# MINNESOTA DEPARTMENT OF NATURAL RESOURCES

In re the Matter of the Minnesota Department of Natural Resources' Consideration of a draft Permit to Mine for the PolyMet NorthMet Copper-Nickel Mine Project.

DECLARATION OF ROLAND RING-JARVI

#### **DECLARATION OF ROLAND RING-JARVI**

I, ROLAND RING-JARVI, declare the following on the basis of personal knowledge to which I am competent to testify.

1. I am a member of WaterLegacy and support its activities, especially its activities to protect water resources and downstream communities from copper-nickel mining pollution in Minnesota.

2. I grew up in Two Harbors, Minnesota and I'm a former teacher and coach at the Elk River School District.

3. My wife, Susan, and I currently own 1.5 acres of land on Wynne Lake in Biwabik, Minnesota. The land is identified as St. Louis County Parcel Number 570-0202-00130. We bought this property more than twenty years ago, before we knew anything about plans for a copper-nickel mine upstream.

4. We have about an acre and a half of frontage on Wynne Lake. With the help of friends and family members, I built our cabin and sauna on the lake myself, splitting wood, painting and installing solar panels.

5. Our land and the quality of the water in Wynne Lake are very important to me. We go up to our cabin many times a year and at all seasons to cross-country ski, bike and canoe. We are avid canoers, and we enjoy canoeing on Wynne Lake and the Embarrass River chain of lakes. I swim in Wynne Lake all the time. I also go up to Giant's Ridge for downhill skiing. The natural

-1-

beauty of the area as well as the quality of water in Wynne Lake are what makes our property valuable to us.

7. I have read about the PolyMet NorthMet copper-nickel project and I am very concerned about the impacts it will have both on my property and on the surrounding area.

8. There is a risk to water quality in Wynne Lake and the Embarrass River chain of lakes and to my interest in the Wynne Lake property I own from the operation of PolyMet's tailings waste storage facility. Seepage of pollution into the Embarrass River watershed and changes in wetlands and streams near the tailings storage could affect water quality in Wynne Lake and the other nearby lakes and streams in which I canoe and swim.

9. I am very concerned about the threat of pollution if there is a toxic release from tailings dam failure. Dam failure at the PolyMet tailings waste storage facility could spill toxic metals and sulfate many miles downstream. Wynne Lake is not much further downstream from the proposed PolyMet tailings dam than the pristine lake that was contaminated when the Mount Polley tailings dam collapsed just a few years ago in Canada. A tailings dam failure at the PolyMet project would destroy water quality in Wynne Lake and in the Embarrass River upstream. The value of my land would be markedly reduced, and my whole purpose in owning my land to enjoy this beautiful area would be destroyed.

10. I've seen the map where PolyMet shows that inundation from a dam breach on the north side of the tailings dams would reach the Embarrass River in about two hours. I want to know how long it would take for a contaminated plume to reach my property. I believe that I and other property owners also have a right to know what would happen to water quality in the Embarrass River and through the chain of lakes to Wynne Lake if there was a tailings dam failure.

-2-

10. I am concerned both that PolyMet is still using the wet tailings storage method used by the Mount Polley copper-nickel mine. I have a direct financial interest in opposing a PolyMet permit to mine that would let PolyMet use outdated technology or cheaper alternatives, rather than protecting downstream water and property from the risk of dam failure.

11. I'm familiar with the controversy over how much money PolyMet should have to secure up front to treat pollution and maintain the mine site and tailings facility after the mine closes or to clean up any contaminated water. In addition to preventing polluted seepage and dam failure, the Minnesota Department of Natural Resources (DNR) must determine how dam failure or pollution would affect water and property downstream and require adequate environmental liability insurance as well as long term treatment costs up front to protect water and downstream property owners like me.

