

Dear EITI Board Members,

**URGENT: Complaint about failure of Ecuadorian Government and the Ecuacorriente S.A. (ECSA) company to disclose key critical information about the safety and construction of the Mirador Mine tailings dams in Ecuador – potential for catastrophic rupture of the dams. This requires urgent action by the EITI Board:**

I am writing to you in my capacity as UN Expert on Earth Jurisprudence working with the UN Harmony with Nature Initiative for the Achievement of the UN Sustainable Development Goals and as a citizen working on this case since 2012. In 2012 I was asked for help by a Shaman of the Shuar Indigenous Nation of Morona Santiago.

**Problems at the Mirador Mine – high likelihood of catastrophic failure of tailings dams:** Central to our concerns are the findings of E Tech International – see here: <http://www.etechinternational.org/ecuador> This organisation has been expressing and publishing their concerns about the Mirador mine project since 2011. (see link for more details of their findings, provided in the Appendix below).

Our key concerns relate to the completely inadequate methodology and quality of construction utilised in the tailings dams at the Mirador mine site. This situation presents an existential threat to human life, livelihoods and biodiversity along the entire downstream Amazon river system, all the way to the Atlantic coast of Brasil. These tailings dams are so badly constructed that they could fail at any time. This therefore requires urgent action to prevent a disaster from taking place. I have been involved, together with others, in seeking public access to documents related to the construction, and subsequent oversight of the mine and its management of tailings disposal activities, matters which, given the above concerns are of immense public interest. Unfortunately, the Ecuadorian authorities and the company concerned (Ecuacorriente S.A (ECSA)), have resisted all efforts to free up this critical information.

This failure to disclose is not only completely unacceptable in terms of public and biodiversity safety but it would appear to also be inconsistent with the commitments made by Ecuador when it joined the EITI. It is clear that action in Ecuador is blocked by very high-level government officials. I therefore call on you, the EITI International Board:

- To urgently call on the highest-level authorities in Ecuador to release all key information pertaining to the Mirador dam site and the construction of its tailings dams, including the release of all permits, and government oversight reports of the management of the site.
- It is also imperative that the authorities implement an immediate moratorium of all mining activities at the site, pending a professional and open inspection of these tailings dams by qualified international experts. Their findings should be made public, and the tailings dams must be remediated to ensure their safety before any recommencement of mining activities. A failure to suspend activities, pending remediation, would constitute a wilfully blind act of irresponsibility.

We note, in stark contrast to our experience, the comments of Ecuador's Vice Minister of Mines, Mr Fernando Benalcàzar, who has subsequently resigned, quoted on EITI's site in September 2019, on the occasion of Ecuador committing to join the EITI. See this link: <https://eiti.org/news/ecuador-commits-join-eiti>, The Vice Minister stated, "Access to information is the right of Ecuadorians." He added, "Our goal is to encourage a more participatory society that is informed about the reality of these sectors." These are indeed laudable goals – but, unfortunately, they would appear to be not available when it comes to the Mirador Mine. Given the immense implications of a dam failure, we wonder what the Ecuadorian government and the company are hiding? **Regardless of the reasons, these would appear to be a serious breach of part 6.4 of the EITI Standard** – both in terms of the performance of the government as an EITI Country, but also of the Ecuacorriente S.A. (ECSA) Company, which is a member of the EITI Multi-Stakeholder Group in Ecuador.

Given the massive public interest in these documents being disclosed – in fact for many, this could be a matter of life and death - so as to properly ensure the safe management of these tailing dams is in fact taking place (right now, the physical evidence shows it is not), the response of the authorities is hardly in the spirit of a commitment to the principles espoused in the EITI initiative, as spelled out by the Vice Minister. There are no credible reasons, such as capacity constraints, etc, for the withholding of such materials. This raises for us serious questions about what the real reasons may be for the withholding of these documents, despite numerous attempts to obtain them – these include the suspicion that these could include the role of corruption? We are sure you would agree, given the unthinkable consequences of a dam failure, that Ecuador's continued obstruction to the public disclosure of documents that should be legally available under Ecuador's own laws is untenable.

**The relief we ask you to help provide:** We believe Ecuador is seriously in breach of part 6.4 of the EITI standard. We appreciate that part 6.4 is currently "encouraged," and is thus not obligatory. But EITI is also about the wider governance of the extractives sector – this means there are additional reasons, looking through the standard, which imply to us that the EITI board must take action. These include the fact that when the dam bursts, this will constitute a massive and preventable extractives sector governance catastrophe with international fall-out dimensions, not to mention a biodiversity disaster, with loss of life and threats to livelihoods. This will also have immense financial implications - very likely of a scale that would ensure that instead of generating much need development dollars, Ecuador becomes saddled with immense liabilities, political instability, and fallout from its own citizens and neighbouring states, not to forget immense debts.

**Killings and threats to citizens:** Finally, we know that a number of citizens have taken up this issue, and raised concerns, only to find themselves harassed and some have even been killed. Especially notable was the killing of Jose Tendetza prior to him giving evidence at the Citizens International Tribunal on the Rights of Nature, held in Lima in 2014. Phone records disappeared and no one has been convicted of Jose's murder.

<https://www.rightsofnaturetribunal.org/cases/condor-mirador-mine-case/>

"Tendetza was murdered a few days before his scheduled departure to Lima. He was coming to denounce the deforestation of more than 500 hectares where endemic species nested in the zone of the mining project as well as the company's persecution of campesinos and indigenous people that oppose selling their land. The Lima Tribunal is dedicated to his honor."

Domingo Ankuash, a Shuar leader who accompanied me to the UN in 2015 was subsequently declared a terrorist during unrest in the area which was militarized, and he was forced to hide in the jungle with a \$50,000 dollar reward on his head.

