

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

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OFFICE OF THE REGIONAL ADMINISTRATOR

February 28, 2014

Mr. Thomas Collier Chief Executive Officer Pebble Limited Partnership 3201 C Street, Suite 604 Anchorage, Alaska 99503 Mr. Joe Balash Commissioner Alaska Department of Natural Resources 550 West 7th Avenue, Suite 1400 Anchorage, Alaska 99501 Colonel Christopher D. Lestochi Commander U.S. Army Corps of Engineers Alaska District PO Box 6898 JBER, Alaska 99506-0898

Dear Messrs. Collier, Balash and Colonel Lestochi:

After careful consideration of available information, including extensive materials provided by The Pebble Partnership, the U.S. Environmental Protection Agency, Region 10, has decided to proceed under its Clean Water Act section 404(c) regulations to review potential adverse environmental effects of discharges of dredged and fill material associated with mining the Pebble deposit in southwest Alaska. This review will only assess the effects of mining the Pebble deposit and will not consider other mining or non-mining related development in the watershed. The Agency is taking this step because it has reason to believe that porphyry copper mining of the scale contemplated at the Pebble deposit would result in significant and unacceptable adverse effects to important fishery areas in the watershed.

Based on extensive existing scientific data, including information collected as a part of the Agency's three-year Bristol Bay ecological risk assessment and in response to petitions from the public, EPA Region 10 is beginning a section 404(c) review in a timely manner and consistent with the public process established in the CWA and our regulations. This process provides multiple opportunities to engage with the public and involved parties, including native communities in the area, fishermen, mining interests, landowners and our state and federal partners. We look forward to working with you to ensure a transparent, fair, scientifically valid and timely review.

The issues before us in this review focus on the fact that the streams, rivers, wetlands, lakes and other waters in the area of the Pebble deposit comprise one of the most productive, pristine, valuable and vulnerable ecosystems remaining in North America today. Based on information provided by Pebble Limited Partnership and Northern Dynasty Minerals, mining the Pebble deposit will involve excavation of the largest open pit ever constructed in North America, completely destroying an area as large as 18 square kilometers and as deep as 1.24 kilometers. Disposal of waste material will require construction of up to three waste impoundments covering an additional 50 square kilometers.

Consistent with the law and the best scientific information available and through a transparent public process, the Agency will examine whether the environmental effects of potential discharges associated with mining at the Pebble deposit are unacceptable under the CWA. If the effects are found to be unacceptable, the Agency will determine whether and how to establish restrictions to protect against any unacceptable adverse effects. This review reflects the ecological significance and vulnerability of the Bristol Bay watershed and the nature and scope of anticipated adverse environmental effects associated with proposed large-scale mining of the Pebble deposit. It does not reflect a change in the way that the Agency will review and assess other mining projects in Alaska or elsewhere.

The watersheds of Bristol Bay are a significant resource of global conservation value with abundant, genetically diverse, wild Pacific salmon populations supported by intact, connected habitats from headwaters to ocean. Bristol Bay's tremendous stream and wetland resources support a world class and economically important commercial and sport fishery for salmon and other sportfish, as well as a 4,000-year-old subsistence-based way of life for Alaska Natives. Bristol Bay produces approximately half of the world's sockeye salmon that likely represent the most abundant and diverse sockeye salmon populations left in the United States. In addition to the ecological and cultural values, the Bristol Bay watershed's ecological resources generated nearly \$480 million in direct economic expenditures and sales and provided employment for over 14,000 full- and part-time workers in 2009. The Bristol Bay commercial salmon fishery generates the largest component of economic activity. It was valued at approximately \$300 million (sales from fishers to processors) and provided employment for over 11,000 full- and part-time workers.

The North Fork Koktuli, South Fork Koktuli and Upper Talarik Creek sub-watersheds, which would be most impacted by mining the Pebble deposit, are at the heart of Bristol Bay, supporting some of the region's highest diversity of salmonid species. These streams support large numbers of spawning, rearing and migrating salmon and other important fish species. The headwater streams of these three sub-watersheds overlie the Pebble deposit and are part of the stream network for the Nushagak and Kvichak River watersheds.

The EPA recently published its final report entitled "Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska." This ecological risk assessment, which was subject to extensive peer review and public comment, describes the significant ecological resources of the region and potential impacts to salmon and other fish from large-scale porphyry copper mining. The Assessment identifies extensive direct and indirect impacts to valuable fishery areas that would result from large-scale mining of the Pebble deposit. The Assessment estimates that discharges of dredged or fill material associated with the footprint of a large-scale mine would likely cause irreversible loss of significant reaches of streams that support salmon and other important species of resident and anadromous fish, as well as extensive areas of wetlands, ponds and lakes in the headwaters of three sub-watersheds at the deposit site (North and South Fork Koktuli and Upper Talarik Creek). The majority of streams that would be destroyed are headwater streams that provide habitat for fish and together with their associated wetlands serve a critical role in supporting downstream fishery areas.

The CWA's section 404(c) regulations provide the opportunity for early consultation among the EPA, the Corps of Engineers and the owners of record of the site. You may submit information for the record to demonstrate that no unacceptable adverse effects to aquatic resources would result from discharges associated with mining the Pebble deposit or that actions could be taken to prevent unacceptable adverse effects to waters from such mining. The section 404(c) regulations provide 15 days for responding to this letter, but a reasonable extension can be provided. The Agency is also prepared to work with you to schedule a meeting if a discussion would be helpful to you in presenting your perspectives.

The section 404(c) process is outlined as follows:

 Step 1 – Consultation period with the U.S. Army Corps of Engineers, the State of Alaska and owners of the site, initiated today

- Step 2 Publication of a Proposed Determination, including proposed prohibitions or restrictions on mining the Pebble deposit, in local newspapers and the Federal Register for public comment, and holding one or more public hearings
- Step 3 Review of public comments and development of a Recommended Determination by the EPA Regional Administrator to the Assistant Administrator for Water at EPA Headquarters in Washington, DC
- Step 4 Second consultation period with the U.S. Army Corps of Engineers, the State of Alaska and site owners and development of a Final Determination by the Assistant Administrator for Water, including any final prohibitions or restrictions on mining the Pebble deposit

Based on the input that the EPA receives during any one of these steps, the Agency could decide that further review under section 404(c) is not necessary.

I appreciate your prompt attention to this matter. If you have any questions or wish to arrange a meeting to discuss any of these issues, please contact me or have your staff contact Rick Parkin, who is the EPA's lead coordinator for the Assessment, at (206) 553-8574.

Sincerely,

Dennis J. McLerran Regional Administrator

cc: Nancy Stoner, Assistant Administrator U.S. Environmental Protection Agency

Colonel Christopher D. Lestochi U.S. Army Corps of Engineers

Joe Balash, Commissioner Alaska Department of Natural Resources

Ron Thiessen, President & CEO Northern Dynasty Minerals Ltd.

John Shively, Chairman of the Board Pebble Limited Partnership

Geoffrey Hackett, Regional Director U.S. Fish & Wildlife Refuge System

James Balsiger, Ph. D, Administrator, Alaska Region National Marine Fisheries Service