



December 18, 2017

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Dear Messrs. Pascall and Newall:

We are writing to express our opposition to your future investment in the Pebble Mine (or “Pebble Project”)—a massive gold and copper mine proposed by Northern Dynasty Minerals Ltd. to be sited at the remote and ecologically sensitive headwaters of Bristol Bay, Alaska. We were disappointed by the announcement today of a framework agreement reached with Northern Dynasty Minerals that, if confirmed in an option agreement, gives First Quantum Minerals Ltd. (“First Quantum”) the option to purchase a 50% interest in the Pebble Limited Partnership. We understand that finalization of this option agreement is contingent upon, among other things, further due diligence and is expected to occur early in Q2 2018.

As First Quantum conducts its due diligence, we would like to draw your attention to the significant environmental and social impacts of the Pebble Mine, which pose financial, regulatory, operational, legal, and reputational risks for any company that pursues this endeavor.

As discussed in more detail below, Northern Dynasty Minerals faces significant hurdles to develop the proposed Pebble Project. First and foremost is the overwhelming consensus of opposition to the mine. Rather than diminishing, this opposition is intensifying. Please find, for example, attached statements from the tribal, economic and political leaders of Bristol Bay responding to today's announcement: "Announcement of New Investor Does Not Change Facts About the Pebble Project: Regional Leadership Remains United in Opposition to Mining at Bristol Bay's Headwaters."

Also attached is the statement published just last week in the Washington Post in opposition to the Pebble Mine signed by former Environmental Protection Agency ("EPA") Administrators from every Republican Administration from Nixon to George W. Bush except one – the Ford Administration, whose EPA Administrator is deceased. The brief but unequivocal bipartisan statement—which ran as a full-page ad in the Post on December 12th—is signed by former EPA Administrators William D. Ruckelshaus (Presidents Nixon and Reagan), William K. Reilly (President George H.W. Bush), and Christine Todd Whitman (President George W. Bush). The statement is also joined by former Secretary of the Interior Bruce Babbitt (President William J. Clinton), whose former Chief of Staff Tom Collier is the CEO of the Pebble Partnership. The message is clear: "The Pebble Mine is the wrong mine in absolutely the wrong place." This statement by former EPA Administrators with regard to a matter pending before a successor EPA Administrator is virtually unprecedented and demonstrates the singular opposition that this project faces.

For all these and other reasons described more fully below, the Pebble Partnership will never achieve the social license necessary to build its mine in Bristol Bay. We urge you to consider whether there aren't other, potentially far more achievable projects in which to invest, and we would welcome the opportunity to discuss this with you at your earliest convenience.

1. Financial Risks

All the major investors in the proposed Pebble Mine have withdrawn from the project. Mitsubishi withdrew in 2011. Anglo American withdrew in 2013, after spending more than \$540 million dollars to develop the mine and writing down \$300 million in additional losses to withdraw, citing a desire to focus on projects with the "highest value and lowest risks."ⁱ Rio Tinto walked away in 2014, donating all of its Northern Dynasty Minerals shares to two Alaskan charitable foundations.ⁱⁱ

Northern Dynasty Minerals' consolidated financials explicitly acknowledge the critical need to obtain additional financing, as well as "substantial doubt about the Company's ability to continue":

As at December 31, 2016, [Northern Dynasty] has \$7.2 million in cash and cash equivalents for its operating requirements. The Group incurred a net loss of \$27.0 million and \$33.8 million during the years ended December 31, 2016 and 2015, respectively and had a deficit \$406.1 million as at December 31, 2016...Additional financing will be required in order to progress any material expenditures at the Pebble Project beyond 2017...There can be no assurances that the Group will be successful in obtaining additional financing. If the Group is unable to raise the necessary capital resources and generate sufficient cash flows to meet obligations as they come due, the Group may, at some point, consider reducing or curtailing its operations. As such there is material uncertainty that raises substantial doubt about the Company's ability to continue as a going concern.ⁱⁱⁱ

