

May 31, 2023

Via Email – francesca@thenarwhal.ca

Attention: Francesca Fionda
Mining Reporter, The Narwhal

Dear Ms. Fionda:

RE: Inaccurate information about the KSM Project in your article

I am writing to address the inaccurate and misleading information about Seabridge Gold's KSM Project published in your May 25, 2023, article titled "*These are 11 of B.C.'s most 'polluting and risky' mines*". Specifically, I would like to highlight your use of the "Dirty Dozen 2023: B.C.'s top polluting and risky mines" report and a quote from Guy Archibald, Executive Director of the Southeast Alaska Indigenous Transboundary Commission, which has led to misinformation about our [KSM Project](#). It is unfortunate that you published the information without seeking clarification from Seabridge, had you reached out to us, we would have readily provided the correct facts about the KSM Project.

First, it is important to note that in 2021, when the first edition of the Dirty Dozen report was published, Seabridge proactively reached out to the author, Adrienne Berchtold, Ecologist & Mining Impacts Researcher at Skeena Wild Conservation Trust, and shared comprehensive and factual information about the KSM Project, offering the opportunity to rectify any misinformation that had been published in the report. We specifically requested that Ms. Berchtold contact us for accurate information before publicly raising concerns about the Project. Regrettably, despite our efforts, Ms. Berchtold chose not to engage with us and has once again included misleading information about our KSM Project in her 2023 report. This evident bias against our Project raises concerns about her commitment to objective and factual reporting. By failing to engage with us and neglecting to present the facts, Ms. Berchtold has deprived her audience, and you, of the opportunity to form well-informed conclusions about our KSM Project. **You can read both the letters here – the [2021 letter](#) and the [2023 letter](#).**

We would like to take this opportunity to educate you and share factual information about our KSM Project so that any of your future articles about the Project reflect these facts. We would also request you rectify the misinformation published in your recent article.

KSM, an Environmental Assessment (EA) approved Project

The KSM Project successfully completed a rigorous joint harmonized EA review as outlined by the [British Columbia Environmental Assessment Act](#), [the Canadian Environmental Assessment Act](#) and in accordance with Nisga'a Lisims Treaty over a seven-year period

(2008-2104). More than 250 scientists, engineers, Indigenous partners, and regulators developed and meticulously reviewed the information pertaining to the KSM Project. Additionally, more than 15,000 people from British Columbia and Alaska actively engaged in public meetings, consultations, and Project information sessions prior to the Project's approval.

The KSM Project has been designed with rigorous environmental measures to minimize its impact on the surrounding ecosystem and we are dedicated to ensuring that our mining activities meet the highest standards of safety and sustainability.

Excerpt from your article - “The mine’s wastewater, containing elevated metals and selenium, will require treatment for hundreds of years before release to the Unuk watershed, - a watershed that supports salmon stocks of concern,” the report reads.

Since 2007, Seabridge Gold has been conducting ongoing water quality and hydrology monitoring within both the Unuk River, which drains into the Alaska border and tributaries of the Bell Irving River, spending approximately C\$1-1.5 million annually on these programs. Based on the data collected, it has been determined that Mitchell and Sulphurets creeks (flowing into the Unuk River) are **degrading naturally, resulting in elevated concentrations of selenium and other metals** within the water. Treaty Creek, located downstream of the yet -to-be-constructed Tailings Management Facility (TMF) location also has elevated levels of minerals due to the upstream stream location of mineralized zones of exposed bedrock, which are naturally oxidizing and eroding. Hence, the **water quality in these watersheds cannot be characterized as pristine. You can read the Unuk River Watershed Baseline Characterization Report (2007 to 2018) [here](#).**

The data we collected (and continue to collect) within the Unuk River was further **validated by Greg Tamblyn (Ministry of Environment and Climate Change Strategy)** during May 19, 2021, AK/BC Transboundary Public Meeting where Mr. Tamblyn said the data collected by Seabridge matched their findings. **Water quality flowing into Alaska will not degrade** beyond levels associated with ongoing erosion as a result of the KSM Project. This includes selenium levels, which will also not increase, in waters flowing across the BC/Alaska border, within the Unuk River.

