

03 June 2025

ALL CONCERNED PARTIES
Republic of Zambia

To All Parties Concerned

We write to you with great urgency and deep concern following the catastrophic failure of the Sino Metals Leach Limited ("**SML**") tailings dam in late February this year. Our sincere hope is that the extensive work we have undertaken to assess the consequences of this disaster is received with the seriousness and speed it so critically demands.

Our engagement with SML, as the identified polluter, has been extremely challenging. From the outset, they have actively sought to **disrupt the assessment process** and have made attempts to **influence the outcomes of our findings**. Despite our appointment as an independent assessor—vetted and approved by the relevant authorities—SML has accused us of breaching the contract and has since **terminated the agreement just days before its conclusion**, seemingly with the intention of preventing our report from reaching the proper authorities.

As a private company, we now find ourselves in the untenable position of having to **self-fund both the extensive costs of the environmental assessment and the legal proceedings** required to defend our work and our reputation. In all our years of responding to environmental disasters and engaging with responsible parties, **we have never encountered a polluter that has demonstrated such a lack of remorse or accountability**. Without the urgent support and intervention of government authorities, we fear that the polluter will evade responsibility, **the truth will remain obscured**, and the burden of both exposure and remedy will fall on those who acted in good faith to protect the people and environment of Zambia.

Over the past two months, we have deployed a team comprising some of the most experienced and qualified geo-scientists, incident commanders, and hazardous materials specialists on the African continent. These experts have worked tirelessly to produce a comprehensive environmental incident impact assessment that serves the long-term health and safety of the Zambian people, the restoration of ecosystems, the viability of both subsistence and commercial agriculture, and the protection of the integrity and reputation of the Zambian authorities.

Rather than delve into the technical specifics—already detailed in the 500 pages of reports submitted to ZEMA—we wish here to present our key findings in plain language, in the hope that urgent and decisive intervention will follow.

Our company has operated in the spill response and environmental risk mitigation industry since 1975. The collective experience of the team deployed to this incident exceeds 200 years, covering thousands of environmental emergencies, including many of the most serious dangerous goods incidents in the SADC region. Based on this vast experience, we unequivocally confirm that the SML incident constitutes a large-scale environmental catastrophe. Without immediate

intervention, the consequences for future generations of Zambians will be severe and long-lasting.

In our field, an incident is classified as *catastrophic* when three key conditions are met:

1. The pollutants involved are acutely toxic to humans.
2. The volume of material released is significant.
3. Human populations are, or will be, directly affected either in the short or long term.

Tragically, the SML disaster meets all three conditions.

Official reports have stated that 50,000 tonnes of tailings were released. However, visual evidence from social media and field data collected by our team confirm this figure to be grossly inaccurate. Our on-the-ground quantification shows approximately **900,000 tonnes** of toxic tailings (excluding acid water) are visibly dispersed across the land and streambanks in the fallout zone. Our conservative estimate is that **over 1.5 million tonnes** were lost from the dam system in total.

Beyond the scale of the release, our scientific assessments confirm the presence of extremely hazardous substances, including **arsenic, cyanide, uranium**, and other heavy metals commonly associated with copper mining. Furthermore, widespread soil and groundwater contamination with **acidic compounds** has created a toxic environment capable of causing irreversible harm to both the ecosystem and human health.

The long-term exposure risks are profound. Communities downstream are at serious risk of developing **birth defects, cancers, liver and lung disease, heart conditions, and other chronic illnesses**. These outcomes are not speculative—they are well-documented consequences of exposure to the substances we have found.

We have documented nearly **800 individuals currently residing within close proximity** to the fallout zone, many of whom—including children—are exposed daily to these hazardous materials. Their water sources, including boreholes, are contaminated; the streams and rivers are polluted; and their agricultural lands are severely damaged. Without proper remediation, these lands will not recover. Importantly, **simple lime dosing is not a sufficient or effective solution**.

In environmental response, we categorise every incident by:

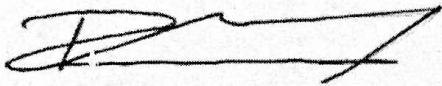
1. **Source** – the hazardous material involved;
2. **Pathway** – how and where it travels;
3. **Receptor** – who or what is exposed.

The first response is always to remove the source. If that is not immediately possible, then one must cut off the pathways. If this too proves ineffective, the final and urgent step is to **remove the receptors—i.e., the communities—from harm's way**.

Of particular concern is that the **source of contamination remains present in the environment**, continuously leaching hazardous pollutants into the soil and groundwater. This ongoing exposure poses a **serious threat to agricultural operations downstream**, both subsistence and commercial.

Given Zambia's strategic ambition to expand its grain export model and establish itself as a major player in the regional beef industry, we are deeply concerned that any **upstream due diligence conducted by potential international buyers** may reveal environmental contamination that could **severely undermine Zambia's agricultural export potential** and compromise market confidence.

We respectfully urge your office to intervene and ensure swift, decisive action to prevent an unfolding human and environmental tragedy. We are available to provide a formal briefing or presentation to yourself or to any delegated authority at your earliest convenience.



Yours sincerely,
Douglas Carmody

Drizit Group CEO