

EIA's Response to TFM Statement

March 20, 2026 Update

Tenke Fungurume Mining (TFM) has seemingly circulated a statement that provides a series of technical critiques of EIA's recent report, *Toxic Transition*, which documents allegations that TFM's mining activities - specifically its alleged release of unsafe levels of sulfur dioxide - poisoned families near its mine. The statement is not available on the company's website as of the time of writing on March 20th.

Below is EIA's response to TFM's statement. EIA remains committed to truth and transparency. The critiques of the investigation findings made by TFM do not amount to a robust counterargument. EIA fully stands by its findings and conclusion.

TFM's technical critiques are italicised and immediately followed by EIA's responses. The order directly reflects the order in which technical critiques appear in TFM's document.

"TFM operates a dual monitoring system—both active (daily) and passive (monthly)—contrary to EIA's assertion that only passive monitoring had been implemented. This point was clearly outlined in TFM's written response to the EIA on February 10, 2026, and we regret that it was not included in the published report."

- TFM's claim that EIA did not report on the dual monitoring system is incorrect. EIA made TFM's full response available on the [web page for EIA's report](#) and mentioned the availability of the full answer in its press release, executive summary, and in the body of the report text. We specifically explained that the company had a dual monitoring system on page 17, stating: "The company clarified that both passive sampling at 'sensitive and receptive areas' and active monitoring 'at relevant process control points,' are being deployed."

"All data collected between late 2024 and early 2025 confirmed that SO₂ concentrations remained within the regulatory limits of the Democratic Republic of the Congo and in compliance with the IFC's EHS guidelines."

- Article 285 bis of DRC's mining code, concerning Industrial Liability of the Licensee, states: "Any holder of a mining and/or quarrying license is liable for damage caused to persons, property, and the environment as a result of their mining activities, even in the absence of any fault or negligence. They are required to provide compensation. The holder may be exempted **only if they provide proof that such damage stems from a cause unrelated to their mining activity, [emphasis added]**." Article 285 ter on Damage caused to persons and the environment by contamination further stipulates: "The holder of a mining and/or quarrying right is also liable in the event of direct or indirect contamination resulting from mining activities that have an impact on human

health and/or lead to environmental degradation, particularly in the form of water, soil, and air pollution, and cause harm to humans, fauna, and flora.”

- Under these articles, TFM’s operations are in apparent violation of DRC’s mining code, and the burden of proof is on TFM to show that the impacts on the community of Fungurume do not stem from their own operations.
- In order to prove its point, TFM must publicly share the database that documents the results of the active monitoring protocol. As Dr. Benoit Nemery – Professor emeritus and a toxicologist in the Department of Public Health and Primary Care at KU Leuven, Belgium – explained, passive monitoring is “scientifically unsuitable” to calculating health risks. This is particularly the case because brief peaks in emissions, which are not captured by passive monitoring, can be highly toxic and even fatal, particularly to children.

“A brief spike in emissions occurred during the plant’s commissioning phase in late 2023; it was quickly identified and corrected. This issue was communicated consistently and transparently in TFM’s 2024 ESG Report and does not reflect any change in its position or communication practices.”

- TFM has changed its public position regarding emissions and the timeline appears to indicate that the company did seemingly cover up emissions. According to the company’s latest statement in response to EIA’s finding, a spike in emission took place in “late 2023,” whereas in May 2024 the company publicly entirely denied pollution allegations – as reported by multiple outlets with some self-explanatory article headlines like “Tenke Fungurume Mining (TFM) Rejects Pollution Accusations” or “TFM Denies Accusations Against the 30k Plant in Manomapia,”¹ which included such statements as: “The results of these studies, finalized on April 15, confirm that the emission levels at the 30K plant are in full compliance with IFC standards.”² In May 2024, John Woto, Deputy General Manager of TFM, also reportedly refuted the allegations of pollution from his company’s 30k plant.³
- It is now the responsibility of the company to prove that this spike in emissions did not happen in breach of Article 285 bis and ter of the DRC Mining Code (cf. paragraph above).