Those consolidated financial statements also acknowledge that the company is still in the process of “exploring and developing the Pebble Project and has not yet determined whether the Pebble Project contains mineral reserves that are economically recoverable.”^{iv} It then warns investors of the risk:

[Northern Dynasty’s] continuing operations and the underlying value and recoverability of the amounts shown for [its] mineral property interests, is entirely dependent upon the existence of economically recoverable mineral reserves; the ability of the Group to obtain financing to complete the exploration and development of the Pebble Project; the Group obtaining the necessary permits to mine; and future profitable production or proceeds from the disposition of the Pebble Project.^v

Northern Dynasty Minerals even warned investors that “[e]nvironmental concerns in general continue to be a significant challenge for Northern Dynasty Unexpected environmental damage from spills, accidents and severe acts of nature such as earthquakes are risks which may not be fully insurable and if catastrophic could mean the total loss of shareholders’ equity.”^{vi} The company acknowledged that “[i]t is possible that the costs and delays associated with compliance with such standards and regulations could become such that we would not proceed with the development or operation.”^{vii}

2. Environmental Risks

If fully developed -- or even if developed over time in smaller segments -- the Pebble Project would be one of the largest mines in North America, producing up to 10 billion tons of mining waste that would have to be stored—forever—in the rivers, streams and wild lands of Bristol Bay’s high-quality salmon habitat. Salmon are the economic backbone of the region and contribute as well to the regional community’s cultural foundation. An economic report released by researchers at the University of Alaska found that the Bristol Bay commercial salmon fishery is worth \$1.5 billion annually, making it the most valuable wild salmon fishery in the world.^{viii} Not only do salmon sustain a prized commercial fishery, they also sustain world-class sports fishing, a subsistence-based economy for Alaska Natives, and 14,000 jobs.^{ix} Given its location at the headwaters of the Bristol Bay watershed, any mining of the Pebble deposit—including even a smaller mine plan—would put salmon—which are highly sensitive to even the slightest increases in copper—at great risk.

The U.S. EPA conducted a scientific assessment of the Bristol Bay watershed to understand impacts from large-scale mining like the proposed Pebble Mine on Bristol Bay fisheries—and the consequent effects on wildlife and Alaska Native cultures in the region. EPA’s Bristol Bay Watershed Assessment—which was subject to extensive public comment and two rounds of expert peer review—concluded that even the smallest mining scenario of the Pebble deposit would have “significant” impacts on fish populations and streams surrounding the mine site, and that a tailings dam failure would have “catastrophic” effects on the region.^x EPA underscored that even with no human or system failure (impossible in the long-term), a mine of *any* foreseeable size would reduce water flow in the region, directly eliminating between 1,300 to 5,350 acres of wetlands and destroying between 24 and 94 miles of salmon-supporting streams.^{xi} EPA evaluated three mining scenarios; even the smallest—smaller than what Northern Dynasty Minerals currently proposes and which is not likely economically feasible unless further developed—would result in “unacceptable adverse effects,” the threshold for EPA intervention under Section 404(c) of the Clean Water Act.

3. Regulatory Risks

The EPA has the unequivocal authority under Section 404(c) of the Clean Water Act to stop dredge and fill projects “whenever” failure to do so would result in unacceptable adverse environmental effects.^{xii} Six federally-recognized tribes in Alaska petitioned EPA to use its authority under Section 404(c) to protect Bristol Bay from large-scale mining like the Pebble Mine. EPA received similar requests from the Bristol Bay Native Corporation (a multi-billion dollar developer and the largest land-owner in the Bristol Bay region representing over 10,000 native shareholders), the Bristol Bay Native Association (a non-profit corporation and tribal consortium serving the 31 federally recognized tribes in the Bristol Bay region), United Tribes of Bristol Bay (a consortium of 15 federally recognized tribes in the Bristol Bay region opposed to the Pebble Mine), Nunamta Aulukestai (a consortium of 10 native village corporations in the Bristol Bay region opposed to the Pebble Mine), commercial fishing and sportsmen groups, chefs, jewelers, investors, churches, business owners, and environmental and conservation groups. In response, EPA conducted the Bristol Bay Watershed Assessment discussed above. Based on this information, in July 2014 EPA issued a Proposed Determination under Section 404(c) of the Clean Water Act to restrict the use of certain waters in the Bristol Bay watershed for disposal of dredged or fill material associated with developing the Pebble Mine.^{xiii} If finalized, EPA’s Proposed Determination would impose restrictions on the size of the Pebble Mine.

