,588, and Doug's fund got \$1,214,783. The state's percentage contribution that year was about 8.3%.

In other words, in each of those years, the general fund contribution was greater than the contribution to Doug's fund. I haven't gone back to do an analysis from the time of the establishment of Doug's fund during the Perpich administration, but it would be an interesting exercise.

In still other words, we all have some skin in this game, and we ought to find it objectionable that the IRRRB wants to bury our nut. Mixed metaphor; sorry.

Range politics and accounting are wondrous things. I really do think they believe they are in a separate country.

Update

The ink was barely dry on this story, and now there are a couple of new ones in northern Minnesota newspapers that are called to my attention.

The Duluth News Tribune reports that the IRRRB and Minnesota's DEED took a big haircut on their investment, that is, former investment, in Twin Metals, which, as I wrote earlier, is pronounced *Antofagasta*. *Anto* used to be a joint venture partner with its friend Duluth Metals (a Canadian company, by the way), in Twin Metals, but decided recently to take its marbles and go home. *Anto*

proved to be false friend, indeed. The junior mining company Duluth Metals couldn't continue, and *Anto* said, *Wait, we changed our minds; we'll buy you out! For 45 cents per share:*

When the Chilean copper mining company Antofagasta bought out Duluth Metals on Jan. 20, they paid 45 cents for every share of the foundering company's stock.

That's better than the 7 cents per share that Duluth Metals was trading for on the Toronto Stock Exchange when the deal originally was announced last fall.

Still, the buying price was way down from the \$3 per share Duluth Metals flirted with in 2011 and 2012. And many stockholders who purchased Duluth Metals in recent years took a big hit — including a more than \$500,000 combined loss for the Iron Range Resources and Rehabilitation Board and the Minnesota Department of Employment and Economic Development.

Here's how the IRRRB and DEED became shareholders of Duluth Metals:

In unusual moves for both state agencies — and maybe for any public agency — economic development officials had purchased outright stock in the fledgling Canadian mining company.

Mark Phillips explained it this way:

Newly appointed IRRRB Commissioner Mark

Phillips (who is a former DEED commissioner) said the risk was calculated at a potentially lucrative reward if Duluth Metals had struck it rich.

He sounds like Humphrey Bogart in the *Treasure of the Sierra Madre*, doesn't he?

Anyway, the IRRRB said, *Let's take some chips out of the Taconite Area Environmental Protection Fund* and play the stock market! And so they did.

In some circles, this would be called pissing away your rainy day fund. Personally, I would never be *that* crude. Duluth Metals would never have been confused with investment grade securities.

But this gives me an idea, sauce for a goose being sauce for a gander and all. Remember the Douglas J. Johnson Not-Memorial Economic Protection Trust Fund? (It up there; just scroll up to find it.)

Since the IRRRB is so hot to open non-ferrous sulfide spewing mines, putting landowners, riparian interests, birds, fish, wild rice, and recreational water users (I've undoubtedly forgotten some) at risk, the IRRRB should pledge the entire Doug Fund to be available for cleanup of a tailings dam breach or other environmental disaster. That would be "economic protection," wouldn't it? Of course it would! I know I'd feel better if there was another \$140 million in the cleanup kitty.

It would also be the IRRRB putting its money where its mouth is. Sen. Tomassoni was the chair of the IRRRB when it decided to bet the marbles on Duluth Metals. What do you think, Dave? I know you have other stuff on your mind right now, but drop me a line when you have a

moment.

And the <u>indefatigable Aaron Brown</u> had an op-ed in the Hibbing paper noting that Tomassoni's move pushes the frontier of Iron Range cronyism:

It's hard to find someone close to the situation who thinks this is a good idea, though some shrug in passive shock. The comments sections of major newspapers in the state — usually viper pits of arguing partisans — seem frighteningly united in scorn, not just for Tomassoni, but for an Iron Range that would allow this.

Rangers ride the Bomb

Steve Timmer

Febuary 3, 2015

I was unaware of the decision making that went into the IRRRB and DEED's pouring of *over a half million dollars* into the rathole known as Duluth Metals. But John Myers wrote a story of this tale of investment woe that appeared in the Duluth News Tribune on January 31st, and you ought to read it. It is quite a good story about the inner workings of a somewhat obscure agency — at least off the Iron Range — the IRRRB.

The IRRRB is almost panting with desire over copper sulfide mining in northern Minnesota. Well, skip the "almost." Its board members are eight Iron Range legislators, plus one more state senator, also usually a Ranger, appointed by the Subcommittee on Subcommittees (I am not making that up)¹⁴. The Subcommittee on Subcommittees is a subcommittee of the Rules Committee. Gee, that was fun to write.

The IRRRB also has an executive, the Commissioner, who until recently was Tony Sertich; he resigned recently and was replaced by Mark Phillips, who will figure more in this tale later. Phillips is a former DEED Commissioner and the Director of Economic Development for the IRRRB.

It has been my experience that economic development types have to be watched especially carefully.

The nine members of the IRRRB are really the emirs of northern Minnesota. Instead of paying *ad valorem* property taxes, operating mining companies pay a "production tax" that is levied per ton of ore mined. The money is collected by the state, not the counties where the mines are located. And it isn't distributed strictly where a mine is located either. There is a statutory formula for distributing the the taxes collected to cities, townships, counties, and school boards in something called the Taconite Assistance Area.

In addition to the entities mentioned above, a nice slice of the pie is given over to the emirs of northern Minnesota to dole out, more or less as they see fit. As you might imagine, this makes the emirs pretty popular.

If you want to promote Hockey Day in Minnesota, repair the Grand Rapids showboat, if you are the Range Area Municipalities and Schools and you want to develop a new model for learning (\$180K in the last report), or you are Detroit Diesel, Delta Airlines, or an established mining company and you want to expand, why, the IRRRB is the place for you. You won't get all the money you need from the IRRRB, but it will chip in.

And this was news to me, but the IRRRB seems really into demolishing houses and garages. Scraping lots so builders don't have to. If you read the report at the link above, you'll see that the outlay by the IRRRB in the most recent accounting period was \$21 million dollars, in round numbers.

The emirs really understand their clout. Last fall, David Dill, a representative from Crane Lake, threatened Grand Marais if it didn't get on board with sulfide mining.

But that's not all. In addition, the IRRRB also manages two other funds (maybe more, who knows?; these are the ones I know about). One is the Douglas J. Johnson Economic Protection Trust Fund, or as I call it, the "Doug Fund," named after a former Range senator who is now a lobbyist for, *inter alia*, Twin Metals, really Antofagasta Plc.

The second one is the Taconite Environmental Protection Fund. The fund is not a "trust," so I suppose that the IRRRB is merely a steward of this money, not a trustee. (Although really I don't think there is any difference in the responsibility of the IRRRB for either fund.)

Both of these funds also receive production tax money. But it's the second one that was involved in the IRRRB's little stock market play.

You wouldn't think that a fund called the *Taconite Environmental Protection* Fund would be involved in investing in start up mining ventures, would you? Well, I wouldn't, but it's one of the wonderful things about the Emirate of Northern Minnesota.

I only took about 675 words to get to the point this time, so you will have to agree that I am getting better.

There is another document that I want you to read. It's the minutes of a meeting of the IRRRB where it decided,

along with Minnesota's DEED, to exercise warrants (stock options) in a company called Franconia Minerals, a predecessor in interest to Duluth Metals. As part of some financing to Franconia, some five years earlier, (again: why is a fund with environmental protection in its name lending money to development stage companies?) the TEPF and DEED got some warrants as a spiff.

Duluth Metals, a Canadian concern, with its impending joint venture marriage with Antofagasta Plc., a joint venture named Twin Metals, was poised to acquire the stock of Franconia, and the warrants to the IRRRB and DEED were assigned as part of the deal.

So, what to do? Wait and exercise the warrants until after the Franconia stock purchase was done? The IRRRB understood at some primitive level that Duluth Metals was not, um, blue chip. If the exercise took place after the purchase by Duluth Metals, the state would have to hold the stock for at least six months before selling, and the stock price could go down. The stock was enjoying a bump because of the pending joint venture.

IRRRB and DEED could sell the warrants, but a broker would probably want a big cut.

Third, exercise the warrants immediately. And that's what they did. The IRRRB and DEED each paid a quarter of a million for Duluth Metals stock.

There was just one teeny problem: the state was investing in the development stage Duluth Metals, not Antofagasta Plc.

It's as if a banker made a car loan to an unemployed sixteen year old kid without getting the guaranty of mom

and dad. (Well, not exactly the same, but you get the idea.) It's an oversight that came back to bite.

Even though there was no guarantee that Antofagasta Plc. would stick with Duluth Metals and the joint venture Twin Metals, the IRRRB and DEED did not sell the stock right away and take its profit. (They were undoubted urged not to by Duluth Metals because of the negative publicity it would generate.)

Instead, they rode that sucker right into the ground.

The charming Anto decided it just wasn't that into Duluth/Twin Metals anymore and declined to make any additional investment in Twin Metals. Duluth Metals stock tanked instantly, because it was recognized that it was a smoking crater.

And irony of ironies, the buyer for the smoking crater was Antofagasta Plc.

In the Duluth News Tribune article linked at the top of this story, Mark Phillips said, *Hey getting warrants is really smart. We should do it more.*

Yeah, Mark it's smart, but not when the warrants are for a bag of beans.

Update

In case you missed it in the story, in addition to the IRRRB money, the State of Minnesota, through DEED, also has a quarter million dollars in ashes in this smoking crater.

You want Dill on that Tomassoni?

Steve Timmer *May 20, 2015*

The close of the recent legislative session will probably set the bar for skullduggery on a number of fronts, not the least of which is the environment. HF 846, the odious Agriculture and Environment Omnibus Budget Bill contains a lot of policy in it — bad policy — some of which wasn't in bills from either body of the Legislature that were presumably being harmonized by the conference committee.

