



## **Climate and Meteorology of the Pebble Project Area**

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On behalf of The Pebble Limited Partnership and under the auspices of Pebble Mines Corp., its general partner, HCG, Inc. d.b.a. Hoefler Consulting Group has reviewed available climatologic data and is collecting meteorological data to support baseline environmental studies, mine design objectives, and air quality permitting for the Pebble Project. This meteorological monitoring program currently consists of four Prevention of Significant Deterioration- (PSD)-quality and two ancillary meteorological monitoring stations located in the mine area and three PSD-quality meteorological monitoring stations located in the port area. Meteorological monitoring began in 2005 with three monitoring stations and has since been expanded to the existing nine station network. Monitored meteorological parameters include wind speed, wind direction, temperature, relative humidity, barometric pressure, and precipitation. These data are continuously collected as 1-hour averages of 1-second observations. Data are downloaded daily to an Anchorage-based server, summarized by month, and reported on a quarterly basis. Monitoring is conducted consistent with a Quality Assurance Project Plan (QAPP) that is on file at the Alaska Department of Environmental Conservation (ADEC).

The review of the climate data indicates that the climate in the mine study area is transitional, being more continental in the winter because of the influence of frozen water bodies, and more maritime in the summer because of the influence of open water. The climate in the port study area is also transitional, but with a stronger maritime influence as compared to the mine because of the port proximity to Cook Inlet.

The summarized data are presented in the paper and are compared to data collected at the Iliamna Airport. That station is operated by the Federal Aviation Administration (FAA) consistent with National Weather Service criteria. The Iliamna Airport meteorological station is approximately 25 kilometers (15 miles) southeast of the mine site and is the nearest routinely operated station to mine site.