



October 9, 2023

Commissioner Sarah Strommen
Minnesota Department of Natural Resources
500 Lafayette Rd. N.
St. Paul, MN 55155

Commissioner Katrina Kessler
Minnesota Pollution Control Agency
520 Lafayette Rd. N.
St. Paul, MN 55155

Re: State Nonferrous Mineral Exploration Plan Submitted Sept. 22, 2023 by Franconia Minerals

Dear Commissioner Strommen and Commissioner Kessler:

Northeastern Minnesotans for Wilderness (“NMW”) understands that on September 22, 2023 the Department of Natural Resources (“DNR”) received an exploration plan from Antofagasta, PLC via the wholly-owned subsidiary of Twin Metals Minnesota LLC (itself a wholly-owned subsidiary of Antofagasta, PLC), Franconia Minerals (“Franconia”). It appears the exploration plan includes at least six drill pads, half of which would be located within the drainage of Unnamed Creek (Bob Bay of Birch Lake) and the other half along the shoreline of Birch Lake in the Rainy River-Headwaters watershed. The purpose of Franconia’s exploratory drilling plan is to utilize state mineral leases to advance the development of a sulfide-ore copper mine within the Rainy River-Headwaters watershed, directly beneath Birch Lake.

As DNR is well aware, the allowability of mining in the Rainy River-Headwaters watershed is the subject of a pending Minnesota Environmental Rights Act (“MERA”) action by NMW. In its May 31, 2023 Findings of Fact, Conclusions of Law, and Order issued as part of that action, DNR determined that Minnesota’s regulations on noise and light were inadequate to protect the Boundary Waters Canoe Area Wilderness (“Boundary Waters”) from mining activities in the Rainy River-Headwaters watershed and ordered rulemaking to expand the State’s Mineral Management Corridor within which mining related surface disturbance is prohibited. That process is ongoing. By demanding that DNR approve exploratory drilling in the Rainy River-Headwaters watershed before the MERA action and related administrative proceedings have concluded, Franconia is essentially requiring DNR to preempt the ongoing MERA lawsuit, short circuiting DNR’s analysis on noise and light pollution, as well as NMW’s intent to introduce evidence at the contested case proceedings on the egregious water quality issues sulfide ore copper mining poses in the Boundary Waters. For DNR to even consider an

exploratory drilling plan by Franconia that would generate the very light and noise that DNR said would pollute the Boundary Waters is completely incongruent with the ongoing MERA lawsuit and related proceedings.

In addition, Birch Lake is listed as impaired for mercury in fish tissue, and NMW's water quality monitoring data for 2020 through 2022 at 26 sites on Birch Lake, a wild rice water, demonstrates that Birch Lake is impaired for sulfate. It is reasonable to assume that Franconia's exploration activities will only exacerbate the two existing impairments by adding sulfate to Birch Lake and increased mercury in fish tissue in Birch Lake.

In short, as DNR's own findings in the MERA lawsuit demonstrate, more analysis is needed with respect to likely pollution of the Boundary Waters before any further investment or drilling is conducted by Franconia. NMW has already made a *prima facie* showing that the current rules are inadequate and must be amended to ban sulfide-ore copper mining in the Rainy River-Headwaters watershed in order to adequately protect the Boundary Waters. Allowing mining activities in the same area while the MERA case is pending is nonsensical. NMW urges DNR to delay approval of any such plan until the MERA case concludes.

1. **Franconia's Proposed Exploratory Drilling Will Cause Noise and Light Pollution in and around the Boundary Waters.**

On May 31, 2023, DNR concluded that Minn. R. 6132.0200 is inadequate to protect the Boundary Waters and its watershed from pollution, impairment, and destruction likely to result from the extraordinary noise and light pollution associated with mining-related activities. Consequently, DNR ordered rulemaking (to occur after a contested case proceeding) to expand the State's Mineral Management Corridor to protect the Boundary Waters from noise and light pollution. The proposed exploratory drilling would cause the same light and noise pollution that DNR identified as harming the Boundary Waters and which it seeks to protect in its rulemaking.

The experience of wilderness includes an untrammelled wilderness soundscape, which encompasses silence and solitude. In 2020, acoustic ecologist Gorgon Hempton identified the Boundary Waters as one of fewer than ten places left in the United States where visitors can escape from the constant noises of civilization for more than 15 minutes. Exploratory noises, such as drilling, blasting, and heavy diesel truck traffic, have already been found to be disruptive in the Boundary Waters. Despite mining company assurances that noise mitigations would be followed during drilling, significant noise from Franconia's and TMM's exploratory drilling on leases between 2006 and 2014 damaged the Boundary Waters' wilderness character on and around Little Gabbro, Gabbro, and Bald Eagle Lakes, Lake One, the portage from Turtle to Bald Eagle, and on portions of the South Kawishiwi River. That exploratory drilling also severely damaged the natural soundscape on and around Birch Lake.

