

Beneath the Green

A Critical Look at the Environmental and Human Costs of Industrial Cobalt Mining in DRC

CORRESPONDENCE BETWEEN RAID / AFREWATCH AND MINING COMPANIES

Table of Contents

CMOC / TFM.....	1
INITIAL LETTER TO CMOC.....	2
CMOC RESPONSE TO THE INITIAL LETTER.....	15
FOLLOW-UP LETTER TO CMOC.....	35
CMOC RESPONSE TO THE FOLLOW-UP LETTER.....	41
THIRD FOLLOW-UP INQUIRY TO CMOC.....	48
CMOC RESPONSE TO THIRD FOLLOW-UP INQUIRY.....	49
ERG / METALKOL.....	50
INITIAL LETTER TO ERG.....	51
ERG RESPONSE TO THE INITIAL LETTER.....	68
FOLLOW-UP LETTER TO ERG.....	96
ERG RESPONSE TO THE FOLLOW-UP LETTER.....	100
THIRD FOLLOW-UP INQUIRY TO ERG.....	109
ERG RESPONSE TO THIRD FOLLOW-UP INQUIRY.....	115
Glencore / KCC & MUMI.....	121
INITIAL LETTER TO GLENCORE.....	122
GLENCORE RESPONSE TO THE INITIAL LETTER.....	135
FOLLOW-UP LETTER TO GLENCORE.....	144
GLENCORE RESPONSE TO THE FOLLOW-UP LETTER.....	151
THIRD FOLLOW-UP INQUIRY TO GLENCORE.....	152
GLENCORE RESPONSE TO THIRD FOLLOW-UP INQUIRY.....	153
FOURTH FOLLOW-UP INQUIRY TO GLENCORE.....	154
Zijin Mining / COMMUS.....	155
INITIAL LETTER TO ZIJIN.....	156
ZIJIN RESPONSE TO THE INITIAL LETTER.....	189

Water pollution and environmental risks at TFM

Anneke Van Woudenberg [REDACTED]

Thu 26/10/2023 14:35

To [REDACTED]

1 attachment (231 KB)

Letter to TFM from RAID + Afrewatch-1.pdf;

Dear Julie,

We are reaching out to you to requests CMOC's response to concerns we have recently received regarding water pollution and environmental risks related to TFM's operations in the Democratic Republic of Congo. We hope you will be in a position to respond to our questions, which you will find in the enclosed correspondence.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning TFM as well as efforts to ensure mining for cobalt and other critical miners is responsible, clean and sustainable. We view these matters as bearing the utmost public interest.

We look forward to hearing back from you.

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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26 October 2023

Julie Liang
 ESG Director
 CMOC
 North Yihe, Huamei Shan Road,
 Luanchuan, Luoyang,
 Henan, China
 471500

Via email to [REDACTED]

Dear Ms Liang ,

Re: Water pollution and environmental risks at Tenke Fungurume Mining (TFM) Mine in DRC

Following our exchanges over the past few years, we are reaching out to you on this occasion to seek your response to concerns we have received regarding water pollution and environmental risks related to the operations of Tenke Fungurume Mining (TFM) in the Democratic Republic of Congo.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning TFM's operations in DRC as well as efforts to ensure cobalt mining is clean. We view these matters as bearing the utmost public interest. We hope you will be in a position to respond to our questions regarding TFM's environmental practices, which you will find in the enclosed attached.

As you know, we are two civil society organisations with a long history of research on human rights and environmental concerns in the mining sector in the DRC. [RAID](#) is a UK-based corporate watchdog NGO, partnering with civil society actors in Africa for more than 25 years. [African Resources Watch \(AFREWATCH\)](#) is a Congolese charity based in Lubumbashi which advocates for fair and equitable exploitation of natural resources.

During our research missions over the past few years, we have repeatedly received concerns from local communities regarding environmental pollution linked to industrial copper and cobalt mining in the Lualaba province. In mid-2022 and early 2023, our organisations conducted field research to look into environmental risks and their impacts on people's human rights at six industrial mines, including at TFM. Our joint team interviewed more than 140 persons across 25 communities located in close proximity to these mines, as well as medical professionals, academic researchers, lawyers and government officials, amongst others.

As set out below, our preliminary findings across the six industrial copper and cobalt operations were alarming and indicate the following:

1. The activities of industrial copper and cobalt mines appear to have had severe – possibly irreversible – adverse effects on the water quality of surrounding lakes, rivers,

swamps and groundwater reserves. While some of this may be linked to historical pollution, local residents and others we interviewed consistently detailed more recent acute periodic episodes of pollution as well as ongoing pollution which they attributed to toxic waste and contaminated water being released by mining companies in adjacent land and water bodies.

2. The damage to local ecosystems has had significant consequences on people's livelihoods. Scores of interviewees told us that since the increase in industrial cobalt and copper mining in 2018, including activities at TFM:
 - a. The lakes and rivers used by fishermen and women have become so polluted that fish populations have decreased dramatically, and they have lost their capacity to retain aquatic life;
 - b. Farmers have seen a sharp decrease in their crop production. They told us that due to mining pollution, their crops rot before they are fully grown, and plants and vegetables no longer grow to full maturity.

3. An increase in health problems, which were confirmed by medical doctors we interviewed:
 - a. Consistently across the villages, interviewees reported dermatological diseases that they associate with the use of contaminated surface water. Some recounted cases of people being severely burnt after entering water containing acid-filled mining waste.
 - b. Most women, including teenage girls, complained of gynaecological and reproductive issues. They reported suffering from urogenital infections, vaginal mycoses and warts, frequent miscarriages, and birth defects. They all linked these conditions to sitting or standing in contaminated water to wash clothes or for hygiene purposes.
 - c. Some interviewees complained of digestive problems, including nausea, stomach pain and diarrhea, after drinking surface or well water, or after eating food prepared with contaminated water.

4. A significant negative impact on the mental health of people living around the mines or in a polluted area. Many of those we interviewed expressed living in constant state of fear of the impact of the pollution on their health and that of their children, and described feeling stressed, depressed and anxious.

5. The loss of livelihoods attributed by local residents to pollution appears to have had profound impacts on people's human rights, including their right to a clean and healthy environment, the right to food, the right to water, the right to education, as well as others. For example:
 - a. The dramatic drop in agricultural and fish yields has forced many people we interviewed to modify their eating patterns by reducing their food portions and the number of meals they eat. Many we spoke to were living on one meal a day, and sometimes even less.
 - b. Unless they considered having no choice, most interviewees said they had stopped using lake, river, and sometimes spring water due to the impacts on their health. Instead, they reported being dependent for their water needs on a small number of boreholes, sometimes located at a considerable distance from their homes.
 - c. Parents reported having to remove their children from school or sending them only occasionally because of reduced incomes.

- d. Several interviewees were worried about the loss of their historical and traditional knowledge which they tied to the pollution caused by mining activities, and associated risks of relocation.

We note that the mining industry has created new employment in the region, though you will be aware that we have [raised concerns](#) about working conditions and the low pay for subcontracted workers. However, in this research, our focus has been on the impact of mining activities on local residents not officially employed in the mining sector and who continue to rely on small-scale agriculture, such as fishing or farming. We trust you will agree that this continues to account for the vast majority of people who live near the large-scale mines.

While not all of the above relate to **TFM**, the overall picture that appears to be emerging is troubling and has the potential to reflect negatively on the cobalt and copper industry as a whole. In effect, Congolese residents we interviewed who live near the industrial mines and rely on farming, fishing and small commerce for their livelihoods consistently told us they believed they were poorer and sicker due to the activities of large-scale copper and cobalt mining.

We would be most grateful for your perspective and input regarding the concerns reported to us. You will find attached our list of questions relating to **TFM** in particular. We are writing separately to the other main industrial mines covered by our research seeking their input and response. Your response will help us to better understand the situation and to accurately report on it.

We plan to publish a public report on our research. In the interest of balanced and fair reporting, we strive to reflect all relevant information in our research and publications. Your response, as well as those from the other industrial mines, will be taken into account in our forthcoming publication. We would welcome any information you wish to share with us on the matters raised or anything else you consider relevant.

Please send any information to RAID at [REDACTED] If you require any further clarifications or if you have questions, please do not hesitate to contact us. We would welcome an opportunity to discuss these concerns with you.

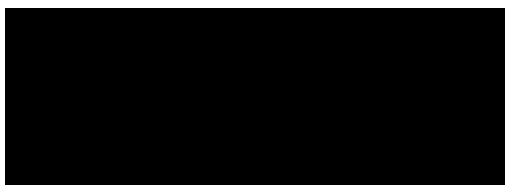
We would be grateful to receive your response by 24 November 2023.

Thank you and we look forward to hearing from you.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc: Placide Kalala Basidiwa, CEO, Gécamines, DRC

Questions from RAID and AFREWATCH to CMOC/TFM

To: CMOC/TFM

Date: 26 October 2023

Subject: Water pollution and environmental risks at the Tenke Fungurume Mining (TFM) mine in DRC

In light of our recent findings, we would welcome responses to the questions set out below.

Please note that we have reviewed TFM's 2019 *Rapport d'Impact Environmental et Social – Volume 2*, TFM's *Programme des Mesures d'Atténuation et de Réhabilitation*, TFM's 2007 *Environmental and Social Impact Assessment – Executive Summary*, and TFM's 2021 *Cahier des Charges*. We have also reviewed China Molybdenum Co. (CMOC)'s 2020 *ESG Report* and CMOC's *Environmental Policy*.

We understand from TFM's 2019 EIS that TFM has an on-site database for environmental water quality (page 132). We trust that will assist you in answering some of the questions set out below. We have indicated the detail we are seeking in each area to assist you in your response.

Water and Air quality

1. TFM's 2010 EIS states that you undertake periodic monitoring of surface water quality (page 334), groundwater quality (p. 342), potable water quality (p. 345) as well as consideration of community health issues related to water quality (p. 241). The frequency of water quality testing is indicated on pages 337-339, which varies from daily to yearly monitoring depending on conventional water monitoring parameters.

Could you please answer the following points:

- (a) Provide a condensed, and where possible, an updated list and the precise location of your water monitoring stations. Please indicate the reasons why these locations have been selected.
- (b) Please detail the results of your monthly water quality tests since 2020 per station. To what extent do they differ from the results presented in the 2019 EIS report which, as you indicate, happened to exceed the legal limits (TFM EIS, pp. 133 & 135)?
- (c) At what frequency do you monitor groundwater and potable water quality? What are the results?
- (d) At what frequency do you monitor leachate from the landfill site? What are the results?
- (e) In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by the TFM mine's activities? If not, which other waterbodies you have not identified in your EISs, and what are the results of their monitoring since 2018.
- (f) Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?

- (g) Can you also please detail who undertakes these tests (including their qualifications and whether they are TFM/CMOC staff or external personnel)?
 - (h) Do you communicate the results of the water testing to local communities? If so, how and when?
2. Your 2019 EIS indicates that you conduct dust fallout monitoring weekly and monthly (at page 332) with consideration of community exposure to asbestos dust (pp. 228 & 300), and a set of dust control measures (pp. 330-332). The EIS states the baseline showed even post-implementation of mitigation measures, dust fallout concentrations could still exceed DRC legal limits in a couple of villages (at pages 219 & 226). It states TFM has a Continuous Emission Monitoring System for SO₂, NO₂ and PM₁₀.

Could you please explain the following:

- (a) The monitoring locations of dust fallout for the TFM project. If you deviated from the previous monitoring locations, could you please provide an updated map and explain why locations were changed?
 - (b) What have been the result of the monthly dust monitoring since 2019? Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.
 - (c) Has the dust monitoring continued to exceed the standards for residential areas or posing livelihood disturbances across the locations set out on page 226? If yes, at which locations? What steps has TFM taken to reduce the levels?
 - (d) Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.
 - (e) Why, in the absence of dusts fallout standards in DRC, you decided to use the US NAAQS, as opposed to any other standards?
 - (f) How do you measure your Air Quality Management plan referred to on page 227 of TFM EIS?
 - (g) Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years.
3. We note that the EIS was developed in consultation with affected communities, and you strived to meet their concerns in your assessments. You recognise in the EIS that “internal and external communications are crucial for an effective environmental management system” (page 321). CMOC’s *Environmental Policy* refers to engagement “with stakeholders at all levels” on the group’s environmental performance. Do you report the results of the dust levels and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures.
4. We recognise that because the TFM mine operates near to other mining projects, some of your environmental impacts may be cumulative in nature (which you also highlight in the EIS at pages 132 & 241). In these circumstances, how do you assess TFM contributions to an environmental impact? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?
5. In Title V of TFM’s EIS report, a range of mitigation measures are set out for the identified environmental impacts. On page 317, you state TFM is implementing an environmental management system that is compliant with ISO 14001 standards with two further certifications – ISO 9001 and ISO 18001. Has there been an independent assessment of how effective

TFM's mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point us to where we can find this assessment. If there is no independent assessment, please describe how is TFM measuring the effectiveness of its mitigation strategies?

6. In your EIS report, you explain that communities' access to potable water has considerably increased following TFM's social programmes (p. 171). These included drilling drinking water wells (p. 370).

Can you please confirm:

- (a) The total number of water installations TFM has built since 2018.
- (b) The locations where these wells have been installed and the number of people or households covered by each water point.
- (c) What further plans TFM has for additional water points.
- (d) If all water points installed by TFM were functional and operational as of April 2023? If not, which ones were in disrepair, contaminated or not functioning and why?
- (e) What policies and procedures are in place at TFM to fix or replace wells that stop functioning or become contaminated?

Health risks associated with water pollution

7. In the 2019 EIS, it states that TFM's activities may result in environmental health impacts as a result of water quality (pages 239, 241 & 295). Could you please explain this further. Have specific environment-related health impacts linked to your activities been reported to you by affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?
8. As set out above, our recent interviews with affected communities indicate many women reported they continue to suffer from these problems, including urogenital infections, vaginal mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water.

Can you please confirm:

- (a) Whether these cases have been reported to you by local populations or whether you considered them in your health impact assessment? If so, please indicate whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynaecological issues and the links to water pollution.
 - (b) What, if any, mitigation strategies you have put in place to address these concerns.
9. The Lancet journal in April 2020 published an [article](#) on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to TFM's activities? What steps, if any, has TFM taken for its staff and/or communities impacted by TFM's activities following this publication? Have local residents reported concerns regarding birth defects to you?

10. Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by TFM's activities?

Livelihoods risks

11. The EIS recognises that TFM's operations may result in negative livelihood impacts, including loss of land/crops and decline in food and nutrition as well as loss of natural soil fertility (pages 208-212 & 226-227), but these risks are overall rated low or medium. The EIS mentions a Social Management Plan to mitigate these impacts (p. 365). It also mentions that you work in close partnership with communities, appropriate government services and non-governmental organisations to align social projects with DRC legal requirements and communities' expectations (page 370).

Can you please explain:

- (a) Where we can find an updated copy of your Social Management Plan. It not available online, please could you send us a copy?
- (b) The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.
- (c) What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?
- (d) Any other actions you have undertaken to mitigate the identified livelihood risks.
- (e) How the 2021 "*Cahier des charges*" impacts the Social Management Plan.
- (f) The progress achieved to date in implementing the *Cahier des charges*.