Under the Trump Administration and during the brief tenure of EPA Administrator Scott Pruitt, however, the agency has reversed course and proposed withdrawing its 2014 Proposed Determination.^{xiv} The public comment period on that proposal closed in October, and EPA received more than 1 million comments; 99.8 percent of those comments urged the agency to retain—not withdraw—its mining restrictions on the proposed Pebble Mine.^{xv} Regardless of whether this administration withdraws the EPA’s 2014 Proposed Determination, it remains clear that EPA’s Bristol Bay Watershed Assessment provides indisputable evidence of the unacceptable adverse impacts that mining would cause in the region. In other words, even if EPA withdraws or does not finalize a 404(c) determination *now*, the agency could proceed with restrictions at *any* time in the future. This creates even greater risk and uncertainty for the project. The D.C. Court of Appeals has held that EPA may “prohibit/deny/restrict/withdraw a specification *at any time*”^{xvi}—before, during, or *after* the permitting process. Therefore, a mining permit issued by the Trump administration could easily be withdrawn or restricted by a future law-abiding administration even after significant funds (beyond the hundreds of millions already invested) have been expended for research, development, and construction. The threat of a federal permit denial or withdrawal will never go away, and will remain long after the Trump administration.

In addition to EPA’s power to prohibit or restrict the mine at any time, the state of Alaska also has the regulatory power to block the project. Alaska Governor Bill Walker, an independent, is on record against the mine: “I am not supportive of the Pebble Mine.”^{xvii} Governor Walker also said that constructing the mine “presents formidable challenges” given the valuable fishery and the rural village life that depends on it. For the first time ever, his administration imposed a \$2 million performance guarantee bond on Northern Dynasty Minerals’ otherwise routine miscellaneous land use permit.^{xviii} Performance guarantee bonds are usually required when there are concerns that the company will not comply with the permit conditions or applicable regulations. Until now, this kind of bond has not been required of Pebble during the decades of exploration work in Bristol Bay.^{xix}

Finally, the “Bristol Bay Forever” initiative, passed in 2014, also has the potential to derail the project.^{xx} The initiative protects the Bristol Bay watershed from large-scale sulfide mining (like the proposed Pebble Mine) that would harm wild salmon by requiring an affirmative finding from the Alaska legislature that mining would not be harmful to wild salmon within the Bristol Bay Fisheries Reserve.

4. Operational Risks

To transport gold and copper from the mine site to market, Northern Dynasty Minerals will have to construct massive infrastructure, including a marine terminal in Cook Inlet, roads, pipelines – and now, perhaps, infrastructure in Lake Iliamna to support a southern ferry route. In order to construct roads, Northern Dynasty Minerals must acquire access rights from area landowners. But numerous native corporations, tribes and other residents currently oppose the mine and will not willingly provide access rights.

5. Legal Risks

A coalition of local communities, tribal governments, the commercial and sport fishing industries, conservation groups, sports groups, and numerous business interests have formed to oppose the mine. Stakeholders have filed challenges against the exploration permit, land use plan, and water rights for the project, as well as intervened on behalf of EPA in lawsuits filed by the Pebble Partnership. Stakeholders are also preparing litigation against the EPA should it formally withdraw its Clean Water Act restrictions. Should the Pebble Project ever reach permitting, additional lawsuits are inevitable.