This killing and the threats to Shuar leader Ankush, would appear to be serious breaches of part 1.3 of the standard of the EITI.

Amnesty International declared that Ecuador was criminalizing dissent – see here: <https://www.refworld.org/docid/54f07dfb14.html>

"Human rights defenders and government critics continued to be attacked and discredited. The right of Indigenous Peoples to consultation and to free, prior and informed consent was not fulfilled."

<https://www.amnesty.org/en/documents/amr28/5712/2022/en/>

In June 2022 – this year, Amnesty International reported similar abuses, that were widespread across Ecuador and represented a systematic closing of civic space in Ecuador.

These would also appear to be breaches of the EITI standard, part 1.3.

Our reading of the standard suggests to us that this situation threatens the very core ethos, the very idea of citizen/civil society participation in the EITI, which is surely a critical element of successful EITI participation.

There is now a massive urgency for action to address the safety concerns about the Mirador tailings dams. Thus, we believe the EITI board should make an urgent call to the Ecuadorian Government to address these shortcomings as a matter of urgency. Such an appeal must be made by the board to the highest-level of the Ecuadorian Government. This is appropriate, given our efforts, made through legitimate means via the courts and via parliament, have utterly failed over a sustained period – there is a political highest-level blockage, and this is where we need action.

We therefore ask you, EITI Board members, to collectively call on the highest-levels of the Ecuadorian Government:

- To release all documents related to the planning, underlying assumptions and construction and current oversight of the tailings dams at the Mirador Mine.
- To immediately ensure a qualified independent external review of the status of these dams, and to publish the findings, including all recommendations for remedial actions to address the safety concerns.

- To implement an immediate moratorium on all mining activities at the Mirador mine site, pending the conclusion of all remediation measures, and after the tailings dams have been confirmed as safe by international experts.
- To call on Ecuadorian authorities to investigate, and where appropriate, to prosecute any breaches of Ecuadorian law related to these matters.
- To report, publicly, in measures that have been undertaken to ensure the safety of the Mirador Mine dams.

We want to open-up a public conversation based on credible information about the dams, based on credible facts and evidence put together by independent qualified persons. We do, of course, appreciate that the majority of Ecuadoreans are not wealthy, and unemployment is high, and that overseas development assistance and inward investment could bring vital components towards the country's sustainable development. If managed correctly, this could include mining - however, we firmly believe this mining project (as it is currently being conducted) is not going to produce any such development prospects – rather quite the opposite. Instead, it will plunge the country into the most serious set of compensation litigation, national financial losses and punitive damages, not to mention irreparable environmental destruction, and loss of life, if it is left as is.

We believe sustainable development programmes in line with the United Nations Sustainable Development Goals would have a far better chance of delivering safe and helpful outcomes for the majority of the Ecuadorean people and we ask for the EITI Board to make this clear to all concerned.

We urgently look forward to your reply and developing an actionable conversation between the EITI and the highest levels of the Ecuadorean Government about these horrifying mining dams and the need for transparency an urgent moratorium and remediation of these dams.

Yours faithfully,

David Frederick Dene.

Please respond to: [david.dene@gmail.com](mailto:david.dene@gmail.com) and [julioprieto@hotmail.com](mailto:julioprieto@hotmail.com)

## **APPENDIX: FURTHER DETAIL RELATED TO OUR CONCERNS AND EFFORTS TO SECURE PUBLIC INTEREST DOCUMENTS:**

Since the 2011 analysis by E Tech International, the risks related to the Mirador mine have not diminished, and the dams are living on borrowed time. If anything, these risks have increased, and in August 2022, E Tech International submitted the following report to the InterAmerican Commission on Human Rights, titled: “***The Potential for Imminent Endangerment to Human Life and the Environment from the Mirador Open Pit Copper Mine in Southeastern Ecuador***” – submitted by : E-Tech International - Steven H. Emerman, PhD; Malach Consulting, and David Chambers, PhD; Center for Science in Public Participation. See their report here:

<https://protectecuador.org/wp-content/uploads/2022/10/E-Tech->

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The above 90 page professionally conducted analysis points to a potential imminent failure of these dams.

Ecuacorriente S.A. (ECSA), the company operating the Mirador mine site, is a Chinese government-controlled company, under a subsidiary of the Chinese parastatal companies Tongling Nonferrous Metals Group, and China Railways Construction Corporation. It has reportedly invested over US \$1.3 billion in the Mirador project, which first started production in July 2019. Today, it is processing 60,000 tons of rock material per day, of which 58,800 tons per day, converts to toxic slurry, which is deposited in the tailings dams.

The Mirador mine has two tailings’ dams, which will hold over 400 million tons of highly toxic tailings. These dams will rupture – it is only a matter of time – and this could happen as a result of an earthquake (this is an area of significant seismic activity), or following an excess rainfall event, which as we see all around the world, cannot be discounted from taking place at any time, given we are now in an era of rapidly escalating numbers of violent weather systems, driven by global heating.

**Consequences of a Dam Failure:** A worst-case scenario of dam failures due to an expected seismic event on the scale considered probable within the life of the mine, would kill an estimated 1,500 people in the first 15 minutes with a 260-meter-high wave released from the Tundayme dam at a speed of 180 km per hour, which would subsequently pollute the entire Amazon river-system, all the way through to the Atlantic coast, in Brasil. The resultant destruction of livelihoods and biodiversity would be catastrophic, even apocalyptic. The additional costs of clean up (if that were indeed possible) and the recompense to the families of those affected (if that too were possible) would be in the order of many tens of billions of dollars, given the precedent of the Fundão Dam, which burst in 2015 in Brasil. That collapse, released 43 million tons of slurry into river systems, with dire financial consequences, biodiversity loss and indeed massive human loss of life and destruction of livelihoods. That spill travelled 600 kilometers to the Atlantic ocean polluting all in its path, including Atlantic fisheries.