You can see the history of HF 846 here. You might want to pay especial attention to a couple members of the conference committee that put this one together; we'll get to that in a moment.

The Minnesota Environmental Partnership has <u>written a</u> <u>letter to Governor Dayton</u>, outlining the most offense provisions of the bill, and asking him to veto it. You really do need to read the letter's description of the bill, including how it will permit plants and seeds that will only kill a bee on second contact, not first, to be labeled "pollinator friendly."

I'll just concentrate on a couple of items from the letter, though, and they both relate to mining. First, this:

Surprise Sulfide Mining Amendment (Art. 4, Sec. 117, Lines 171.17-21): the bill exempts sulfide mining waste from solid waste rules. *This amendment was never introduced as a bill or heard in any committee, and its future effect is unknown.*Exempting as-of-yet unknown waste streams from potential sulfide mines is an unnecessary risk to water quality and public health. Nobody has been able to explain how or whether this would apply to PolyMet and other proposed mines.

And this:

Suspending Wild Rice Protection (Art. 4, Sec. 136, Lines 183.26 – 184.14): forbids the PCA from requiring investments to comply with the sulfate standard, which protects wild rice, until the PCA completes a new rulemaking on the wild rice standard.

It is not a coincidence, of course, that two Range legislators, Sen. David Tomassoni and Rep. David Dill, were on the conference committee. I wonder which one brought the sulfide mining amendment to the meeting in his pocket; maybe they both did. These two have also practically traded chairship of the IRRRB for a number of years.

They are not friends of an environment you or I want to live in, hike or paddle through, or fish in.

The Separation of Powers

Steve Timmer *June 10, 2015*

In civics class, back when they had them, we learned about the three branches – functions, really – of government: legislative, executive, and judicial. We learned that the branches operate in a ballet called "checks and balances." The functions were not supposed to be intermingled.

Minnesota takes this idea pretty seriously. Article III, Section 1 (there is only one section in Article III, really) of the Minnesota Constitution states:

DISTRIBUTION OF THE POWERS OF GOVERNMENT – The powers of government shall be divided into three distinct departments: legislative, executive and judicial. No person or persons belonging to or constituting one of these departments shall exercise any of the powers properly belonging to either of the others except in the instances expressly provided in this constitution.

The next three articles in the Constitution describe the three branches or functions, but Article III is a predicate to them, warning people not to mix them up.

A principle abstracted by the courts from the language of Article III is that "core functions" of a branch cannot be usurped by or delegated to another branch. The express language of the section also states that a person cannot serve in two branches (at least at the same time), unless it is "expressly provided" elsewhere in the Constitution.

In fact, Section 5 of Article IV states:

RESTRICTION ON HOLDING OFFICE – No senator or representative shall hold any other office under the authority of the United States or the state of Minnesota, except that of postmaster or of notary public. If elected or appointed to another office, a legislator may resign from the legislature by tendering his resignation to the governor.

The section does not say "elective office," just "office." Because of the narrowness of the exclusion, a legislator sitting in a governor's administration would certainly seem to be prohibited.

In general, of course, the legislative branch makes the laws; the executive branch executes or performs them, and the judicial branch adjudicates disputes about the law, and when necessary, interprets the law and determines its consonance with the Constitution.

Professor David Schultz wrote recently – and not charitably – on his blog about the recently-ended legislative session He mentioned in particular the middle of the night shenanigans to gut the Office of the State Auditor. In spite of the efforts of Governor Dayton to undo this feat of legerdemain by the leadership of the Legislature, including Senate Majority Leader Tom Bakk

and his Chief of Staff Tom Kukielka (who is also, I believe, the Executive Director for the Senate Rules Committee), it appears that it is going to happen.

Professor Schultz wrote that the act of the Legislature to effectively defund a constitutional office raised a serious issue under the separation of powers doctrine. He cited several cases, one in particular dealing with another constitutional office, the State Treasurer:

One of the best cases on this issue is *State ex rel*. *Mattson v. Kiedrowski*, 391 N.W.2d 777 (1986). In that case at issue was a 1985 law enacted by the legislature, in special session, which transferred most of the responsibilities of the State Treasurer, an executive officer, to the Commissioner of Finance. The reason for the transfer of responsibility was that the Treasurer, then a constitutional officer [the Office of State Treasurer was abolished by amendment of the Constitution, subsequently, *Ed.*], essentially abandoned the state and was no longer performing his duties. The Supreme Court rejected this transfer of duties.

The Supreme Court reasoned that the Legislature could not, because of the separation of powers clause, strip a constitutional officer of his or her authority.

Cases involving the separation of powers also arose to challenge the failure to provide funding for the judicial branch; Professor Schultz refers to one of them, *In re Temporary Funding of the Judicial Branch*, holding that the courts could compel the Legislature and the Governor to fund the courts.

The separation of powers was also raised by the plaintiffs in <u>Brayton v. Pawlenty</u>, a case that sought to restrain the use of the unallotment authority of the governor to balance a budget before a biennium even began. The case was decided on statutory construction grounds, holding that the unallotment authority did not extend to balancing an unbalanced biennial budget prior to its beginning.

In his concurrence with the result, however, Justice Alan Page would have found Governor Pawlenty's unallotment actions to be unconstitutional under the separation of powers clause, as an invasion of the legislative function, not merely unlawful as a matter of statutory construction. Justice Paul Anderson joined Justice Page's concurrence.

I doubt that we have heard the end of this. Auditor Rebecca Otto has said as much. The governor has vowed to pursue it, too.

One of the things that ought to be part of the summing up of this lamentable affair is exposing the <u>vendetta</u> of Sen. Tom Bakk and his lieutenant, his henchman, the sinecure holder, Chief of Staff Tom Kukielka. And other Ranger senators, too, like Senator Tom Saxhaug. Sitting on the Executive Committee of the state, Rebecca Otto voted against the approval of 31 sulfide mining leases in northern Minnesota. That voted touched off what turned out to be a spectacularly unsuccessful "Dump Otto" campaign on the Range. Since it didn't work, other methods were apparently required.

Now if this bothers you, and perhaps it should, you might consider signing a <u>petition calling for Tom Bakk's</u> <u>resignation</u> as Senate Majority Leader.

But that isn't all that needs to be done. The work of the separation of powers isn't finished. The Iron Range Resources and Rehabilitation Board, a state agency on which the Range legislators sit, and decide millions of dollars of grants and indulgences every year, that giant suckhole of money and patronage, ought to be examined to see if it is an unlawful invasion of the executive branch by the legislative branch.

The IRRRB has a Commissioner who sits in the governor's cabinet. The Board – these legislators – make the spending decisions about who gets the money. (They have an annual appropriation of about \$20 million¹⁵ to hand out, part of the mining production taxes levied and collected by the state, and make grant decisions out of other special Range funds, often to the mining companies.) Not the governor, not the whole legislature, but rather part of the legislature sitting as an agency. Reporters often describe the IRRRB as an "unusual" or "peculiar" agency when writing about it.

But it's so much more.

Entirely apart from the usurpation of an executive function, the legislators on the IRRRB hold multiple offices "under the authority of the state of Minnesota." I think they're constitutional dead ducks. The IRRRB may be, too.

Some Range legislators are so cavalier about separating their job as a legislator from everything else that they <u>don't</u> see a problem with taking yet an additional position, for compensation, with a publicly-funded organization that lobbies the Legislature for more.

The Rangers wail that the mining production taxes

collected and distributed by, *inter alia*, the IRRRB, are merely in lieu of property taxes on mining companies. That is so under Article X, Section 6 of the Minnesota Constitution, the same document that requires the separation of powers and prohibits legislators from wearing multiple official hats.

The IRRRB is an engine of patronage, and probably worse. The legislators who sit on it retire from the legislature to peddle their influence on behalf of mining companies. If you are really good at it, you get a slush fund named after you.

Governance in the Dismal Swamp

Steve Timmer *June 17*, 2015



The Dismal Swamp Illustration by Ken Avidor.

In recent months, controversy has swirled around the Iron Range Resources and Rehabilitation Board (the "IRRRB") and the people who populate and control it: Iron Range legislators. There was another story by investigative reporter Jennifer Bjorhus in the Star Tribune on Sunday, June 14th – another eyebrow raiser – involving IRRRB loans to a Mountain Iron company, Silicon Energy, that also rather mysteriously (or not, when you think about it)

got a leg-up from the Legislature in solar rebates, pushing it to the front of its competition in available-rebate amount.

NOT coincidentally, the same people who made the loans to Silicon Energy championed the rebates in the Legislature, including Sen. David Tomassoni, a DFLer from Chisholm. This is a curious tale involving a lobbyist, previously convicted of financial shenanigans, who touted an earlier wind energy company that the IRRRB loaned money to and failed, and who was able to persuade the IRRRB to loan even more money to Silicon Energy when it was on the brink of bankruptcy. THEN he persuaded the Rangers to push for the bigger rebates.

Did I mention that Silicon Energy apparently employs eleven people? Down from fifteen?

Obviously, this fellow has a silver tongue. And some really good friends. And the lobbyist, Gary Cerkvenik, is now an executive with the company (maybe he's one of the eleven), so all's well that ends well, right?

It's a good story well told by Jennifer Bjorhus, so don't rely on my brief recital here. The story is just the latest in a string of proofs that the IRRRB is the Dismal Swamp of governance. I'll get into some of these proofs more in later stories, but for now I want to concentrate on how the IRRRB got this way.

Be sure to read Aaron Brown's heart warming story about the lobbyist circle of life on the Range.

The IRRRB was created in 1941 by an act of the Legislature that is now found in Minn. Stat. § 298.22

(2014). The composition of the Board has varied over the years; presently, it is made up of the senators and house reps elected from districts "in which one-third or more of the residents reside in a taconite assistance area." One additional senator is appointed to the Board by my favorite Gilbert and Sullivan legislative institution, the Senate's Subcommittee on Committees of the Committee on Rules and Administration. (Currently, that means Majority Leader Tom Bakk gets to pick somebody.) Subd. 1a. <u>You can see the current roster of Board members here</u>.