6. Reputational Risks

Northern Dynasty Minerals will never obtain the social license to build the proposed Pebble Mine. There is overwhelming local opposition to the Pebble Project by Yup'ik, Denai'na, Alutiq and other indigenous peoples: a survey released by the Bristol Bay Native Corporation found that 81 percent of its native shareholders strongly oppose the mine.^{xxi} In addition, over 80 percent of Bristol Bay residents^{xxii} and 85 percent of commercial fishermen in Bristol Bay oppose the mine.^{xxiii}

State opposition to the Pebble Mine is also strong. In November 2014, Alaska voters passed—with 65 percent of the vote (or more) in every precinct across the state—the anti-Pebble "Bristol Bay Forever" initiative.^{xxiv} The initiative requires the Alaska legislature to issue an affirmative finding (in the form of a duly enacted bill) that the mine would not harm wild salmon within the Bristol Bay Fisheries Reserve.

Opposition to the Pebble Mine is not limited to Alaska. For instance, 77 percent of Americans in the lower 48 oppose the Pebble Mine. That opposition crosses ideological, political, gender, and age group lines.^{xxv} The Pebble Mine is also an international pariah. Last year, the IUCN World Conservation Congress adopted virtually unanimously a motion that opposes the Pebble Mine and urges the United States government to deny any permits.^{xxvi} The World Conservation Congress carries significant global clout. Members include 217 countries and government agencies and more than 1,000 domestic and international NGOs, which rely on more than 16,000 experts around the world to address the most significant global threats to conservation.^{xxvii} And the Pebble Mine is included in that list of global threats.

Given the local, state, federal and international opposition, any association with the Pebble Project could result in substantial adverse public relations and potential customer and investor backlash, as happened with mountaintop removal mining.^{xxviii} Prominent jewelers like Tiffany & Co., Helzberg Diamonds, Zale and Jostens have expressed their opposition to the Pebble Mine and vowed not to use gold extracted from it.^{xxix}

Conclusion

For many of the reasons discussed above, local opposition to the Pebble Project is unwavering. “Thanks but no thanks,” wrote tribal, economic, and political leaders of Bristol Bay in an op-ed published this summer in Alaska. “Bristol Bay has thought this over for a long time, and we have long since made up our minds: Pebble mine is not welcome here. The discussion is over.”^{xxx}

“The Pebble Mine is, and always will be, the wrong mine in the wrong place,” wrote the chairman of the board of Bristol Bay’s Native Corporation— a multi-billion dollar developer and the largest land-owner in the Bristol Bay region representing over 10,000 native shareholders—in an anti-Pebble op-ed published in connection with Northern Dynasty Minerals’ 2017 shareholder meeting.^{xxxi}

We understand that First Quantum is currently conducting due diligence. Given the absence of social, regulatory and legal licensing, we believe that you will find expending any additional funds to advance the Pebble Project is imprudent, particularly in the absence of a feasibility study to support the economics of a smaller mine plan.

We strongly recommend speaking with the stakeholders, communities and tribes most affected and would welcome the opportunity to discuss our concerns with you in further detail at your earliest convenience. Please contact Taryn Kiekow Heimer at tkiekowheimer@nrdc.org or 310-434-2300 to schedule a meeting. Thank you in advance for your prompt response.

