

Herman Henning
Chief Inspector of Mines
Ministry of Energy Mines & Petroleum Resources
c/o Mining Division - Southwest Region
PO Box 9395 Stn Prov Govt
Victoria BC, V8W 9M9

Submitted electronically to SouthwestMinesDivision@gov.bc.ca

9 May 2019

RE: Notice of application for a permit approving the amended mine plan and reclamation program for the Giant Copper Property

Dear Mr. Henning,

Thank you for taking the time to consider our comment on the 5-year exploration permit that was submitted by Imperial Mining Corporation for proposed mining activities in the upper Skagit River Watershed.

RE Sources for Sustainable Communities is a local organization in northwest Washington, founded in 1982. RE Sources works to build sustainable communities and protect the health of northwest Washington's people and ecosystems through the application of science, education, advocacy, and action. Our North Sound Baykeeper program is dedicated to protecting and enhancing the marine and nearshore habitats of northern Puget Sound and the Georgia Strait. Our chief focus is on preventing pollution from entering the North Sound and Strait, while helping our local citizenry better understand the complex connections between prosperity, society, environmental health, and individual wellbeing. Our North Sound Baykeeper is the 43rd member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has over 20,000 members in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

The 1984 High Ross Treaty and subsequent creation of the Skagit Environmental Endowment Commission (SEEC) were initiated in part to preserve and protect the essential fish and wildlife habitat in the Upper Skagit Watershed. It was therefore surprising and disconcerting to learn that a 5,800-hectare "donut hole" had been opened to clearcut logging and that it may face further damage from mining operations.

This 5,800 -hectare inholding is situated at the headwaters of the Skagit river and within a cross-border Parks and Protected Areas Wildlife Habitat that spans more than 1 million hectares. This protected area is considered the best hope for protecting and recovering native fish and wildlife species in this region, most notably grizzly bears, northern spotted owls, and Chinook salmon. Impacts to the headwaters to this protected area would put this entire area at risk, therefore it is egregious to think that both logging and mining operations could be allowed here.



Research shows that clearcut logging is harmful to salmon¹. Clearcut harvesting quickly and dramatically changes the ecosystem of a stream - increasing flow, increasing temperature and light, increasing the amount of sediment, and decreasing the amount of dead and downed wood. These changes have dramatic effects on the various life stages of salmon and result in decreased salmon populations following clearcut timber harvesting.

Like logging, mining also disturbs the ground and can increase the amount of sediment that travels into streams. With a proposed copper mine, however, the potential exposure to copper is especially worrisome. Copper is considered a neurotoxin and has shown to adversely affect a salmon's olfactory system^{2,3}. Juveniles exposed to copper at very low levels become unresponsive to chemical signals in their environment, including those warning them of nearby predators. This makes these salmon much more vulnerable to predation.

Humans, including those who work for Imperial Mines, are not infallible. Despite the best intentions and Best Management Practices, there is absolutely no way to ensure that copper or sediment will not enter the streams whether it is because of a breached tailing pond or simply heavy rain on exposed soil. While lessons were learned from the Mount Polley mine disaster there is no guarantee that another accident of this magnitude won't take place especially since Imperial Mines was never held accountable and were never required to pay a fine for the damage their operations caused.

Salmon, particularly Chinook, are returning to rivers at record low numbers and their populations are dwindling overall. Salmon are keystone species which means entire ecosystems depend on their survival which helps explain why southern resident orca whales are at the brink of extinction. The Skagit river in Washington state is our best chance at salmon and orca whale recovery in the Puget Sound. Substantial gains have already been made to improve habitat in the lower reaches of the Skagit but a disaster upriver could undo all the progress that has been made here.

This region is not only ecologically important for fish and wildlife but it is also important for people. These are unceded Indigenous lands for the Upper Skagit, Stó:lō, Syilx and Nlaka'pamux people who use this land for sustenance and spirituality. It also houses hundreds of miles of recreation roads and trails that are used to access hiking, camping, fishing, hunting, and other recreational activities. This is the time to take the donut hole out of production, as was intended with the creation of SEEC, and make it into one, contiguous conservation area that will preserve and protect into perpetuity.

We request that you deny the 5-year exploration permit being requested by Imperial Mines and work to protect this area that has irreplaceable ecological, and recreational value.

Sincerely,

Kirsten McDade, Pollution Prevention Specialist
Eleanor Hines, North Sound Baykeeper
Ander Russell, Clean Water Program Manager
RE Sources for Sustainable Communities

References:

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McIntyre, J.K., Baldwin, D.H., Beauchamp, D.A., and Scholz, N.L. 2012. Low-level copper exposures increase the visibility and vulnerability of juvenile coho salmon to cutthroat trout predators. *Ecological Applications*, 22:1460-1471.

Hicks, Brendan. (2019). Gravel galore: Impacts of clear-cut logging on salmon and their habitats.

CC:

John Horgan, British Columbia Premier

George Heyman, Environment Minister

Doug Donaldson, BC Forests Minister

Jay Inslee, Washington State Governor

Rob Duff, Senior Policy Advisor - Environment, Office of Governor Inslee

Doug Ericksen, 42nd District State Senator

Luanne Van Werven, 42nd District State Representative

Sharon Shewmake, 42nd District State Representative

Liz Lovelett, 40th District State Senator

Jeff Morris, 40th District State Representative

Debra Lekanoff, 40th District State Representative

Keith Wagoner, 39th District State Senator

Carolyn Eslick, 39th District State Representative

Robert Sutherland, 39th District State Representative