Community Grievances on pollution and environmental damage

12. In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:

- (a) What proportion of these concerns relate to (i) health issues, including mental health and gynaecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?
- (b) How many of these complaints were accepted and what subsequent actions were taken as a result?
- (c) For the complaints that were rejected, what were the ground for the rejection?

Environmental damage and/or pollution linked to TFM's operations

13. Could you please detail:

- (a) How many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at TFM since operations restarted in 2018? Please provide details on the causes.
- (b) How many tailings dam wall failures or similar incidents occurred at TFM since 2018? Please indicate the dates and the details about what led to the breaches.

- (c) For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?
- (d) What steps were taken to clean up the damage and what compensation, if any, was provided?
- (e) What reports were submitted to government authorities?

14. Were procedures put in place for the environmental rehabilitation of affected areas? If so, could you please detail what these procedures were and how they were implemented?

Prevention and due diligence

15. Which international standards and best practice do TFM and CMOC apply in relation to their environmental commitments and management? How has CMOC applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?

16. In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to CMOC's human rights and environmental policies as a result?

17. Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?

18. In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the TFM mine every two years. Could you please direct us to where we can find the audit for the past six years?

19. Could you please provide information, including written documentation, on how TFM manages and seeks to minimise concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

@]: Water pollution and environmental risks at TFM

Liang, Julie Wei (CMOC)

Fri 27/10/2023 08:47

To

Hello Anneke,

Thank you for the inquiries. We will provide our response before the deadline of Nov. 24.

Best regards,
Julie

&{*A: Anneke Van Woudenberg

i!tffa.J: 2023 10} =J26B 20:36

llsl{*A: Liang, Julie Wei (CMOC)

Water pollution and environmental risks at TFM

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Dear Julie,

We are reaching out to you to requests CMOC's response to concerns we have recently received regarding water pollution and environmental risks related to TFM's operations in the Democratic Republic of Congo. We hope you will be in a position to respond to our questions, which you will find in the enclosed correspondence.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning TFM as well as efforts to ensure mining for cobalt and other critical miners is responsible, clean and sustainable. We view these matters as bearing the utmost public interest.

We look forward to hearing back from you.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development (RAID)



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<http://raid-uk.org>

FW: Water pollution and environmental risks at TFM

Anneke Van Woudenberg [REDACTED]

Wed 29/11/2023 14:45

1 attachments (384 KB)

20231124 Response to RAID .pdf;

FYI

From: Liang, Julie Wei (CMOC) [REDACTED]
Date: Friday, 24 November 2023 at 16:55
To: Anneke Van Woudenberg [REDACTED]
Cc: ESG - [REDACTED]
Subject: n [REDACTED] and environmental risks at TFM

Hello Anneke,

Please see attached our response to your questions. Hope these clarifications can help you better understand TFM's environmental management system and community work.

Best regards,

m Julie LIANG
 ESG .m
 Vice President in charge of ESG
 Email: [REDACTED]
 Phone: [REDACTED]
 Web: www.cmoc.com



&!J:A: Anneke Van Woudenberg [REDACTED]
&!r.W:l: 2023ff:10J::!}26B 20:36
!SfJ:A: Liang, Julie Wei (CMOC) [REDACTED]
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We look forward to hearing back from you.

14

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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24 November 2023

Rights and Accountability in Development (RAID)

Studio 204 ScreenWorks

22 Highbury Grove

Highbury East, London, NS 2EF

African Resources Watch (AFREWATCH)

11, Avenue Baraka, Commune de Barumbu, Kinshasa,

Republique Democratique du Congo

In response to your letter addressed to CMOC on 26 October 2023, we are providing answers and clarifications to demonstrate the environmental and social standards that we align our operations with, the practices that we employ on a daily basis, and the results that can be drawn from these practices. We highly appreciate the opportunity of communicating with RAID and AFREWATCH as well as NGO sector at large.

In general, we would like to stress the fact that CMOC is committed to complying with environmental laws and regulations applicable to our operations. We manage the extent of our environmental impact through risk-based approaches to material issues and adherence to standards. All of our operations maintain mature Environmental Management Systems (EMS) certified to ISO 14001 standards, including TFM. These management systems are independently audited at each operating site for recertification and include required training of all employees and contractors on environmental objectives and procedures.

Below please find the details of our response:

Water and Air quality

1. *TFM's 201 O EIS states that you undertake periodic monitoring of surface water quality (page 334), groundwater quality (p. 342), potable water quality (p. 345) as well as consideration of community health issues related to water quality (p. 241). The frequency of water quality testing is indicated on pages 337-339, which varies from daily to yearly monitoring depending on conventional water monitoring parameters.*

Could you please answer the following points:

- (a) *Provide a condensed, and where possible, an updated list and the precise location of your water monitoring stations. Please indicate the reasons why these locations have been selected.*

Across its concession, TFM has a water monitoring system composed of 72 ground water wells, 15 ground water springs, 32 surface water points, and 33 drinking water points. The locations have been selected on the basis of TFM’s activities and suggested by our ESIA consultants like GOLDER Associate, SRK and Okapi Environnement et Genie Civil.

- (b) *Please detail the results of your monthly water quality tests since 2020 per station. To what extent do they differ from the results presented in the 2019 EIS report which, as you indicate, happened to exceed the legal limits (TFM EIS, pp. 133 & 135)?*

The monthly monitoring results of water quality since 2020 per station do not indicate any exceedances for sodium and Chloride as shown in TFM Environmental Database. Here are average results of Mofya Area compared to water quality standards (WHO Drinking water and IFC-Fresh water):

Water Quality Standards	Chloride (mg/l)	Sodium, Dissolved (mg/l)
WHO Drinking water	250	200
IFC-Fresh water	230	-
Surface water, Mofya Area	0.9182	4.5511

For detailed results, please refer to section C as below.

- (c) *At what frequency do you monitor groundwater and potable water quality? What are the results?*

TFM has a complete system of water monitoring, in which ground water is monitored quarterly and potable water is monitored annually as required by the ESIA. As a copper and cobalt mine, we consider the heavy metal indicators as most representative to demonstrate our impact to the environment, and below results show the water quality meets the WHO drinking water guideline and (Chronic) Aquatic Exposure Guideline:

Ground water wells average assessment results per areas

Indicator	WHO Drinking Water Guideline and (Chronic) Aquatic Exposure Guideline	Unit	Fungurume area	Pumpi area	Kwatebala area	Tenke area	Mofya Area
pH	6.5-8.5	/	7.69	7.71	7.99	7.8	8.03
Cd	0.003	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Cu	2	mg/L	0.007	<0.007	<0.007	<0.007	<0.007
Fe	1	mg/L	<0.02	<0.02	0.01	<0.02	<0.02
Pb	0.01	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Mn	0.07	mg/L	0.0091	0.01	0.01	<0.002	<0.002
Ni	0.02	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002
U	0.03	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Zn	0.441	mg/L	0.013	0.0005	<0.003	<0.003	0.0055

Spring water average assessment results per areas

Indicator	WHO Drinking Water guideline and (Chronic) Aquatic Exposure Guideline	Unit	Pumpi area	Kwatebala area	Tenke area
pH	6.5-8.5	/	7.7	7.87	8
Cd	0.003	mg/L	<0.0005	<0.0005	<0.0005
Cu	2	mg/L	<0.007	<0.007	<0.007
Fe	1	mg/L	<0.02	<0.02	<0.02
Pb	0.01	mg/L	<0.005	<0.005	<0.005
Mn	0.07	mg/L	0.01	0.012	<0.002
Ni	0.02	mg/L	<0.002	<0.002	<0.002
U	0.03	mg/L	<0.005	<0.005	<0.005
Zn	0.441	mg/L	0.005	0.028	<0.003

Drinking water average assessment results per areas

Indicator	WHO Drinking Water Guideline and (Chronic) Aquatic Exposure Guideline	Unit	Fungurume area	Kwatebala area	Tenke area	Mofya Area
pH	6.5-8.5	/	7.46	7.3	8.05	7.8
Cd	0.003	mg/L	<0.0005	<0.0005	<0.0005	<0.0005
Cu	2	mg/L	<0.007	<0.007	0.022	<0.007

Fe	1	mg/L	<0.02	<0.02	<0.02	<0.02
Pb	0.01	mg/L	<0.005	<0.005	<0.005	<0.005
Mn	0.07	mg/L	<0.002	<0.002	<0.002	<0.002
Ni	0.02	mg/L	<0.002	<0.002	<0.002	<0.002
U	0.03	mg/L	<0.005	<0.005	<0.005	<0.005
Zn	0.441	mg/L	0.005	0.004	0.0075	0.0008

(d) *At what frequency do you monitor leachate from the landfill site? What are the results?*

At TFM, leachate from the landfill is not discharged into nature. Instead, it is connected to water recirculating pump then is pumped into process plant (closed circuit). Although the ESIA required monitoring once a year, we have been doing this on a quarterly basis. The average assessment results for leachate Kwatebala Landfill show that leachate water meets the World Bank EHS Discharge Guidelines for Mining and DRC Effluent standards :

Leachate average assessment results

Indicator	World Bank EHS Discharge Guidelines for Mining & DRC Effluent standards	Unit	Leachate
pH	6-9	/	7.84
Cd	0.1	mg/L	<0.0005
Cu	1.5	mg/L	0.013
Fe	2	mg/L	1.0123
Pb	0.1	mg/L	<0.005
Ni	1	mg/L	0.0107
U	0.03	mg/L	<0.005
Zn	1	mg/L	0.01

(e) *In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by the TFM mine’s activities? If not, which other waterbodies you have not identified in your EISs, and what are the results of their monitoring since 2018.*

The monitored waterbodies were defined by ESIA monitoring plan and all representative water bodies have been included. TFM is monitoring

all of them as required. The result is mentioned as below.

Waterbody's average assessment results per areas

Indicator	WHO Drinking Water Guideline & (Chronic) Aquatic Exposure Guideline	Unit	Pumpi Area	Fungurume Area	Tenke Area	Kwatebala Area	Mofya Area
pH	6.5-8.5	/	8.1	8.1	7.6	8.42	8.2
Cd	0.003	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cu	2	mg/L	<0.007	0.0553	0.029	0.0364	0.011
Fe	1	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Pb	0.01	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Mn	0.07	mg/L	<0.05	0.0605	0.014	0.0524	0.0274
Ni	0.02	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002
U	0.03	mg/L	<0.005	<0.005	0.005	<0.005	<0.005
Zn	0.441	mg/L	<0.003	<0.003	0.003	0.0058	0.007

(f) *Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?*

No, TFM monitoring plan covers all points where likely to be impacted according to ESIA requirements within TFM concession.

(g) *Can you also please detail who undertakes these tests (including their qualifications and whether they are TFM/CMOC staff or external personnel)?*

TFM monitoring team is composed of:

- Supervisor: Environmental Engineer (a Civil Engineer)/ TFM
- 2 Environmental Scientists (Graduate Geologists)/ Contractor
- 2 Environmental Assistants (Technicians) / TFM and contractor
- 1 Database (Graduate Geologist) managing an EDMS (Environmental Data Management System) which can generate automatically exceedances for different parameters results from the Laboratory, in case of deviations

- TFM is using a British International accredited laboratory for water sample analysis.

(h) *Do you communicate the results of the water testing to local communities? If so, how and when?*

We use multiple communication channels to talk about our operations, collect concerns, clarify misunderstandings or confirm facts where needed. These channels include community forums, liaison personnels, visits and meetings, and news releases.

2. *Your 2019 EIS indicates that you conduct dust fallout monitoring weekly and monthly (at page 332) with consideration of community exposure to asbestos dust (pp. 228 & 300), and a set of dust control measures (pp. 330-332). The EIS states the baseline showed even postimplementation of mitigation measures, dust fallout concentrations could still exceed DRC legal limits in a couple of villages (at pages 219 & 226). It states TFM has a Continuous Emission Monitoring System for SO₂, NO₂ and PM₁₀.*

Could you please explain the following:

- (a) *The monitoring locations of dust fallout for the TFM project. If you deviated from the previous monitoring locations, could you please provide an updated map and explain why locations were changed?*

There is no change and all locations have been selected on the basis of TFM's activities by ESIA consultants. TFM follows what was recommended in the ESIA.

- (b) *What have been the result of the monthly dust monitoring since 2019? Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.*

All of results were under standards limits and no deviation was noticed.

- (c) *Has the dust monitoring continued to exceed the standards for residential areas or posing livelihood disturbances across the locations set out on page 226? If yes, at which locations? What steps has TFM taken to reduce the levels?*

The dust monitoring results do not show excessive values compared to the standards. In order to reduce the impact of our operations to the local communities, TFM uses a series of dust control measures, such as application of Dustex on main roads, regular spray of water on secondary roads as well as speed limit on the site. These measures contribute significantly to mitigating the dispersion of dust in and around the concession. The progressive reclamation also contributes to reduce

the dust.

- (d) *Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.*

This is not required by the ESIA or any other national and international regulations to which TFM has already subscribed. TFM performs particle size or physical analysis (granulometric measures), not the chemical ones.

- (e) *Why, in the absence of dusts fallout standards in DRC, you decided to use the US NAAQS, as opposed to any other standards?*

TFM SA, as an international company, uses DRC standards and rigorous international standards in order to improve the quality of its services.

- (f) *How do you measure your Air Quality Management plan referred to on page 227 of TFM EIS?*

TFM proceed as following:

- SO₂-NO₂ air monitoring by method with Radiello cartridges absorbents: respectively, these measurements are carried out at processing plant fencing line and surrounding communities. Active measurements are taken on real time in the processing plant area 24/7.
- Particulates materials under 10µ: PM₁₀ monitoring with filters and automatic real-time online data reading for villages that are likely impacted.
- PM_{2.5} measurements are also improving.

- (g) *Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years.*

The annual report is submitted to the Mines Ministry following a framework previously defined by the authority. These are the conclusions about air quality contained in the annual reports in the past 4 years.

Year	Conclusions in the annual environmental report	
2019	TSP and PM ₁₀	- The monitoring programmes in place for PM ₁₀ emissions enable particles smaller than 10 microns to be monitored on a regular basis at target sites based on mining activities and the population. - PM ₁₀ is monitored in the nearest locations that are most likely impacted,

		and no exceedances of ambient air standards have been recorded.
	Dust circulation and the onset of respiratory diseases	<ul style="list-style-type: none"> - Dust control measures, such as road watering and the application of dust suppressants, are regularly used to limit the amount of dust emitted. - Personal protective equipment (PPE), including chemical and dust respirators, is used in areas of potential dust exposure. - No respiratory illnesses caused by emitted dust have been recorded.
	Degradation of air quality	- TFM's treatment of copper and cobalt ore is a hydro-metallurgical process which, consequently, does not involve the emission of combustion products or toxic metals into the air.
2020	TSP and PM ₁₀	<ul style="list-style-type: none"> - The PM₁₀ emission monitoring programmes in place enable regular monitoring of particles smaller than 10 microns at target sites according to mining activities and the population. - PM₁₀ is monitored in the nearest locations that are most likely impacted. - No exceedances of ambient air standards have been recorded.
	Dust circulation and the onset of respiratory diseases	<ul style="list-style-type: none"> - Dust control measures, such as road watering and the application of dust suppressants, are regularly used to limit the amount of dust emitted. - Personal protective equipment (PPE), including chemical and dust respirators, is used in areas of potential dust exposure. - No respiratory illnesses due to emitted dust have been recorded.
	Degradation of air quality	- The treatment of copper and cobalt ore by TFM is a hydro-metallurgical process which, consequently, does not involve the emission of combustion products or toxic metals into the air.
2021	PM ₁₀ emissions	- PM ₁₀ is monitored at the nearest locations that are most likely impacted. No exceedance of ambient air standards has been recorded.
	Dust circulation and the onset of respiratory diseases	<ul style="list-style-type: none"> - Dust controls such as watering roads and applying dust suppressants are used on a regular basis and monitored to limit exposures to fugitive dust. - Personal Protective Equipment (PPE), including chemical and dust respirators, are used in areas where there is potential exposure to dust. - No respiratory illnesses due to the emitted dust were recorded.
	(PICs) and toxic metals	- TFM processing of copper and cobalt ore is a hydrometallurgical process and therefore does not have combustion sources or toxic metal emissions.
2022	TSP and PM ₁₀	<ul style="list-style-type: none"> - The PM₁₀ emission monitoring program in place enables regular monitoring of these particles at target sites. - The target sites have been identified on the basis of TFM's industrial activities and the location of populations, according to a modelling study previously carried out during the environmental impact studies. - TFM is in the process of installing new automatic PM₁₀ monitors, which are online via intranet and provide results in real time. - No exceedance of ambient air standards has been recorded.