12. It seems that PolyMet and the DNR have put a high value on the copper and nickel that PolyMet would mine. I am concerned that the DNR has not put a high enough value on the quality of natural resources and recreation. Even though I don't own property on Giant's Ridge, the proximity of its alpine ski runs and the beauty of its views are part of what makes my property on Wynne Lake valuable to me and would make it valuable to other prospective buyers if we decided to sell it. The PolyMet mine project would impair this natural landscape.

13. The PolyMet draft permit to mine doesn't prevent water pollution, safeguard the value of natural resources, ensure tailings dam safety, or provide require financial protection. If the DNR denies the draft PolyMet permit to mine, it would protect my interest in property, the value of my land, and my purpose in buying it and investing time and sweat equity in building my cabin.

14. I believe that the DNR should hold a contested case hearing on the draft PolyMet permit to mine so that an administrative judge can help examine the project and evaluate whether the

-3-

permit should be denied or stronger project conditions required. I would like WaterLegacy to represent me to request a contested case and protect my interests if a contested case is approved.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on:

Feb. 17 , 2018\_\_\_\_\_ Date <u>s/Roland Ring-Jarvi</u> Roland Ring-Jarvi

# MINNESOTA DEPARTMENT OF NATURAL RESOURCES

In re the Matter of the Minnesota Department of Natural Resources' Consideration of a draft Permit to Mine for the PolyMet NorthMet Copper-Nickel Mine Project.

DECLARATION OF SHELLEY STROHMAIER

#### **DECLARATION OF SHELLEY STROHMAIER**

I, SHELLEY STROHMAIER, declare the following on the basis of personal knowledge to which I am competent to testify.

1. I am a member of WaterLegacy and support its activities, especially its work to protect water resources and downstream communities from copper-nickel mining pollution in Minnesota.

2. My parents moved from Canada to the United States in the early 1950s. My father had worked for the Hudson Bay Mining Company in Canada, and came here to work for U.S. Steel as an engineer for Minntac. My family earned a living from iron and taconite mining, and I am not anti-mining. But I am extremely worried about copper mining in sulfide ore; it is a different type of mining and poses much greater risks to water quality in Minnesota.

3. My parents and all four of the siblings in our family have had a cabin on Lake Esquagama for sixty years, located on Ponderosa Drive in Gilbert, Minnesota. As I understand it, we have a 99-year lease for this cabin from the Esquagama Country Club, which owns a large portion of the Esquagama lakeshore. All of our family have come to this cabin for decades to enjoy the Lake and being with each other.

4. As our own family has grown, my husband and I bought land with a second cabin of our own eight years ago on four parcels on the west side of Esquagama Lake. Our property, which is located on Palm Drive in Gilbert, Minnesota is identified as St. Louis County Parcel Number 260-0021-00130. It has substantial lake frontage. We've made a lot of improvements to the

-1-

cabin, and our lake property has a high monetary value as well as a profound personal value to us.

5. We use our cabin and land on Lake Esquagama to enjoy every possible benefit of the water. We swim, fish, kayak, paddleboard, water ski, and go out on the lake on our pontoon. We enjoy the entire Embarrass River chain of lakes for the quality of the water. Sometimes we put our kayaks in at Giant's Ridge and kayak all the way down the chain of lakes to our cabin on Lake Esquagama.

6. Our cabin and land on Lake Esquagama bring our family together. We get together with my siblings' families across the lake. All three of my husband's and my children lived in other states for a while. But, they all came back to Minnesota to live; they returned to Minnesota to be near our cabin. My husband grew up on the West Coast. Our land in northern Minnesota is his "happy place." We have planned and saved and invested in our land and our cabin on Lake Esquagama to keep it in our family for our children and grandchildren.

8. I have read a lot about the PolyMet copper-nickel mine. I am very concerned that this mine will ruin the water and harm the fish, damaging the value of our property and our purpose in buying the property and making improvements for future generations of our family. I know that copper-nickel mine tailings will leach pollution, and I think it is imprudent and short sighted to assume that the PolyMet company will be around for hundreds of years to treat pollution or clean up damage. Pollution that leaches into the Embarrass River watershed has the potential to degrade water quality in the chain of lakes and in Lake Esquagama, negatively affecting our property value and our enjoyment of our lakefront land and our cabin.