The Board membership has always been mostly, almost exclusively, Range legislators.

The IRRRB is clearly a state agency in the executive branch of government. It says so right in the statute. It has a commissioner who sits in the governor's cabinet. But it gets weird after that, and therein hangs a tale.

Before that can be explained, though, a little more history of the IRRRB is required. The IRRRB itself has its own little history – self laudatory, as you would expect – here.

The IRRRB was established under the leadership of Governor Harold Stassen, just before he went off to war. Quoting from the IRRRB website:

IRRRB was founded in 1941 by the Minnesota Legislature with support from Governor Harold Stassen to rehabilitate the economy of northeastern Minnesota, a region dependent on natural iron ore mining. Since the Iron Range was viewed as a collection of communities facing common economic and social challenges, the Minnesota Legislature and Stassen determined the development of new natural resource-based industries would lessen the region's dependence on mining.

You would have expected it to be rehabilitated by now, wouldn't you?

The real mud fight over the IRRRB, though, began with the adoption of the revered Taconite Amendment. (You can tell it's revered because they capitalized it, like God or Horace Rumpole's She Who Must Be Obeyed.) Again, from the IRRRB's history:

By the 1960s, business development and increased diversification of the northeastern Minnesota economy became a key IRRRB mission. Passage of the Taconite Amendment in 1964 helped establish a stable form of taxation for Iron Range mining companies, creating the way for the construction of taconite plants across the region and creating thousands of new mining jobs. With IRRRB funding previously based on the occupation tax, which decreased as natural iron ores were depleted, the Minnesota Legislature in 1971 appropriated one-centper-ton from the taconite production tax to the IRRRB. That year, the tax generated \$170,000 in revenue to the agency. Today, a portion of the taconite production tax, paid by mining companies in lieu of property taxes, remains the funding source for IRRRB programs and operations.

As a brief aside, the operating mining companies pay two special taxes in lieu of the regular taxes that ordinary mortals and their companies pay. The first is the occupation tax, paid instead of the corporate income tax, and the production tax, instead of property taxes. The rates for both are set by the Legislature. The occupation tax, paid into the general fund of the state, and for schools and the University of Minnesota, continues to not raise much money. The production tax is the mother lode. There isn't anything in the Minnesota Constitution, though, that says we have to completely beggar the occupation tax in favor of the production tax.

But this tells you about everything you need to know about why Rangers, like the retired and now-lobbyist Senator Doug Johnson, love to sit on the tax committees.

Since they are in lieu of property taxes, a lot of the production tax revenue does go to pay the things that property taxes elsewhere do: funding counties and cities, school districts, *etc*. And it should; no argument there. But there is a lot left over, apparently. We'll get into actual numbers in later stories. Deciding where it goes, though, is a source of enormous political power.

Throughout most of its history, the IRRRB functioned as a more-or-less advisory board or legislative commission, providing advice to the executive branch.

That changed in 1995, and you will never guess how it happened. Go on, guess.

If you guessed that it happened in the dead of night in a conference committee at the end of a special legislative session, go get yourself a cookie.

First, let's set the chessboard. The governor is the just reelected Arne Carlson. The Speaker of the House is Irv Anderson, from International Falls, and the Senate Majority Leader is Roger Moe, from Erskine; both are DFLers. They are undoubtedly communicating with their conference committee members, just as Tom Bakk was at the end of the session this year, when he, or his confidant, Tom Kukielka, urged Sandy Pappas and Jim Carlson to stick a shiv in Rebecca Otto.

The amendments to the IRRRB enabling statute, in neither chamber's version of the bills that went to conference, and that got added at the last minute, created a tectonic shift in decision making at the IRRRB, at least with respect to the power of the Board over what is known as the Board account and the Environmental Protection Fund, too. This is all chronicled very well in law professor Neil Hamilton's article that you can read at 25 Wm. Mitchell Law Rev. 1203 (1999). Actually, you probably can't read it, since it isn't available online unless you have access to Westlaw or Lexis.

The legislator members of the IRRRB asserted, according to Professor Hamilton, both operational and policy control over the (executive) agency; he cited a memorandum from Jim Gustafson, then IRRRB Commissioner, to Doug Gregor, an Assistant Attorney General, dated October 28, 1997. (I tried to obtain a copy of the memo, however the AG's Office said *nyet* to the request.)

I wrote earlier that control of an executive agency by a group of legislators, performing executive tasks, is, or ought to be, a constitutional non-starter under the Separation of Powers Clause in Article III of the Minnesota Constitution. Professor Hamilton agrees with

me, or rather I agree with him, since the law review article predated my LeftMN article by a mere fifteen years or so.

There are really good reasons why this control of a state agency by a small group of legislators is terrible policy, on top of being unconstitutional. As I have *also* written before, membership on the IRRRB makes one a virtual Emir of Northern Minnesota. One can imagine the ring-kissing that must go on by minor functionaries across the Range to obtain the blessing of the Emirs, and well, get some cash, too.

You have to wonder how many fundraisers for the Emirs are hosted by the ring kissers.

The IRRRB <u>publishes splashy reports</u> on how many houses and derelict garages it paid to tear down in Hibbing, but much less about the real money it controls. You need not believe me about this; the Legislative Auditor thinks that the <u>IRRRB reporting is a bit sketchy</u>, too.

Among the things that the IRRRB likes to do is rebate production taxes to the mining companies.

It also likes to lend money to Gary Cerkvenik's wind energy client, and then not exactly publish the fact to the public when it comes a cropper. I tell you what, friends, I challenge you to find evidence that the IRRRB publicly wrote off the loan to Gary's client.

I wrote to the IRRRB some months ago, and I asked if it published financial statements, and it responded, "Sure, look here." It gave me a link to agency fund accounting for the whole state. Gary's wind client wasn't in it. Really, it probably was, but not in a way that anyone could see. At

all events, it didn't say something like, "We loaned Gary's client x million dollars, and we lost it all." 16

I'm sure they think this is funny, but I don't.

I don't care what your political persuasion is, after twenty years of this Dismal Swamp, you ought to be demanding better. Especially if you live on the Range.

Lee Schafer: PolyMet tout

Steve Timmer

October 21, 2015

It has been an especially glum time for the mining industry in recent months. Taconite (spellchecker offers *masonite*) plants are shuttered across northern Minnesota, and to add insult to injury, a new one, Essar Steel "Minnesota" is set to commence operations next year, financed in part with some \$72 million in state funds, from DEED and the IRRRB. It turns out that "steel" is also a bit of a stretch in the name, since the company has <u>backed away from building the promised steel plant</u>, so it'll just be Essar Taconite Minnesota in reality.

It would probably be fair to say that existing taconite producers are not happy about a new competitor, especially in the current low commodity prices environment, and especially when that competitor was given a leg up by the State of Minnesota (with some taconite production tax money paid by the existing producers, by the way). Moreover, it seems that Essar's parent company, located in the city we used to call Bombay, is crosswise with the state on covenanted promises to build the steel plant contained in the financial deal. It's an ugly word, but Essar is in default.

The CEO of Cliffs Natural Resources (just a comparative

hop, skip and a jump away in Cleveland!), which has multiple facilities on the Range, has <u>vowed to shutter one</u> <u>of its taconite production facilities permanently</u> if Essar coughs up so much as a pellet (like an owl), saying that Essar would create a titanic oversupply of taconite.

Apparently, the governor and others had a video conference with the Essar CEO in Bombay about the problem and that the state wants its money back. You see, when you are a creditor, and the only way you can talk to your defaulting debtor is by video conference, well, the situation is not ideal. [The loan remains unpaid, *Ed*.]

With that 250 or so word preamble — a trifle for me, really — here's what I really want to talk about: PolyMet and a recent column by the Dr. Pangloss of the local business press, Lee Schafer. It's titled, <u>Despite lower copper prices</u>, <u>PolyMet's mine still has financial appeal</u>. The web version of the story is dated October 15th.

It isn't only the price of taconite pellets that's been in steep decline; copper has been, too, as the headline intimates. Both PolyMet and Glencore's (<u>PolyMet's sugar daddy</u>) stock have nosedived in recent months and days.

According to Schafer, though, everything is fine. And he has two sources: PolyMet's CEO Jon Cherry, and a company called Lake Street Capital Markets.

Well, okay then, Lee, <u>Karin Housley</u> can just put in that big buy order for PolyMet stock!

But the rest of you may want to consider Schafer's sources.

CEO Cherry, reports Schafer, said that *Glencore likes us*; it really likes us! And we got another \$6 million loan from *Glencore*.

Sadly, \$6 million will only fund at most a few months of PolyMet's office operations. Even if things go really, really well — which they won't — that isn't nearly enough money to get PolyMet to a mine, much less operate one. For that, it would need hundreds of millions of dollars. PolyMet can't raise it, and Glencore's shareholders and creditors probably won't let it guarantee PolyMet's financing, given Glencore's balance sheet. In addition to the cost of operating a mine, there are the financial assurances that must be provided —up front — to the state.

It's likely that PolyMet's best play is to try to get a permit to mine and then be acquired by another mining major, like the way <u>Duluth Metals was acquired by Antofagasta</u>. [That's exactly what happened. *ed.*] The problem with this scenario is that other mining majors are in the same or a similar boat as Glencore. (As we know, the majority of PolyMet's stock was acquired by Glencore, and it is balking at providing any guaranty for PolyMet.)

Glencore's \$6 million is a band aid, one of those really little round ones.

There's one other thing you need to know about CEO Jon Cherry's blandishments. He probably doesn't even believe them.

Here's PolyMet's stock chart for the last thirty days.



PolyMet 30-day stock price chart

Note a couple of things: the bump that the stock got at the time Lee Schafer's article was published, but also note the big drop in the stock right at the beginning of October.