<p>Dust circulation and the onset of respiratory diseases</p>	<ul style="list-style-type: none"> - Dust controls such as watering roads and applying dust suppressants are used on a regular basis and monitored to limit exposures to fugitive dust. - Personal Protective Equipment (PPE), including chemical and dust respirators, are used in areas where there is potential exposure to dust. - No respiratory illnesses due to the emitted dust were recorded.
<p>(PICs) and toxic metals</p>	<ul style="list-style-type: none"> - The treatment of copper and cobalt ore by TFM is a hydrometallurgical process which, consequently, does not involve the emission of combustion products or toxic metals into the air. - Caustic scrubbers are installed to clean residual gases in our operations such as the leaching section and laboratories.

3. We note that the EIS was developed in consultation with affected communities, and you strived to meet their concerns in your assessments. You recognize in the EIS that “internal and external communications are crucial for an effective environmental management system” (page 321). CMOC’s Environmental Policy refers to engagement “with stakeholders at all levels” on the group’s environmental performance. Do you report the results of the dust levels and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures.

Regular meetings are organized by Community Development department on a quarterly basis with the stakeholders to discuss about environmental impacts on communities, including water management, air, etc.

4. We recognize that because the TFM mine operates near to other mining projects, some of your environmental impacts may be cumulative in nature (which you also highlight in the EIS at pages 132 & 241). In these circumstances, how do you assess TFM contributions to an environmental impact? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?

TFM strictly implements the environmental monitoring system defined in the ESIA, and conducts regular monitoring of air, surface water, groundwater, and drinking water, and monitors the cumulative performance at all time. Based on the current data no cumulative pollution problems have been identified.

5. In Title V of TFM’s EIS report, a range of mitigation measures are set out for the identified environmental impacts. On page 317, you state TFM is implementing an environmental management system that is compliant with ISO 14001 standards with two further certifications

– ISO 9001 and ISO 18001. Has there been an independent assessment of how

effective TFM's mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point us to where we can find this assessment. If there is no independent assessment, please describe how is TFM measuring the effectiveness of its mitigation strategies?

TFM's management system is independently audited annually by international accredited organizations: ERM CVS for ISO 14001 and ISO 45001; SGS for ISO 9001.

6. In your EIS report, you explain that communities' access to potable water has considerably increased following TFM's social programmes (p. 171). These included drilling drinking water wells (p. 370).

Can you please confirm:

- (a) The total number of water installations TFM has built since 2018.

There are 20 water wells drilled, and 15 water distribution points built since 2018.

- (b) The locations where these wells have been installed and the number of people or households covered by each water point.

1) Water wells drilled from 2018 to 2022

No	Village name	# of water wells drilled	Population Estimation*
1	Kabwe Dikuku	1	868
2	Kamipungu	2	232
3	Kando	1	775
4	Kimbotela	1	79
5	Kyango	1	347
6	Lukotola	2	2813
7	Lumbwe	1	503
8	Lupama	1	448
9	Mpala	2	7218
10	Mumena	1	105
11	Mwanga Musonge	1	467
12	Ndela Nguza	2	197
13	Nguba	1	1724
14	Salabwe	1	303
15	Tshilongo	2	4880

(*) Estimation from the Fungurume Health Zone.

2) Water distribution points built from 2018 to 2022

No	Village name	# of water distribution points built	Population Estimation*
1	Tenke	5	57016
2	New Mitumba	7	
3	New Kyamba	3	

(*) Estimation from the Fungurume Health Zone.

(c) *What further plans TFM has for additional water points.*

As part of the Cahier des Charges, TFM will:

- complete the drilling of 71 water wells with hand pumps in 70 villages.
- drill 1 industrial water well in Fungurume and install a reservoir of 200 m3 capacity.
- expand water distribution points in Fungurume. In total. 50 water distribution points will be built in Fungurume. 30 will be done once the industrial well will be completed. The remaining (20) will be done between 2024 and 2025.
- expand water distribution points in Tenke. In total five is planned to be done in 2024.
- build 2 water springs in Kabwe Dikuku and Kifungo villages.

(d) *If all water points installed by TFM were functional and operational as of April 2023? If not, which ones were in disrepair, contaminated or not functioning and why?*

The majority of the 139 water wells constructed between 2008 and 2022 by TFM are functional. Among these wells, two have solar panel system problems (in Kamipungu and Kilusonsa villages), the other five have spare parts problems that will be fixed by COGEPCO (community-based water management committee). Nineteen were out of use because of abandonment or destruction. However in villages like Kabwe Dikuku, Mpala, Lumbwe, Tshilongo, we already drilled new wells. In Tenke, there is a water expansion project. In other villages, the drilling is ongoing as part of the 'Cahier des Charges'.

(e) *What policies and procedures are in place at TFM to fix or replace wells that stop functioning or become contaminated?*

When the water supply system in urban area is handed over to the local communities, management committees are set up with repairmen equipped to manage the maintenance. In our practice, water management committee members are trained and provided with spare parts to support the maintenance work. In rural areas where we have hand pumps, COGEPCO (community-based water management

committee) is in charge of the maintenance and repair where needed. Money collected from water users facilitates the payment of salaries of people directly managing each water point and for the maintenance. However major breakdowns are repaired by TFM for the Tenke and Fungurume water distribution network.

Health risks associated with water pollution

7. *In the 2019 EIS, it states that TFM's activities may result in environmental health impacts as a result of water quality (pages 239, 241 & 295). Could you please explain this further. Have specific environment-related health impacts linked to your activities been reported to you by affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?*

We would like to stress the fact that the ESIA is a RISK assessment and TFM has adopted control measures to mitigate these risks so that our operations will not cause negative impacts to community members. TFM strictly follows the requirements of the EISA for air, water and noise control measures and monitoring system. Apart from installing water wells, a mature environmental management system, which is in line with ISO 14001 and 45001, ensures that we can minimize the health impacts of our operations.

8. *As set out above, our recent interviews with affected communities indicate many women reported they continue to suffer from these problems, including urogenital infections, vaginal mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water.*

Can you please confirm:

- (a) *Whether these cases have been reported to you by local populations or whether you considered them in your health impact assessment? If so, please indicate whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynaecological issues and the links to water pollution.*

According to the doctors in the Fungurume Health Zone, there's no evidence of increased prevalence of women's health issues relates to industrial operations. Urogenital infections are caused by microbes. Microbes can be bacteria, viruses, parasites or fungi. The main cause

of genital infections and the health problems for women include unprotected intercourse, antibiotic treatment, hormonal deficiency (for instance menopause) and mechanical irritation.

However, we recognize that migrant population may increase the risk of female health issues. TFM has been supporting the “SafeTstop” HIV/AIDS awareness and testing initiative for truck drivers. In 2022, we distributed over 27,000 condoms to truck drivers. In addition, we assisted the local NGO Lamuka with an HIV awareness campaign for 2,961 residents of neighboring communities (including 1,306 high-risk individuals such as sex workers, truck drivers, taxi drivers, and police officers). Approximately 45,000 condoms were distributed as part of the campaign.

There is another possible reason which is totally outside the impact range of TFM: studies have shown that female artisanal miners are exposed to health risks when they wash ores without PPEs in contaminated rivers. As the artisanal mining is a common activity in the region, it may be linked to reported gynaecological issues. Although TFM does not use any artisanal product in its supply chain, CMOC and IXM have been supporting ASM formalization efforts with the Fair Cobalt Alliance and the Better Mining since 2021 to improve the working and living conditions of artisanal miners.

- (b) *What, if any, mitigation strategies you have put in place to address these concerns.*

Although these diseases are not relevant to TFM, we attach a great importance to community health and provide support where needed. For example, TFM supports training in reproductive health for the Fungurume Health Zone staff so that they can be equipped to support the women as needed. TFM launched for the first time the antiretroviral treatment (for HIV) and a comprehensive sexual transmitted infections management. We continue to monitor this program up to now by purchasing drugs, tests and condoms.

9. *The Lancet journal in April 2020 published an [article](#) on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to TFM’s activities? What steps, if any, has TFM taken for its staff and/or communities impacted by TFM’s activities following this publication? Have local residents reported concerns regarding birth defects to you?*

This research, in the actual context, is not relevant to TFM’s activities. In fact, TFM’s environmental management system is strong and certified to ISO45001 and ISO14001 standards. All the staff being in contact with

copper and cobalt production are equipped with appropriate PPE, this is part of the zero-tolerance rules. Water discharge, air and noise are also monitored closely to prevent negative impact to community health.

Regarding birth defects, the Chief Medical Officer of the Government clinic (Dipeta clinic) reported that her clinic receives approximately 5 cases per year. Among them, she mentioned namely omphalocele, clubfoot, annal imperforation. However, no deep investigation is conducted for every single case.

10. *Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by TFM's activities?*

TFM recognizes that mental health is important for overall health. However, there is no single cause for mental illness, such as:

- Adverse Childhood Experiences, such as trauma or a history of abuse (for example, child abuse, sexual assault, witnessing violence, etc.)
- Experiences related to other ongoing (chronic) medical conditions, such as cancer or diabetes
- Biological factors or chemical imbalances in the brain
- Use of alcohol or drugs
- Having feelings of loneliness or isolation

In TFM concession, for this specific question, we did approach 2 Chief Medical Officers (CMOs): the TFM CMO and the CMO working for the referral government clinic called Dipeta clinic. The two, separately, reported that for the last 10 years, they did not see any increase in terms of mental health cases among the local communities. They recall having received sporadic cases and do not see this as a major public health issue. The TFM's CMO is a specialist in that domain and train regularly medical doctors from the Dipeta clinic.

Livelihoods risks

11. *The EIS recognizes that TFM's operations may result in negative livelihood impacts, including loss of land/crops and decline in food and nutrition as well as loss of natural soil fertility (pages 208-212 & 226-227), but these risks are overall rated low or medium. The EIS mentions a Social*

Management Plan to mitigate these impacts (p. 365). It also mentions that you work in close partnership with communities, appropriate government services and non-governmental organizations to align social projects with DRC legal requirements and communities’ expectations (page 370).

Can you please explain:

- (a) *Where we can find an updated copy of your Social Management Plan. It not available online, please could you send us a copy?*

The TFM’s mining specifications or ‘Cahier des charges’ that is a five-year commitment plan can be considered as major component of our Social Management Plan. Attached please find a copy.

In addition to the above, we have other separate budget lines: 1) mining mitigation plan, 2) Community liaison and engagement plan and 3) other community projects not included in the Mining Specifications but as required for a responsible mining company.

- (b) *The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.*

Community Development Spending		
Year	Amount (USD million)	
2018	\$	41.70
2019	\$	21.82
2020	\$	21.62
2021	\$	17.88
2022	\$	36.35
	\$	139.37

- (c) *What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?*

The investments have been targeting the priority needs of communities, including education, health, economic development and infrastructures. The population has increased from fewer than 50,000 to about 400,000 within TFM concession. TFM’s investment in infrastructure, including water and electricity supply, schools, and clinics as well as health facilities have been benefiting these many populations. Our social investments are audited two times per year by the “local monitoring committee”, as part of the mining specifications. For more information on TFM social impacts, please read TFM ESG Report and CMOC ESG Report on our website www.cmoc.com.

- (d) *Any other actions you have undertaken to mitigate the identified livelihood risks.*

Please see TFM ESG Report on www.cmoc.com

- (e) *How the 2021 “Cahier des charges” impacts the Social Management Plan.*

Please see above answers.

- (f) *The progress achieved to date in implementing the Cahier des charges.*

The progress to date stands at 44.7% of the plan.

Community Grievances on pollution and environmental damage

12. *In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:*

- (a) *What proportion of these concerns relate to (i) health issues, including mental health and gynecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?*

In the past five years, we recorded 785 grievance reports from communities, among which 3 were about road safety, 28 were about access to water, 754 were related to property damages. 693 have been addressed and closed so far.

- (b) *How many of these complaints were accepted and what subsequent actions were taken as a result?*

During past five years, 785 complaints were recorded. In TFM's procedure, when a grievance is qualified as recordable, a specific form is completed by the Community Liaison Officer (CLO) and the grievance is registered in the system. Once a grievance is registered, the Grievance Resolution Officer is assigned and an investigation is carried out to determine if it is founded or not. If yes, the topo team will continue to collect associated evidences and evaluate impact, including damages. Then the compensation team will calculate the cost and will establish the agreement of compensation with this complainant. Once the bank payment is done, the grievance will be dully closed.

- (c) *For the complaints that were rejected, what were the ground for the rejection?*

For each complaint that is rejected, a specific official letter to the complainant mentions the reason. If a complainant is not satisfied with the conclusion of his/her grievance, he/she is free to contact the Independent Mediation Committee (IMC) chaired by members elected by the community. If he/she not satisfied by the IMC's decision, he/she is free to go to the Court.

Environmental damage and/or pollution linked to TFM's operations

13. *Could you please detail:*

- (a) *How many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at TFM since operations restarted in 2018? Please provide details on the causes.*

There was no major spills recorded.

- (b) *How many tailings dam wall failures or similar incidents occurred at TFM since 2018? Please indicate the dates and the details about what led to the breaches.*

There was no tailings dam failures or similar incidents occurred.

- (c) *For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?*

N/A

- (d) *What steps were taken to clean up the damage and what compensation, if any, was provided?*

N/A

- (e) *What reports were submitted to government authorities?*

N/A

11. *Were procedures put in place for the environmental rehabilitation of affected areas? If so, could you please detail what these procedures were and how they were implemented?*

TFM has 5-year reclamation plan (progressive revegetation) as a good environmental practice. A procedure has been established and is closely monitored.

TFM has implemented a quantitative evaluation procedure which consists of measuring the net gain and loss of biodiversity in artificial and natural ecosystems in the TFM concession. This procedure makes it possible to decide whether or not to introduce species into their conservation space. The quality measurements make it possible to evaluate the level of disturbance and its impact on the numbers of plant species preserved in a well-defined space.