The pictures below demonstrate the existing natural conditions around the KSM Project and the current water quality issues in this region.



Photo 1: Confluence of Sulphurets Creek with the Unuk river depicting the impact of the natural erosion of the upstream mineral deposits on the regional water quality. The confluence is located approximately 22 miles upriver from the Alaska/BC border.



Photo 3: Existing conditions at the KSM and downstream areas. Seep water near the Mitchell Glacier Toe.



Photo 2: The Mitchell Deposit highlighting the natural erosion and oxidation processes at work. Please note the presence of “green” copper sulphate staining in the middle left portion of the photograph.

The water management strategy we have proposed at the KSM Project will not only manage water that has been in contact with mining activities but will also improve the existing naturally poor water quality.

Furthermore, the KSM Project's TMF is located in the upper reaches of the Bell Irving River Basin and drains into Canadian waters, not the Unuk River, or any other US waterway. The KSM Project's mineral deposits are situated geographically north of the BC/Alaska Border on Sulphurets Creek, a tributary of the transboundary Unuk River, an area in which both the BC and Canadian governments allow responsible mineral exploration and mining to occur. Although the KSM Project does not require any permits from US jurisdictions, including Alaska, due to the deposit's location and being a responsible company, concerns of Alaskans along with the potential impacts to Alaskan waters were an important focus and carefully evaluated during both the provincial and federal EA reviews.

Alaskans expressed the same concerns as Canadians, and those concerns were given equal weight in the assessment process and ultimately, they were fully mitigated within the design of the proposed Project **adding more than C\$300 million in design changes to the Project's capital cost.** Alaska-specific changes include –

- Changed the water management approach on the mine side of the Project, to mimic mine discharge with high seasonal flows.
- Incorporating lined centre cell in the TMF to store sulphide-rich tailings.

The independent Canadian Environmental Assessment Agency (CEAA) Report acknowledged and summarized these comments for the public record as follows: *"Residents of the United States, including tribal groups, raised concerns over the Project's potential transboundary impacts on fish, recreational and commercial fisheries, and human health from degraded water quality and changes in water quantity in the Unuk River. The Agency is satisfied that identified mitigation measures for the Project would address potential impacts in Alaska on fish; recreational and commercial fisheries and human health from changes to water quality and quantity in the Unuk River."* **You can access the report [here](#).**

The participating US Federal and State agencies also did not identify any outstanding transboundary concerns following the EA processes. In fact, an April 2014 article in the Juneau Empire described the US's review of the KSM Project as follows: *"Four of the same resource managers and specialists who review Alaskan mines have examined KSM's plan, said Kyle Moselle of the Alaska Department of Natural Resources. They found no significant issues with the application."*

Once the KSM Project begins operations, it will be subject to stringent monitoring requirements under a variety of approved plans including aquatic effects management, selenium management, wildlife management, and the Canadian Federal Government Metal Diamond, Mining and Effluent Regulations. This monitoring will further minimize any potential impacts to the local environment and the Unuk River.

Excerpt from your article - “Selenium is incredibly detrimental to fish and it's not the only poison that will be coming down the river,” Archibald said.

During the KSM Project’s EA process, potential impacts to the environment arising from selenium and other naturally occurring metals **were thoroughly evaluated and assessed**. In fact, the BC EA process required Seabridge to evaluate and adopt an effective selenium treatment technology for the KSM Project; it was a legally binding condition for the EA. To that end, Seabridge adopted Selen-IX™ technology developed by selenium technical experts BioteQ Environmental Technologies, Inc. In 2015, Seabridge successfully completed a pilot plant evaluation of this new process for the removal of selenium from waters in northwest BC, proving that the technology works.