When the Mirador Mine dams burst, the volume of toxic waste will be roughly **ten times** that spilled when the Fundão Dam burst.

**RECOMMENDATIONS** The recommendation of the E Tech report is that there should be an immediate moratorium on further construction and operation of the Mirador mine. The moratorium should be followed by the convening of an independent panel of international experts who will evaluate the design and construction of the Mirador tailings management facilities. This panel must be provided with full and complete information from Ecuacorriente S.A, and the Government of Ecuador, without which it will be impossible to make specific recommendations for remediation. This panel would be similar to the independent expert panels who evaluated the failures of the Mount Polley (Independent Expert Engineering Investigation and Review Panel, 2015) and Fundão tailings dams (Fundão Tailings Dam Review Panel, 2016). Unlike the previous expert panels, it is self-evident that this panel should be convened and enabled to do its work, subsequently ensuring that remediation is undertaken before a disaster takes place, and not afterwards.

The potential compensation costs following a disaster – assuming this project is even insured (and we have our doubts), would likely be unpayable. And at any rate, they would certainly dwarf, by many times over, any credible assessment of economic benefits that could be generated by proceeding with the mine project.

I have spoken at some length with Steven Emerman (one of the technical experts who investigated and wrote the most recent E Tech International report, see above link) and based on his analysis (as previously stated, a situation very likely to take place if nothing is now done to stop it),

I have created these two short animations, titled “Mirador Mine - Ecuador - Amazon – Inevitable catastrophic tailings dam collapse”

[https://www.youtube.com/watch?v=9pRTuuVHDr8&t=8s&ab\\_channel=DavidDene](https://www.youtube.com/watch?v=9pRTuuVHDr8&t=8s&ab_channel=DavidDene)

and “Mirador Mine - South Eastern Ecuador - Death for The Amazon?”

[https://www.youtube.com/watch?v=4eXfCpNLCBE&ab\\_channel=DavidDene](https://www.youtube.com/watch?v=4eXfCpNLCBE&ab_channel=DavidDene)

The implications of a worst-case scenario are the release of 400 million cubic meters of tailings, travelling and inundating 1,680 km of river valleys, and then the run off, travelling 7,000 km to the Atlantic coast. This presents a picture of apocalyptic destruction.

***“The probability of failure of either tailings dam due to either earthquake or flooding over the life of the project is 21.85%.”*** (E-Tech International report to the InterAmerican Commission on Human Rights - 28 August 2022 – see page 22).

Tailings are toxic in perpetuity. The operating life of the mine is estimated to be 30 years

**Myself and colleagues have been seeking further information for some time, but have been blocked at every stage:**

We have been asking for access to details of the construction of the tailing's dams and treatment of waste-water, which are normally in the public domain so as to enable analysis and the upholding of standards of safety.

Until now **all** our efforts have been met with rebuttals. The document titled "*Lack of transparency and access to information concerning the Mirador Mine Project – attempts to access information – July 21<sup>st</sup> 2022*" provides an itemized and time-lined report on our efforts to procure compliance at the highest levels of the Ecuadorian administration.

A request from Sr. Salvador Quishpe Lozano, Assembly man of the Ecuadorian National Assembly, which was submitted to the MSG, and which received no response, is included as an Annex in the E-Tech International report.

*"Lack of transparency and access to information concerning the Mirador Mine Project – attempts to access information – July 21<sup>st</sup> 2022"*

21 July 2022

## LACK OF TRANSPARENCY AND ACCESS TO INFORMATION IN THE MIRADOR MINING PROJECT

### ATTEMPTS TO ACCESS INFORMATION

This report refers to the various attempts that have been made by individuals, through the processes provided for in the Organic Law on Transparency and Access to Information (LOTAIP), and also the requests for information sent from the National Assembly, under the powers granted to Assembly members, to access environmental information relating to the Mirador mining project.

The Mirador Mining Project is Ecuador's first approach to mega-mining, and is run by Ecuacorriente S.A. (ECSA). It is the first open-pit mining operation and requires infrastructure that has never been built in Ecuador and involves risks of socio-environmental damage. Among these are the tailings deposits, which will remain on the site in perpetuity and have the potential to cause ecological and human catastrophes.

The information requested refers to the documents supporting the reports submitted by Ecuacorriente S.A. (ECSA) to the Ministry of Energy and Mines,<sup>1</sup> , for which the Ministry is the custodian.

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<sup>1</sup> -Supporting Information of the Official Letter N° ECSA-HSE-2019-104, dated May 3, 2019, by which ECSA requested to the Zonal Coordination of South Mining the scope of the feasibility issue of the Tundayme tailings dam and its optimized facilities, attaching the Report "DESCRIPTION OF TUNDAYME TAP AND OPTIMIZATION OF THE FACILITIES, MIRADOR PROJECT, PRODUCTION 60000 TONS PER DAY", dated May 2019. In particular, and with total clarity, the

As reflected in this report, despite having a legal and constitutional framework that guarantees transparency and access to information, the Ministry of Energy and Mines presents all kinds of obstacles and refusals in the face of different attempts to access this information, as explained here.

## **I. Requests for information submitted by individuals**

Chronologically, we find that citizen Julio Prieto (El Ciudadano) initially submitted an administrative request for access to information that was partially answered, and then submitted a second request that received a negative response.