¹ “Tenke Fungurume Mining Disputes Environmental Pollution Claims in Manomapia,” Copperbelt Katanga Mining, May 3, 2024, <https://copperbeltkatangamining.com/tenke-fungurume-mining-disputes-environmental-pollution-claims-in-manomapia/>; “Tenke Fungurume Mining (TFM) rejette les accusations de pollution,” Actualite.cd, May 14, 2024, <https://actualite.cd/2024/05/14/tenke-fungurume-mining-tfm-rejette-les-accusations-de-pollution>; Yasmine Kankolongo, “TFM dément les accusations contre l’usine 30K de Mano Mapia,” LA GUARDIA, May 14, 2024, <https://magazinelaguardia.info/2024/05/14/tfm-dement-les-accusations-contre-lusine-30k-de-mano-mapia/>

² “Tenke Fungurume Mining (TFM) rejette les accusations de pollution,” Actualite.cd, May 14, 2024, <https://actualite.cd/2024/05/14/tenke-fungurume-mining-tfm-rejette-les-accusations-de-pollution>

³ Denise Maheho, “DRC: Families Displaced Due to Mining Pollution,” Business and Human Rights Centre, May 11, 2024, <https://www.business-humanrights.org/en/latest-news/rdc-des-familles-d%C3%A9plac%C3%A9es-pour-cause-de-pollution-engendr%C3%A9e-par-l'exploitation-mini%C3%A8re/>.

- Dr. Benoit Nemery, Professor emeritus in the Department of Public Health and Primary Care at KU Leuven, Belgium, further explains: “[TFM] do not give convincing evidence to support the absence of the episodic occurrence of peaks of emissions of SO₂ (or other pollutants) following the start of operations: no information, let alone numeric data, is provided, neither about measuring techniques, nor location of the sampling. As indicated previously, their reliance on diffusive sampling was misplaced.”

“The analysis of health impacts presented by EIA raises several fundamental methodological issues. First, there is a clear inconsistency in the timeline of events: the EIA attributes certain health impacts to the year 2022, whereas the 30K plant did not begin operations until August 30, 2023. Events prior to the plant’s commissioning cannot reasonably be attributed to its operations.”

- EIA does not attribute the 2022 cases to the impacts of TFM’s operations; these are a baseline used to show the surge in the number of people seeking medical help in 2023 and 2024 for severe respiratory illnesses after the 30k facility became operational.

Second, no comparative data has been provided. Regarding issues such as miscarriages and birth defects, the report lacks sufficient baseline data to support a clear attribution.

- EIA’s analysis of community health data is exclusively focused on respiratory health. The analysis documented, as stated in the executive summary of the report, the increase in patients being treated for “coughing up blood and severe respiratory illnesses like pneumonia and bronchitis.” Health data analysis did not include miscarriages and birth defects, so the lack of “sufficient baseline data” is irrelevant.
- EIA reported on the statements from multiple community members and health professionals who attributed the maternal health issues they suffered - including miscarriages, stillbirths, and birth defects - to the impacts of pollution in Fungurume. EIA took care to make a clear distinction in its reporting on what relates to health data analysis and what relates to convergent testimonies by individuals.

Third, confounding variables do not appear to have been properly controlled for. The EIA report itself notes that, starting in February 2024, provincial authorities actively encouraged residents to seek medical care. Variations in consultation rates may therefore reflect multiple influences, which were not sufficiently accounted for in the analysis.

- TFM raises the issue of the provincial government encouraging residents to get treatment at the local hospital as of February, 2024. EIA did indeed present this fact in its graph, in the interest of transparency. However, it is worth noting that the government’s call to encourage people to seek care elsewhere would mean that the data from this clinic would *understate* the severity of the problem after February 2024. In other words, the results presented by EIA are deliberately conservative.