9. I am also very worried about a breach of the tailings dam, like what happened in the Mount Polley mine tailings disaster in British Columbia. The Embarrass River chain of lakes and

-2-

our property on Lake Esquagama could be seriously harmed by a tailings breach releasing polluted water and tailings from the PolyMet tailings storage facility. I have seen the map PolyMet made showing that it would take about two hours for a "flood wave" to reach the Embarrass River in the event of a tailings breach. I want to know how long it would take a contaminated plume to extend down through the chain of lakes and what would happen to the clarity of the water, the concentration of chemicals in the water, the health of the fish, and whether the fish would be more contaminated with toxic metals, like mercury or lead, especially in Esquagama Lake, where our property is located. This information has not been shared with us or with the public.

10. I also believe that PolyMet's proposal to put wet tailings on top of the existing taconite tailings and wetlands is not a safe or responsible way to store tailings waste, especially in such a vulnerable watershed and over the long term. Although PolyMet's method of storing tailings may be less costly for the company, it could end up being very costly to downstream property owners, like my family.

11. PolyMet is a shell company for a foreign corporation, and I don't believe they have the best interests of property owners or the community in mind. I am worried that they will make a lot of money and leave us with the costs of pollution. Protecting my interests in property would require not only that PolyMet put money up front for long term pollution treatment, but that they be required to have a large environmental liability insurance policy to cover costs of environmental clean up for the polluted seepage that we know this project will cause as well as a possible tailings dam failure that releases toxic pollution.

12. Many aspects of the PolyMet draft permit to mine have the potential to negatively affect my interests and the interests of my family in the property my husband and I own on Esquagama

-3-

Lake – failure to control all contaminated seepage – especially from the PolyMet tailings waste facility; failure to use the safest tailings storage methods; failure to have a realistic long-term plan for pollution control; failure to analyze the effects of toxic seepage and tailings dam failure on downstream water quality, fish, and property values; and failure to require sufficient up-front protection from environmental liability as well as to cover long-term water treatment costs.

13. If the DNR were to deny the PolyMet permit to mine it would protect water quality and the value of my husband's and my property and our investments in improving our land and cabin so that our children and grandchildren can enjoy Lake Esquagama and the Embarrass River chain of lakes for generations to come.

14. I believe that the DNR should hold a contested case hearing on the draft PolyMet permit to mine so that an objective administrative judge can make recommendations on whether the permit should be granted and, if so, under what conditions. I would like WaterLegacy to represent me to request contested case and protect my interests in a contested case hearing.

I declare under penalty of perjury that the foregoing is true and correct. Executed on:

 $\frac{2/21/18}{\text{Date}}$ 

s/Shelley Strohmaier\_\_\_\_\_\_Shelley Strohmaier

# MINNESOTA DEPARTMENT OF NATURAL RESOURCES

In re the Matter of the Minnesota Department of Natural Resources' Consideration of a draft Permit to Mine for the PolyMet NorthMet Copper-Nickel Mine Project.

DECLARATION OF TIMOTHY J. WALLACE

### **DECLARATION OF TIMOTHY J. WALLACE**

)

I, TIMOTHY J. WALLACE, declare the following on the basis of personal knowledge to which I am competent to testify.

1. I am a member of WaterLegacy and support its activities, especially its work to protect water resources and downstream communities from copper-nickel mining pollution in Minnesota.

2. I am a biologist by training, and I worked for 26 years for the Minnesota Department of Natural Resources (DNR). My last position was as a wildlife manager stationed in Eveleth, MN (I'm now retired). I am familiar with the effects of mining on landscapes and water quality and with the historic practices of mining companies in addressing potential environmental liabilities.

3. My wife, Amy Loiselle, and I currently own 52.96 acres of undeveloped land with riparian frontage on the St. Louis River near where we live in Zim, Minnesota. The land is identified as St. Louis County Parcel Number 435-0010-03465 and Parcel Number 435-0010-03470. We bought this property fifteen years ago on 2/14/2003, before we knew anything about plans for a copper-nickel mine upstream.