The first request was addressed to the Ministry of Energy and Mines and the Ministry of Environment. Although both responded, the Ministry of Energy presented several obstacles, such as requesting that the citizen justify their interest in the requested documents, or requesting exaggerated amounts of money to provide the information, as can be seen in the responses offered by the Ministry within this process:

- i. By means of official letter No. CIUDADANO -CIU-2021-3221, dated May 25, 2021, Julio Prieto filed the ARCERNNR-Z-2021-1526-EX, requesting information corresponding to the Mirador Project.
- ii. In official letter No. ARCERNNR-Z-2021-0793-OF, signed by the engineer Pablo Agustín Espinoza Zamora, on 20 May 2021, it is indicated: "In this regard, and prior to meeting the request in accordance with the law, it is necessary that the applicant justifies the capacity in which he/she appears, the need for the information requested, the authorisation of the Mining Owner or Legal Representative as appropriate, given that the information

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delivery of the nine (9) annexes detailed on page three (3) of the above-mentioned document was requested.

-Supporting information of Technical Report No. 0141-CRMZ-2018, dated 21 February 2018; issued by the Regional Coordination of Mines Zamora of the Mining Regulation and Control Agency, with subject: VERIFICATION OF TECHNICAL INFORMATION ANALYSIS OF PLANS OF THE MIRADOR MINING PROJECT (Cia. ECUACORRIENTES S.A.). OF THE WORKS CONDITIONED IN THE ENVIRONMENTAL LICENSE PHASE OF EXPLOITATION OF METALLIC MINERALS. It was expressly requested, and with total clarity, that the Technical Reports of support of the Analysis of the Presented Information of the Works Conditioned in the Environmental License Phase Exploitation of Minerals, and of the Annexes of Technical Information and Memorandums, according to the detail indicated in the request, be delivered.

-Supporting Information of Technical Report No. 0156-CGRMZ-2018, dated 27 November 2018, issued by the Regional Coordination of Mines Zamora of the Mining Regulation and Control Agency, with subject: ANALYSIS OF TECHNICAL INFORMATION OF THE TUDAYME RELAVERA DAM FILTRATION ACID WATER TREATMENT PLANT (BENEFIT). It was expressly requested, and with total clarity, that the four (4) annexes described on page two (2) be delivered, that is, the Information Submitted by the Acid Water Treatment Plant of the Tundayme Dam Seepage Water, 3.1 Plans Submitted. The detail is repeated in the original request, in the access to information appeal and in your appeal.



requested corresponds to a Mining Company, which the applicant is not authorised; in addition to this the respective payment for each copy requested. "

- iii. In official letter No. ARCERNNR-Z-2021-0893-OF, dated 21 June 2021. ARCERNNR-Z-2021-0893-OF, dated 21 June 2021, the same engineer Pablo Agustín Espinoza Zamora, requests money to deliver the information, as follows: "Having presented the corresponding justification with respect to the information requested and prior to meeting the request in accordance with the law, it is appropriate that the applicant proceed to pay USD 2.00 for each copy requested to Code 1301121959 of Banco Pichincha on behalf of the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources. "

After studying the documents submitted, it was revealed that they were incomplete, as the annexes and other supporting information had not been attached. As a result, the citizen submitted a new administrative request for access to information (Citizen Letter No. CIUDADANO-CIU-2021-51225). This request was first ignored and then denied, so the Citizen filed a judicial appeal for access to public information, which was also denied in first and second instance. The case is currently pending before the Constitutional Court, after the citizen filed an Extraordinary Action for Protection against the second instance ruling (Case No. 1892-22-EP). The details of this procedure reveal several irregularities:

- i. On 31 August 2021, the Citizen submitted a Request for Access to Information addressed to Juan Carlos Bermeo Calderón, Minister of Energy and Non-Renewable Natural Resources, and with a copy to Xavier Fernando Vera Grunauer, Vice-Minister of Mines. This Request for Access to Information was entered into the Quipux system through Citizen Letter No. CIUDADANO-CIU-2021-51225 .
- ii. On 21 September 2021, by official letter No. MERNNNR-CZS-2021-2517-OF, the lawyer Paulo Roberto Mata Chiriboga, Southern Zonal Coordinator, forwarded the Request for Access to Information to the mining company ECUACORRIENTE S.A.
- iii. By means of Oficio No. CIUDADANO-CIU-2021-55190, dated 23 September 2021, arguments were presented against the transfer to the company ECSA, because this procedure is not covered by any regulation and deviates from the provisions of the Organic Law on Transparency and Access to Information.
- iv. By means of Official Letter No. CIUDADANO-CIU-2021-62203, dated 9 November 2021, without having received any response to the Request for Access to Information, Citizen Letter No. CIUDADANO-CIU-2021-62203 is presented, leaving "Constancia de la Negativa Tácita a Solicitud de Acceso a Información Pública No. CIUDADANO-CIU-2021-62203, leaving "Constancia

de la Negativa Tácita a Solicitud de Acceso a Información Pública No. CIUDADANO-CIU-51225". CIUDADANO-CIU-51225", due to the fact that much more time had elapsed than the ten-day deadline established in the Organic Law on Transparency and Access to Information (LOTAIP) to provide a response.