Fourth, data from a single facility cannot, on its own, support conclusions covering the entire region. The EIA relies primarily on data from a clinic in Fungurume to support the existence of a broader regional health problem, without sufficiently accounting for factors such as demographic changes, improved access to healthcare, or changes in institutional capacity.”

- EIA did not report or imply that the pollution was affecting the “entire region.” The report focuses explicitly on the case of the Fungurume neighborhood located near the 30k plant. This is made abundantly clear in the body of the text and most notably in Section 2.2 of the report, entitled “Medical Records Analysis: A Public Health Crisis in Manomapia.”
- According to Dr. Benoit Nemery, “the incidence of reported upper and lower respiratory irritation was undoubtedly increased among the community living in the plant’s vicinity. Collectively, these clinical observations are highly consistent with the known effects of SO₂ pollution on the respiratory tract.”

The EIA used a multiparametric optical air quality sensor, whose accuracy is inherently limited and whose margins of error are greater than those of certified analytical instruments. The equipment lacked metrological certification and documented annual calibration records, calling into question the reliability of the measurements.

- The detector in question had been calibrated by the manufacturer at RAE Benelux.
- As Dr. Benoit Nemery explains: “In fact, the issue with the portable device used is not low precision but low sensitivity, because this device (which had been duly calibrated) is designed for measuring (very) high concentrations of SO₂ as may occur in work environments.” In other words, the portable - which has a low sensitivity - is well adapted at measuring very high levels of sulfur dioxide, like the levels recorded near the 30k plant.
- The independent toxicology expert who consulted with EIA on this study explained: “The multiparametric sensors used are widely employed in community-based environmental monitoring, particularly in resource-limited settings. The objective of our study was not strict regulatory measurement, but rather an indicative assessment of population exposure, in line with public health approaches.”

The location of the sampling points—including instruments suspended from tree branches, a configuration that does not meet basic site selection requirements—did not comply with international standards (China HJ 664-2013, US EPA 40 CFR Part 58), which require unobstructed airflow and spatial representativeness.

- The norms referenced by TFM here are for fixed regulatory capture, not for community monitoring in real-life conditions. As the independent expert consulted by EIA who carried out this study explains, “The sensors were positioned to reflect residents’ actual exposure, rather than idealized measurement conditions. The proximity of obstacles (trees, buildings) accurately reflects local living conditions, which enhances the data’s public health relevance.”

Of the five monitoring graphs presented in the EIA report, four (Figures 1, 3, 4, 5) show trends inconsistent with the established behavior of SO₂ atmospheric dispersion: Figure 1 shows a continuous monotonic decline to a level close to zero within 20 minutes; Figures 3, 4, and 5 show repeated instantaneous spikes and drops (“pulses”), which are atypical of the behavior of ambient air pollutants and suggest potential anomalies related to the instruments or methodology rather than genuine environmental signals.

- TFM’s characterization of these variations as “atypical” is simply incorrect. As noted by the independent expert consulted by EIA, “Industrial environments, particularly mining environments, are characterized by intermittent and variable emissions (winds, industrial operations, etc.). The observed peaks are consistent with episodes of point source emissions, which are frequently reported in the literature on SO₂.”

An independent monitoring study commissioned by TFM and conducted by Skyside, based on Windrose modeling and atmospheric dispersion modeling (Airshed methodology), revealed no exceedances at sensitive receptors located within the defined study area for any of the periods evaluated.

- As explained at length in EIA’s report on page 16, TFM’s use of passive detection and modeling presents serious methodological flaws. Notably, this methodology smooths out relatively short-term peaks of sulfur dioxide emissions, even though short-term peaks have a serious toxic impact on people.
- Dr. Benoit Nemery explained in the Wall Street Journal that the use of passive sampling and modeling was “scientifically unsuitable,” given the importance of peaks to the toxicology impact of emissions.
- EIA’s active monitoring measurement allowed for the real-time capturing of peaks. Notably, the absence of unsafe levels of SO₂ in TFM’s Skyside dataset does not contradict the presence of unsafe levels of SO₂, given the fundamentally differing methodologies.