Prevention and due diligence

12. *Which international standards and best practice do TFM and CMOC apply in relation to their environmental commitments and management? How has CMOC applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?*

TFM applies ISO 14001 for environment, ISO 45001 for safety and ISO 9001 for quality.

15. *In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to CMOC's human rights and environmental policies as a result?*

Environment and human rights are two important areas, which are interlinked, in our ESG framework. In 2022-2023, CMOC engaged a third party to conduct a human right due diligence at TFM, in which environmental risks and impact on human rights were assessed through interviews with TFM management, environmental team and community representatives. TFM developed a Human Rights Statement in line with the CMOC Human Rights policy, UNGPs and other related international standards. TFM also designated the Chief Partnership Officer to supervise the human rights management system and human rights working group of TFM. HSE and Community teams are part of the working group and the salient human rights issues/risks/impacts and mitigation measures on environment are also considered and reviewed at a regular basis.

16. *Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?*

TFM submits the annual report to the Mines Ministry according to law requirements.

17. *In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the TFM mine every two years. Could you please direct us to where we can find the audit for the past six years?*

TFM submits updated ESIA or environmental audit according to law requirements. Since 2019, TFM undergoes major modifications in its projects which involve either an ESIA revision or a new one every 1 or 2 years. In addition to that, TFM continues to have ISO audits, annual report and other third-party audits to ensure our management system in line with international standards.

18. Could you please provide information, including written documentation, on how TFM manages and seeks to minimise concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

TFM is working so far on its own environmental management system in accordance with international standards to minimize its impacts to the environment and local communities. We remain open to discussion and collaboration with the government and industrial peers in all the ESG related areas.

Re: Water pollution and environmental risks at TFM

Anneke Van Woudenberg [REDACTED]

Wed 07/02/2024 18:58

To [REDACTED]

1 attachments (214 KB)

Follow-up Questions to TFM 07 Feb 2024.pdf;

Dear Julie,

Thank you for your letter to us dated 24 November 2023, in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the TFM mine in DRC. We have gone through your response carefully and appreciate the efforts you have made in setting out CMOC's general perspectives and inputs regarding these matters.

As we approach the date for the publication of our report, we would like to seek further clarification on a number of your answers. Please see attached our list of follow-up questions. We would be most grateful for a response by 19 February.

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Email: [REDACTED]

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From: Liang, Julie Wei (CMOC) [REDACTED]
Date: Friday, 24 November 2023 at 16:55
To: Anneke Van Woudenberg [REDACTED]
Cc: ESG - [REDACTED]
Subject: [REDACTED]: Water pollution and environmental risks at TFM

Hello Anneke,

Please see attached our response to your questions. Hope these clarifications can help you better understand TFM's environmental management system and community work.

Best regards,



7 February 2024

Julie Liang
 Vice President in charge of ESG
 CMOC
 North Yihe, Huamei Shan Road,
 Luanchuan, Luoyang,
 Henan, China
 471500

Via email to [REDACTED]

Dear Ms Liang,

Re: Water pollution and environmental risks at Tenke Fungurume Mining (TFM) Mine in DRC – Follow-up questions

Thank you for your letter to us dated 24 November 2023, in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the Tenke Fungurume Mining (TFM) mine in the Democratic Republic of Congo (DRC). We have gone through your response carefully and appreciate the efforts you have made in setting out CMOC’s general perspectives and inputs regarding these matters.

As we approach the date for the publication of our report, we would like to seek further clarification on a number of your answers. Please see below a list of follow-up questions, to which we hope you will be in a position to respond:

Environmental incidents

1. In response to our Question 13(a) on accidental spillages at TFM, you state that “there were no major spills recorded”. However, the CMOC 2020 ESG Report revealed that “68% of the complaints received by TFM [in 2020] were in the environment category, primarily regarding the discharge of water from the mine pits” (at page 8). TFM’s 2022 ESG Report further mentions that the company received 124 environment-related grievances (p. 9). Local residents in Chungu in particular reported to us that their crops had been destroyed on 5 December 2022 as a result of acid waste being dumped by TFM along the river. They said that while the company had sent its staff to assess the damage and to take pictures, the victims have not yet been compensated.
 - a. Could you please explain the nature of these environmental grievances, including incidents related to the discharge of water from the mine pits? Can you also detail when and how did they happen?
 - b. Given you have indicated to us that TFM has recorded no major spills since 2018, can you please explain what techniques and criteria you use to determine the severity of an environmental incident?

- c. In relation to the 5 December 2022 incident, can you please detail the actions you have implemented following the field mission undertaken by TFM agents as mentioned above? What are your plans for compensating the victims of this incident?
2. Your response to Question 12(b) describes the compensation scheme in place at TFM as a response to reported grievances. In relation to environmental grievances, could you please explain what action, apart from compensation, you take to respond to the complaints of environmental damage? For instance, do you analyse water, air, and/or soil samples, or do you engage with potentially affected communities, or do you conduct any other relevant activity? If so, could you please share with us the results of your investigations?
3. As part of our research, we have received numerous reports regarding pollution-induced relocation. TFM's 2022 ESG Report mentions that the company received 296 grievances in the resettlement category (p. 9), and CMOC's 2022 ESG Report indicates this represented 46% of all the complaints received by TFM in 2022 (p. 10). At the same time, we heard from communities that TFM reduced the amount of resettlement compensation it provides to residents if relocation is due to pollution.
 - a. Can you please confirm how many cases of pollution-related relocation have occurred at TFM since 2018?
 - b. Can you please provide further details on these cases of pollution? For example, when and how did they happen? Did you measure the levels of chemicals and contaminants released in water, soil or air for each incident? If yes, what were the results?
 - c. Did you conduct investigations, including independent assessments or cooperation with government agencies, into the causes of these pollutions? If so, what were the results? Can you please provide us with a copy of your assessments?
 - d. What are your resettlement compensation policies, and to what extent do they differ when relocation is justified to make space for the company's activities (ie voluntary relocation) versus when it is the result of pollution such that communities need to relocate elsewhere (ie, involuntary compensation)? Can you please confirm whether compensation for involuntary relocation is lesser than compensation for voluntary compensation?
4. Since 2018, has TFM received any summons or non-compliance penalties from DRC government authorities for breaches of environmental requirements as set out under the DRC mining code and its regulations? If yes, please provide the number, reasons and the penalty.

Livelihood risks

5. Your response to Question 12(a) confirms that TFM has recorded 754 grievances related to property damages. In 2022, there were 173 such cases (TFM 2022 ESG Report, p. 9). Can you please provide further details as to the causes of these property destructions? What proportion relate to accidental spillages and/or environmental concerns?

6. Your responses to Question 6 indicate that 19 wells were out of use and, among other villages, that you have drilled 1 water well for the Salabwe village to date for an estimated population of 303.
- a. Can you please explain TFM's relationship with COGEPCO (community-based water management committee)? For example, does COGEPCO report back to TFM on water well management?
 - b. We understand from local residents' accounts that TFM drilled 2 water wells for the Salabwe village. Residents said that 1 well has not been functioning for some time despite repeated requests to TFM representatives to fix it, and that the water from the other well is not enough to sustain the whole village. Can you please confirm your water plans for the Salabwe village, including any plans to fix or replace the water well that has stopped functioning?
 - c. While your letter does not mention Chungu as a location where TFM has drilled water wells for local residents, we understand TFM did drill a well for this village. We understand that local residents have complained to TFM on several occasions that the water supplied by this well is not of good quality. Can you please explain if any investigations have been conducted into these complaints? If so, what were the results, and what corrective actions were adopted?

Health issues

7. Your responses to our questions relating to health risks associated with water pollution indicate that such health issues, if they exist, "are not relevant to TFM" but are caused by other factors. and not to TFM's activities. For example, as you write, gynaecological problems may result, among other factors, from the fact that "female artisanal miners are exposed to health risks when they wash ores without PPEs in contaminated rivers" (Response to Q/ 8(a)). On birth defects, you confirm that the Dipeta clinic receives approximately 5 cases per year, though "no deep investigation is conducted for every single case" (Response to Q/ 9).

However, you may be aware [a number of studies](#) indicate elevated levels of zinc, selenium, lead, copper and cobalt levels in the bodies of copper-mining town residents, and this may be a possible cause of human congenital malformations (see [here](#) and [here](#)). TFM's 2019 EIS confirms that "A number of additional substances are frequently present at levels above aquatic guidelines in samples from springs and streams, including some described in relation to drinking water guidelines (e.g. selenium) and others that have not been included in drinking water guidelines (e.g. aluminium and iron)" (p. 135).

- a. Apart from efforts to formalise artisanal mining, has TFM taken any steps to analyse the quality of water in TFM concessions for possible impacts on female health and birth defect issues as reported by scientists and academics? If yes, what were the results? If not, would you consider programming this into your future investment in health programmes for local residents?
- b. Local populations have told us that in 2021, an incident of air pollution in Salabwe resulted in children having itching and scabies on their skin. We were told that TFM staff recorded the list of sick children but did not provide any medical treatment despite promises to provide them with appropriate medicine. Did you conduct investigations into the causes of this incident? If yes, what were the results? What

corrective measures did you take in light of the complaints about the pollution and apparent illnesses?

Risk prevention

8. We take note of the recognition in TFM's 2022 ESG Report that "CMOC is keenly aware of the history of [tailings storage facility] failures and the catastrophic consequences for the public, the environment, and mining businesses involved" (p. 11). However, community members told us that TFM has an ongoing sulphuric acid project and has installed pipes that go to the collection tanks. These acid pipes, they say, are exposed and pose a danger to the public, including to children who could inadvertently damage them and sustain burns, or worse. Community members told us that they have made TFM aware of their concerns, but have seen no action to address the problem.
- a. Can you please confirm the location of these newly built pipes and their proximity to public roads and residences?
 - b. What action, if any, are you taking to have these pipes out of reach of the general population?
9. We have also received reports from communities located in proximity to TFM's settling tanks raising concerns that these tanks are compromised and could rupture at any time. Community members said alarms were installed and that TFM had promised to provide megaphones in case of an accident. Can you please confirm the state of these tanks? What are your plans for conducting the remediation work if they are compromised? Beyond these reactive measures, can you also please confirm what strategies TFM is implementing to prevent their rupture, and to avoid harm to local populations if a rupture does occur.
10. TFM's 2022 ESG Report mentions that the company was subject to an independent third-party review of its tailings storage facility. Could you please provide us with the results?

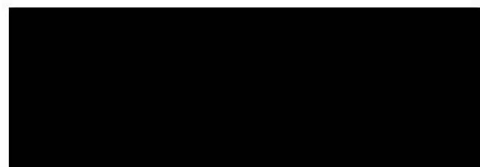
Documents mentioned in your response

11. In your 24 November letter and the reports referred to therein, you mentioned a number of documents which would be helpful for us to consult. These include:
- a. Annual reports to the DRC Government (Response to Q/ 2(g) & 16)
 - b. A third-party human rights due diligence at TFM commissioned by CMOC (Response to Q/ 15)
 - c. Annual independent audits of TFM's management system (Response to Q/ 5)

Could you please share copies of these documents with us? If you cannot share any or some of these, could you please outline the reasons for not doing so?

In light of our upcoming publication date, we would be grateful to receive your additional response by 19 February. In the meantime, if you have any questions, please do not hesitate to contact us.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc: Placide Kalala Basidiwa, CEO, Gecamines, DRC

Water pollution and environmental risks at TFM

Liang, Julie Wei (CMOC)

Mon 19/02/2024 10:53

To: Anneke Van Woudenberg

1 attachments (99 KB)

Follow-up Questions to TFM 07 Feb 2024_CMOC_clean.docx;

Hello Anneke,

Thank you for your enquiry, please find om response to yom letter dated Feb. 7, 2024.

Best regards,
Julie

J:A: Anneke Van Woudenberg

3::: Re: Water pollution and environmental risks at TFM

请注意: 此电子邮件来自组织外部。不要单击链接或打开附件，除非您识别发件人并知道内容是安全的。

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Dear Julie,

Thank you for your letter to us dated 24 November 2023, in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the TFM mine in DRC. We have gone through your response carefully and appreciate the efforts you have made in setting out CMOC's general perspectives and inputs regarding these matters.

As we approach the date for the publication of our report, we would like to seek further clarification on a number of your answers. Please see attached our list of follow-up questions. We would be most grateful for a response by 19 February.

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



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7 February 2024

Via email to [REDACTED]

Re: Water pollution and environmental risks at Tenke Fungurume Mining (TFM) Mine in DRC – Follow-up questions

Thank you for your letter to us dated 24 November 2023, in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the Tenke Fungurume Mining (TFM) mine in the Democratic Republic of Congo (DRC). We have gone through your response carefully and appreciate the efforts you have made in setting out CMOC's general perspectives and inputs regarding these matters.

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 - a. Could you please explain the nature of these environmental grievances, including incidents related to the discharge of water from the mine pits? Can you also detail when and how did they happen?

In the past years, the majority of the environmental complaints were mainly related to sediment caused by heavy rainfall. During raining seasons, muddy rainwater flooding above nearby roads can damage or destroy crops and generate complaints.

The discharge of water from the mine pits is due to pits dewatering purpose, and is monitored under effluent standards.

At TFM, all complaints are treated and recorded in accordance with its grievance procedure. After investigation, all the founded cases are handled in accordance with standard procedures and then closed, with compensation made as necessary. The villagers can also make an appeal to the Community Independent Mediation Committee or the court if they are not satisfied with the result. TFM keeps the records of all the cases and the compensation made.

- b. Given you have indicated to us that TFM has recorded no major spills since 2018, can you please explain what techniques and criteria you use to determine the severity of an environmental incident?

The site defines the environmental incident with the incident evaluation matrix which takes globally account of frequency of event to occur and the gravity of the impact with below details:

- Impact extent
- The reversibility of the impact caused by the incident
- Means and costs for repair
- Reputation of the company
- Potential related fines

- c. In relation to the 5 December 2022 incident, can you please detail the actions you have implemented following the field mission undertaken by TFM agents as mentioned above? What are your plans for compensating the victims of this incident?

In 2022 TFM had received some complaints regarding a whitish substance that appeared on vegetable fields. As a standard procedure, all complaints were investigated by environmental experts and assessed by RAP topographers, and the sample of the whitish substance were taken to have the test.

Laboratory tests indicated the white substance contains mainly calcium and magnesium, which are the usual constituents of rocks, and has no acidity.

As a result, the person affected were compensated according to TFM policies between October and November of 2023. Meanwhile, the below actions were taken:

- Replacement of their land within the concession,
- Land preparation bonus (for land clearing),
- Land preparation bonus (for ploughing the land),
- Agricultural input support for three years,
- Technical support from our agronomists (advice, yield assessment).

2. Your response to Question 12(b) describes the compensation scheme in place at TFM as a response to reported grievances. In relation to environmental grievances, could you please explain what action, apart from compensation, you take to respond to the complaints of environmental damage? For instance, do you analyse water, air, and/or soil samples, or do you engage with potentially affected communities, or do you conduct any other relevant activity? If so, could you please share with us the results of your investigations?

We collect samples based on the nature of the complaints. We analyze the samples and give feedback to communities involved in the grievance resolution. If there is disagreement with the concerning communities, a mixed committee composed of community representatives mainly and some TFM representatives re-do the investigation and draw conclusions with communities involved in the grievance resolution. If the communities are still not satisfied, they are free to go to the court.