Although you wouldn't know it from the Schafer piece, the drop corresponds with some heavy insider selling of PolyMet shares by, among others, CEO Jon Cherry. On October 1st, CEO Cherry disposed of 195,750 shares or options to buy shares for *61 cents* a share. (Recall also, that PolyMet's largest shareholder and sugar daddy, had its own shares plummet to historic lows on September 28th.)

Jon Cherry sold a substantial portion of his shares or share rights in the company when the shares were trading in the basement. Not exactly the conduct of a CEO confident of the future of his company: poised to get a permit to mine and to start operating one.

According to this linked report, most of the shares "sold" by Cherry on October 1st were "exercise[d] for cash." In other words, rather than taking the shares and then selling them in a public market, he took the money out of the company till. The till of a company that had just gone begging to Glencore for \$6 million to help keep the lights on.

But he was hardly the only <u>insider</u> selling shares at the time.

Over a couple of weeks leading up to October 1st, David Dreisinger, board member, disposed of a little over 258,000 shares; he acquired 28,726 shares pursuant to a stock option on October 2nd, but sold those shares immediately, too.

Officers Doug Newby, Brad Moore, and Stephanie Hunter, and multiple directors, too, sold many shares in the company right at the end of September, often dumping shares acquired from executive stock options in the market the same day, or a few days later (that's what the board chair did, too), or exchanging them for the company's cash, as CEO Cherry did.

The consequence of these actions was to diminish the cash of a company that needs it badly, and to depress the market for PolyMet shares.

Anyone who thinks these people are going to stick around and protect Minnesota's environment and its patrimony of clean water is sadly mistaken. They don't even protect their own shareholders. But let's also spend a moment considering Schafer's other witness to the health of the PolyMet project, <u>Lake Street Capital Markets</u>. Schafer writes this:

Financial analysts who have looked at PolyMet don't have to just stick with the company's plan, of course. Chris Krueger of Minneapolis-based Lake Street Capital Markets assumes far lower metals prices in his financial model, but it still shows a consistently profitable operation with annual EBITDA of about \$176 million.

"EBITDA" means earnings before interest payments, taxes, depreciation and amortization. EBITDA is kind of a measure of the cash that a business is expected to throw off from operations. We know that PolyMet will have to raise a half a billion dollars, in round numbers, to open a mine. [Maybe twice that, according to current estimates, *Ed.*] That will obviously come at significant capital cost. It will also have to pay federal taxes, and state mining production and occupation taxes.

One of the other interesting things about Lake Street Capital Markets, though, is this, taken from a 2015 press release, linked above:

Lake Street Capital Markets, or its affiliates, intends to seek or expects to receive compensation for investment banking services from the subject issuer in the next three months.

The authoring analysts who are responsible for the preparation of this investment research are eligible for compensation based on the total revenue and general profitability of Lake Street Capital Markets, which

includes investment banking revenue. However, such authoring analyst will not receive compensation that is directly based on or linked to specific investment banking transactions.

LSCM and its analysts have a direct financial interest in PolyMet, which is why it had to disclose that fact.

But just as in the case of the heavy PolyMet insider selling, Lee Schafer doesn't mention this to his readers.

(For a more, well, sober judgment of PolyMet prospects, I recommend this <u>recent article by Ed Lotterman</u> in the Pioneer Press.)

This troubles me, frankly, and I think it ought to trouble you, too. It is difficult for the public to understand the nature and extent of the financial risks to the state and to the public without a genuine and accurate picture of whom we're dealing with.

Update

The pixels were barely dry on this story when this went up at My Minnesota: Mining pollutes financial as well as natural environments. It included this observation:

Mining operations and companies are frequently structured to be not "too big to fail," but to be able to "bail at fail" with government, the environment and locals trying to clean up the messes left behind.

Bingo.

Further Update

Reader Alan observes:

Lee Schafer appears to be some kind of operative of the Chamber of Commerce or something. He wrote a recent article saying that we are already taxing the rich as much as we possibly can without huge negative consequences. I wonder if he's not very bright. Or maybe he's just bright enough to remember who owns the newspaper and what it will take to retain a job there.

Lee Schafer was a Babbitt long before Glen Taylor came along. But I agree with the operative part.

Yet Another Update

Here's a historical stock chart. It shows the average volume in shares of PolyMet over the last three months as about 227,000 shares/trading day. Compare that with the number of shares sold by just CEO Jon Cherry (195,750) and board member David Dreisinger (258,000) in a couple of days.

Today's Trading

Previous close	0.80
Today's open	0.80
Day's range	0.76 - 0.80
Volume	1,045
Average volume (3 months)	227,319
Market cap	\$221.3M
Dividend yield	-

Data as of 9:30am ET, 10/23/2015

"Leave no nest unshitted!"

Kurt Daudt, 2015

Steve Timmer

October 24, 2015

Governor Mark Dayton has said that whether or not to permit the PolyMet Mining non-ferrous or sulfide mining project will be the most momentous decision of his time as governor. [We know how that went, *Ed.*] In other words, he takes it seriously. So seriously, in fact, that he wants to retain an outside law firm to help him evaluate the risk. He's approached legislative leaders about permission to do that.

Having studied the financial risks a bit myself, I'll say they are considerable. The history of mining can be summed up thusly:

Miners appear, fleece investors, the public, and the environment, then bail with everyone else holding the bag. The country, nay the world, is littered with specimens of the pillage of miners. Just by way of illustration, there are eighteen federal Superfund sites in Montana alone, over half of them are from mining or metals production (processing or smelting). All of them, I think, are related to extractive industries in some way. A Superfund designation is being considered in Montana for an aluminum plant owned by Glencore PLC, PolyMet

Mining's sugarless sugar daddy.

"A mine is a hole in the ground owned by a liar," are remarks attributed to Mark Twain.

A group of Duluth-area businesses called the <u>Downstream</u> <u>Coalition</u> has asked the governor to oppose the project, asserting that the economy and the public have much more to lose from the project than can hope to be gained.

Kurt Daudt, Speaker of the Minnesota House, made remarks for the linked article that I could have written for him, without even seeing the article:

"I have not heard from Governor Dayton about this and would need to see a formal proposal," House Speaker Kurt Daudt, R-Crown, said in a written statement. "I look forward to a discussion about making PolyMet a reality so we can bring goodpaying, long-lasting jobs to the Iron Range."

Governor Dayton sounds like a prudent executive [Those hopes were dashed, too, *Ed.*] trying to make an informed decision, considering the risks to the state and to all its citizens, while Kurt Daudt sounds like a log-rolling boxhead, heedless of anyone but mining interests.

Update

Cementing his position as a <u>PolyMet tout</u>, Lee Schafer posted this:



Gov. Dayton wants indepth financial analysis, plans to hire a law firm? Why not an Ad Agency? Priest? Gym teacher? startribune.com/dayton-wants-l...

8:23 AM · Oct 23, 2015 · TweetDeck

Tweet from <u>@LeeASchafer</u>

Perhaps Lee is unaware that issues of corporate finance and corporate law generally, bankruptcy and reorganization law, suretyship and guaranty law, insurance law, real estate and water law, including the rights of downstream riparian property owners, liability for health hazards created by surface and groundwater pollution, liability for damage to recreational interests, liability to sovereign native nations for pollution, to name just some, are legal issues involved.

Governor Dayton has obviously thought about this a *lot* more that either Kurt Daudt or Lee Schafer.

The ne'er-do-well brother-in-law

Steve Timmer

November 14, 2015

Most families have one: he needs just a little more help to make a go of whatever he's up to — the 3.2 bar with futons for furniture, or whatever — or a place to crash when it doesn't. And you can never do enough for him, either, because, well, he's family. Everyone has an assigned role to play in these little tragedies, and often play it without giving it much thought. Outsiders can see what is going on, though, and that's why it is such rich material for drama — and comedy, too.

The mining industry is Minnesota's ne'er-do-well brother-in-law. A couple more examples of why surfaced this week.

About 650 taconite miners are about to run out of unemployment benefits. The governor has called for a special session to consider the <u>extension of those benefits</u> because the mines are still closed.

Dayton wants to help laid-off steelworkers by lengthening the period of eligibility for unemployment benefits beyond the state-mandated 26 weeks.

By the end of October, according to the

administration, companies including Minntac, U.S. Steel and Magnetation had laid off an estimated 1,413 workers in response to plunging global steel prices.

Later this month, 74 of those workers will see their weekly benefits expire. Next February and March, an additional 596 workers will lose theirs.

The benefit amount is about half what the worker made per week while employed, with a maximum weekly amount of \$640. It was not immediately clear how much longer Dayton wants to extend the benefits; the governor, whose father died Friday morning, was not available for comment.

Sen. David Tomassoni, DFL-Chisholm, argued that a longer-than-usual period of unemployment benefits would be appropriate for the steelworkers since many have delayed job searches or retraining in hopes that the mining companies would summon them back to work. [I thought, in fact, that you were supposed to engage in "job searches and retraining" when you were collecting unemployment. *ed*]

This is just the latest example of why the mining industry is an unreliable boom-and-bust employer and how the consequences of the bust are are visited on the state.

If this is such a good idea, Sen. Tomassoni, why don't you dip into the Doug Fund's \$150,000,000 you've salted away? The Doug Fund, a fund that's full name is the Douglas J. Johnson Economic Protection Trust Fund, receives a portion of the production taxes collected on mining activity. Mining taxes, the production tax and the "occupation" tax, are heavily skewed toward the

production tax, which stays on the Range. The occupation tax does not produce much revenue for the state.

What could be better economic protection than helping 650 unemployed miners out? What do you think, Senator? It sounds like a winner to me.

And now comes the news that Minnesota Power wants to give <u>"electric rate" relief to mines</u> and mills on the Range because of the tough time they are having. Mighty charitable of them. But there is a catch.

Of course.