The exploratory drilling now proposed by Franconia, if permitted, would create distinctive and persistent noise, some of which would be audible during otherwise calm and quiet times at distances of more than 14 miles away, polluting, impairing, and destroying a key characteristic of the Boundary Waters not just with audible industrial noise, but with a

component of low-frequency noise, which is uncommon and thus recognizable even at lower decibels than nearby high frequency natural sounds.

The exploratory drilling proposed by Franconia would also damage special features on and around Birch Lake. These include two federal campgrounds on the shore of Birch Lake and the South Kawishiwi River, Camp Northern Lights YMCA camp, Voyageur Outward Bound School (VOBS) on the South Kawishiwi River, and a set of at least 14 dispersed backcountry water-access campsites on the shores of Birch Lake and the South Kawishiwi River. Those who have not lived in or spent substantial time in an area subjected to exploratory drilling might not understand why this is so. Exploratory drilling can and often does continue 24 hours a day for months and seasons on end, a ceaseless attack on the natural soundscape and the hearing and quality of life for all within earshot.

To understand what the sound of constant drilling and heavy equipment is like, if you have never lived through it, try this for a few months or so: put your Kitchen-Aid mixer on the counter, plug it in, throw rocks into the steel pot, and leave it running with the blades hitting the side of the pot 24 hours a day, seven days a week, for months on end. Occasionally turn the mixer off, bang on it with a hammer, and restart it minutes later, without notice. That is what it sounded like to us, even when the drilling sites were miles away.

Decl. of Stephen Koschak, Dec., 21, 2022, at ¶16.

Even prior to 2006, we were impacted by the noise of Franconia drilling at the Birch Lake site, four or five miles down the lake. Franconia anchored a barge in the middle of the lake but noise travels a long way over water. The noise funneled down the lake so we heard it at our property but the entire lake was also affected by this relentless auditory pollution for an entire summer. The drilling noise was loud enough that I know it impacted the campsites around the lake. Our guests asked us about it all summer long, taking time away from our work and creating an anguishing situation for us, as we had no idea how long it would continue. I went on a tour of the Franconia drilling operation and experienced the deafening noise in the immediate vicinity. I have some experience with sound abatement in the construction of buildings and noticed there was no attempt at sound abatement at the Franconia operation. I also saw that the drilling barge flew both an American and a pirate flag, which I felt was a statement of the mining company's attitude toward neighbors on the lake and the forest environment.

Id. at ¶ 24.

In and before 2006, similar exploratory drilling occurred in close proximity to the sites now proposed by Franconia. Despite mitigation efforts, people at River Point Resort & Outfitting Company more than five miles from the drilling sites were disturbed almost without letup by the sounds of drilling, finding any preventative measures inadequate to protect special features on Birch Lake and the South Kawishiwi River. Based on the new exploratory plan, it is assumed this horrible noise will return to Birch Lake and continue through March 2025, or longer. If

another exploration plan were to be submitted by Franconia around or on the Birch Lake deposit then noise and light pollution from exploration might continue for years beyond March 2025. If approval of Franconia's September 22, 2023 drilling plan is possible, would it be for other plans at any or all of the other state leases in the watershed?

In addition to noise pollution, drill pads would cause light pollution. Drilling around the clock necessitates industrial lighting equipment at the Franconia drill pads, half of which would be on or adjacent to the Birch Lake shoreline.

Given that noise and light pollution from mining activity in the Rainy River Headwaters is set to be addressed as part of the ongoing MERA action, NMW requests DNR wait until the close of rulemaking and the MERA lawsuit to determine whether any new nonferrous metallic mineral exploration in the Rainy River Headwaters watershed is permissible, and if so, what mitigation measures, plan adjustments, and other conditions would be necessary for Franconia – or others – to proceed. Until such time, Franconia should delay any preparation for exploration in the BWCAW headwaters.

2. Birch Lake Is Impaired for Mercury in Fish Tissue and Is a Wild Rice Lake Impaired for Sulfate.

Allowing Franconia's exploration plan to proceed as submitted would likely result in water pollution of Birch Lake and water flowing to Birch Lake, which would contribute to the existing impairments of Birch Lake for sulfate and mercury in fish tissue. For that reason, Franconia's plan must not be approved.