Sincerely,



Robert Heyano
President
United Tribes of Bristol Bay



Taryn Kiekow Heimer
Senior Policy Analyst
Natural Resources Defense Council



Ralph Andersen
President & CEO
Bristol Bay Native Association



Kristina Andrew
Director
Sustaining Bristol Bay Fisheries



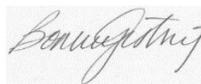
Myrtice Evalt
Interim Executive Director
Nunamta Aulukestai



Tim Bristol
Executive Director
Salmon State



Guido Rahr
President & CEO
Wild Salmon Center



Bonnie Gestring
NW Program Director
Earthworks

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- ⁱ Taryn Kiekow Heimer, *Anglo American is Officially Out of Pebble Mine*, NRDC Expert Blog, Dec. 13, 2013, available at <https://www.nrdc.org/experts/taryn-kiekow-heimer/anglo-american-officially-out-pebble-mine>.
- ⁱⁱ Joel Reynolds, *Thank You Rio Tinto: British Mining Giant Divests from Pebble Mine, Gives its Stake in the Project to Alaska Charities*, NRDC Expert Blog, April 7, 2014, available at <https://www.nrdc.org/experts/joel-reynolds/thank-you-rio-tinto-british-mining-giant-divests-pebble-mine-gives-its-stake>.
- ⁱⁱⁱ Northern Dynasty Minerals Ltd., Consolidated Financial Statements, for the years ended December 31, 2016 and 2015, at 7 (emphasis added).
- ^{iv} Id.
- ^v Id. (emphasis added).
- ^{vi} Northern Dynasty Minerals Ltd., Form 20-F, Securities and Exchange Commission, CIK Number 0001164771, for the fiscal year ended December 31, 2004, at 11.
- ^{vii} Northern Dynasty Minerals Ltd., Management's Discussion and Analysis, Six Months Ended June 30, 2010, at 30.
- ^{viii} Gunnar Knapp et al., Univ. of Alaska Anchorage Inst. of Soc. & Econ. Research, *The Economic Importance of the Bristol Bay Salmon Industry* (Apr. 2013), available at <http://fishermenforbristolbay.org/wp-content/uploads/2013/02/CFBB-ISER-FINAL-REPORT-5-10-2013.pdf>.
- ^{ix} EPA, *An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska*, 910-R-14-001A (Jan. 2014), available at https://www.epa.gov/sites/production/files/2015-05/documents/bristol_bay_assessment_final_2014_voll.pdf.
- ^x Id.
- ^{xi} Id.
- ^{xii} 33 U.S.C. § 1344(c).
- ^{xiii} EPA, *Proposed Determination of the U.S. Environmental Protection Agency Region 10 Pursuant to Section 404(c) of the Clean Water Act Pebble Deposit Area, Southwest Alaska* (July 2014), available at https://www.epa.gov/sites/production/files/2014-07/documents/pebble_pd_071714_final.pdf.
- ^{xiv} *Proposal To Withdraw Proposed Determination To Restrict the Use of an Area as a Disposal Site; Pebble Deposit Area, Southwest Alaska*, 82 Fed. Reg. 33123 (July 19, 2017).
- ^{xv} EPA, *Proposed Determination to Restrict Use of Area as Disposal Site: Pebble Deposit Area, Southwest Alaska; Proposed Withdrawal*, available at <https://www.regulations.gov/document?D=EPA-R10-OW-2017-0369-0001>.
- ^{xvi} *Mingo Logan Coal Co. v. EPA*, 714 F.3d 608, 613-14 (D.C. Cir. 2013)(italics added).
- ^{xvii} Elizabeth Harball, *Walker doubles down on opposing Pebble Mine*, KTOO, Oct. 4, 2017, available at <https://www.ktoo.org/2017/10/04/walker-doubles-opposing-pebble-mine/>; see also Walker/ Mallott campaign website, Pebble Mine, available at <https://web.archive.org/web/20141222034402/http://www.walkermallottforalaska.com/on-the-issues/pebble-mine-2/>.
- ^{xviii} Elwood Brehmer, *DNR approves Pebble permit, with conditions*, Alaska Journal of Commerce, April 11, 2017.
- ^{xix} Trustees For Alaska, *New Pebble permit requires \$2 million bond, Pebble gets one-year permit with strings attached*, April 11, 2017, available at <http://www.trustees.org/new-pebble-permit-requires-2-million-bond/> (Also noting other differences in this year's permit, including: (1) This permit decision was 177 pages; last year's was 39; (2) This permit was issued with an 8-page decision document and a 56 page chart responding to public comments; last years' permit was issued with a single page cover letter; (3) This permit was subject to a 30-day public notice and comment period; DNR has never before had a 30-day public notice and comment period for a Pebble land-use permit; (4) This permit required Pebble to obtain an insurance policy with a minimum coverage of \$2 million and that named the State as an additional insured party; DNR has never before required Pebble to maintain an insurance policy; and (5) This permit was signed by the DNR commissioner; the other land use permits issued to Pebble have been signed by lower level employees within the agency).
- ^{xx} Ballotpedia, *Alaska Bristol Bay Mining Ban, Ballot Measure 4 (2014)*, available at [http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban_Ballot_Measure_4_\(2014\)](http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban_Ballot_Measure_4_(2014))
- ^{xxi} Alaska Business Monthly, *BBNC Shareholder Opposition to Pebble Mine Grows to 81 percent*, Nov. 23, 2011, available at <http://www.akbizmag.com/Alaska-Business-Monthly/November-2011/BBNC-Shareholder-Opposition-to-Pebble-Mine-Grows-to-81-percent/>.

