

# **Pebble Mine Facts**

## **Developers**

- Pebble Limited Partnership is the developer of the mine project.
- Formed in 2007 as a U.S. registered company based in Anchorage.
- It is a 50-50 partnership between Anglo-American plc and Northern Dynasty Minerals Limited of Canada.
- The Pebble Partnership holds direct and indirect interests in 650 square miles of mineral claims in southwest Alaska.

## **Location**

- Bristol Bay Region of Alaska.
- Seventeen miles north of the village of Iliamna.
- Is located solely on land owned by the State of Alaska.
- The state-owned land is located within the Lake and Peninsula Borough.
- Surrounding land owners include the Bureau of Land Management, National Parks, State of Alaska and Village/Regional Corporations.
- Access to the site is limited as there are no roads.

## **Mineral Content**

- Pebble is the largest known undeveloped copper ore body in the world.
- The U.S. Geological Survey lists the Pebble resource lands as the most extensive mineralized system in the world.
- The January 2010 Pebble mineral resource estimates are as follows.
  - Measured and indicated Mineral Resources
    - 55 billion pounds of copper,
    - 67 million ounces of gold
    - 3.3 billion pounds of molybdenum.
  - Inferred Mineral Resources
    - 25.6 billion pounds of copper
    - 40 million ounces of gold
    - 2.3 billion pounds of molybdenum
- Northern Dynasty Minerals, Ltd. estimates that at 2010 prices Pebble Mine contains over 300 billion dollars of recoverable metals.

## **Mine Design**

- Data from a Preliminary Assessment released by Northern Dynasty Minerals Ltd.
- A range of options for project planning are currently being examined including a conventional open pit, high-volume underground mining (block caving) or a combination of both.
- The Pebble study team is looking at a range of tailings storage options.
- Tailings would be held behind four earthen dams measuring 740, 700, 400, and 175 feet.

## **Infrastructure**

- Data from a Preliminary Assessment released by Northern Dynasty Minerals Ltd.
- Current concepts include: an 86-mile transportation corridor to connect the mine to a proposed port site on Cook Inlet.
- Two-lane gravel access road running from the mine to Cook Inlet.
- The road would include 20 bridges.
- Four parallel pipelines for transporting copper-gold concentrate, reclaim water, natural gas and diesel fuel.
- A 378 megawatt natural gas generating plant at the mine site.
- Temporary port at Williamsport, to serve as an “inbound logistics facility”.
- Permanent deep-water “Port Site 1” on Iniskin Bay capable of handling 1.1 million tons of concentrate and 50 million gallons of fuel per year.

## **Project Status**

- By the end of 2011 Northern Dynasty and the Pebble Partnership have invested more than US \$500 million in the project.
- US \$150 million has been spent on environmental and socioeconomic studies
- Preliminary Assessment Technical Report of the Pebble Project undertaken by Wardrop, A Tetra Tech Company, was completed in February 2011.

## **Timeline for Development**

- This timeline comes from the Northern Dynast Limited website and is an estimate.
- Environment and Socioeconomic study complete by the end of the year 2016.
- Feasibility and permitting completed by the middle of 2015.
- Project Financing secured by the middle of 2015.
- Design Engineering completed by the middle of 2016.
- Construction phase completed by the middle of 2019.
- Production beginning the middle of 2019.