

The disposal plan for arsenic waste from the Chelopech mine violates the international convention on waste disposal, showing how the procurement of raw materials at the expense of human health and environmental protection can have severe consequences. Canadian company Dundee Precious Metals has used continuous loans from the European Bank for Reconstruction and Development (EBRD) to improve the profitability and performance of its copper and gold mining operations in Bulgaria. Arsenic content in the precious metal concentrates is one of the main environmental and health issues connected to the operations. The company failed to ensure the extraction, stabilisation and safe deposit of the arsenic in Bulgaria and instead the concentrate with arsenic is exported to Namibia. The primary saleable product of Chelopech is a gold-copper concentrate containing, on average, 5.5% arsenic.

After the tailing dam of the nearby smelter collapsed in 1988 and because of the relatively high arsenic content of the concentrates, in 1990 the Bulgarian government issued a decree that Chelopech concentrate could no longer be treated in Bulgaria, unless arsenic capturing and treatment facilities were installed at the smelter. For this reason, the arsenic is transported by sea to the Tsumeb smelter in Namibia. The annual processed ore in the Chelopech gold mine has increased from around 0.5 million tons in 2004 to above 2 million tons in 2019.

By the final year of the mine, which is projected to be 2025, around 100,000 tons of arsenic will be extracted, processed, stored and/or released in some form elsewhere around the world. Dundee applied for the approval of cyanide leaching technology, claiming that this would also ensure the capture and stabilisation of the arsenic residue, but with no success. In addition, the project's EIA and permit, which were respectively approved and issued by the relevant ministry, were ultimately rejected by the Bulgarian Administrative Court in 2010 due to significant deficiencies. Under the threat of not being able to process the concentrate, Dundee acquired the Tsumeb smelter in 2010.

The Tsumeb smelter in Namibia was constructed in the early 1960's and is one of the few smelters in the world equipped to treat complex concentrates as its primary feed. Behind the neutral term 'complex concentrate' lies the fact that complex concentrates have high levels of one or more deleterious elements, such as arsenic, uranium, cadmium or mercury. Smelters that will currently accept complex concentrates include Tsumeb in Namibia, Altonorte in Chile, Guixi in China and Horne in Canada. For complex concentrates that contain more than one per cent arsenic, the DPM smelter in Namibia at Tsumeb is now the only smelting option.

Source: bankwatch.org

Transfer of toxic mining waste materials from Bulgaria to Namibia