Additionally, community engagement has been one of key means that TFM employs to improve inclusiveness and transparency of our communication with communities.

Specifically, community representatives attend quarterly meetings that TFM organizes to communicate and discuss various issues raised by communities. In the investigation of this case, chiefdom and community representatives were invited to join.

3. As part of our research, we have received numerous reports regarding pollution induced relocation. TFM's 2022 ESG Report mentions that the company received 296 grievances in the resettlement category (p. 9), and CMOC's 2022 ESG Report indicates this represented 46% of all the complaints received by TFM in 2022 (p. 10). At the same time, we heard from communities that TFM reduced the amount of resettlement compensation it provides to residents if relocation is due to pollution.

- a. Can you please confirm how many cases of pollution-related relocation have occurred at TFM since 2018?

TFM follows international standards and good practices on resettlement-related work. There hasn't been any case of pollution-related relocation at TFM since 2018.

- b. Can you please provide further details on these cases of pollution? For example, when and how did they happen? Did you measure the levels of chemicals and contaminants released in water, soil or air for each incident? If yes, what were the results?

There hasn't been any case of pollution-related relocation at TFM since 2018.

- c. Did you conduct investigations, including independent assessments or cooperation with government agencies, into the causes of these pollutions? If so, what were the results? Can you please provide us with a copy of your assessments?



Salabwe monitoring
data.xlsx

Please see attached an example of the assessments we conducted for pollution monitoring. In general, TFM has a strong system of preventive measures to prevent pollutions:

For air quality:

- Scrubbers are used to control acidic gas emissions.
- Roads are watered to reduce dust.
- Dustex (made from sugar industry residue) is applied in high traffic roads.
- Disturbed areas are progressively reclaimed to reduce wind erosion.

For water quality:

- Strong spill prevention is in place as mentioned before.
- Stormwater control structures are built around areas exposed to sediments.

For soil quality:

- TFM installs sediment control structures (drainage berms, rock berms, etc.) around disturbed areas (embankments, quarries, constructions, etc.) to prevent sediments and suspended elements from moving out of the line to farm areas.
- TFM carries out stripping and storage of arable soil before any activities (road construction, infrastructure, etc.). these operations are carried out on

the basis of a standard operating procedure (SOP) relating to arable land management. Topsoil reserves are located far from areas with high erosion potential and far from rivers.

d. What are your resettlement compensation policies, and to what extent do they differ when relocation is justified to make space for the company's activities (ie voluntary relocation) versus when it is the result of pollution such that communities need to relocate elsewhere (ie, involuntary compensation)? Can you please confirm whether compensation for involuntary relocation is lesser than compensation for voluntary compensation?

As explained at above 3a, TFM follows international standards and good practices in the relocation/resettlement work, including compensation, which is calculated and constantly updated based on local market analysis, guided by international standards, and agreed with local communities, and consulted with local government as appropriate.

4. Since 2018, has TFM received any summons or non-compliance penalties from DRC government authorities for breaches of environmental requirements as set out under the DRC mining code and its regulations? If yes, please provide the number, reasons and the penalty.

No.

Livelihood risks

5. Your response to Question 12(a) confirms that TFM has recorded 754 grievances related to property damages. In 2022, there were 173 such cases (TFM 2022 ESG Report, p. 9). Can you please provide further details as to the causes of these property destructions? What proportion relate to accidental spillages and/or environmental concerns?

Among the 173 grievances recorded in property damages, majority of these cases were related to crops damaged by TFM's geological exploration work, such as road marking or boreholes. At TFM, all the exploration induced compensations are recorded automatically as grievances in our system to ensure the confidentiality of the activity and the rapidity of the compensation made to the villagers.

6. Your responses to Question 6 indicate that 19 wells were out of use and, among other villages, that you have drilled 1 water well for the Salabwe village to date for an estimated population of 303.

a. Can you please explain TFM's relationship with COGEPCO (community-based water management committee)? For example, does COGEPCO report back to TFM on water well management?

It is TFM's effort that support and help to set up COGEPCO to manage and maintain water supply facilities. It's the good practice that TFM employs in its water supply/infrastructure investment. As a monitoring mechanism, TFM receives reports on COGEPCO's water management activities. Additionally, we provide training on management and repair/maintenance for COGEPCO to help sustain the water supply system for community members. We always lend our hands in our capacity to support COGEPCO's operation at a daily basis, for instance occasionally supporting transportation.

- b. We understand from local residents' accounts that TFM drilled 2 water wells for the Salabwe village. Residents said that 1 well has not been functioning for some time despite repeated requests to TFM representatives to fix it, and that the water from the other well is not enough to sustain the whole village. Can you please confirm your water plans for the Salabwe village, including any plans to fix or replace the water well that has stopped functioning?

In fact, there are two wells in Salabwe managed by a committee whose members are from the village. It was our understanding that there was communication gap between the Salabwe village water committee and COGEPCO. This village committee has made no reports to COGEPCO regarding the well, and as a result COGEPCO was not aware of the condition of the well. Currently, the chairman of the Salabwe water management committee has been invited to discuss with COGEPCO regarding how to remedy the situation. Pending on their discussion outcomes, TFM stands by to assist if needed.

- c. While your letter does not mention Chungu as a location where TFM has drilled water wells for local residents, we understand TFM did drill a well for this village. We understand that local residents have complained to TFM on several occasions that the water supplied by this well is not of good quality. Can you please explain if any investigations have been conducted into these complaints? If so, what were the results, and what corrective actions were adopted?

There are two wells drilled before 2018 in Shungu (if you meant to refer to as 'Chungu'.) These two Shungu wells are being used by the community, which has never complained about water quality to COGEPCO or to TFM. The last inspection carried out by the team from the Lualaba Provincial Health Division and the Fungurume Health Zone (i.e. the Government) on 03 February 2024 found that the population was using the water without any problems, and no complaints about water quality were mentioned.

Health issues

7. Your responses to our questions relating to health risks associated with water pollution indicate that such health issues, if they exist, "are not relevant to TFM" but are caused by other factors. and not to TFM's activities. For example, as you write, gynaecological problems may result, among other factors, from the fact that "female artisanal miners are exposed to health risks when they wash ores without PPEs in contaminated rivers" (Response to Q/ 8(a)). On birth defects, you confirm that the Dipeta clinic receives approximately 5 cases per year, though "no deep investigation is conducted for every single case" (Response to Q/ 9).

However, you may be aware [a number of studies](#) indicate elevated levels of zinc, selenium, lead, copper and cobalt levels in the bodies of copper-mining town residents, and this may be a possible cause of human congenital malformations (see [here](#) and [here](#)). TFM's 2019 EIS confirms that "A number of additional substances are frequently present at levels above aquatic guidelines in samples from springs and streams, including some described in relation to drinking water guidelines (e.g. selenium) and others that have not been included in drinking water guidelines (e.g. aluminium and iron)" (p. 135).

- a. Apart from efforts to formalise artisanal mining, has TFM taken any steps to analyse the quality of water in TFM concessions for possible impacts on female health and birth defect issues as reported by scientists and academics? If yes, what were the results? If not, would you consider programming this into your future investment in health programmes for local residents?

The female health and birth defect issues, and the community's public health issues at large, are affected by various factors. These factors include, among others, hygiene and sanitation, genetic issues, nutrient level, or unprotected artisanal mining activities. TFM has been making efforts and investments in maintaining high standards of environment management to mitigate impacts on communities. In the meantime, we prioritize health in our community investment, including building hospitals and clinics, supplying medical equipment and medicines, providing capacity trainings to medical staff, screening diseases in schools and providing vaccinations to children, just to name a few. All of these efforts aim to strengthen infrastructure and people's capacity in public health system, as well as to improve the health of local population.

- b. Local populations have told us that in 2021, an incident of air pollution in Salabwe resulted in children having itching and scabies on their skin. We were told that TFM staff recorded the list of sick children but did not provide any medical treatment despite promises to provide them with appropriate medicine. Did you conduct investigations into the causes of this incident? If yes, what were the results? What corrective measures did you take in light of the complaints about the pollution and apparent illnesses?

TFM never registered any cases of sick children from Salabwe. Instead, we received WhatsApp message from a local health care provider mentioning the cases of the children. Following this message, TFM organized a field investigation, including local civil society representatives, local authorities, Fungurume health zone chief, journalists, community representatives and other stakeholders. As a result, there was no evidence of the so-called pollution as well as no evidence of relating the children's problems to TFM's operation.

Risk prevention

Risk prevention

8. We take note of the recognition in TFM's 2022 ESG Report that "CMOC is keenly aware of the history of [tailings storage facility] failures and the catastrophic consequences for the public, the environment, and mining businesses involved" (p. 11). However, community members told us that TFM has an ongoing sulphuric acid project and has installed pipes that go to the collection tanks. These acid pipes, they say, are exposed and pose a danger to the public, including to children who could inadvertently damage them and sustain burns, or worse. Community members told us that they have made TFM aware of their concerns, but have seen no action to address the problem.
- a. Can you please confirm the location of these newly built pipes and their proximity to public roads and residences?

We have no pipeline that goes through or near communities' areas. The nearest facility using acid is 15K SX plant located around 4.5km from the zone of concern.

- b. What action, if any, are you taking to have these pipes out of reach of the general population?

We have no pipeline that goes through or near communities' areas. The nearest facility using acid is 15K SX plant located around 4.5km from the zone of concern.

9. We have also received reports from communities located in proximity to TFM's settling tanks raising concerns that these tanks are compromised and could rupture at any time. Community members said alarms were installed and that TFM had promised to provide megaphones in case of an accident. Can you please confirm the state of these tanks? What are your plans for conducting the remediation work if they are compromised? Beyond these reactive measures, can you also please confirm what strategies TFM is implementing to prevent their rupture, and to avoid harm to local populations if a rupture does occur.

We have no tanks in the concession that have a status like the one mentioned.

This concern might be linked to the tailing storage facilities for which we are implementing a system of emergency response process involving the participation of the downstream community. This is part of the good practices we are implementing in line with international standards. These allegations are due to misunderstanding from the communities and do not mean the pond status is bad. We are aware of the need of continuously enhancing the communication with the downstream community regarding the TSF emergence response process.

10. TFM's 2022 ESG Report mentions that the company was subject to an independent third-party review of its tailings storage facility. Could you please provide us with the results?

The tailings storage facility third-party audit was conducted according to international standards and good practice. This is a key component of criteria to meet for the international ESG accreditation.

Documents mentioned in your response

11. In your 24 November letter and the reports referred to therein, you mentioned a number of documents which would be helpful for us to consult. These include:

- a. Annual reports to the DRC Government (Response to Q/ 2(g) & 16)
- b. A third-party human rights due diligence at TFM commissioned by CMOC (Response to Q/ 15)
- c. Annual independent audits of TFM's management system (Response to Q/ 5)

Could you please share copies of these documents with us? If you cannot share any or some of these, could you please outline the reasons for not doing so?

You will find all the publicly available reports on CMOC's website www.cmoc.com. As a listed company, CMOC is bound by the rules of the Stock Exchanges in information disclosure.

Re: Water pollution and environmental risks at TFM

Anneke Van Woudenberg [REDACTED]

Dear Julie,

Thank you very much for your response on 19 February which we have read with great interest.

We would be most grateful if you could clarify a few small points:

- The villages and towns impacted by TFM's operations and your estimated population numbers for each. For villages we have Shungu, Kasanga, Mwelanpande, Kansekenene, Kiomba, Salabwe, Lukotola, Kioni, Mwangi kakutu, Pangatadi. Are these correct? Are we missing any?
- The number of water points that TFM have installed to date in the impacted villages?

We are nearly complete with our report and intend to publish it at the end of the month. If you could get back to me by the end of the week with the above information, we would be most grateful.

We would be very happy to discuss our findings with you in detail once the report is complete. We will be in touch with some suggested dates for that soon.

With my best regards,

Anneke

Anneke Van Woudenberg
 Executive Director
 Rights and Accountability in Development (RAID)

 blue and orange circle with text Description automatically generated

Email: [REDACTED]
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From: Liang, Julie Wei [REDACTED]

Subject: 回复: Water pollution and environmental risks at TFM

Hello Anneke,

Thank you for your enquiry, please find our response to your letter dated Feb. 7, 2024.

Best regards,
Julie

{!J:A: Anneke Van Woudenberg [REDACTED]

ffj]: Water pollution and environmental risks at TFM

Liang, Julie Wei [REDACTED]

[REDACTED]

1 attachments (49 KB)

20240308_Water pollution and environmental risks at TFM_questions from RAID_TFM Response.docx;

Hello Anneke,

Please see attached answer from TFM to your below two questions. Please note the following important points regarding the information attached:

1. There are in total more than 120 villages in TFM concession. For the sake of transparency, we provide the whole list of villages and quaitiers located within TFM concession, [REDACTED]
2. Because no official census was conducted since 1986 in all the DRC, all the numbers of the population are our estimates from the Ministry of Health i.e., the Fungunune Health Zone (FHZ) based on the number of under 5 years of age children vaccinated by using an annual growth population rate of 3%. Please don't quote the numbers as exact information in your report.

Best regards,
Julie

&{4:A:Anneke Van Woudenberg [REDACTED]

[REDACTED]

fm: Re: Water pollution and environmental risks at TFM

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Dear Julie,

Thank you very much for your response on 19 February which we have read with great interest.

We would be most grateful if you could clarify a few small points:

- The villages and towns impacted by TFM's operations and your estimated population numbers for each. For villages we have Shungu, Kasanga, Mwelanpande, Kansekenene, Kiomba, Salabwe, Lukotola, Kioni, Mwanga kakutu, Pangatadi. Are these correct? Are we missing any?
- The number of water points that TFM have installed to date in the impacted villages?

We are nearly complete with our report and intend to publish it at the end of the month. If you could get back to me by the end of the week with the above information, we would be most grateful.

We would be very happy to discuss our findings with you in detail once the report is complete. We will be in touch with some suggested dates for that soon.

With my best regards,

Anneke

Anneke Van Woudenberg

Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [REDACTED]

Fri 06/10/2023 12:55

To: Benedikt Sobotka [REDACTED]

1 attachments (297 KB)

Letter to ERG from RAID+ Afrewatch 6-10-2023.pdf;

Dear Benedikt,

We are reaching out to you and your team to requests ERG's response to concerns we have received regarding water pollution and environmental risks related to Metalkol RTR's operations in the Democratic Republic of Congo.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning the Metalkol mine as well as efforts to ensure cobalt mining is clean. We view these matters as bearing the utmost public interest.

We hope you and your team will be in a position to respond to our questions, which you will find in the enclosed correspondence.

We look forward to hearing back from you.

With my best reagrds,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))



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6 October 2023

Mr. Benedikt Sobotka
Chief Executive Officer
Eurasian Resources Group (ERG)
9, rue Sainte Zithe
L-2763
Luxembourg

Via email

Dear Mr Sobotka,

Re: Water pollution and environmental risks at the Metalkol Mine in DR Congo

Following our exchanges over the past few years, we are reaching out to you on this occasion to seek your response to concerns we have received regarding water pollution and environmental risks related to Metalkol RTR's operations in the Democratic Republic of Congo.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning the Metalkol mine as well as efforts to ensure cobalt mining is clean. We view these matters as bearing the utmost public interest. We hope you will be in a position to respond to our questions, which you will find in the enclosed attached.