- v. On 1 December 2021, an Appeal for Access to Information against the Minister of Energy and Non-Renewable Natural Resources - Juan Carlos Bermeo Calderón, the Vice-Minister of Mines - Xavier Fernando Vera Grunauer, and the South Zonal Coordinator - Paul Roberto Mata Chiriboga was filed in a court of law. By drawing lots by law, jurisdiction was assigned to the Judicial Unit for Family, Women, Children and Adolescents based in the parish of Mariscal Sucre in the Metropolitan District of Quito, province of Pichincha.
- vi. On January 3, 2022, Dr. Martha Cecilia Vimos Vimos, in her capacity as Titular Judge of the Judicial Unit for Family, Women, Children and Adolescents of the parish of Mariscal Sucre in the canton of Quito, Province of Pichincha, took cognizance of the request for access to information.
- vii. After several failed attempts to hold the hearing, it was held on 15 February 2022, and an oral ruling was issued during the hearing, denying access to the information, under the argument that it would be "reserved" and "confidential" information (simultaneously) and that the contract that establishes confidentiality is above the Organic Law on Transparency and Access to Information.
- viii. The Sentence was finally notified almost 4 months later, only on 9 June 2022, by the Judicial Unit for Family, Women, Children and Adolescents based in the Mariscal Sucre Parish of the Metropolitan District of Quito.
- ix. The grounds of appeal were filed on 14 June 2022.
- x. On 16 June 2022, , the Specialised Criminal, Military Criminal, Police Criminal and Traffic Chamber of the Provincial Court of Justice of Pichincha took cognizance of the appeal and requested that the case be sentenced.
- xi. On 21 June 2022, the Citizen filed a brief requesting the revocation of the order of 16 June in order to call for a hearing before judgment. Despite its filing date and the fact that a request for revocation was pending, this brief was not taken into account by the Chamber.
- xii. The Specialised Criminal, Military Criminal, Police Criminal and Traffic Court of the Provincial Court of Justice of Pichincha issued a sentence on 23 June 2022, without having dealt with the appeal for revocation or the request for a hearing, ratifying the first instance sentence and denying access to public information under the argument that a contract signed between ECSA and the Government of Ecuador, in one of its clauses, includes a "public interest" on confidentiality, which takes precedence over my "personal interest" to access the requested information. The Chamber's ruling states:

*"... the discussion that generates the lodging of the appeal is the need to determine whether a contractual clause between the State (in the general interest) can be considered to resolve a Constitutional issue of access to public information (which in this case represents a personal interest of the plaintiff, although he refers to the need to study it for the benefit of the community that inhabits this environment)".*

xiii. It was only on 29 June 2022 that the Specialised Criminal, Military Criminal, Police Criminal and Traffic Chamber of the Provincial Court of Justice of Pichincha heard the request for revocation and hearing, which was filed on 21 June 2022. In other words, the Chamber heard the request for revocation after the sentence had been issued, although the request was filed two days before the issuance of the sentence. The order of 29 June 2022 omits to refer to the date on which my request for revocation was filed, and states:

*"The virtual document presented by Mr. Julio Marcelo Prieto Méndez should be added to the process, in view of the fact that in the present case the judgement has been issued on 22 June 2022, which has been notified in legal and due form on 23 June 2022, it is not appropriate to attend to his request".*

xiv. On 20 July 2022, the Citizen filed an Extraordinary Action for Protection against the judgment of 23 June 2022. The case was admitted by order of 2 August 2022, and is pending before Judge Carmen Corral, under number 1892-22-EP.

## **II. Requests for information sent from the National Assembly**

This same information was also requested by Assembly member Salvador Quishpe Lozano, who on several occasions has insisted on its release and is currently negotiating a confidentiality agreement that would allow him access to the information but would restrict its use, should it be necessary, for example, to file a complaint. This process of requesting public information based on the oversight powers of assembly members has also failed to generate the information at the time of writing. The detail of this process also reflects the State's unwillingness to make the guarantee of access to information effective:

i. On 17 February 2022, in his capacity as Assemblyman, Salvador Quishpe Lozano sent official letter No. AN-QLS-2022-0030-O, to Mr. Juan Carlos Bermeo Calderón, then Minister of Energy and Non-Renewable Natural Resources. In this letter, Assemblyman Quishpe asked former Minister Bermeo, in compliance with articles 120.9 and 18.2 of the Constitution, articles 74, 75 and 110.3 of the Organic Law of the Legislative Function, and articles 22 and 23 of the Organic Law of Transparency and Access to Information, to "urgently deliver certified and foliated copies" of information regarding the Mirador Mining Project.

- ii. On 2 March 2022, by means of Official Letter No. MERNNNR-SMI-2022-0037-OF, Engineer Reinaldo Agustín Reyes Nole, Undersecretary of Industrial Mining in the Exploitation Stage, sent this request to the mining company Ecuacorriente S.A. (ECSA).
- iii. On March 3, 2022, the mining company ECSA responded to the Ministry, by means of official letter NO. ECSA.VPLG.2022.005, indicating that the Assemblyman's request should not be granted because it is subject to intellectual property protection, confidentiality and "public security", and therefore expressly denied authorisation, stating that "it does NOT authorise its disclosure or delivery to any citizen, authority or dignitary, or any other interested party, since this information is private property and confidential".
- iv. On 10 March 2022, Assemblyman Quishpe issued Memorandum No. AN-QLS-2022-0021-M, addressed to the President of the National Assembly, Guadalupe Llori, informing her of his request for information and the "non-compliance with the request for information", to be submitted to the Legislative Administration Council (CAL) for consideration.
- v. Subsequently, by Resolution CEPBRN 2021-2023-038 dated 13 April 2022, the Permanent Special Commission on Biodiversity and Natural Resources resolved in article 5: "To summon the Minister of Energy and Non-Renewable Natural Resources, Eng. Juan Carlos Bermeo, to appear before the plenary of the Biodiversity and Natural Resources Commission, within 10 days, in order to answer the requests for information from Assembly Members Salvador Quishpe Lozano, Juan Cristóbal Lloret Valdivieso, María Vanessa Álava Moreira, Fernando Cedeño Rivadeneira and Consuelo Vega Olmedo, in accordance with paragraph 2 of Article 76 of the Organic Law of the Legislative Function". This resolution was notified to the Minister of Energy and Mines, by means of Oficio No. AN-CBRN-2022-0276-O of 14 April 2022.
- vi. The same Commission, by means of official letter No. AN-CBRN-2022-0285-O dated 21 April 2022, addressed to the Minister of Energy and Mines, requested his personal and non-delegable appearance at ordinary session No. 069 of the Permanent Specialised Commission on Biodiversity and Natural Resources , to be held on Wednesday 27 April 2022 at 09h00.
- vii. On 26 April 2022, by means of official letter No. MEM-MERNNNR-2022-0313-OF, which was notified on 27 April 2022, the Minister of Energy and Mines, Juan Carlos Bermeo, presented his apologies to the ordinary session No. 069 of the Permanent Specialised Commission on Biodiversity and Natural Resources, which was to be held on Wednesday 27 April 2022 at 09h00.
- viii. On 27 April 2022, the Permanent Specialised Commission on Biodiversity and Natural Resources issued its Resolution No. 2021-2023-039 , in which it acknowledges and rejects the non-attendance of Minister Bermeo. Article 2 of this resolution states that: "... it provides for the following