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- ^{xxii} Bristol Bay and Lake Peninsula Boroughs Pebble Mine Survey (Oct. 2009), available at <http://www.renewableresourcesfoundation.org/sites/www.renewableresourcescoalition.org/files/resolutions-polls/Hellenthal%20Poll%20-%2014Oct09.pdf>
- ^{xxiii} Bristol Bay Regional Seafood Development Association, Survey: Bristol Bay fishermen strongly opposed to Pebble Mine (June 2011), available at <http://www.bbrsda.com/survey-bristol-bay-fishermen-strongly-opposed-to-pebble-mine/>.
- ^{xxiv} Ballotpedia, *Alaska Bristol Bay Mining Ban, Ballot Measure 4 (2014)*, available at [http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban_Ballot_Measure_4_\(2014\)](http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban_Ballot_Measure_4_(2014))
- ^{xxv} Taryn Kiekow Heimer, *First Poll in Lower 48 Shows Strong Majority of Americans Oppose Pebble Mine*, NRDC Expert Blog, Dec. 6, 2011, available at <https://www.nrdc.org/experts/taryn-kiekow-heimer/first-poll-lower-48-shows-strong-majority-americans-oppose-pebble-mine>.
- ^{xxvi} IUCN World Conservation Congress, *Protecting the world's greatest salmon fishery in Bristol Bay, Alaska from large-scale mining*, final version as adopted, Nov. 7, 2016, available at <https://portals.iucn.org/congress/motion/057>.
- ^{xxvii} Taryn Kiekow Heimer, *NRDC Ad Celebrates Global Opposition to the Pebble Mine*, NRDC Expert Blog, Sept. 15, 2016, available at <https://www.nrdc.org/experts/taryn-kiekow-heimer/nrdc-ad-celebrates-global-opposition-pebble-mine>.
- ^{xxviii} *E.g.*, Tom Zeller, Jr., *Banks Grow Wary of Environmental Risks*, NY Times, Aug. 30, 2010.
- ^{xxix} Margot Roosevelt, *Retailers to Hold Mine to Higher Gold Standards*, LA Times, Feb. 12, 2008.
- ^{xxx} Ralph Andersen et al., *Pebble advisers must know the answer is still no*, Anchorage Daily News, Aug. 19, 2017, available at <https://www.adn.com/opinions/2017/08/19/pebble-advisors-must-know-the-answer-is-still-no/>.
- ^{xxxi} Joe Chythlook, *Proposed Pebble Mine a non-starter for Alaska*, Vancouver Sun, Sept. 13, 2017, available at <http://vancouversun.com/opinion/op-ed/opinion-proposed-pebble-mine-a-non-starter-for-alaska>.