As you know, we are two civil society organisations with a long history of research on human rights and environmental concerns in the mining sector in the DRC. [RAID](#) is a UK-based corporate watchdog NGO, partnering with civil society actors in Africa for more than 25 years. [African Resources Watch \(AFREWATCH\)](#) is a Congolese charity based in Lubumbashi which advocates for fair and equitable exploitation of natural resources.

During our research missions over the past few years, we have repeatedly received concerns from local communities regarding environmental pollution linked to industrial copper and cobalt mining in the Lualaba province. In mid-2022 and early 2023, our organisations conducted field research to look into environmental risks and their impacts on people's human rights at six industrial mines, including at the Metalkol mine. Our joint team interviewed more than 140 persons across 25 communities located in close proximity to these mines, as well as medical professionals, academic researchers, lawyers and government officials, amongst others.

As set out below, our preliminary findings across the six industrial copper and cobalt operations were alarming and indicate the following:

1. The activities of industrial copper and cobalt mines appear to have had severe – possibly irreversible – adverse effects on the water quality of surrounding lakes, rivers, swamps and groundwater reserves. While some of this may be linked to historical pollution, local residents and others we interviewed consistently detailed more recent acute periodic episodes of pollution as well as ongoing pollution which they attributed to toxic waste and contaminated water being released by mining companies in adjacent land and water bodies.
2. The damage to local ecosystems has had significant consequences on people's livelihoods. Scores of interviewees told us that since the increase in industrial cobalt and copper mining in 2018, including the resumption of activities at Metalkol:
 - a) The lakes and rivers used by fishermen and women have become so polluted that fish populations have decreased dramatically, and they have lost their capacity to retain aquatic life;
 - b) Farmers have seen a sharp decrease in their crop production. They told us that due to mining pollution, their crops rot before they are fully grown, and plants and vegetables no longer grow to full maturity.
3. An increase in health problems, which were confirmed by medical doctors we interviewed:
 - a) Consistently across the villages, interviewees reported dermatological diseases that they associate with the use of contaminated surface water. Some recounted cases of people being severely burnt after entering water containing acid-filled mining waste.
 - b) Most women, including teenage girls, complained of gynaecological and reproductive issues. They reported suffering from urogenital infections, vaginal mycoses and warts, frequent miscarriages, and birth defects. They all linked these conditions to sitting or standing in contaminated water to wash clothes or for hygiene purposes.
 - c) Some interviewees complained of digestive problems, including nausea, stomach pain and diarrhea, after drinking surface or well water, or after eating food prepared with contaminated water.
4. A significant negative impact on the mental health of people living around the mines or in a polluted area. Many of those we interviewed expressed living in constant state of fear of the impact of the pollution on their health and that of their children, and described feeling stressed, depressed and anxious.
5. The loss of livelihoods attributed by local residents to pollution appears to have had profound impacts on people's human rights, including their right to a clean and healthy environment, the right to food, the right to water, the right to education, as well as others. For example:
 - a) The dramatic drop in agricultural and fish yields has forced many people we interviewed to modify their eating patterns by reducing their food portions and

the number of meals they eat. Many we spoke to were living on one meal a day, and sometimes even less.

- b) Unless they considered having no choice, most interviewees said they had stopped using lake, river, and sometimes spring water due to the impacts on their health. Instead, they reported being dependent for their water needs on a small number of boreholes, sometimes located at a considerable distance from their homes.
- c) Parents reported having to remove their children from school or sending them only occasionally because of reduced incomes.
- d) Several interviewees were worried about the loss of their historical and traditional knowledge which they tied to the pollution caused by mining activities, and associated risks of relocation.

We note that the mining industry has created new employment in the region, though you will be aware that we have [raised concerns](#) about working conditions and the low pay for subcontracted workers. However, in this research, our focus has been on the impact of mining activities on local residents not officially employed in the mining sector and who continue to rely on small-scale agriculture, such as fishing or farming. We trust you will agree that this continues to account for the vast majority of people who live near the large-scale mines.

While not all of the above relate to the Metalkol mine, the overall picture that appears to be emerging is troubling and has the potential to reflect negatively on the cobalt and copper industry as a whole. In effect, Congolese residents we interviewed who live near the industrial mines and rely on farming, fishing and small commerce for their livelihoods consistently told us they believed they were poorer and sicker due to the activities of large-scale copper and cobalt mining.

We would be most grateful for your perspective and input regarding the concerns reported to us. You will find attached our list of questions relating to the Metalkol mine in particular. We are writing separately to the other main industrial mines covered by our research seeking their input and response. Your response will help us to better understand the situation and to accurately report on it.

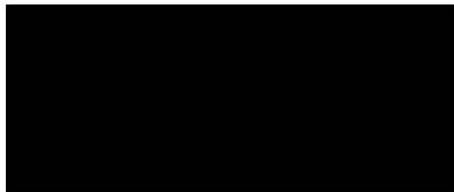
We plan to publish a public report on our research. In the interest of balanced and fair reporting, we strive to reflect all relevant information in our research and publications. Your response, as well as those from the other industrial mines, will be taken into account in our forthcoming publication. We would welcome any information you wish to share with us on the matters raised or anything else you consider relevant.

Please send any information to RAID at [REDACTED] If you require any further clarifications or if you have questions, please do not hesitate to contact us. We would welcome an opportunity to discuss these concerns with you.

We would be grateful to receive your response by 31 October 2023.

Thank you and we look forward to hearing from you.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc: Placide Kalala Basidiwa, CEO, Gecamines, DRC

Daniella Savic, Head of International ESG Compliance, ERG

Katrina White, Head of Compliance International - ERG

Paul Viljoen, General Manger, Metalkol

Questions from RAID and AFREWATCH to ERG/Metalkol

To: ERG/Metalkol

Date: 27 September 2023

Subject: Water pollution and environmental risks at the Metalkol mine in DRC

In light of our recent findings, we would welcome responses to the questions set out below. Please note that we have reviewed Metalkol's publicly available documents including its *2019 Environmental Impact Study – Executive Summary (EIS)*, and its *2022 Clean Copper & Cobalt Performance Report (CCCPR)*. We have also reviewed ERG's *2021 Sustainable Development Report*; ERG Africa's *Safety, Health & Sustainability (SHS) Policy*; and ERG Africa's *Community Relations and Responsible Environmental Stewardship* focus areas. If there are any other relevant documents we should take into consideration, do please let us know.

We understand from the CCCPR 2022 that Metalkol's obligations from the Economic and Social Impact Assessment are "documented in a web-based database system, Isometrix, which stores and manages safety, health, environment and community data and allows us to track our performance in mitigating these risks and impacts." We trust that will assist in answering the questions set out below. We have indicated the detail we are seeking in each area to assist you in your response.

Water and Air quality

1. Your 2019 EIS recommends water quality monitoring of upstream and downstream rivers/streams (page 23), regular monitoring of surface water effluent streams and flow rates, and groundwater quality (page 22), as well as consideration of community health issues related to inadequate water delivery (page 25). Your CCCPR 2022 further states a monitoring programme and stations set up to assess the quality of surface water and groundwater, amongst others (page 15), though it does not identify how many stations have been installed or where. It further states that a water monitoring program is in place to identify leachate from the landfill site. The CCCPR says monthly reports are provided to the Metalkol General Manager and bi-monthly to the DRC government.

Could you please answer the following points:

- (a) Provide a list of your water monitoring stations and their precise locations. Please indicate the reasons why these locations have been selected.
- (b) At what frequency do you conduct water quality tests at the water monitoring stations? What are the results? Please detail the results since 2018 per station.
- (c) At what frequency do you monitor leachate from the landfill site? What are the results?
- (d) In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by Metalkol mine's activities? If not, which other waterbodies you have not identified in your EIS, and what are the results of their monitoring since 2018.

- (e) Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?
 - (f) Can you also please detail who undertakes these tests (including their qualifications and whether they are ERG staff or external personnel)?
 - (g) Do you communicate the results of the water testing to local communities? If so, how and when?
 - (h) Can you please direct us to where we can find the bi-monthly reports to the Congolese government?
2. Your 2019 EIS indicates that you conduct dust fallout monitoring monthly (at page 17) and provides a map of initial locations and proposed locations. The EIS states the baseline showed dust fallout concentrations exceeded the Residential Area guidelines (600mg/m²/day) 58% of the time, including during much of the wet season, and that the concentrations of fine particles PM_{2.5} exceeded WB/IFC guidelines on several occasions (at page 19). It states Metalkol will continue monitoring dust, fine particulate (PM₁₀), and SO₂ at receptor locations surrounding the area of project activities for compliance with local and international guidelines. Your CCCPR 2022 makes no mention of your dust fallout monitoring program.

At our meeting on 14 May 2019 and in the follow-up written communications, you explained that an internationally accredited laboratory in South Africa is used for the analysis of the results and that you report on these annually to DRC authorities. Can you please detail the following:

- (a) If you deviated from the proposed monitoring locations set out in Figure 6 on page 20 of the EIS, please provide an updated map and explain why locations were changed.
 - (b) What have been the result of the monthly dust monitoring since 2018. Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.
 - (c) Since 2018, has the dust monitoring continued to exceed the South Africa standards for residential areas? If yes, at which locations? What steps has Metalkol taken to reduce the levels? Have you monitored the health impacts of the harmful dust?
 - (d) Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.
 - (e) Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years.
3. At our meeting on 14 May 2019 and in the follow-up written communications, you recognised it was not the practice at Metalkol to communicate the results of environmental monitoring with local communities. However, you committed to doing so in future community engagement meetings and said it would become a standard practice. Could you please confirm whether you now report the results of the dusts monitoring and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures. Could you also please provide a copy of the presentations and reports you provide to local communities.

4. We recognise that because the Metalkol mine operates in close proximity to other mining projects, some of your environmental impacts may be cumulative in nature. In these circumstances, how do you assess Metalkol's own contribution to environmental impacts? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?
5. In section 7 of Metalkol's EIS report, a range of mitigation measures are set out for the identified environmental impacts. In your CCCPR 2022 you state Metalkol is implementing an environmental management system that is compliant with ISO 14001 standards. Has there been an independent assessment of how effective Metalkol's mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point us to where we can find this assessment. If there is no independent assessment, please describe how Metalkol is measuring the effectiveness of its mitigation strategies.

Access to potable water

6. You stated in your letter to RAID dated 14 June 2019 that Metalkol had installed 10 solar water pumping stations for residents of nearby villages and that you were planning to install 11 additional boreholes in 2019, as well as to progressively increase community access to potable water. You also said you would hire consultants to monitor and report on their functionality. During the interviews with affected communities, some people told us they pay 100 Congolese Francs per jerrycan to access Metalkol's wells.

Can you please confirm:

- (a) The total number of water installations Metalkol has built since restarting operations in 2018.
- (b) The locations where these wells have been installed and the number of people or households covered by each water point.
- (c) What further plans Metalkol has for additional water points.
- (d) If all water points installed by Metalkol were functional and operational as of April 2023? If no, which ones were in disrepair, contaminated or not functioning and why?
- (e) Beyond establishing water committees, what other policies and procedures are in place at Metalkol to fix or replace wells that stop functioning or become contaminated?
- (f) The usage made of the money that communities pay to access Metalkol's wells.

Health risks associated with water pollution

7. In the 2019 EIS, it is stated that Metalkol's activities may result in environmental health impacts as a result of water quality (pages 24-25). Could you please explain this further. Have specific environment-related health impacts linked to your activities been reported to you by affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?
8. At our meeting of 14 May 2019 and in the follow-up written communications, we informed you of the gynaecological problems that local female residents had reported to us. As set out above, our recent interviews with affected communities indicate many women reportedly continue to suffer from these problems, including urogenital infections, vaginal

mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water. You previously told us that you were unaware of these incidents but would investigate them further, including taking forward our recommendation that female community liaison workers conduct discussions with female interviewees.

Can you please confirm:

- (a) Whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynaecological issues and the links to water pollution.
- (b) What, if any, mitigation strategies you have put in place to address these concerns.

9. The Lancet journal in April 2020 published an [article](#) on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to Metalkol's activities? What steps, if any, has Metalkol taken for its staff and/or communities impacted by Metalkol's activities following this publication? Have local residents reported concerns regarding birth defects to you?
10. Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by Metalkol's activities?

Livelihoods risks

11. The EIS recognises that Metalkol's operations may result in negative livelihood impacts, including loss of land/crops and decline in food and nutrition (pages 24-25), as well as loss of natural soil fertility (page 22). The EIS mentions a Social Management Plan to mitigate these impacts and the CCCPR 2022 indicates you have a strategy on social investment, though we could not find a publicly available copy of it. It also mentions that you work in close partnership with communities, regional government and local and international organisations to support sustainable development amongst those communities most affected by our operation. You further state in the CCCPR that the Metalkol Commitments Register (*cahier des charges*), signed in November 2020, contains a set of periodic commitments negotiated and agreed upon between the company and the nine affected communities for the implementation of sustainable development projects. We understand from our previous written correspondence and meetings that you are taking the following actions to address these impacts: (i) provision of seed and fertiliser; (ii) support to the Bon Pasteur Alternative Livelihood Programme to empower young women; (iii) support to the Bon Pasteur business programmes in fish, farming and eggs; and (iv) nurseries and piggery planned for 2020.

Could you please detail:

- (a) Where we can find a copy of your Social Management Plan. If not available online, please could you send us a copy?
- (b) The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.

- (c) What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?
- (d) Any other actions you have undertaken to mitigate the identified livelihood risks.
- (e) How the “*Cahier des charges*” signed in November 2020 impacts the Social Management Plan.
- (f) The progress achieved to date in implementing the *Cahier des charges*.

Community Grievances on pollution and environmental damage

12. In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:

- (a) What proportion of these concerns relate to (i) health issues, including mental health and gynaecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?
- (b) How many of these complaints were accepted and what subsequent actions were taken as a result?
- (c) For the complaints that were rejected, what were the ground for the rejection?

Environmental damage and/or pollution linked to Metalkol’s operations

13. According to information received by RAID/Afrewatch, there have been a number of environmental incidents linked to Metalkol’s operations since 2018, including amongst others, chemical spills and tailings storage facility breaches. Information received by RAID includes testimonies from community members, community leaders, ERG whistleblowers, civil society groups, as well as video and photographic materials.

Could you please detail:

- (a) How many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at Metalkol since operations restarted in 2018? Please provide details on the causes.
- (b) How many tailings dam wall failures or similar incidents occurred at Metalkol since 2018? Please indicate the dates and the details about what led to the breaches, including the tailing dam wall breach in January 2019.
- (c) For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?
- (d) What steps were taken to clean up the damage and what compensation, if any, was provided?
- (e) What reports were submitted to government authorities?

14. RAID/Afrewatch further received information regarding regular breaches of the process water containment system at Metalkol, causing repeated overflows with potential impacts on groundwater, the environment and nearby communities. According to one source, Metalkol’s management is aware of this issue but has not addressed it so far. We would be grateful for your view on this matter.

Could you please clarify:

- a) If there is, or has been, a problem as described above. If yes, please detail the problem, including the frequency of overflows and the volumes.
- b) What steps has Metalkol taken to resolve the regular overflows?
- c) What analysis has Metalkol conducted to determine the extent of any damage to the environment and any impact on ground and surface water, the environment and nearby communities. What were the results?

