RESOURCES FOR SUSTAINABLE COMMUNITIES
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To: Tricia Miller
Permit Administrator
3190 - 160th Avenue SE
Bellevue, WA 980078
Transmitted Via Email to: tmil461@ecy.wa.gov

November 21, 2018

RE: Darigold Inc. - Lynden Plant. NPDES Wastewater Discharge Permit #WA0002470

Dear Ms. Miller,

Thank you for taking the time to consider my comment on the NPDES Wastewater Discharge Permit being considered for Darigold Inc. in Lynden, WA.

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.

I appreciate the rigorous temperature measurements that are included in the specifics of this permit, particularly during the summer months when water quality tends to decrease. I am concerned, however, that the warm condensate of whey (COW) water that is being discharged into the Nooksack River is contributing to this river's declining water quality. The Nooksack River is a 303(d) listed body of water because it continually fails to meet several water quality standards near the Darigold facility, including temperature[1]. The Nooksack River is designated as Core Summer Salmonid Use which means the temperature criterion for the river is 16 °C[2]. The COW water being discharged at the Darigold facility ranges from 16.7-29.4 °C which are all above this temperature criterion. Given that Darigold is allowed to

discharge up to one million gallons of warm COW water into the river per day, the laws of physics tell us that this in turn will raise the temperature of the Nooksack River.

Ecology currently allows a point source to warm water at the edge of the chronic mixing zone by 0.3 °C. Given the already impaired state of the water body I argue that there should be no allowable temperature rise and that the COW water should be treated (cooled) before being discharged into the Nooksack river.

According to the Water Quality Standards for Surface Waters of the State of Washington the "Protection and maintenance of existing and designated uses [states that]…whenever the natural conditions of a water body are of a lower quality than the assigned criteria, the natural conditions constitute the water quality criteria. Where water quality criteria are not met because of natural conditions, *human actions are not allowed to further lower the water quality.*[2]" (Italics added for emphasis). Raising the temperature of the Nooksack River would constitute lowering the water quality and would, therefore, be considered degradation.

Maintaining status quo is no longer an acceptable practice as we see continual deterioration of the Nooksack River under current practices. With climate change models showing that stream temperatures are going to rise between 3.4 °C to 5.9 °C without any change we cannot afford *any* further increase in water temperature[3]. We also cannot wait for the Department of Ecology to develop a TMDL for the Nooksack River to provide guidance on how to heal this river; we already know what needs to be done including bringing down the overall temperature of the water.

The Nooksack River is an iconic river of Whatcom county. It has sustained local tribes for thousands of years, is home to the five species of Pacific salmon, and provides abundant recreational opportunities. The Chinook salmon that inhabit the Nooksack are federally listed as threatened and are the preferred food of the southern resident orca whale. Protecting these salmon from further habitat degradation is in alignment with the southern resident orca task force's primary goal to increase Chinook abundance[4].

I understand that developing a water treatment facility or other means to cool COW water is a large endeavor and will take time and significant resources. In the meantime, I strongly encourage you to require Darigold to mitigate for their warm water discharge in the form of a vegetative buffer that will provide shade and help cool the river. A Shade Model created for the South Fork Nooksack River shows that buffers can help to mitigate for rising river temperatures[3].

Thank-you for the opportunity to comment on this wastewater discharge permit. I hope that you take my suggestions to prohibit any warm water discharge into the already impaired Nooksack River and to consider requiring Darigold to plant a buffer along the river to mitigate their impacts.

Sincerely,

Kirsten McDade
Pollution Prevention Specialist
RE Sources for Sustainable Communities

[1]Washington State Water Quality Assessment. Retrieved from: https://fortress.wa.gov/ecy/approvedwqa/ApprovedSearch.aspx
[2]Water Quality Standards for Surface Waters of the State of Washington. 2006. Retrieved from: https://fortress.wa.gov/ecy/publications/documents/0610091.pdf
[3]South Fork Nooksack River Temperature TMDLs Draft. 2018. Retrieved from: https://fortress.wa.gov/ecy/publications/documents/1810021.pdf
[4]Southern Resident Orca Task Force Report and Recommendations. 2018. Retrieved from: https://www.governor.wa.gov/sites/default/files/OrcaTaskForce_reportandrecommendations_11.16.18.pdf