

A Threat to Humanity and the Environment

CORRUPTION?

The Mirador Mine

Ecuador

The Mirador Mine is Ecuador's first open-pit mega-mine and is producing more toxic waste than any mineral exploitation in the history of Ecuador.

We bring to attention the existence of dams that hold back toxic mining waste and we bring to attention their serious structural failings which based on expert opinion and assessments indicate a certainty of failure/collapse.

Copper and Gold extraction from rock creates crushed, ground-up rock material known as tailings. Tailings are extremely toxic and present a threat to human and environmental life and need to be held securely in perpetuity.

Below is a photograph of **the Quimi Dam, the smaller dam**, and you can see the perilously high angle of construction, in fact, a 45-degree angle which in engineering terms is "critical" and refers to safety in relation to failure/collapse. With this dam, the concept of 10,000 years of safe impoundment of 60 million cubic meters of toxic waste could be considered a joke if it was not for the seriousness of the situation which is exposing humanity and the environment to extreme risk of death and irredeemable environmental destruction. In other words, a clearly definable threat of Ecocide.



La relavera Quimi fue construida al borde del río con ese mismo nombre. La escombrera tiene una altura de aproximadamente 30 metros. Fotos: Luis Argüello. PlanV

The Tundayme Dam, the larger of the two dams, will be 265 meters high impounding 390 MILLION cubic meters of poison. Below is a picture of the dam under construction with a drainage tower on the right of the picture which indicates the enormous size and height of the dam under construction.



En la relavera Tundayme se construye el segundo dique más alto del mundo (265mts). Las torres de decantación, que servirán para filtrar el agua de la represa, dan una idea de lo alta que será la estructura. Foto: Manuel Novik

The second-highest dam in the world (265m) is being built at the Tundayme tailings dam. The settling towers, which will serve to filter the dam water, give an idea of how tall the structure will be. Photo: Manuel.

The question is not whether these relaves, (dams), will fail, the question is when, and what are the triggers for failure.

The mining administration is refusing to divulge plans indicating the manner in which these dams are being constructed. You will read of extensive endeavours to obtain transparency in the link below. We have a case pending in the Constitutional Court of Ecuador challenging the company's claim that the structural

details of dam construction are the intellectual property of the mine owners.

<https://protectecuador.org/legal-actions/> **Complaint to International Board EITI (Extractive Industry Transparency Initiative)**

We appear to have a “red flag” for corruption surrounding the impoundment of these tailings and the apparent non-compliance with Environmental Impact Assessments in relation to the construction of the impoundment dams. The EIA mechanism is being used as a way of licensing works rather than assessing the environmental impact.

To illustrate this point it is worth noting that the most recent EIA indicates an increase of tailings from 60,000 tons a day to 140,000 tons a day with no existing plans of where that waste is to be impounded. This reads as a license to increase production without any environmental impact assessment as there is no agreement or even a plan as to where the increased tailings are to be stored. I quote from the EIA: I added the “bold” typeface.

“The processing capacity of the beneficiation plant will be 140 ktpd (140,000 tons per day) and 46.2 Mtpa (46 million, 200,000 tons per year. The annual continuous working system will be adopted, 330 d/a, 2 shifts/d, 12 h/shift. The tailings generated will be disposed of in the Tundayme tailings deposit, which is currently in operation. **As an increase in the tailings deposit capacity is required, ECSA is in the process of studying and analysing alternatives.** As soon as the best option for tailings management is defined, we will proceed with the regularisation of the beneficiation for a production of 140 ktpd (140,000 tons per day), considering: tailings deposit, auxiliary and complementary works.”

<https://protectecuador.org/legal-actions/> English Translation 2022: COMPLEMENTARY

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE MIRADOR PROJECT, EXPLOITATION PHASE

The Administration / Government authorizing this on any basis whatsoever would by default be guilty of putting its citizens at risk and also its own national interests.

A credible worst-case scenario of dam failure would impact Peru and Brazil and initiate crippling transboundary claims as well as irredeemable ecological, human and infrastructure destruction in Ecuador along the Rivers Quimi, Zamorra and Santiago, in short an apocalyptic scenario in which more than 380 MILLION cubic meters of toxic waste containing sulphuric acid, heavy metals, arsenic and mercury would be released in a primary wave of death to be followed by slow bioaccumulation of deadly toxins throughout the chain of life impacting the Amazon Basin from the Sierra Del Condor to the Atlantic Ocean.

The two relaves, under construction at the Mirador Mine are certain to fail. The reasoning behind this conclusion is clearly stated in Steve Emerman's report submitted to the Inter-American Commission on Human Rights. When will they collapse? Within 30 years is a credible scenario.

<https://www.etchinternational.org/ecuador> **Report to the InterAmerican Commission on Human Rights (Comisión Interamericana de Derechos Humanos), 2022.**

- Aug 28, 2022: [The Potential for Imminent Endangerment to Human Life and the Environment from the Mirador Open Pit Copper Mine in Southeastern Ecuador](#)

To understand how any Government could possibly sign off on such a scenario we can take into account two possibilities.

- 1) The ones who signed off on this are sublimely ignorant,
- 2) The signees were paid to look the other way.

Given the risk to life and the National interest, it is inconceivable, in the absence of a better explanation, how this isn't a red flag for corruption and that it deserves a credible and fair investigation.

It becomes clear in this analysis that these are major, substantial, flashing red lights and warning signs for corruption and it is incumbent and in the national interest to investigate this as a matter of highest priority and understand how it was that this was signed off in contravention of Ecuadorian environmental and constitutional law.

David Frederick Dene - October 2023

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