15. ERG Africa's *SHS Policy* mentions the group's commitment to progressive rehabilitation of areas affected by mining operations. Apart from the indirect effect of the tailings reclamation process of Metalkol, how are you implementing this policy in Congo? Which waterbodies, if any, have been rehabilitated? Please provide details.

16. Your operations at one of your other mines in DRC, Boss Mining, were recently suspended by the DRC Minister of Mines due to acute episodes of pollution and non-compliance with Congolese legal obligations pertaining to environmental and social impact assessment. We understand that [you rebutted](#) the environmental grievances as non-substantiated and have [recently agreed](#) on the *Cahiers des Charges* with local communities.

- (a) Could you provide further details to your counterargument, including, where possible, the results of your own investigation following the complained pollution?
- (b) Are you taking any steps with the Congolese government to identify those harmed by the complained pollution and provide remedy if appropriate?
- (c) As a result of this incident and in light of the recommendations you received from the Mining Environment Protection Service, are you planning to review your environmental policies in Congo? If yes, please provide more details, especially how this will relate to the Metalkol mine?

Prevention and due diligence

17. Which international standards and best practice do Metalkol and ERG apply in relation to their environmental commitments and management? How has ERG applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?

18. In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to ERG's human rights and environmental policies as a result?

19. Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?

20. In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the Metalkol mine every two years. We have seen the EIS conducted from September 2019, which is on your website. Please

could you clarify if this is the audit for 2019? Could you please direct us to where we can find the audit for 2021?

21. In ERG's 2021 Sustainable Development Report, you detail the example of cleaning up historic tailings at Metalkol. Could you please provide further information, including written documentation, on how Metalkol manages and seeks to minimise concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

RE: Water pollution and environmental risks at Metalkol RTR

Katrina White [REDACTED]

Mon 30/10/2023 11:13

To: Anneke Van Woudenberg [REDACTED]

Dear Anneke,

We confirm receipt of your letter dated 6 November 2023 and will be providing a detailed response to it. Given the extensive list of questions contained in the letter, we anticipate being able to provide our response by 10 November 2023.

Yours sincerely

Katrina White

Katrina White

**Head of Compliance International
Eurasian Resources Group**



M: [REDACTED]

UP Office Building
Piel Heinkade 55, Amsterdam
1019 GM, The Netherlands
www.eurasianresources.lu

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From: Anneke Van Woudenberg [REDACTED]

Sent: Friday, October 6, 2023 12:56

To: Benedikt Sobotka [REDACTED]

Subject: Water pollution and environmental risks at Metalkol RTR

CAUTION: This email originated from outside of ERG. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Benedikt,

We are reaching out to you and your team to requests ERG's response to concerns we have received regarding water pollution and environmental risks related to Metalkol RTR's operations in the Democratic Republic of Congo.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning the Metalkol mine as well as efforts to ensure cobalt mining is clean. We view these matters as bearing the utmost public interest.

We hope you and your team will be in a position to respond to our questions, which you will find in the enclosed correspondence.

We look forward to hearing back from you.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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Re: Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [REDACTED]

Mon 30/10/2023 12:03

To: Katrina White [REDACTED]

Dear Katrina,

Thank you for your message. I can confirm that a response by 10 November works from our side and we look forward to receiving it.

Should you have any questions, please do not hesitate to contact me.

With my best regards,

Anneke

From: Katrina White [REDACTED]

Date: Monday, 30 October 2023 at 10:13

To: Anneke Van Woudenberg [REDACTED]

Subject: RE: Water pollution and environmental risks at Metalkol RTR

Dear Anneke,

We confirm receipt of your letter dated 6 November 2023 and will be providing a detailed response to it. Given the extensive list of questions contained in the letter, we anticipate being able to provide our response by 10 November 2023.

Yours sincerely

Katrina White

Katrina White

Head of Compliance International
Eurasian Resources Group



M: [REDACTED]

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RE: Water pollution and environmental risks at Metalkol RTR

Katrina White [redacted]

Mon 20/11/2023 10:26

To: Anneke Van Woudenberg [redacted]

2 attachments (671 KB)

L RAID 20.11.2023 .pdf; COM-012_Human Rights Policy.pdf;

Dear Anneke,

Thank you for the opportunity to respond on the questions raised in your letter dated 6 October 2023 in relation to Metalkol.

An integral part of ERG's business is to ensure that we have sustainable community development practices in place to help the surrounding communities benefit from our operations and to manage any potential impacts on those communities, including environmental-related.

Our response to the questions is set out in the attached letter. The 2023 revision of the Human Rights Policy is also attached.

The Cahier des Charges is too large to attach to this email and can be accessed through [redacted] which the password will be sent separately. Please let me know if you have any issues with access.

Yours sincerely,

Katrina White

Katrina White

Head of Compliance International
Eurasian Resources Group



M: [redacted]

UP Off B Id

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20 November 2023



Ms Anneke van Woudenberg
Executive Director
RAID

Eurasian Resources Group

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By email: [REDACTED]

Dear Ms van Woudenberg,

Re: Meeting with ERG

We confirm receipt of your letter dated 8 October 2023, and we set out our response below.

An integral part of ERG's business is to ensure that we have sustainable community development practices in place to help the surrounding communities benefit from our operations and to manage any potential impacts on those communities, including environmental-related.

Clean Cobalt & Copper Framework and external assurance

Our [Clean Cobalt & Copper Framework](#) aims to deliver high levels of responsible cobalt and copper production, value chain assurance, and help improve living conditions for local communities, including near the Metalkol operation. The framework comprises seven goals:

1. Compliance with the OECD Due Diligence Guidance for Responsible Mineral Supply Chains from Conflict-Affected and High-Risk Areas
2. Our cobalt and copper are sourced without child labour
3. Clean cobalt and copper are traceable
4. Clean cobalt and copper are not sourced from artisanal and small-scale mining
5. Restoring the environment
6. Collaborating to promote sustainable development
7. Leading our industry towards more sustainable cobalt and copper value chains

The Framework - first introduced in 2019 as the *Clean Cobalt Framework* and extended to include copper in 2022, goes above and beyond the globally recognised supply chain guidance of the OECD.

Since 2019, ERG has published its Performance Reports which set out Metalkol's performance in managing social and environmental impacts according to the Framework. These are independently assured by PwC, and the Performance Reports and assurance reports are linked further below.

In 2020, Metalkol also committed to the [Responsible Minerals Assurance Process](#) (RMAP) of the [Responsible Minerals Initiative](#). RMAP includes a Step 6 on Community Participation which we fully apply at Metalkol through various processes including stakeholder engagement, participatory rural appraisals, community development initiatives, local economic opportunities and a community grievance mechanism.

In February 2023, the RMI re-confirmed that Metalkol is conformant with the Assessment Standard for Joint Due Diligence Standard for Copper, Lead, Nickel and Zinc (2021) and Cobalt (2018).

Please find the links to all the mentioned documents below:

[Metalkol Clean Cobalt and Copper Performance Report 2023](#)

[ERG Clean Cobalt and Copper Framework PwC Assurance Report 2023](#)

[Metalkol Clean Cobalt and Copper Performance Report 2022](#)

[ERG Clean Cobalt and Copper Framework PwC Assurance Report 2022](#)

[Metalkol Clean Cobalt Performance Report 2019](#)

[ERG Clean Cobalt Framework PwC Assurance Report 2019](#)

Environmental management

In relation to potential environmental impacts, an Environmental and Social Impact Assessment (ESIA) for Metalkol was conducted and approved by the DRC Government in 2018. A gap analysis audit was performed against IFC Performance Standards to align the submitted ESIA with international standards. The ESIA forms the basis of the Environmental Site Management Plan and supplemental management plans for the identified potential environmental and social impacts. It is being updated as operational changes occur, or at least every five years. At Metalkol, we submitted an updated ESIA (which covers planned additional processing activities at the site) for Government approval in 2021, which was approved in September 2022.

Comprehensive environmental policies and procedures are also in place and cover all aspects of environmental management. This environmental management system includes biannual 3rd party environmental audits and annual environmental reports shared with the relevant authorities, as well as monthly internal reports acting as our risk-based controls to avoid/prevent, minimise, mitigate and/or remedy physical and psychological health, safety and environmental impacts on workers and local communities.

A gap analysis for ISO 14001 and ISO 45001 certification (international standards for environmental management systems and health and safety management systems) has been conducted and work towards certification is in progress.

Community engagement and investment

Metalkol has implemented a **Social Management System** including procedures and plans for:

- stakeholder engagement,
- sustainable socio-economic development,
- community health, safety and security,
- influx management,
- ASM management,
- land compensation & resettlement, and
- grievance management.

The Stakeholder Engagement Procedure and Plan sets out our engagement with local communities and provides the basis for Metalkol's community relations approach and priorities. The procedure defines the purpose, scope, requirements and roles and responsibilities for our engagement with key stakeholders.

Through this procedure, we have identified and mapped relevant stakeholders, which include nine communities with a population of approximately 100,000 – 150,000 people. Metalkol's engagement with these communities is captured in a **Community Engagement Calendar** which outlines the stakeholders we are engaging, on which scope, when, and through which engagement methods.

Metalkol has adopted a **Strategic Community Investment Plan**, which defines our social investment process. The plan's objectives are informed by a participatory rural appraisal process, which not only puts communities at the forefront but also involves them in defining priorities for development.

In 2017, we conducted nine **Participatory Rural Appraisals** covering populations affected by the Metalkol operation. Access to clean water was identified as the top priority across communities. Consequently, Metalkol installed solar-powered water stations in all its nine impacted communities, managed by community water committees. Metalkol continues to provide periodic assistance in relation to maintenance and testing.

In 2018, the revised DRC Mining Code introduced an obligation for mining companies to develop a "Commitments Register" which will be correctly referred to as a "Community Development Plan Agreement" (*Cahier des Charges*) in this response, which defines social responsibilities for permit holders towards communities affected by mining activities, in addition to the 0.3% of turnover contribution to community development and the Social Mining Royalty (*Redevance Miniere*) required under the Code.

During the development process of Metalkol's Community Development Plan Agreement, the priorities identified through the Participatory Rural Appraisals processes and reports were reinforced via intensive community consultations and other validation processes led by a local NGO, Alternative Plus. The Metalkol Community Development Plan Agreement, signed in November 2020, contains a set of periodic commitments negotiated and agreed upon between the company, the nine affected communities, and the local/provincial authorities for the implementation of sustainable development projects.

A **Grievance Mechanism Procedure** for communities has been rolled out to all communities whereby community members can raise their concerns with Metalkol.

Metalkol partners with civil society organisations and NGOs to promote sustainable development. We have partnered with the Good Shepherd International Foundation since 2017 on multiple projects and activities on child protection, women's empowerment, alternative livelihoods and capacity building, including the construction of a child protection centre facility.

In 2018, Metalkol resettled 16 households from Samukonga village to a new co-designed village with solar powered services and is implementing a Livelihood Restoration Programme. We have provided ongoing maintenance services for water supply systems, solar power systems and general housing stock.

In 2022, we developed the ERG Mining Academy, a partnership with the University of Kolwezi to provide scholarships for approximately 200 Congolese graduates seeking to complete recognised master's degrees in mining-related disciplines. The ultimate goal is to increase the student's employability by bridging the gap between the current educational curricula and international mining companies' needs in terms of skills and competences.

Responses to specific queries

Question 1. The activities of industrial copper and cobalt mines appear to have had severe – possibly irreversible – adverse effects on the water quality of surrounding lakes, rivers, swamps and groundwater reserves. While some of this may be linked to historical pollution, local residents and others we interviewed consistently detailed more recent acute periodic episodes of pollution as well as ongoing pollution which they attributed to toxic waste and contaminated water being released by mining companies in adjacent land and water bodies.

Response:

The Musonoi river flows through the Metalkol concession area from South to North and includes the Musonoi Tailings, which form part of the Metalkol's tailings reclamation resource. This river drains wastewater from the town of Kolwezi and discharges from mining companies operating upstream from Metalkol.

However, Metalkol does not discharge into the Musonoi river or any other watercourse or natural environment, instead Metalkol operates a closed circuit that recycles wastewater from its processing facilities. After neutralisation, the wastewater from the treatment plant is sent to the modern custom-built residue storage facility (“RSF”) as slurry (consisting of 40% water and 60% solid particles). Following sedimentation of the solid particles, the water is sent to a return water pond and pumped back into the process plant for reuse.

In addition, Metalkol's production processes – encompassing copper solvent extraction, copper tank-house operations and packaging, as well as its cobalt hydroxide purification, precipitation, drying, and packaging – were [recently awarded an ISO 9001:2015 certification](#), which is globally recognised as the most comprehensive quality management system.

Metalkol has established monitoring location points for surface water and groundwater quality, which are monitored weekly, monthly, and quarterly as specified within the Mining Code, regulations and the approved ESIA.

Question 2. The damage to local ecosystems has had significant consequences on people's livelihoods. Scores of interviewees told us that since the increase in industrial cobalt and copper mining in 2018, including the resumption of activities at Metalkol:

2 (a) The lakes and rivers used by fishermen and women have become so polluted that fish populations have decreased dramatically, and they have lost their capacity to retain aquatic life.

Response:

As noted in the response to Question 1, Metalkol does not discharge into the environment and conducts regular water monitoring. The monitoring results show no pollution, thus ruling out Metalkol's operations contributing to claims of diminishing aquatic life.

It should be noted that factors other than pollution can contribute to a decrease in fish populations. For example, sustainable fishing needs to be carefully managed and requires a period of cessation of activity for the reproduction of fish and the fishing net mesh must be appropriate. The regulations in relation to management of fishing are not always adhered to or regulated/monitored in this region. This, together with the significant population growth in Kolwezi and surroundings, can also place additional pressure on fish stocks.

As an environmentally aware and responsible operator, Metalkol is partnering with the University of Lubumbashi to assess aquatic and plant biodiversity, with these studies commencing shortly.

Recognising that fish is a food source and contributor to community livelihoods, Metalkol's community development projects to be implemented include fish farms, in addition to other livelihoods projects.

2 (b) Farmers have seen a sharp decrease in their crop production. They told us that due to mining pollution, their crops rot before they are fully grown, and plants and vegetables no longer grow to full maturity.

Response:

Sustainable farming is a multifaceted activity that involves a variety of practices and techniques in order to achieve optimal results. One particular practice that is often overlooked by farmers is crop rotation, which compromises the opportunity to improve soil health and productivity levels.

For example, if maize is grown in the same field for several years, the soil becomes progressively depleted, with a consequential impact on harvests. Furthermore, the ongoing and common practice of bush burning and charcoal production has a negative impact on the regional environment. Metalkol regularly conducts community awareness-raising campaigns on nature protection to address these issues, in addition to its air and water quality monitoring activities.

During the Participatory Rural Appraisal ("PRA") activities conducted in the communities before Metalkol began its activities, these problems were already being raised and a number of the livelihoods projects being undertaken by Metalkol involve sustainable agricultural initiatives as a result.

Question 3. An increase in health problems, which were confirmed by medical doctors we interviewed:

3 (a) Consistently across the villages, interviewees reported dermatological diseases that they associate with the use of contaminated surface water. Some recounted cases of people being severely burnt after entering water containing acid-filled mining waste.