Minnesota Power — which wants to keep the mines operating because they are big customers — believes that charity begins at home. Specifically, the homes of the residential rate payers served by Minnesota Power.

Struggling northern Minnesota mining companies and paper mills would get a 5 percent break on their electric bills under a rate relief plan that also would drive up residential rates, a Duluth-based utility said Friday.

Residential customers of Minnesota Power would see an increase of 14.5 percent, or about \$11.45 per month, based on a typical 750 kilowatt-hours of monthly power use, the utility said. General commercial businesses would see a 4 percent rate hike.

And it doesn't take much of a trip down memory lane to remember Essar Steel "Minnesota." You'll recall that DEED, the economic development people at the state, (along with the IRRRB, which contributed a much smaller

amount) ponied up about \$70 million to help Essar Steel India build a state-of-the-art taconite plant and steel mill. Great, but there won't be a steel mill, and now everybody is standing around trying to figure out how the hell the state gets its money back.

Short answer? It won't. Which is too bad, because Minnesota Power could have sold Essar Steel Minnesota a lot of electricity at residential rate payers' expense.

I hope, friends, you are beginning to discern the pattern here. It's a pattern that goes back a very long time. The IRRRB, for instance, was formed in 1941 — before we entered WWII — with the idea that the Range needed to be rehabilitated.

After all of the millions of public money poured into the area since then, name a prosperous Range mining city. Go ahead.

No, my friends, the Range is still not rehabilitated. But soon! One more mine! That's the ticket!

One of the things that PolyMet touts as an advantage it has over other mining companies is that it got its plant and tailings basin really, really cheap. Well, yes, it did. The taconite mining company that previously owned it, LTV, went bankrupt. (The tailings basin leaks, by the way, which Cleveland-Cliffs and maybe Minnesota Power are on the hook to fix, but that's a tortured tale for another day.)

It's bad enough when these duds don't work out, but it adds insult to injury when they not only go down the drain, but screw up the environment in the process. It's like paying somebody to throw trash in your yard. It's exactly like that.

The IRRRB and DEED have already put money into PolyMet. The recent and "final" — well, we will see, won't we? — environmental impact statement issued a week ago says next to nothing about how PolyMet will pay to clean up its messes, <u>especially after it is dead</u>.

When Frank, Jon, Bruce, Brad — or even Jess — and all the rest of your brothers-in-law show up at the front door and ask to crash on the couch, think hard about whether you'll swing the door wide.

What color is your hat?

Steve Timmer

December 12, 2015

In many specialties in the practice of law, lawyers and law firms are divided into two camps. There are plaintiffs' personal injury firms, and there are insurance defense firms, for example. And there are lawyers who represents environmental non-profits and lawyers who represent extractive industries and polluters.

Crossover from one side to the other is rare because, among other things, it's bad for business. You'll get a rep. If you make your living defending polluters, it is highly unlikely that you'll accept a brief defending environmental regulation.

It just isn't done. It looks bad to existing clients, who will wonder where your loyalties lie, and it will scare away prospects.

Which brings us to the Bleak House characters <u>Crowell & Moring</u>, the law firm hired by the State of Minnesota to defend the state's decision on the PolyMet mine, whatever that decision is. *Whatever* that decision is. Right.

Let's look at some of C&M's clients. <u>National Mining Association? Check! Massey Energy (felon Don Blankenship's company)? Check!</u> Sierra Club? Well, I

don't see it anywhere.

In fact, the firm, which is based in Washington, D.C., not Minnesota, <u>brags about its mining industry representation</u> around the world, and how it is expert in turning back the evil regulators wherever they may be found, and protecting mining companies from liability for the messes they make.

The color of C&M's hat is obvious to even the casual observer. It's as black as the coal their clients mine.

This was a stunningly wrong-footed move.

Really, a skeptical person might think the permitting decision was already made.

The MMB Commissioner, Myron Frans, who I like and admire, says, *Oh*, *don't worry!*

Frans said the firm has reviewed its potential conflicts and is able to create an ethical wall between its other clients and the state of Minnesota.

"They like to work both sides of the issue," he said. "It's an opportunity to get them on the public service side."

Opportunity? Translation: they don't do that now.

It seems a little, well, *adroit*, doesn't it? It seems a little adroit to a University of Minnesota law professor, too:

There are, however, more subtle problems, said Richard Painter, who teaches legal and government ethics at the University of Minnesota Law School. He was hired by 3M as an expert witness in its dispute with the state.

"My gut reaction is, if your decision is to deny the permit, then mining company lawyers are not going to be your best advocates," he said.

Painter also questioned whether Minnesota and the law firm can fully assess potential conflicts of interest before the state decides for or against PolyMet's plan.

This is especially the case when the current proposed miner is the <u>laughably lightweight PolyMet Mining</u>, the never-a-mining company that will obviously need a real mining company as a partner or investor to actually operate a mine.

And what are the chances that the real mining company has been represented by Crowell & Morning somewhere? Pretty good, I'd say. Especially if that real mining company is Glencore PLC, which has coal mines around the world. C&M is big into coal.

Commissioner Frans says that all the Minnesota firms were "conflicted out." But C&M is almost certainly going to be "conflicted out" when a real mining company is identified.

And then the citizens of the state are going to be left to wonder if the whole thing was an inside job.

Update

Kathryn Hoffman, the Minnesota Center for Environmental Action's lead mining lawyer, is pretty steamed about the choice of Crowell & Moring. *What were you thinking*? she asks in a letter to Governor Dayton:

Noting that the Crowell & Moring "markets itself to

clients who seek to undermine and limit the application of state and federal environmental law," Hoffmann characterized the firm's prior record of mining-related litigation as "antithetical" to Dayton's values.

Further Update

Reader Ned comments:

Reading Ms. Hoffman's letter, I was wondering, is it standard procedure for Attorney General Lori Swanson to appoint the firm (Crowell & Moring) to this position? Is it under the direction of the Governor's office or does she do this independently?

It seems from the media reports that the hire is actually being run out of the Governor's office, by MMB Commissioner Myron Frans — the state's COO. I do suspect that the formal appointment of a firm of lawyers to represent the state in a matter like this has to be made by the Attorney General, but I am not entirely sure. But it's obvious that Governor Dayton is in on it.

"It's a giant money suckhole"

Steve Timmer *March* 19, 2016

That's a comment I have heard muttered multiple times in various warrens at the Capitol to describe the Iron Range Resources and Rehabilitation Board (the "IRRRB"). We are now better able measure the dimensions of the suckhole, because of a <u>report prepared by Minnesota's legislative auditor</u> and published on Friday.

For an earlier story that I wrote about the IRRRB, please see <u>Governance in the Dismal Swamp</u>. Suckhole, swamp? What's the difference?

And here's the Star Tribune's wrapup of the report, complete with some pithy quotes from Range pols: Scathing audit questions Iron Range agency's accountability.

The legislative auditor's report is damning of the IRRRB accounting practices:

IRRRB cannot evaluate its loan program because it does not maintain an accurate database of loans. (Page *xi* of the report summary.)

According to the report, the IRRRB's loan database was developed in 1987, which Twins fans will tell you is a long time ago. The IRRRB is also exempt, by its enabling statute, from IT supervision by Minnesota Management and Budget. Minn. Stat. § 298.22. Neat, huh?

The grant programs of the IRRRB don't fare any better in monitoring compliance with the conditions of the grant.

I contacted the IRRRB many months ago to ask if it maintained accounting records for its activities, including the loan portfolio (other than its biennial puff piece to the legislature); I was told that of course it did, and was referred to MMB. Upon contacting MMB, I was told, *Gee*, *Steve*, *we don't have anywhere near that kind of detail*.

Apparently, the IRRRB doesn't either. According to the report, the IRRRB has only the dimmest notion of whether loans are performing, and by that I mean not only are payments being made, but whether other loan covenants are being observed: the promised creation of jobs, or the protection of collateral, for example.

This is appalling. I mean, I thought I was probably just missing something. Someone is missing something, all right, but it I don't think it's me.

For fiscal 2015, the IRRRB budget was \$41 million, but it spent \$85.5 million, because in addition to its budget, it receives money annually from several statutory funds which in turn receive money from the taconite production tax. The IRRRB prepares a glossy report to the legislature about the \$41 million, but not the rest. Somewhat ironically, Giant's Ridge, the suckhole within the suckhole, as described in the auditor's report, is usually prominently featured in the IRRRB's report to the legislature.

Let's assume that at least some of the IRRRB's loans are paid back. What happens to that money? How much is it? Is is part of the difference between the \$85.5 million and \$41 million? Or is it just more money?

Appendix A to the legislative auditor's report also lays out the case that the agency is unconstitutional, as it presently exists. I wrote about a year ago that I thought the agency violated the separation of powers clause and the prohibition of legislators holding an office in the executive branch. The auditor's report contained a statement on the purpose of the separation of powers clause from the debate leading up to the constitution's adoption, by Territorial Supreme Court Justice Bradley Meeker:

The man who makes the law must not expound the law, and the man who executes the law must not be the law maker. These are maxims of government, which we have been taught from our boyhood, and I am opposed to their being broken down by this body.

That's retrograde gender politics, but it's a pretty good statement of the *raison d'être* of the separation of powers clause.

In the linked Strib article, former legislator Tom Rukavina said it was a "bad report." You can be sure than even now Rangers like the Ruk are circling the wagons. Legislative reform of the IRRRB will be difficult. But the case against the IRRRB is a slam dunk constitutionally, and ought to be

brought to move things along.

[Since the Legislative Auditor's report was written, there have been no calls by either Governor Dayton or Walz to reform the IRRRB, nor any serious legislative initiatives to do so. And astonishingly, no one has filed suit to ask the courts to examine this extra-constitutional engine of patronage and graft, *Ed*.]

Update

There are a couple of quotes in the linked Star Tribune article on which I cannot resist comment. First, here's IRRRB Commish Mark Phillips:

"We haven't looked at ourselves since 1985, so this was a timely thing to do," said Phillips, who became commissioner last year. "The longer things aren't looked at, things get looser, sloppier, however you want to put it ... things slide, loan files slide."