*"Having reviewed the files related to the request for information by Assemblyman Salvador Quishpe Lozano, **the Minister of Energy and Mines has incurred in the grounds for impeachment in** accordance with the penultimate paragraph of Article 76 of the Organic Law of the Legislative Function, whose requests were notified to the State portfolio by resolution CAL-2021-2023-467 dated April 6, 2022 and official letters AN-CBRN-2022-0276-O of April 14, 2022; and, AN-CBRN-2022-0285-O of 21 April 2022, **for failing to submit the information within the 5 days established in the aforementioned article and for failing to appear before the Biodiversity and Natural Resources Commission on the date of notification.**"*

- ix. Article 3 of Resolution No. 2021-2023-039 states "To request the Presidency of the National Assembly to initiate impeachment proceedings against the Minister of Energy and Mines, Engineer Juan Carlos Bermeo, in accordance with the provisions of the third paragraph of Article 76 of the Organic Law of the Legislative Function, without prejudice to compliance with the provisions of Article 79 of the aforementioned law, due to his failure to provide information and appear before the Commission on Biodiversity and Natural Resources, within the deadlines established in the aforementioned body of law".
- x. On 27 April 2022, former Minister Bermeo resigns and leaves office.
- xi. On 6 May 2022, through Of. No. AN-QLS-2022-0014-ORI, Assemblyman Salvador Quishpe presented a new request for information to the new Minister of Energy and Mines, Xavier Vera Grunauer.
- xii. By means of Oficio No. MEM-MEM-2022-0409-OF, dated 27 May 2022, Minister Xavier Vera responded to the request for access to information made by Assemblyman Quishpe, indicating that attached is Memorandum No. MEM-VM-2022-0183-ME, "by means of which Eng. Reinaldo Agustín Reyes Nole, in his capacity as Vice-Minister of Mines, responds to your request", however in this supposed response, under the title "FUNDAMENTO LEGAL", he limits himself to mentioning contractual clauses, but omits any consideration of constitutional regulations, the Organic Law on Transparency and Access to Information, the Organic Law of the Legislative Function, the Escazú Agreement, and the commitments acquired by Ecuador and by the Ministry of Energy and Mines in relation to the EITI initiative. In this Oficio, the Minister invites to set up technical roundtables in which this information could be made available.
- xiii. It has come to our attention that the Ministry has demanded that a confidentiality agreement be signed prior to the release of the information, but as of the date of writing this report, this agreement has not been signed and the information has not been released.

## RELEVANCE OF THE REQUESTED INFORMATION

Mine tailings are mining waste that cannot be treated or disposed of, and must remain in perpetuity in huge reservoirs that are contained by dams that are built for this purpose. In the case of the Mirador Project, two tailings dams (Quimi and Tundayme) are being built. Within the framework of the development of this Project, there are several concerns and the need to know first hand the information that supports its progress, especially regarding the construction of the dams that are expected to hold the mine tailings. The reason is simple: the tailings dams have obvious environmental and social impacts that we need to be concerned about in perpetuity.

It is important to note that Ecuador was admitted as an EITI member country and that ECSA itself is also part of the EITI Ecuador Industry Group. However, as reflected in this report, despite having a legal and constitutional framework that guarantees transparency and access to information, the Ministry of Energy and Mines and ECSA present all kinds of obstacles and refusals to the various attempts to access this information.

This case demonstrates that, beyond having a regulatory framework guaranteeing access to public information, it is frequently ignored by those who are called upon to apply it, so that the problem we face is not due to the absence of norms but to a lack of compliance on the part of the State.

### Excerpts from E Tech International report to IACHR

The Mirador Mine Project – selected excerpts from E Tech International Report. August 2022.

The Ministerio de Energía y Recursos Naturales no Renovables (MERNNR) signed an exploitation contract with ECSA in March 2012. This was the first exploitation contract for large-scale mining for the government in decades. In 2015 the project obtained the environmental license for exploitation (IGF, 2019, p. 14). Construction began in December 2015 and production started in July 2019. The mine life is estimated at 30 years, from 2019 to 2049 (International Copper Study Group, 2022).

#### **b. Risks Associated with Earthquakes**

E-Tech International's first evaluations in 2011 and 2012 responded to requests by former Zamora Chinchipe Prefect Salvador Quishpe and the Ministry of the Environment (MAE, Ministerio del Ambiente) of Ecuador to address environmental concerns related to operation of the mine. At that time, **we highlighted serious deficiencies in proposed siting and construction of mine infrastructure, concerns over high precipitation and seismic vulnerability, lack of adequate closure plans and financial assurance**, the development of acid mine drainage

and contaminant leaching, and adverse water quality effects to surface water and groundwater resources.

