EFFECTS OF CYANIDE LEACHING OF AMALGAMATED TAILINGS

LEONCIO M. NA-OY
Benguet Federation of Small-scale Miners

Small-scale Gold Mining in Benguet, Northern Philippines

- ASGM takes place in 9 of Benguet's 13 municipalities with about 15,000 to 20,000 miners

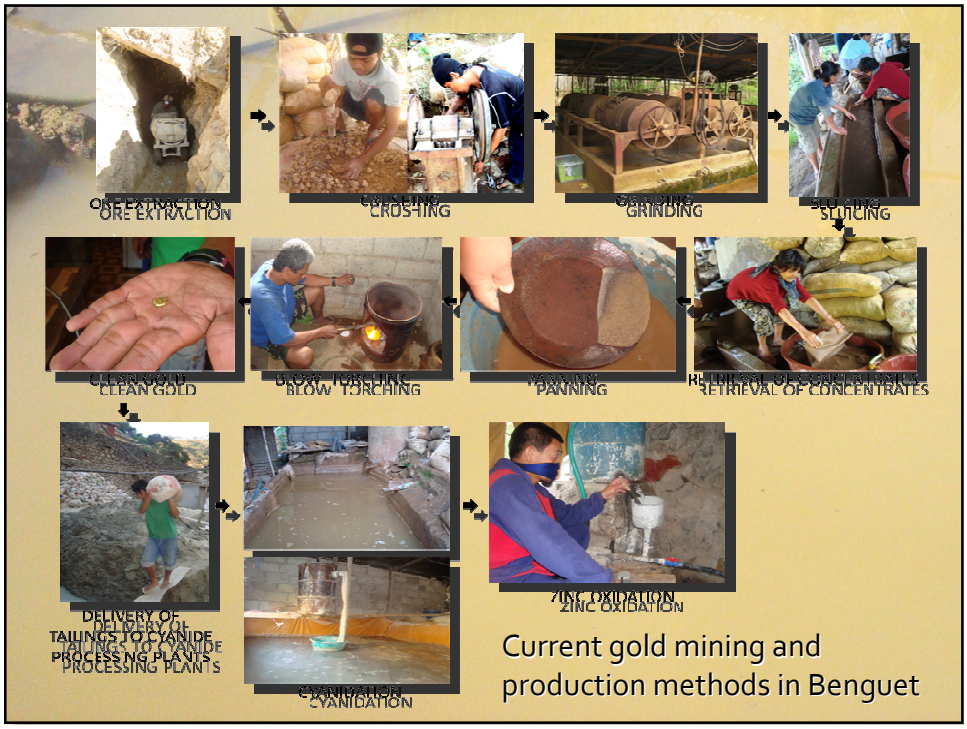
- Annual gold production is approximately 3 tons
- Miners are organized into a Federation comprised of 63 associations
- Since 2005, the Federation has been campaigning against mercury use among miners

ASGM Production Methods

- Benguet miners have long been using traditional mining methods
- In the 1940s, mercury use became rampant due to high-grading of gold in large-scale mining companies
- In the 80s, mercury use became prevalent among small-scale miners
- In the early 90s, cyanidation emerged (carbon-in-leach, carbon-in-pulp, heap leach)
- Amalgamated tailings were re-processed using cyanide

Cyanide leaching of amalgamated tailings

- The practice has been discontinued because of the effect of mercury – cyanide interaction in amalgamated tailings
- Miners in Benguet now practice traditional and modern method (e.g. Use of sluice box without Hg and cyanidation of mercury-free tailings



Current gold mining and production methods in Benguet

Reasons why we discourage leaching of amalgamated tailings

- Amalgam poses a hindrance to the efficient recovery of gold
- Mercury-cyanide combination easily transforms mercury into an organic mercury (methylmercury), its more lethal form

Thank you for listening!