





MERCURY: IMPORTANT BY-PRODUCT FROM PERU'S LARGE SCALE GOLD MINES

Consultation meeting on Waste and Storage

Geneva, September 23, 2010



 The productive activities that provide greater income to the country are manufacturing, followed by agriculture and mining.

 Peru ranks first in gold production in Latin America and sixth in world gold production. It is also a world leader in silver, zinc, copper, and tin production.

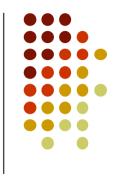
PERU'S MERCURY IMPORTS



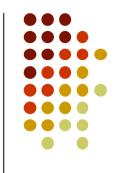
 Peru imports mercury for artisanal mining, chlor-alkali production, and dental amalgam. Mercury is also imported as a component of batteries, electronics, fluorescent lamps, medical equipment, and thermometers.

 Peru imported mercury: 180 t (2009), 119 t (2008) y 86 t. (2007)*

Source: *TRANSACTION



 Thanks to the environmental awareness and mercury stewardship in Peru's major international mining companies, Peru has become a leader in reduction of mercury emissions and by-product mercury recovery from their open-pit large scale mines.



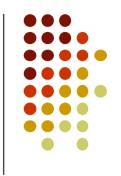
 By-product mercury and calomel, which is recovered from precious metals processing in Peru, are exported to the United States for processing. The mercury might then re-sold into the world market, where it may be used for a variety of uses.

PERU'S MERCURY EXPORTS

- Peru is also the greatest exporter of mercury in the region LAC:
 107 t (2009) 86 t (2008) 60 t (2007)
 - 107 t (2009), 86 t (2008), 60 t (2007)*, 22 t (2006), 128 t (2005), 0 t (2004), 19 t (2003), 0 t (2002), 29 t (2001), and 11 t (2000)**.
- The by-product recovery operations are done on the major gold mining companies. The main exporter is Minera Yanacocha SRL, with 63 % of the volume yearly (roughly); ranking second is Minera Barrick Misquichilca, with 36 %.

Sources: *TRANSACCTION, **USGS





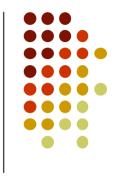
 Currently, the cost of mercury export is very cheap (<\$1,00/Kg). However, the export is expected to become more expensive, since companies will be charged higher fees for the treatment and disposal services provided at storage facilities.



- The increasing amount of mercury exported by Peru reflects a big capacity of producing elemental mercury from gold and other metal mines.
- Peruvian gold has a 7,7% contribution to the worldwide international markets: Switzerland (57%), Canada (25%) and USA (14%).



In the year 2009, it was registered an annual gold production of over 182 ton. However, this production will increase because Peru has much to offer. Only 0.67% of Peruvian territory has been explored, which places us as the world's tenth largest gold reserve.



 The large identified mining projects portfolio. Their costing of a projected total investment is for over USD\$ 35,000 million nationwide. USD\$ 4,500 million are investments in gold mining projects, which the most important are:

- Minas Conga (USD\$ 1,090 million),
- Chaquicocha (USD\$ 400 million),
- La Zanja (USD\$ 60 million)
- Tantahuatay (USD\$ 56 million)
- and Shahuindo (USD\$ 90 million)
- La Arena (USD\$ 360 million) in La Libertad;
- Ollachea (USD\$ 150 million),
- Pucamarca (USD\$ 65 million)

Cajamarca

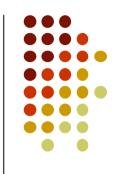
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These projects are reaffirming our gold abundance. But with it, it also increases our concern for the production of mercury as a by-product.

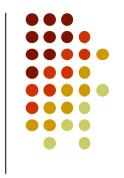




 This fact could be critical at the moment that ban exports in USA and EU start to be applied. Peru does not have facilities for the storage of mercury.



- In Peru there are hazardous waste landfills; however, they are not considered as an option for elemental mercury, because it is a liquid and it is difficult to stabilize.
- Support is needed for governments, like Peru, to initiate pre-feasibility studies on the accessible and useful areas to implement over-ground storage facilities or other viable options.



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