The Selen-IX™ treatment technology was able to reduce selenium concentrations to 1 ppb in water extracted from the KSM Project site. The technology was issued a **US patent in 2018 further validating Seabridge Gold’s chosen approach for selenium treatment** at the KSM Project. Two additional Se treatment plants utilizing the same technology as for the KSM Project, are now successfully operating in the US. In 2020, BQE Water also completed the commissioning and Performance Test of the First Selen-IX™ Plant for selenium removal at the Kemess Property in BC. Over the last years, there has been a major increase in the number of projects where **Selen-IX is selected as the treatment technology of choice by project owners, approved by regulators, and advanced into implementation**. In 2020, BQE Water completed the commissioning and Performance Test of the First Selen-IX™ Plant for Selenium Removal at the Kemess Property in BC and in 2021 was awarded the prestigious 2022 Clean50 Top Project Award for the Kemess plant by Delta Management Group.

Excerpt from your article - As KSM has gone through the permitting process, “not a single U.S. tribe was at the table,” Archibald told The Narwhal.

Mr. Archibald's claim is entirely unfounded. Throughout the environmental assessment review period to ensure the concerns of Alaskans are heard and addressed, the Seabridge team extensively engaged with Alaskan tribes and ENGOs and is maintaining ongoing engagement with the US Federal and State agencies. **Some of these interactions include –**

- Presented at the Central Council of the Tlingit and Haida Indian Tribes of Alaska conference in Craig, Forum for Ketchikan Business Leaders in Prince Rupert, Alaska Miners Association in Anchorage and Juneau, Southeast Conference, Juneau Chamber of Commerce and Prince of Wales Island-Wide Mining Symposium, and joint business conference for British Columbia and Alaska in Prince George.
 - More than 140 different ongoing meetings, interactions and correspondence with Alaskan State agencies and US Federal agencies. In May of this year, representatives of the Alaska Department of Fish and Game, and Alaska Department of Environmental Conservation attended Seabridge Gold’s Environmental Workshop.
 - Met with Alaskan ENGOs including the Tlingit-Haida Central Leadership Council, the Organized Village of Kasaan, the Southeast Alaska Conservation Council, Rivers Without Borders and the Southeast Alaska Indigenous Transboundary Commission.
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- Formed Alaska Working Group.
 - Organized site tours for working groups, Alaskan media, Alaska Department of Natural Resources Mining, Land and Water and the US Environmental Protection Agency. The KSM site was last toured by Alaskan regulators in 2018.
 - The Canadian Environmental Assessment Agency received and addressed over 400 comments related to BC-Alaska transboundary concerns.

The extensive engagements we have undertaken are a testament to Seabridge Gold's responsible approach in advancing the KSM Project and the significant importance we place on engaging with Alaskan stakeholders to address their concerns, despite KSM being a BC-based project.

It is worth noting that the Southeast Alaska Indigenous Transboundary Commission, which Mr. Archibald represents, was also involved in the engagement process. Therefore, his false claim that U.S. tribes were not included in the environmental assessment of KSM undermines their agenda, which seems to be centred on completely shutting down BC's mining industry, rather than conducting an unbiased analysis of projects based on factual information. This is particularly significant considering the need for responsible mining projects to meet the growing demand for critical metals like copper, to achieve the ambitious goal of achieving net-zero carbon emissions by 2050. KSM, being the world's third-largest undeveloped copper Project, will play a vital role in supporting this demand. Once in production, the Project is estimated to provide **19.4 billion+ pounds (M&I)** of responsible Canadian-sourced copper.

Excerpt from your article - *The proposed tailings storage facility is 239 metres tall and can hold 2.3 billion tonnes of wet tailings, making it one of the largest in the world.*

It is important to note that once built, the KSM Project will have a lifespan of 50+ years. The Project's TMF was designed with consideration for that long lifespan and the resultant tailing volume to be stored. Using the best available technology, the facility as is currently designed can safely and securely store 2.3 billion tonnes of tailings.

Additionally, KSM Project's TMF has been specifically engineered to be stable under all conditions, including earthquakes, and comply with the highest standards of static stability. The location of the TMF site was selected after completing an extensive alternative assessment that examined 14 different sites and consultations with local Indigenous groups. The remote location was selected for being the most secure site from an operational and closure perspective and was found to have the best environmental and waste management approach. Additionally, water management volumes are also minimized as the TMF location is situated in an alpine valley with no surrounding glaciers.