As for a constitutional challenge to the board's structure, Phillips said he is not concerned. But the matter is up to the board and the Legislature, he said.

They're not a terribly introspective bunch, apparently. It was *1995* though, when the big power grab by the IRRRB occurred, vesting decision-making authority in the board.

And Mr. Phillips is whistling past the graveyard when he says he isn't worried about the constitutional challenge. And contrary to his statement, it isn't up to the board and the legislature; in the last analysis the Minnesota Supreme Court gets to say what's constitutional. It's that pesky

separation of powers again.

And who can resist the quote machine Tom Rukavina:

Tom Rukavina, who served on the IRRRB board for 26 years and is now a St. Louis County commissioner, dismissed the audit as another "bad report" from the Office of the Legislative Auditor.

"Any time they're bored and don't have anything to do they attack the IRRRB," Rukavina said. "It's kind of like death and taxes, it comes around often enough." [Last in 1985, *Ed*.]

"Nobody wants to talk about the good things it does."

You see the problem, Ruk, is — as the legislative auditor points out — nobody, including the IRRRB itself, can tell whether it is doing any good.

"Nobody wants to talk about the good things it does"

Good things like this, eh, Ruk?

Steve Timmer *March 22, 2016*

From the **Cook County News Herald** a few years ago:

According to Cook County Commissioner Bruce Martinson, several members of the Iron Range Resources Rehabilitation Board (IRRRB) were angry after reading an editorial by Bill Hanna in the Mesabi Daily News on Sept 4.

Hanna wrote about the "anti-mining play" that was performed by the Good Harbor Hill Players at North House Folk School during its mid-June Wooden Boat Show and Solstice Pageant.

Martinson addressed the Tofte Town Board at its September 8 meeting. He had just come back from attending an IRRRB meeting, and said the tone toward Cook County was cool.

"Rep. Tom Rukavina said he was inclined to not give any more money to non-profit groups in Cook County," said Martinson.

Or more recently, this:

[I]t's not terribly difficult to find someone who's been on the receiving end of a letter or phone call from former State Rep. Tom Rukavina, who is currently running for St. Louis County Commissioner. He has been outspoken in dealing with township officials opposed to [new sulfide] mining, again using the threat of IRRRB funding.

Or this, from the same linked LeftMN story, quoting a letter to the editor from the late Rep. David Dill, also concerning Cook County:

There are times when Senator Bakk and myself [*sic*] have to fight and answer questions from core Iron Range legislators as to why Cook County should get taconite tax dollars when they hear anti-mining rhetoric from some citizens in Cook County.

Legislators are listening to the mining debate [about sulfide mining] going on in the Cook County and elections have consequences. The rail harbor has been shut down for years. The power plant is reducing its output and with generator No. 3 scheduled to be closed in the future there will be more questions. The loss of millions of production tax dollars a year would be devastating to businesses, Grand Marais, the school and the county. The local boards would have very tough decisions to make.

Other counties have stayed in the service area after mining has left their communities. Those communities have realized the benefit it is to be a part of a "mining region" and likewise have supported mining.

In the earlier story, I paraphrased it this way:

Yeah, nice lil' county ya got dere. Shame if sumptin' happin ta it. So wacher moufs.

My friends, this is your IRRRB at work. Charmless thuggery and blackmail.

Before Harold Stassen headed off to war, he helped set up the IRRRB to assist the Range transition to a post-mining future. But what has happened is that the IRRRB has become an institution whose principal purpose is its own perpetuation, the increase in mining production taxes paid to it, and the increase of political patronage of the Range legislators who sit on the board.

One has to wonder how many fundraisers, fish fries, and bean feeds have been organized for the board members over the years by the county and township board members, the city council members, and the school board members, and all the others who are beholden to these IRRRB board members.

I've called the IRRRB board members the <u>emirs of</u> <u>northern Minnesota</u>. The legislative auditor calls them "unaccountable." In recent comments, Senate Majority Leader Tom Bakk promises changes, but as entrenched as the Range is in the legislature, the Senate leadership especially, I won't hold my breath.

I think the courts are going to have to declare this an unconstitutional mess, and the sooner, the better.

The Annals of Muffing It

Steve Timmer

June 13, 2018

Last Friday, June 8th, Tina Smith pulled the most odious stunt of her admittedly short senatorial career. I am reluctant to call Tina Smith a senator because she never won the job in an election. She is an incumbent in only the most jocular sense. When she was appointed to the job by Governor Dayton, I was prepared to let her earn the post and vote for her in November; I really thought she would earn it.

But in the only meaningful thing she has done since being appointed, she muffed it. Catastrophically muffed it. Bill Buckner is off the hook.

At least her move will be memorialized in the Annals of Muffdom as the "Smith Amendment." Amy Klobuchar supports this clunker, too, but Amy was smart enough to dodge the limelight on this one. "I tell you what, Tina," says Amy, "I'm going to give you a chance to shine."

"Gee, thanks," replies Tina, "I owe you one."

What I am talking about is the Russian-oligarch-worthy bill to sell off — "trade" — part of Minnesota's birthright to a <u>fly-by-night Canadian "mining" company and its</u> <u>puppeteer</u> for a song. PolyMet needs this land to expand its

proposed sulfide pit mine near Hoyt Lakes.

The land that PolyMet has its eye on is currently owned by We The People. The US Forest Service is our land agent here, and the swap under consideration is being examined administratively [and now by the courts, *Ed.*] from an environmental standpoint and the fairness of the price (which it doesn't seem to be).

Anyway, Tina said "What, the hell; let's just do it!" So she offered her "amendment" to a defense authorization bill, claiming the metals that would be produced at the mine are "strategic." Strategic for China, perhaps, since that is where any copper from the mine is going for the first several years, anyway.

It is a brazen and disingenuous end-around due process to benefit a Canadian "mining" company (PolyMet) and its effective bad-boy Swiss conglomerate parent (Glencore). We The People are just chopped liver, I guess. When first approached after she offered the amendment about why she did, she didn't have a response. No ready justification for what she had just done? Later she told the AP it wouldn't interfere with rigorous environmental review. [chortle] Naturally, that is exactly what it is *supposed* to do. But lying about it just compounds the felony.

[The land swap is in litigation because it would result in the largest destruction of wetlands in Minnesota history, *Ed.*]

The last couple of sessions of the Minnesota Legislature have featured Republican efforts to roll back environmental protection and administrative decision-making on things like groundwater, riparian buffers, sulfate standard in surface water, and even the adjudicated

regulation of the level of White Bear Lake. The Dayton Administration, of which Tina Smith was a part until early this year, complained loudly about these things. The governor also vetoed the two largest bills of this past session, the tax and supplemental budget bills, over the kind of logrolling that Smith engages in here.

It didn't take Tina Smith very long to go native in Washington.

But you can hear dollars clapping in some places, the PolyMet corporate offices for one. Three PolyMet executives, <u>President Jon Cherry</u>, <u>Vice President Brad Moore</u>, and <u>Vice President Bruce Richardson</u> have each contributed to Tina Smith's campaign.

You will never guess who they contributed to last cycle. (And apparently their only contributions.) Oh, of course, you can guess: Rick Nolan. Rick has offered the same legislation as the Smith Amendment in the House.

You might compare all of this to the position of Senate candidate Richard Painter. He is unalterably opposed to sulfide mining in Minnesota. He has said so in many places, including Drinking Liberally last week.

Update

For a more complete, and frankly better, exposition of this issue I recommend <u>Marshall Helmberger's terrific piece in the Timberjay</u>.

Further Update

There is an article about Tina Smith's response to questions about the land exchange deal in the <u>Saturday edition of the</u>

Star Tribune. "Oh, the exchange seems fair," opines Tina, "And besides, it's done all the time."

Perhaps she can point to a deal to sell or exchange land for use in strip mining after the Weeks Act was passed in 1911. We're waiting.

PolyMet scores a hat trick!

Steve Timmer *June 26, 2019*

Marshall Helmberger, editor of the estimable Timberjay newspaper, tells the story well. In the space of a handful of days, the PolyMet water discharge permit issued by the infidels (Infidel: someone lacking fidelity to a set of principles — or the law) at the Minnesota Pollution Control Agency racked up not one, not two, but *three* investigations into "irregularities" [cough, cough] in consideration and issuance of the water discharge permit to PolyMet.

Really good work, people.

- 1) Several days ago, the Inspector General of the United States Environmental Protection Agency announced an investigation of the consideration of the PolyMet water permit by the EPA and the communications it had with the Minnesota Pollution Control Agency about the permit. Serious EPA staff objections to the permit were never made part of the public record heh, until now.
- 2) At the request of Rep. Rick Hansen, the Chair of the Environment and Natural Resources Finance Division and the Chair of the Legislative Coordinating Commission, James Nobles, the Legislative Auditor, has agreed to commence an immediate investigation into the MPCA's

decision making on the water discharge permit.

3) Lastly, but probably firstly, the Minnesota Court of Appeals has sent an appeal of the MPCA's issuance of the water permit by Water Legacy and other environmental groups to the Ramsey County District Court for some serious record making about "substantial evidence of procedural irregularities." This is court speak for something doesn't smell right here. I've described it more colorfully elsewhere. Water Legacy and the Minnesota Center for Environmental Advocacy have a great deal of motivation to get to the bottom of what is certainly the malfeasance and infidelity of the staff of the MPCA.

But I think even more people need to be involved in lancing an abscess of corruption here. I will tell you why.

The EPA's inspector general will necessarily be concerned primarily with the actions of the staff of the EPA. But it was the MPCA that issued the water discharge permit. The MPCA will likely get sideswiped in the Inspector General's report, but it won't say that the permit was unlawful. Probably.