Birch Lake is a wild rice water impaired for sulfate. NMW's data demonstrating such impairment have been received and accepted by the Minnesota Pollution Control Agency ("MPCA"). Birch Lake has long been on the impaired waters list for mercury in fish tissue (HgF). The fish in Birch Lake have a high enough mercury burden that Birch Lake cannot be covered by Minnesota's statewide mercury TMDL; Birch Lake requires its own TMDL, which has not yet been prepared.

Activities that increase the pollutant reaching a waterbody already impaired for that pollutant are said to cause or contribute to the waterbody's impairment, a violation of the Clean Water Act. Franconia's plan proposes road building, road widening, other earth movement such as the clearing of drill pads along and near the shore of Birch Lake, and drilling multiple boreholes on those pads. If the plan is approved, the creation and maintenance of these features is expected by DNR to continue for an 18-month period ending March 31, 2025 – that is, unless another exploration plan were to be submitted before the end of March 2025, in which case exploration activities in and around the Birch Lake deposit might continue for many more years. The totality of the planned activities is likely to cause erosion, runoff, and transport of contaminants – including sulfate in drill cuttings and drilling mud and mercury in conjunction with eroded soils – directly or through surficial soils and shallow groundwater into Birch Lake and surface waters draining to Birch Lake. Addition of sulfate to Birch Lake is likely to increase both the release of mercury from sediments into the water column and the methylation of

mercury, further increasing HgF. Thus, Franconia’s proposed exploratory mining is likely to violate the Clean Water Act by contributing to two existing impairments in Birch Lake.

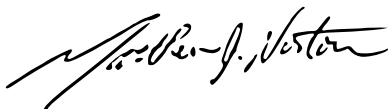
Moreover, NMW’s data show that elevated sulfate contributed to Birch Lake via Dunka River and Unnamed Creek (Bob Bay, Birch Lake, the site of three of Franconia’s proposed drilling locations with the remaining three along or near Unnamed Creek) is traceable at elevated concentrations as far downstream as NMW has yet sampled, at this point 21.7 miles downstream. Sulfate is said to be a conservative pollutant, such that additional sulfate loading delivered to Birch Lake in the Bob Bay area will cause an additional load downstream at the Boundary Waters’ boundary on Fall Lake.

Conclusion

For at least these reasons, NMW requests that DNR reject Franconia’s exploration plan submitted on September 22, 2023. A mineral exploration plan should not be approved when it will, or is likely to, result in a violation of the federal Clean Water Act’s prohibition on contributing to an existing water quality impairment. Nor should Franconia be allowed to pollute, impair, and destroy the Boundary Waters and its watershed with noise and light pollution—particularly when such noise and light pollution is under evaluation in a pending MERA case.

If DNR believes it must allow the exploration, NMW requests that DNR initiate a public review and comment process to allow for more complete public input. In that situation, NMW asks DNR to review the 2012 Superior National Forest Prospecting Final EIS (Prospecting Permit EIS) and specifically require Franconia to comply with the stipulations in Alternative Four meant to provide mitigation measures to protect the Boundary Waters.¹

Sincerely,



Matt Norton
Policy & Science Director
Northeastern Minnesotans for Wilderness & Save the Boundary Waters

¹ Included with this letter is Attachment 2: Stipulations from the Federal Hardrock Minerals Prospecting Permits Forest Service Record of Decision; these stipulations include mitigation required of the Forest Service for exploratory drilling for the purpose of protecting the Boundary Waters. Respectfully, the DNR should also review the U.S. Forest Service’s 2022 Soundscapes Report prepared for the 2022 Federal Mineral Withdrawal Environmental Assessment. In that report, the U.S. Forest Service concluded that additional mitigations included in Alternative Three of the Prospecting Permit EIS were necessary based on public comments received subsequent to the Prospecting Permit EIS indicating that Alternative Four’s stipulations/mitigation measures were insufficient to protect the project area. (Evidence of this insufficiency is available in a set of “Paddle Flashes” submitted by staff of the U.S. Forest Service cooperator VOBS. VOBS instructors filled out the forms attesting to the drilling, heavy equipment, and other exploration noise heard by the instructors while they were on trips well within the Boundary Waters.) The Soundscapes Report concluded that even with Alternative 3 and 4 stipulations, there would be impacts to opportunities for solitude due to sound levels reaching the Boundary Waters. Included with this letter are the Paddle Flashes.

Cc: Barb Naramore, DNR
Jess Richards, DNR
Joe Henderson, DNR
Peter Tester, MPCA