Additional information about KSM Project's proposed TMF which we think you might find useful:

- KSM Project's TMF design (and future operations) is annually reviewed by the [Independent Geotechnical Review Board](#) (IGRB) formed by Seabridge in 2015,
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which is comprised of world-class experts in tailings management with more than 300 years of combined experience. **In April 2016, the IGRB confirmed that the design of the proposed structures for the KSM Project were appropriate and safe.**

- Seabridge voluntarily initiated a [Best Available Tailings Technology \(BATT\)](#) Review of the planned management approach for the KSM Project in 2015, after the Project had received its environmental approvals. The study confirmed that the existing tailing management facility design is the best available technology for tailings deposition and the most environmentally responsible plan to minimize long-term risks. **Please read the [BATT Report](#) and the [Plain Language Summary](#) for more information.**
- Furthermore, Seabridge also commissioned an independent review of the BATT report by Dr. Dirk van Zyl, a world-recognized expert in tailings, mined-earth structures and sustainability with more than 40 years of experience. He also sat on the Mount Polley Independent Expert Review Panel. In his review, Dr. van Zyl concluded: "I support the overall conclusions of the KSM BATT report."
- For more information about the design of the TMF, **you can also visit our website (and video) [here](#).**

Engaging with our Indigenous Partners and Local Communities in Northwest BC.

For the past 12 years, Seabridge Gold has worked closely with our Indigenous partners and local communities in northwest BC to gain the social license to operate. Because of the trust built through consultations, engagements and the accommodations we have made to address their concerns, **Seabridge entered into comprehensive Benefits Agreements with both Nisga'a Lisims Treaty Nation in 2014 and the Tahltan Nation in 2019** (the First Nations on whose traditional territory the KSM Project is located), covering protections of Indigenous rights, the environment and shared economic benefits for the KSM Project. As you may also be aware on January 26, 2023, these **two Nations formally announced their newly established [Treaty Creek Limited Partnership](#)** that will optimize their participation, maximize economic benefits and create new opportunities for Nation members through training, employment, and contracting at our KSM Project.

Seabridge Gold also has an environmental agreement with the Gitanyow Wilps and the Gitxsan Hereditary Chiefs have endorsed the Project with a letter of support for the environmental assessment approval. We have also received letters from the local communities of Terrace and Smithers supporting the KSM Project and **an independent perception audit conducted in 2020 revealed that approximately 61% of residents in northwest BC either strongly supported or supported the KSM Project.**

These agreements, support letters, and the positive survey results serve as a powerful testament to our unwavering commitment to meaningful consultation, genuine cooperation, and the establishment of robust partnerships with our Indigenous partners and local communities built on trust, respect, and shared prosperity. Furthermore, these achievements unequivocally highlight the fact that the local and Indigenous communities in northwest BC wholeheartedly endorse responsible mining projects, unlike the Alaskan-based tribes. Their

resounding support stems from a profound understanding of the significant economic and social advantages that responsible mining projects like KSM bring to the northwest BC region and beyond and the stringent laws and regulations that govern BC's mining industry.

For Seabridge Gold, protection of the environment in both Canada and the US is a guiding principle behind all our Projects. We remain steadfast in our commitment to upholding the highest standards of environmental stewardship and would like to reiterate that the KSM Project has been through extensive environmental and technical evaluations by independent experts to ensure its operation will not cause harm to the surrounding environment, including waterways and fish, and has worked closely with all stakeholders, including Alaskans, to ensure that their concerns were acknowledged and addressed throughout the environmental assessment review. We are confident in our design and the robustness of the environmental assessment review processes that were mandated by BC and Canada, respectively.

We are committed to being transparent and providing factual information, and we would appreciate your commitment to journalistic integrity by ensuring that accurate information is published. We kindly request that you review the details we have provided and consider incorporating them into your recently published and any future articles. Furthermore, if you wish to discuss the Project and learn how we are advancing the KSM Project using the best available technology, responsible practices and most importantly, collaborative relationships with our Indigenous partners and stakeholders, you can reach out to me via email - brent@seabridgegold.com.

Thank you for your time.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brent Murphy".

R. Brent Murphy, M.Sc., P.Geo
Senior Vice President, Environmental Affairs
Seabridge Gold

RBM/RS/...