The role of the Legislative Auditor is likewise somewhat circumscribed. Here are the last couple of the grafs of the article about the OLA linked above:

Separately, Nobles on Tuesday said his legislative auditor's office will start examining the permit issues as soon as it can. Their focus is more on transparency of the process, he said. The review may take several months.

"I do not think we are being asked to necessarily look at the substance of their decision," Nobles said, "but the process by which they arrived at it and whether or not it was consistent with state law and best practices."

We already know the process stunk, Mr. Legislative Auditor; we don't need you for that. But godspeed, James Nobles; you have a good staff; let them loose.

Personally, I pin my hope on the nonprofit environmental groups who are heading for the Ramsey County District Court to do discovery and make a record. If you can, send them some money; court reporters and transcription fees ain't cheap. There are lots of depositions to be taken here.

[The District Court had only allowed very limited discovery until a recent ruling ordered the forensic examination of the email accounts of leadership at the MPCA, *Ed.*]

But back to who else needs to come to the party. First, Governor Walz. By executive action, he needs to suspend the PolyMet permits, especially the water discharge permit and the permit to mine while a record is made on the corruption, malfeasance, and infidelity involved in their issuance. This is his administration now, and it's his MPCA, too.

Attorney General Keith Ellison is another Minnesota executive officer who needs to come to the table. AG Ellison's jurisdiction is not circumscribed the way the Legislative Auditor's is. The <u>statute that deals directly with malfeasance of public employees</u> is much broader than the brief of the Legislative Auditor.

609.43 MISCONDUCT OF PUBLIC OFFICER OR EMPLOYEE.

A public officer or employee who does any of the following, for which no other sentence is specifically provided by law, may be sentenced to imprisonment for not more than one year or to payment of a fine of not more than \$3,000, or both:

- (1) intentionally fails or refuses to perform a known mandatory, nondiscretionary, ministerial duty of the office or employment within the time or in the manner required by law; or
- (2) in the capacity of such officer or employee, does an act knowing it is in excess of lawful authority or knowing it is forbidden by law to be done in that capacity; or
- (3) under pretense or color of official authority intentionally and unlawfully injures another in the other's person, property, or rights; or
- (4) in the capacity of such officer or employee, makes a return, certificate, official report, or other like document having knowledge it is false in any material respect.

The role of the Legislative Auditor is limited generally to injuries to the state and the conduct of its agents, not third parties, such as PolyMet or its agents.

AG Ellison has said recently that he would defend the stupid elbows-and-knees-under-the-basket state laws to limit access to abortion which have recently been challenged in court, even though he says he is pro-choice. He ought, in my view, certainly to be at least as interested in the demonstrated corruption of an important cabinet-level department of state government.

But maybe that's just me.

Ancillary to AG Ellison, of course, are the BCA, and the Ramsey County Sheriff and Attorney.

This is as big a scandal in state government as I can remember, and it needs serious law enforcement attention.

Update

But there is really nothing new under the sun for Minnesota's Pollution Control Agency.

An Award for Polluting

Further Update

The Timberjay story linked just above is about how in the Orwellian world of mining regulation, you can be a serious polluter yet receive an award for regulatory compliance. Here's a few grafs from the story:

I put that question [how can you get an award for polluting] to the MPCA, and I'll let Darin Broton, the new spokesperson for the agency, explain:

"The current permit does not have effluent limits for sulfate, hardness, and specific conductance and thus there is no permit noncompliance associated with these parameters. The permit does not have an effluent limit for nickel as an individual parameter for the constructed wetland treatment systems – the permit instead includes an effluent limit for 'additive toxicity' of which nickel is a component. All five wetland treatment system discharges routinely meet the permit 'additive toxicity' effluent limit."

There is a lot in this answer, but let's be clear about

the most basic issue— the MPCA's approach to mining pollution far too often is to eliminate any requirement to comply with a specific effluent standard. As long as the company takes its monthly water samples and sends the results to the MPCA, they are in full compliance with their permit, even if the test results show the facility is polluting Minnesota waters. This approach by the MPCA not only allows mining companies to continue to pollute, it actually indemnifies the company against lawsuits that citizens might otherwise be allowed to file.

It also allows copper-nickel mining supporters to make misleading claims about the environmental impacts of sulfide-based rock, by suggesting that the Dunka pit does not pose an environmental hazard simply because it is in compliance with an unconscionably-weak discharge permit.

You have to wonder if PolyMet VP and former head of the Minnesota Pollution Control Agency Brad Moore was hired specifically to help engineer an "unconscionablyweak discharge permit."



PolyMet executive Brad Moore at a DNR (& other regulators) debutante ball for PolyMet in 2014

Probably. But it'd be nice to have Professor Wigmore's Great Engine of Truth, cross examination, to help us find out.

If a mining company can engineer a weak permit, it becomes a virtual property right, literally permitting it to pollute in perpetuity. The regulators in Minnesota won't ever make it tougher; we have a hundred years of proof of that, and citizens can't sue because of the "permit shield."

The terms of the permit are the whole game, really, now and forever, which is why the corruption at the MPCA, aided and abetted by others we haven't yet identified, is such a problem and needs such thorough investigation.

But that doesn't mean that fumbling idiots like Rep. Dave Lislegard from Aurora won't say things like this:

PolyMet is the most highly regulated mining

company in Minnesota history. The level of scrutiny in environmental review and permitting, the additional investment toward required environmental safeguards, the abundance of ongoing reporting requirements, and the level of financial assurance are each far greater than any mine ever in Minnesota.

Yes, Dave, and the MPCA pissed it all away by issuing a water discharge permit in the dark.

Rep. Lislegard is obviously another northern Minnesota PolyMet sycophant legislator who has either no understanding of the permitting and regulation here, or he doesn't care.

Follow the money

Steve Timmer

September 19, 2019

Some of you may have seen a <u>letter to the editor in the Star Tribune</u> that I coauthored on the influence of mining money in Range politics. Here's the letter:

State Rep. Dave Lislegard's counterpoint (<u>"We know mining. Our laws, processes work,"</u> Sept. 3) says that Iron Rangers "will be here to hold companies accountable for their environmental performance." When you take a closer look at the companies that have bankrolled Rep. Lislegard's campaign, however, you have to wonder who is holding whom accountable.

According to a filed 2018 year-end <u>campaign finance</u> report, Lislegard received more than \$50,000 in campaign contributions, most of them from the companies he claims that he will hold accountable for environmental pollution. He received the maximum \$1,000 from: CEO of PolyMet Jon Cherry, Vice President and Treasurer of Cleveland Cliffs Celso Goncalves, PolyMet VP Bruce Richardson, Allete CEO and PolyMet Director Alan Hodnik, four other members of the Hodnik family, Enbridge VP John Swanson, and Christopher Knight, publisher of the

unabashedly pro-mining Mesabi Daily News.

Former Twin Metals VP Anne Williamson, plus lobbyists for PolyMet (including PolyMet VP of Public Affairs Brad Moore) and other mines and the steel industry all made contributions of \$250 or above.

Not only did nearly all of Lislegard's campaign funds come from companies and groups that stand to make money if copper-nickel mines open, he also works for Lakehead Constructors, which works as a contractor for the mining and steel industries. But none of this was disclosed in his commentary piece.

Minnesotans should connect the dots and recognize the influence these contributors have over Lislegard's expressed opinion.

Janet Entzel and Steve Timmer

Entzel is a former DFL state representative from Minneapolis and former assistant commissioner of the Department of Corrections; Timmer is a retired Edina attorney.

All of the people identified in the letter are pretty easy to figure out, except for Celso Goncalves and maybe Alan Hodnik. In order to do that, it is helpful to cast yourselves back to October of 2001 and this lede from a press release:

(Duluth, MN)—Minnesota Power, a business of ALLETE, Inc. (NYSE:ALE), and Cleveland-Cliffs Inc (NYSE: CLE) announce that they have executed an Asset Purchase Agreement with LTV to acquire all of the assets of LTV Steel Mining Co. (LTVSMC).

The LTVSMC mining operation was closed on Jan. 5, 2001, after LTV initiated a Chapter 11 bankruptcy proceeding. The purchase agreement is subject to approval from the U.S. Bankruptcy Court and satisfaction of other closing conditions.

Cleveland-Cliffs bought the mining assets of LTV, including the taconite processing plant and tailings impoundment at Hoyt Lakes; Allete bought utility generation and distribution assets, including a coal-fired power plant and associated "coal pile" at the late Taconite Harbor. That plant, one of the dirtiest in Minnesota, and the coal pile, too, are gone.

Cleveland-Cliffs is in the taconite mining business in Minnesota and Allete is the parent of Minnesota Power, a northern Minnesota electrical power generator and distributor. A lot of Minnesota Power's big customers are mining companies.

It became known that there was substantial deferred maintenance and environmental liability arising out of LTV's operation and (lack of) maintenance of the tailings impoundment – and the Minnesota DNR's neglect of same – that Cleveland-Cliffs bought, and it sought to discharge that liability in bankruptcy but it could not.

The sale of the crushing plant and tailings impoundment to PolyMet Mining for use in a non-ferrous mine was a godsend to Cleveland-Cliffs and, well, to the DNR, too. But Cleveland-Cliffs took a pretty big haircut. I haven't seen the agreement, but I believe PolyMet is supposed to take care of the tailings impoundment, or at least kick that can down the road, which is a load off the DNR's shoulders. It explains in part why the DNR is such a

cheerleader for the most dangerous kind of tailings storage: an upstream tailings dam of the type that has suffered three major failures in a handful of years, two in Brazil, and one in Canada in British Columbia, PolyMet's home.

We can see why Celso would support a politician who would help the environmental liability cup pass from Cleveland-Cliffs!

Turning now to Alan Hodnik and his substantial brood, it is obvious that Minnesota Power would like to turn the LTV crushing plant and tailings impoundment pumps back into a paying customer. And Dave Lislegard is just the guy to help make it happen!