Knight-Piésold (2007) predicted that the liquefaction of both the tailings and the foundation, with the subsequent failure of the tailings dam, was expected to occur during the 30-year lifetime of the Mirador project. There is no available documentation that discusses the Maximum Design Earthquake, the Maximum Credible Earthquake, the Operating Base Earthquake, the foundation characteristics, or the seismic stability for the Tundayme dam.

The USGS Earthquake Catalog (USGS, 2022b) lists 19 epicenters of earthquakes with magnitudes equal to or greater than 7.5 within 1000 kilometers of the Mirador Mine since 1906. In fact, three such large earthquakes have occurred since the opening of the mine in 2019. Earthquakes with magnitudes 7.5, 8.0 and 7.5 occurred 218 kilometers northeast of the mine, 434 kilometers southeast of the mine, and 208 kilometers southeast of the mine on February 22, 2019, May 26, 2019, and November 28, 2021, respectively. It is notable that the 1797 Riobamba earthquake with an estimated magnitude of 8.3 and up to 40,000 fatalities had its epicenter 217 kilometers north of the Mirador Mine. The most important observation of all could be that the Mine apparently sits in a seismic gap, that is, a region without recorded large earthquakes that is surrounded by recorded large earthquakes. According to modern seismic prediction theory, such gaps are due for large earthquakes at times that are impossible to predict.

With further regard to scenarios that are worse than the worst-case scenario, in light of the dire warnings of seismic instability by KnightPiésold (2007), the response of the Ministry of the Environment of Ecuador to the 2010 Environmental Impact Assessment (EIA) by Walsh Scientists and Engineers (2010a-b) was that **the seismic risk, as well as the landslide risk, were both high and poorly known.**

### **c. Risks Associated with Precipitation, Storm Events, and Climate Change**

Knight-Piésold (2007) recommended that the Quimi dam be designed for a Probable Maximum Precipitation (PMP) event of 300 mm in 24 hours.

Although high precipitation can lead to failure of the dam by overtopping, the combination of steep slopes and high precipitation also increases the probability of failure by land sliding into the supernatant pond. The landslide potential in the vicinity of the tailings dams is clearly indicated by the numerous landslide scars, one of which had nearly undermined a transmission tower near the Quimi dam.

Earthquakes and floods are two major sources of tailings dam failures, and the Mirador Mine is in an area of very high risk for earthquakes and large flood events.

In summary, the following tailings management and inherent site characteristics highlight what the Mirador tailings impoundments have in common with the three great failures of the last decade:

- Lack of adherence to design (Mirador, Mount Polley)

- Upstream construction (Mirador, Mount Polley, Samarco, Brumadinho)
- Overly steep embankments (Mirador, Mount Polley, Brumadinho)
- Inadequate characterization of the foundation (Mirador, Mount Polley, Samarco)
- Seismicity (Mirador, Samarco)
- Heavy rainfall (Mirador, Brumadinho)
- Excessive water behind the dam (Mirador, Mount Polley, Brumadinho)

The mining operation has directly impacted and continues to impact the Yanúa Kim Shuar community, the Churuwia and Etsa Shuar centers, the San Carlos de Numpaim Shuar center, farms and properties in San Antonio and Santa Cruz, the Quimi Valley, El Quimi, Machinaza Alto, Chuchumbletza, Remolino 2, and more communities and populated centers.

As a result of contamination of the Tundayme and Wawayme rivers, they cannot use their waters for human consumption, animal watering, fishing, rituals, or recreation, as they have traditionally done. Their self-sustaining crops have been destroyed by the removal of soil, contamination, and overflow of watercourses, with no other possible economic support other than dependence on working for the mining company.

The water sources that originate and flow where the project operates are severely affected in this first stage of copper exploitation (Ministerio del Ambiente, 2015). The more than 200 sources and water springs run the same risk, which according to the Contraloria of the State of Ecuador are within the area that the project impacts (Contraloria, 2012).

## 1. Potential for failure of the tailings dams

The central issue that is driving the high probability of failure of the tailings dams at the Mirador Mine is the lack of adherence to analyses, designs, proposals, and permits. In fact, due to the numerous contradictions within the 2014 EIA by Cardno (2014a-b), it is difficult to tell which were the real designs and proposals.

Since both tailings storage facilities have been constructed, it is impossible to determine the real plans of the Mirador Mine and which of those plans, if any, have been subjected to the type of rigorous analysis that was carried out by Knight-Piésold (2007) for only the Quimi dam.

a slope of 1V:1H is generally regarded as the maximum critical angle for the prevention of failure by internal erosion, the process by which seepage through the dam washes out solid particles, so that the dam loses its structural integrity (Holtz et al., 2011; LePoudre, 2015). Thus, **the Quimi dam should be considered as temporarily existing at the cusp of failure.**



Although the construction methods were never explicitly stated in the second EIA (Cardno, 2014a), the discussion of the impermeable layers for both the Quimi and Tundayme dams made it clear that the upstream construction method was not intended, since the use of the upstream method would not provide any place to put those layers (Emerman, 2019; Appendix 1). A particular feature of the upstream method is that the downstream edge of the starter dike marks the maximum downstream extent of the tailings dam (see Fig. 5a in Emerman (2019); Appendix 1). Thus, the location of the downstream edge of the starter dike at the edge of the highway (see Fig. 16 in Emerman (2019); Appendix 1) indicates the intention to construct the entire dam using the most dangerous upstream method.

