

WEDNESDAY September 2, 2015

# Starribune







# A YEAR OF

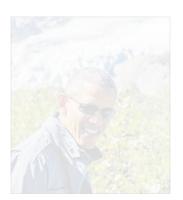
pregnancies. A4

is king of stops



# Obama seeks Arctic clout

See **OBAMA** on A8 ►



### **Schools** closing reading, math gap

See **SCHOOLS** on A6 ►

## PolyMet mine water could flow north, toward BWCA



File photo by RENÉE JONES SCHNEIDER • reneejones@startribune.com

David Hughes of PolyMet walked on the proposed site near Hoyt Lakes. The project prompted a decade of environmental review.

By JOSEPHINE MARCOTTY josephine.marcotty@startribune.com

After months of behind-the-scenes debate, state and federal regulators have conceded for the first time that some potentially polluted water from Minnesota's first proposed coppernickel mine could flow north toward the Boundary Waters Canoe Area Wilderness.

As a result, the U.S. Environmental Protection Agency is urging state officials to disclose that possibility and propose a solution in the final version of the 10-year-old environmental review of the controversial project, which is due out later this year.

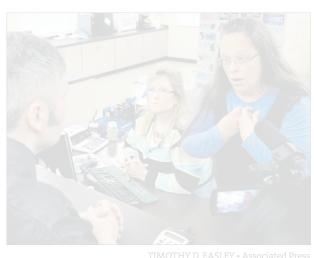
While the flow of water at issue could be relatively small, and wouldn't occur for decades, environmentalists and Indian tribes say the miscalculation is an indication that the computer modeling used to project the mine's environmental risk to water is badly flawed.

"How, after 10 years of study, can we not know which way the water is going to go?" said Kathryn Hoffman, an attorney with the Minnesota Center for Environmental Advocacy, a nonprofit law firm. "It suggests that See MINE on A6 ►

"The Clean Water Act should not be a race to the bottom." If you have a pristine watershed, you have to keep it that way." Kathryn Hoffman, an attorney with the Minnesota Center for Environmental Advocacy

### Clerk stages last stand on gay marriage

See **CLERK** on A6 ►



### Twice in 8 months, St. Paul retiree has lottery's number

1 in 2.7 M

See **WINNER** on A6 ►

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**▼ MINE** from A1

there is a lot we don't know about the impact."

The Minnesota Department of Natural Resources, which is leading the project's environmental review, said in a statement Tuesday that it is evaluating the scenario. It was only brought to its attention recently, the agency said.

PolyMet Corp., which has proposed the mine, said in a statement that it is confident the water modeling is safe and protective of human health and the environment, and that questions will be addressed by the lead regu-

But arguments detailed in technical documents obtained through the Minnesota Data Practices Act show just how difficult it is for engineers to predict the flow and quality of water that could emerge after decades of mining alter the landscape in one of Minnesota's wettest

And they raise a specter that conservationists and canoeists in Minnesota have long feared: that the nearly pristine watershed that contains the BWCA will be harmed by PolyMet's mine.

"The Clean Water Act should not be a race to the bottom," said Hoffman. "If you have a pristine watershed, you have to keep it that way."

### Mine would create 350 jobs

PolyMet, a Canadian company partly owned by the international mining conglomerate Glencore, has proposed a \$650 million open-pit mine near Hoyt Lakes, on the site of an old taconite mine. It would create some 350 jobs, and operate for 20 years or more, opening what some hope could be a new era of mining for copper and other precious metals on the Iron Range.

But unlike taconite mining, copper-nickel mining exposes rock containing sulfides, which can cause significant environmental risks from leached metals and other contaminants if exposed to air and water.

As a result, the proposed project has created one of the most contentious and long-running environmental



RENÉE JONES SCHNEIDER • reneejones@startribune.com

An environmental impact statement said the majority of water seeping from the mine would be collected and run through a wastewater treatment system to remove contaminants. But opponents say the risk to such a pristine area is still too great.

debates in Minnesota history.

The latest problem, first reported in August by the weekly Timberjay newspaper, was identified by scientists who work for the Minnesota Chippewa Tribe. The tribe has a seat at the table for the review along with the U.S. Forest Service, the U.S. Army Corps of Engineers and the EPA.

Until now, it was assumed that water from PolyMet would flow south toward the St. Louis River and Lake Superior, and away from the BWCA.

But the tribal scientists pointed out that groundwater flow is strongly influenced by a 12-mile-long taconite mine 1 mile north of Poly-Met's proposed site — the Peter Mitchell pit owned by the Northshore Mining Co. Recent mining operations in the Mitchell pit have removed a geological barrier that once stood between the two water-

When that taconite mine closes years from now, its water level will be 300 feet lower than the level in Poly-Met's mine at closure, according to scientists for the Great Lakes Indian Fish and Wildlife Commission (GLIFWC). And water, as the tribal leaders and scientists have pointed out in documents provided to the DNR and federal agencies, flows downhill.

That suggests that contaminants from PolyMet "may flow north rather than the southward direction currently assumed," said John Coleman, environmental section leader for GLIFWC in a June 18 letter to government agencies.

How much water, and to what extent it could be contaminated, is unclear. The most recent environmental impact statement said the vast majority of water seeping from the PolyMet site would be collected and run through a wastewater treatment system to remove contaminants.

But, Coleman argues, Poly-Met and its consultants, Barr Engineering, used old and inaccurate water data and assumed that the levels in the Peter Mitchell pit wouldn't change. Nor did they include the correct predicted levels for the Peter Mitchell pit when it closes decades from

now, he said.

The DNR says in documents that, when closed around 2070, the water level in the Peter Mitchell pit will be 1,250 to 1,350 feet above sea level, while the water level at the PolyMet mine will be at 1,576 to 1,592 above sea level.

The difference is equal to about twice the height of Niagara Falls.

### A natural barrier?

The DNR declined to make officials available for comment. But in a June 22 memo, the DNR and federal officials disputed Coleman's conclusions. They said they believe that rain and other drainage sources will create an underground "groundwater mound" that would act as a barrier to any flow from PolyMet.

Nonetheless, they conceded, a northward flow from PolyMet is a "theoretical possibility."

State geologist Tony Runkel, who has been critical of the data used to create Poly-Met's water model, was more certain.

"If you change the ground- Josephine Marcotty • 612-673-7394

water levels of different areas outside the mine site, that can definitely change the direction in which the water flows,"

Coleman declined to be interviewed for this story, but GLIFWC spokesman Charlie Rasmussen said: "If it's less than the best environmental analysis, the tribes are going to say do better."

Technical documents reviewed by the Star Tribune also outlined some actions, such as monitoring and groundwater extraction wells, that could mitigate a northward flow of groundwater. The EPA said in its letter that such "adaptive management" strategies are acceptable in an EIS.

But, Coleman said in his letter, none of those options has been thoroughly reviewed and they could be expensive.

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**▼CLERK** from A1

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### September 2, 2015



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