4. Our land on the St. Louis River is a nice piece of predominately upland property. We have stands of young aspen and stands of both young and mature white pine and red pine mixed with red maple and birch. Three intermittent streams cross the property that terminate at the river. The banks are dominated by lowland hardwoods. Although there was some logging before we purchased the

property, they did a good job and there are still many old growth trees as much as 300 years old on our land.

5. My wife and I enjoy the land as it is. Much of the land near us on the St. Louis River, including property on both sides of ours, used to be owned by Minnesota Power and was sold to the State of Minnesota to be protected. As I understand the St. Louis River Management Plan, it was part of this land sale and was finalized in 1994 and then adopted into St. Louis County land use ordinances. It calls for maintaining the land uses that existed during the development of the plan in the early 1990s in order to preserve the river's character and ecology and includes where our land is located. One reason we bought this land was to maintain it's healthy natural condition with the goal of preserving the ecology of the river and riparian habitat. That is a big part of its value to us.

6. Our way of life depends upon the quality of water and natural resources. We enjoy many outdoor activities revolving around healthy natural resources including canoeing local rivers and lakes, gardening, wildlife observation, feeding birds, and raising and racing sled dogs in the St. Louis River watershed.

7. I have read extensively about the PolyMet NorthMet copper-nickel project in order to evaluate its potential effects on downstream waters, my own property, and taxpayers. No one has ever done this type of mining without pollution. I've seen how the big mining companies operate. If there is an environmental problem, they walk away from it and there seems to be no one to hold them accountable. Whether they are in Minnesota or somewhere else, they will do their project as cheaply as they can; they are part of a world market seeking the lowest price. I believe if companies could mine without jobs they would do it; mines are becoming more and more automated.

8. Water pollution and hydrologic changes in the St. Louis River headwaters from PolyMet's proposed mine project would have a potential adverse affect on the value of property we own on the St. Louis River and to our purpose in owning this land. I am most concerned about the threat of water

-2-

pollution of the river due to PolyMet operations and the threat of catastrophic failure of the tailings dam. I am concerned as well about ground and surface water quality at and around PolyMet mine that influences the St. Louis River and the adjacent watersheds.

9. If there is a toxic release from failure of the PolyMet tailings dam, water quality changes could diminish the value of our land as well as severely degrade the value of the ecology of the river, which was our reason for buying and managing this land in an undeveloped condition. PolyMet would not want to pay millions of dollars to clean up that mess.

10. I've read that PolyMet was going to shore up its dams by drilling holes and using cement columns and that they've changed their minds about how to bolster their dam due to cost considerations. I'm concerned that the type of tailings waste facility proposed for the PolyMet project may be the least cost, but not the safest method of storing tailings waste.

11. In addition to preventing polluted seepage and tailings dam failure, I believe that the DNR should require PolyMet to analyze the ecological and financial impacts on the St. Louis River, its headwaters, and downstream property owners and communities from toxic seepage and from dam failure. DNR should use that dollar figure to require PolyMet to get adequate environmental liability insurance up front in addition to up front money to treat pollution and maintain the mine site and tailings basin long after the mine closes.

12. If the DNR denies the PolyMet permit to mine, or even imposes strict conditions that reduce water pollution, protect the St. Louis River headwaters, increase tailings dam safety and require financial protection, it would better protect the value of my land and my purpose in buying it.

13. I believe that the DNR should hold a contested case hearing on the draft PolyMet permit to mine so that an impartial administrative judge could make recommendations on whether the permit should be granted and, if so, under what conditions. I would like WaterLegacy to represent me to request contested case and protect my interests in a contested case hearing.

-3-

I declare under penalty of perjury that the foregoing is true and correct.

Executed on:

\_2/172018\_\_\_\_\_ Date <u>s/Timothy J. Wallace</u> Timothy J. Wallace