Parenthetically, Alan: just a little friendly advice. Circumvention, that is, making a campaign contribution through another, is a <u>gross misdemeanor</u>.

Every coal-fired electrical generating plant in Minnesota is scheduled to be retired by 2030, except one.

Go ahead. Guess which one.

If you guessed Minnesota Power's Clay Boswell plant at Cohasset, go get yourself a cookie. The Clay Boswell plant is a big sucker, too. According to the linked article, it's the 18th dirtiest coal plant in the country for coal combustion waste stored in surface impoundments, at least as of 2006, the most recent year available. The figures quoted for mercury release were 279 pounds and 8 million tons (say that again: 8 million tons) of C02 annually.

This is where miners get their power and where PolyMet would, too.

This is why when PolyMet touts tell you that the mine will help with the climate and the environment, they are blowing smoke somewhere.

Epilogue

Keep up the good work, people

Steve Timmer *October* 6, 2019



Taking Down PolyMet Illustration by Ken Avidor.

From a recent editorial in the Timberjay:

It wasn't inevitable that PolyMet Mining's proposed copper-nickel mine near Hoyt Lakes would face growing skepticism by the courts and by independent government watchdogs. But an environmental review and permitting process that appears to have been driven by political calculation more than science,

financial prudence, or the law certainly contributed to the latest series of setbacks for the company.

What was inevitable was that the mine would have sailed through but for the dogged resistance of a small band of individuals, environmental nonprofits and, well, the Timberjay. People who care about the environment, northern Minnesota, the Boundary Waters, the St. Louis River, Lake Superior, and especially those who eat the fish and drink the water of the St. Louis, owe them a debt of gratitude. I could get Churchillian about this, but I won't.

I wrote an <u>op-ed piece about Glencore/PolyMet's project</u> that was published in MinnPost a few weeks ago. Here's how it ended:

The governor says that we've been at the issue of permitting PolyMet for 14 years, as though we should just give up and give them what they want. When 14 years yields a 400-plus page water discharge permit that fails to prohibit heavy metal pollution, approves the most dangerous tailing storage system extant (and now prohibited by Brazil), and fails to have the financial commitment of the real party in interest, though, the time has been poorly spent.

The governor seems to think that a permit to mine should awarded as a participation prize.

The Walz administration and Minnesota's attorney general Keith Ellison have demonstrated a studied lack of concern about Glencore/PolyMet and the obvious regulatory corruption that occurred, which is discouraging.

"Desperate last minute attempts" to derail the mine say the

mining touts. Really, though, the investigations by the EPA's Inspector General and Minnesota's Legislative Auditor, and the stay of the permit for water discharge, the dam safety permit, and the permit to mine itself represent not the *last* efforts, but the *first* efforts of decision makers who don't resemble zombies to look at decisions across several federal and state agencies that considered Glencore and its pet rabbit PolyMet Mining's project.

"Political calculation, financial imprudence, and lawlessness," as the Timberjay calls it, is a really good summary of what happened.

Now, let's hope it is time for our regulatory agencies to pay the piper.

We aren't at the end of the examination of bad decision making by our regulatory agencies. We're closer to the beginning. The Minnesota Center for Environmental Advocacy and the Fond du Lac Band of Lake Superior Chippewa have each recently filed suit against the Army Corps of Engineers and the EPA over permits to allow the destruction of wetlands for the open pit mine project. That one is just getting started.

So thanks to the Minnesota Center for Environmental Advocacy, Water Legacy, The Fond du Lac Band of Lake Superior Chippewa, the Friends of the Boundary Waters Wilderness, Duluth for Clean Water, the Northstar Chapter of the Sierra Club, the Minnesota Environmental Partnership, The Center for Biodiversity, the Izaak Walton League, Save Lake Superior Association, Save Our Sky Blue Waters, Friends of the Cloquet Valley State Forest, and undoubtedly others that I am forgetting.

Thanks also to some important individuals: Marshall

Helmberger, the smart, indefatigable, and lucid writer-editor-publisher of the Timberjay, former governor Arne Carlson who lends policy seriousness to anything he chooses to take up, and Professor Richard Painter, whose presence on social media and his drumbeat of commentary on the corruption in the Glencore/PolyMet permitting process has reached multitudes.

I applaud you all for your efforts, and I wish you energy (and the financing) to keep up the fight.

Endnotes

- 1. Chart derived from Arizona Office of Employment and Population Statistics, "Arizona Unemployment Statistics Program Special Unemployment Report," accessed June 12, 2012. ←
- 3. U.S. Department of Commerce Bureau of Economic Analysis. Regional Data: Other Local Areas Personal Income and Employment: Personal Income and Employment Summary (CA04): Safford Micropolitan Area (2000-2009). 2009 Dollars calculated with U.S. Department of Labor Bureau of Labor Statistics. "CPI Inflation Calculator." ←
- 5. As sociologist Michael Kimmel notes, "the social contract that enabled self-made men to feel that they *could* make it, even if they somehow failed to realize

their dreams, has indeed, been shredded, abandoned for lavish profiteering by the rich, enabled by a government composed of foxes who have long ago abandoned their posts at the henhouse. [...] Many white men feel they have played by the rules and expected to reap the rewards of that obedient responsibility. It's pretty infuriating not to get what you feel you deserve" (203). Kimmel, Michael. *Angry White Men: American Masculinity at the End of an Era*. New York: Nation Books, 2013. Print. See also Tavis Smiley's interview with Michael Kimmel.

- 7. While the Minnesota Chamber of Commerce took no official position on the "right to work" legislative push in the 2012 session, Chamber President David Olson did tell the Minneapolis/St. Paul Business Journal, "The business community has a long history of support for 'right-to-work' legislation; now is no exception. Our members believe workers should have the right to choose whether or not they belong to a union and/or pay union dues." ←
- 8. "I go to IRRRB meetings and I can assure you they work tirelessly to rebate tax dollars to right back to the mining companies in the last 20 years, more than \$200 million. They'll do it again this year unless we embarrass them enough, and it takes a lot to embarrass a mining company," testified retired miner

Bob Tammen at the <u>St. Paul Polymet mine hearing</u>.

- 9. "One of the loudest moments came late in the evening, when former DFL Rep. Tom Rukavina challenged mining opponents to leave their cell phones and iPads containing the debated metals in paper bags at the door. Mining supporters at the back of the vast room held up paper bags and shook them in the air," as reported by MPR's Elizabeth Dunbar.
- 11. Screen capture from mngeo.state.mn.us/ ←
- 12. Section of US Forest Service map of proposed land exchanges, full map available at <u>sosbluewaters.org</u> ←
- 13. Screen capture from <u>Duluth Metals</u> <u>←</u>
- 14. Really, I was making it up. A reader asked, with a sense of wonder and a little suspicion, I think if there was such a committee. It's really the Subcommittee on Committees, which is a subcommittee of the Rules Committee. I regret the error. It's still Kafka. ←
- 15. More than that, <u>currently</u>. $\stackrel{\frown}{\leftarrow}$

List of Illustrations

- 1. Graph describing the unemployment rate in Safford and Arizona as a whole.
- 2. <u>Graph describing the labor force and unemployment rates in Safford over ten years.</u>
- 3. Graph describing the difference in per capita income and per capita earnings for Safford, AZ.
- 4. <u>Graph describing the composition of income in</u> Safford, AZ.
- 5. <u>Graph describing the non-farm proprietors income in Safford, AZ from 2000 to 2009.</u>
- 6. Graph describing the non-farm proprietors income in Graham and Greenlee counties as a percentage of the US non-metro average.
- 7. Polymet Gravestone Illustration by Ken Avidor.
- 8. A Polymet supporter yields his time to State Senator David Tomassoni.
- 9. Screenshot of a Tweet from @FriendsBWCAW.
- 10. <u>Screenshot of a Tweet from @KarinHousley.</u>
- 11. Screenshot of a Tweet from @aaronklemz.
- 12. <u>Screenshot of a Tweet from @KarinHousley.</u>
- 13. Photo of runoff from Spruce Road.
- 14. <u>Map of proposed developments on INCOs Spruce</u> Road Site.
- 15. Map of mineral deposits in the Duluth Complex.
- 16. Arial photo of the Flambeau mine before it was filled in.

- 17. Photo of a sign reading 'Welcome to the... Reclaimed Flambeau mine' and a man standing next to it holding a sign reading 'Just grass over a grave'.
- 18. Photo of an infiltration basin nearly topping a retaining berm.
- 19. Photo of Hazeltine Creek.
- 20. Arial photo of the former Mount Polley tailings dam.
- 21. Photo of a hearing before the Environment, Natural Resources, and Agriculture Finance Committee of the Minnesota House of Representatives.
- 22. Photo of people lining up for water.
- 23. Photo of the Mount Polley tailings dam breach.
- 24. <u>Photo of a tattered sign reading 'Gilt Edge Mine Superfund Site'.</u>
- 25. Screenshot of a Tweet from @JohnCroman.
- 26. Screenshot of a Tweet from @thauserkstp.
- 27. PolyMet Mining Corp 5-year stock chart.
- 28. Arial photograph of the Partridge River.
- 29. <u>PolyMet executive Brad Moore gives Steve the stink eye.</u>
- 30. Map of the area of the Children's State Forest.
- 31. <u>Map of federal parcels being considered for a land exchange within the Children's State Forest.</u>
- 32. <u>Map of the propsed sulfide mining projects in the area of the Children's State Forest.</u>
- 33. Photo of Lake Shebandowan Mine shaft.
- 34. The Dismal Swamp Illustration by Ken Avidor.
- 35. PolyMet Mining Corp 30-day stock chart.
- 36. <u>PolyMet Mining Corp average volume of shares over</u> the last three months.
- 37. Screenshot of a Tweet from @LeeASchafer.
- 38. Taking Down PolyMet Illustration by Ken Avidor.

Copyright

LeftMN eBooks releases this ebook under the terms of the <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License</u>.