It is alarming that the steepening of the outer embankment and the switch from the centerline to the upstream method as a result of the lack of construction material was the exact sequence of events that led to the failure of the tailings dam at the Mount Polley mine in Canada in 2014 (Independent Expert Engineering Investigation and Review Panel, 2015).

### **Probability of failure.**

Based on the annual probability of failure due to flooding, the probability of failure of a single tailings dam over the life of the project is 5.83%, leading to a probability of failure of either tailings dam due to flooding of 11.32% over the life of the project. In summary, **the probability of failure of either tailings dam due to either earthquake or flooding over the life of the project is 21.85%.**

However, in addition to the preceding physical factors, the following human factors must be taken into consideration:

- 1) The seismic stability analysis assumed that the maximum dam height would be 63 meters (although the Tundayme dam will be 260 meters high).
- 2) The seismic stability analysis assumed centerline construction (although the Quimi dam uses upstream construction).
- 3) The seismic stability analysis assumed an outer embankment slope of 1V:2H (although the Quimi dam has an outer embankment slope of 1V:1H and the design slope for the outer embankment of the Tundayme dam is 1V:1.5H).
- 4) The seismic stability analysis was not carried out for the much steeper slope of the Tundayme site (the Quimi Valley has 7% slope down to the Rio Quimi, while the Tundayme Valley has 13% slope down to the Rio Quimi).
- 5) There has been no study of local faults and seismicity.
- 6) There has been no study of the foundation at the Tundayme site.
- 7) There has been no evaluation of the risk of landslides or the high erosion rate in the area.
- 8) The design for the 500-year flood did not take climate change into account.

9) There is apparently no commitment to construct and operate the dams in concordance with the analyses, designs, proposals, and permits.

**Based upon the preceding considerations, the probability of failure of one or both tailings dams at the Mirador Mine at some time during or after the life of the project is so high that it should be treated as inevitable.**

There is certainly no plan to carry out monitoring, inspection, and maintenance of the tailings dams in perpetuity.

Facilities created to store and treat acid mine drainage

The expected volumes of acidic water from each source is 30,000 m<sup>3</sup> /day from the Northeast waste rock dump and 40,000 m<sup>3</sup> /day from the open pit (Cardno, 2014b, Figure 4-26). The impoundment is designed for a total capacity of 3.15 million m<sup>3</sup> to store the acidic water and a storm with a return period of only 50 years (a storm predicted to occur once in 50 years).

Lack of experience of Ecuador with regulating large-scale mining operations

The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) conducted an assessment of the mining policy framework of the country of Ecuador in 2019 (IGF, 2019). As noted in the introduction to this report, the mining contract with ECSA for the Mirador Mine was the first exploitation contract for large-scale mining for the government in decades. The IGF report found that Ecuador needs to do more to improve its regulation of large-scale mining by developing specific regulations or guidelines for better environmental management, including the management of the large volumes of waste from large-scale mining and creating a mine closure system.

As an example, **E-Tech International was first asked by MAE in 2011 to assist them with the evaluation of the exploitation EIA for the Mirador Mine because they lacked experience.** E-Tech evaluated the EIA and subsequently conducted a training session for MAE on large-scale mining.

We returned approximately six months later to find a near complete turnover of agency staff. We have no evidence that the staff has become more experienced with large-scale mining since that time. The lack of experience in regulating large-scale mines combined with the prioritizing of large-scale mining as an economic activity adds to the degree of scrutiny that we feel must be applied to the Mirador Mine.

Information needed to evaluate whether an imminent danger exists and transparency of information

Two requests for access to information related to the Mirador Mine were submitted on March 30, 2021, to the MAE and the MERNNR. The requests were submitted under the Constitution of Ecuador (Sections 18, 66.23) and the Ley Orgánica de Transparencia y Acceso a la Información Pública (Sections 1, 4, 5, and 9). The requests were labelled Tramite No. MERNNR-MERNNR2021-0630-EX. The requests that were handled by the MERNNR were responded to in an incomplete

manner. Another request was submitted for the remaining information. This time the government denied the request, arguing that, according to the contract signed with the mining company, the information requested was confidential. The Asamblea Nacional also submitted an official request to the MERNNR (Appendix 4).

In terms of transparency of information, as an example, with the assistance of the World Bank, Ecuador joined the Initiative for the Transparency in Extractive Industries (EITI) in October 2020.

In addition, Ecuador ratified the Acuerdo de Escazú, which also addresses transparency of environmental information, in May 2020.<sup>5</sup> The fact that Ecuador has obligations under both of these international agreements argues strongly that all environmental information related to the safety of the mine and the effects of the mine on the environment and human health should be made publicly available.

This information will allow the detailed evaluation of the potential for imminent endangerment related to the operation and management of the mine.

**There seems to be no commitment to build according to the design, especially no commitment to use the centerline construction method. It is important to note that the upstream construction method is more susceptible to all causes of dam failure.**

Changes to the Quimi dam (change from centerline construction to upstream construction, steepening of the embankment slope from 1V:2H to 1V:1H) also increase the probability of failure of the Quimi dam. **Based on the above, the probabilities of failure of both dams are so high that they should be regarded as inevitable.**

## **RECOMMENDATIONS**

The recommendation of this report is that there should be an immediate moratorium on further construction of the Mirador mine. The moratorium should be followed by the convening of an independent panel of international experts who will evaluate the design and construction of the Mirador tailings management facilities. This panel must be provided with full and complete information from Ecuacorriente S.A., without which it is impossible to make specific recommendations. This panel would be similar to the independent expert panels who evaluated the failures of the Mount Polley (Independent Expert Engineering Investigation and Review Panel, 2015) and Fundão tailings dams (Fundão Tailings Dam Review Panel, 2016).

Unlike the previous expert panels, it is recommended that this panel be convened before the disaster and not after.