Response:

Metalkol has already set up surface water quality monitoring stations (covering watercourses surrounding its concession) which are monitored weekly, monthly, and quarterly. No cases of acid pollution have been reported.

As noted in the response to Question 1, Metalkol operates a closed circuit in regard to water, and therefore no wastewater from its treatment plant is released into the environment.

Metalkol has taken a significant step towards finding a sustainable solution to the water problem in local communities by setting up a water drilling campaign. This project has been well-received by the local population and has been instrumental in addressing the water scarcity issue in the surrounding areas. The project is supported by other similar projects contained in its Community Development Plan Agreement to find a sustainable solution to the water problem.

3 (b) Most women, including teenage girls, complained of gynaecological and reproductive issues. They reported suffering from urogenital infections, vaginal mycoses and warts, frequent miscarriages, and birth defects. They all linked these conditions to sitting or standing in contaminated water to wash clothes or for hygiene purposes.

Response:

Please see response to questions 3 (a) and 13.

3 (c) Some interviewees complained of digestive problems, including nausea, stomach pain and diarrhea, after drinking surface or well water, or after eating food prepared with contaminated water.

Response:

Please indicate the locations from which the surface and well-water is sourced. In relation to the wells that Metalkol has drilled in its impacted communities, these are subject to chlorine dioxide (EOXIDE) treatment on a weekly basis and are monitored monthly. Given this, we do not consider that these would be the source in relation to these complaints.

It should be kept in mind that the country's troubled legacy of conflict, environmental degradation, rapid urbanisation and under-investment in water infrastructure has seriously affected the availability of surface drinking water – a topic covered by numerous available literature and studies. Therefore, surface water can pose a significant health risk due to its unknown biological composition. Consumption of unclean water can lead to water-borne diseases, which can have serious health consequences, particularly for vulnerable populations such as children and the elderly.

The water supply project set up by Metalkol is focused on addressing this issue and preventing the consumption of unclean water. This is a critical objective of the project, and one that is well-aligned with long-established public health practices.

Question 4. A significant negative impact on the mental health of people living around the mines or in a polluted area. Many of those we interviewed expressed living in constant state of fear of the impact of the pollution on their health and that of their children, and described feeling stressed, depressed and anxious.

Response:

When speaking about pollution as an underlying factor causing mental health concerns, our response requires us to address the question of pollution itself. We have already covered water pollution claims in previous sections of our response. We have not recorded any regulatory exceedances at monitoring sites with respect to surface water monitoring.

Regarding air quality, the results of related monitoring in terms of suspended solid particles and gaseous emissions do not exceed the standards to which Metalkol is subject. Metalkol's air quality monitoring equipment runs 24/7 and analyses several parameters.

Metalkol did experience temporary dust exceedances due to very dry weather conditions between July and September 2022. This was addressed through the application of 'directional' dust monitoring (i.e. to inform more effective and timely control measures) and molasses-based road treatments during the dry season. The monitoring results on inhalable and respirable dust have not indicated any no other exceedances.

Metalkol provided feedback on these exceedances to local communities and regularly engages with those communities.

Question 5. The loss of livelihoods attributed by local residents to pollution appears to have had profound impacts on people's human rights, including their right to a clean and healthy environment, the right to food, the right to water, the right to education, as well as others. For example:

5 (a) The dramatic drop in agricultural and fish yields has forced many people we interviewed to modify their eating patterns by reducing their food portions and the number of meals they eat. Many we spoke to were living on one meal a day, and sometimes even less.

Response:

Please see the responses to Question 2 (a) and (b). Livelihood projects are a key component of the Community Development Plan Agreement being implemented by Metalkol following consultation of the local communities.

5 (b) Unless they considered having no choice, most interviewees said they had stopped using lake, river, and sometimes spring water due to the impacts on their health. Instead, they reported being dependent for their water needs on a small number of boreholes, sometimes located at a considerable distance from their homes.

Response:

The aim of the behaviour change awareness process in the communities is to put an end to high-risk practices, particularly the consumption of lake and river water.

The Metalkol water projects already implemented, and to be supplemented with additional Community Development Plan Agreement projects, take into account the population density and size of the villages. Planning for these projects also included geophysics and underground water mapping, ensuring that wells are drilled in the most effective locations. This investment is not intended to replace governmental initiatives, but rather to provide a solution to the growing water problem affecting growing local communities.

By investing in the well-drilling project, Metalkol is demonstrating its commitment to environmental stewardship and social responsibility. The water project is an important step in ensuring that local communities have access to clean and safe water, which is critical to their health and well-being.

Overall, the water project is part of a broader effort to promote sustainable development and responsible business practices. By working with local communities and stakeholders, Metalkol is committed to finding effective solutions to the challenges facing the region and ensuring the long-term sustainability of its operations.

5 (c) Parents reported having to remove their children from school or sending them only occasionally because of reduced incomes.

Response:

Poor harvesting and the drop in income cannot be directly attributed to Metalkol. Please refer to the responses provided in previous sections above.

This issue preceded the establishment of Metalkol and is noted in the ESIA. The causes of reduced income and poor harvesting are more likely to be found in agricultural and fish farming practices, which can be impacted by a variety of factors, such as climate conditions and soil health.

Metalkol is committed to supporting projects relating to livelihoods to address the economic conditions in the local communities.

5 (d) Several interviewees were worried about the loss of their historical and traditional knowledge, which they tied to the pollution caused by mining activities and associated risks of relocation.

Response:

Metalkol considers that historical and traditional knowledge forms an essential part of a community's culture and heritage. Metalkol has adhered to all relocation norms and standards in relation to the resettlement community at Samukonga, to ensure the protection and respect of cultural heritage in accordance with national and international laws.

Water and Air quality

Question 6. Your 2019 EIS recommends water quality monitoring of upstream and downstream rivers/streams (page 23), regular monitoring of surface water effluent streams and flow rates, and groundwater quality (page 22), as well as consideration of community health issues related to inadequate water delivery (page 25). Your CCCPR 2022 further states a monitoring programme and stations set up to assess the quality of surface water and groundwater, amongst others (page 15), though it does not identify how many stations have been installed or where. It further states that a water monitoring program is in place to identify leachate from the landfill site. The CCCPR says monthly reports are provided to the Metalkol General Manager and bi-monthly to the DRC government.

Could you please answer the following points:

6 (a) Provide a list of your water monitoring stations and their precise locations. Please indicate the reasons why these locations have been selected.

Response:

The water monitoring stations have been selected to ensure that the risks identified within the EISA and the recommendations from the authorities are mitigated and implemented. This should ensure a comprehensive water monitoring system. The locations are as follows:

SURFACE WATER MONITORING POINTS		
Parameter Component	MTK Surface Water Points	SW Monitoring Point Description
Surface Water	MTK_SW_01	Musonoi river
Surface Water	MTK_SW_02	Luilu river
Surface Water	MTK_SW_03	Musonoi river
Surface Water	MTK_SW_04	UCK plant discharge
Surface Water	MTK_SW_05	Kakifuluwe river
Surface Water	MTK_SW_06	Kanamwamwa river
Surface Water	MTK_SW_07	Kasobantu dam
Surface Water	MTK_SW_08	Nzilo dam
Surface Water	MTK_SW_09	Dilala upstream
Surface Water	MTK_SW_10	Dambo next to plant
Surface Water	MTK_SW_11	Muninga river
Surface Water	MTK_SW_12	Luilu River-down
Surface Water	MTK_SW_13	KOV pit north discharge
Surface Water	MTK_SW_14	Kolwezi plant discharge
Surface Water	MTK_SW_15	River/stream near/next to plant
Surface Water	MTK_SW_16	Chinganda river
Surface Water	MTK_SW_17	KOV (pit East) discharge
Surface Water	MTK_SW_18	Mussonoi River upstream

Spring	MTK_SW_19	Muninga Spring RSF
Discharge	MTK_SW_20	Sewage plant
Discharge	MTK_SW_21	Penstock
Pond RSF	MTK_SW_22	Supernatant pond 1
Pond RSF	MTK_SW_23	RSF Beach area 1
Pond RSF	MTK_SW_24	RSF Beach Area 2
Pond RSF	MTK_SW_25	Plant discharge into the RSF pond
Surface Water	MTK_SW_26	Nursery water pumping
Surface Water	MTK_SW_27	RSF Return water pond
Surface Water	MTK_SW_28	Musonoi Pump Station Discharge (outlet pipe)
Surface Water	MTK_SW_29	Musonoi River Water Abstraction (Near Musonoi Pump Station)- Dredger
Surface Water	MTK_SW_30	Kasabantu Water Discharge
Surface Water	MTK_SW_31	Danzama river up stream
Surface Water	MTK_SW_32	Raw Water Pond
Surface Water	MTK_SW_33	Kasabantu Return Water

GROUND WATER MONITORING POINTS		
Parameter Component	MTK GW Monitoring Points	GW Monitoring Point Description
Ground Water	MTK_GW_01	Position southwest of Lake Nzilo
Ground Water	MTK_GW_01B	RSF Monitoring Borehole North
Ground Water	MTK_GW_02	RSF Monitoring borehole eastern collapsed
Ground Water	MTK_GW_02B	RSF Monitoring Borehole East
Ground Water	MTK_GW_03D	RSF Monitoring Borehole Northeast corner deep
Ground Water	MTK_GW_03S	RSF Northeast Corner Shallow
Ground Water	MTK_GW_04S	RSF Monitoring Borehole Southern Toe Shallow
Ground Water	MTK_GW_04D	RSF Monitoring Borehole Southern Toe Deep
Ground Water	MTK_GW_05S	RSF Monitoring Borehole Southeast corner
Ground Water	MTK_GW_05D	RSF Monitoring Borehole Southeast corner
Ground Water	MTK_GW_06S	SX&EW Monitoring borehole
Ground Water	MTK_GW_06D	SX&EW Monitoring borehole
Ground Water	MTK_GW_07S	Main road plant Monitoring borehole
Ground Water	MTK_GW_07D	Main road plant Monitoring borehole
Ground Water	MTK_GW_08S	Acid plant Monitoring borehole
Ground Water	MTK_GW_08D	Acid plant Monitoring borehole
Ground Water	MTK_GW_09S	Pre-leach plant Monitoring borehole
Ground Water	MTK_GW_09D	Pre-leach plant Monitoring borehole
Ground Water	MTK_GW_10S	UCK plant Monitoring borehole
Ground Water	MTK_GW_10D	UCK plant Monitoring borehole
Ground Water	MTK_GW_11	Manga wellfield Monitoring borehole
Ground Water	MTK_GW_12	Along Musonoi river monitoring borehole
Ground Water	MTK_GW_13	Kingamyambo tailing dam Monitoring borehole
Ground Water	MTK_GW_14	FQM BH1 Musonoi camp Borehole
Ground Water	MTK_GW_15	FQM BH2 Plant Borehole SO2 Plant

Ground Water	MTK_GW_16	FQM BH3 Kinganyambo camp Borehole (Acc Camp)
Ground Water	MTK_GW_17	Plant site /Water treatment plant source
Ground Water	MTK_GW_18	Manga wellfield
Ground Water	MTK_GW_19	Manga wellfield
Ground Water	MTK_GW_20	Manga wellfield
Ground Water	MTK_GW_21	Manga wellfield
Ground Water	MTK_GW_22	Manga wellfield
Ground Water	MTK_GW_23	Manga wellfield
Ground Water	MTK_GW_24	Manga wellfield
Ground Water	MTK_GW_25	Manga wellfield

6 (b) At what frequency do you conduct water quality tests at the water monitoring stations? What are the results? Please detail the results since 2018 per station.

Response:

The water quality tests are conducted weekly, monthly or quarterly as set out in the ESIA and the results are monitored to ensure compliance with the applicable standards. The results are submitted to the regulators and also form part of the annual environmental reporting and 3rd party bi-annual audits. At this point, all the 3rd party audits and external laboratories results did not raise any issues of non-compliance.

6 (c) At what frequency do you monitor leachate from the landfill site? What are the results?

Response:

Monitoring is carried out on a daily basis and no exceedances have been recorded.

6 (d) In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by Metalkol mine's activities? If not, which other waterbodies you have not identified in your EIS, and what are the results of their monitoring since 2018.

Response:

Yes, based on the governmental approval of our ESIA, we consider these monitoring activities as a comprehensive monitoring system which covers all relevant waterbodies. If otherwise, we would have expected to receive some further recommendations from external experts involved in our audits.

6 (e) Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?

Response:

Please see response to question 6 (d).

6 (f) Can you also please detail who undertakes these tests (including their qualifications and whether they are ERG staff or external personnel)?

Response:

The tests are carried out by external specialist laboratories which meet the required standards for such testing.

6 (g) Do you communicate the results of the water testing to local communities? If so, how, and when?

Response:

Yes, stakeholder engagement in relation to water testing is scheduled quarterly with the communities and the results of testing are shared with them.

6 (h) Can you please direct us to where we can find the bi-monthly reports to the Congolese government?

Response:

These are submitted to the regulatory agencies: Department for the Protection of the Mining Environment (DPEM), L'Agence Congolaise de l'Environnement (ACE) and other interested agencies.

Question 7. Your 2019 EIS indicates that you conduct dust fallout monitoring monthly (at page 17) and provides a map of initial locations and proposed locations. The EIS states the baseline showed dust fallout concentrations exceeded the Residential Area guidelines (600mg/m²/day) 58% of the time, including during much of the wet season, and that the concentrations of fine particles PM_{2.5} exceeded WB/IFC guidelines on several occasions (at page 19). It states Metalkol will continue monitoring dust, fine particulate (PM₁₀), and SO₂ at receptor locations surrounding the area of project activities for compliance with local and international guidelines. Your CCCPR 2022 makes no mention of your dust fallout monitoring program.

At our meeting on 14 May 2019 and in the follow-up written communications, you explained that an internationally accredited laboratory in South Africa is used for the analysis of the results and that you report on these annually to DRC authorities. Can you please detail the following:

7 (a) If you deviated from the proposed monitoring locations set out in Figure 6 on page 20 of the EIS, please provide an updated map and explain why locations were changed.

Response:

No monitoring points have been changed.

7 (b) What have been the result of the monthly dust monitoring since 2018. Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.

Response:

Concerning air quality: the results of air quality monitoring (in terms of suspended solid particles and gaseous emissions) do not exceed the standards to which Metalkol is subject. The air quality monitoring equipment runs 24/7 and analyses several parameters.

Metalkol did experience temporary dust exceedances due to very dry weather conditions between July and September 2022, which were addressed through the application of 'directional' dust monitoring (i.e. to inform more effective and timely control measures) and molasses-based road treatments during the dry season. The monitoring results on inhalable and respirable dust do not indicate any no other exceedances.

PM2.5 is recorded with a concentration less than 35 µg/m³ for 100% of the time. These results can be explained by the fact that Metalkol has good roads, limits unnecessary traffic and follows a worksite watering programme. Above all, however, it is since a programme of spreading bitumen has been initiated that we have significantly reduced dust observed as the dry season approaches Metalkol.

7 (c) Since 2018, has the dust monitoring continued to exceed the South Africa standards for residential areas? If yes, at which locations? What steps has Metalkol taken to reduce the levels? Have you monitored the health impacts of the harmful dust?

Response:

Please see answer to question 7 (b).

7 (d) Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.

Response:

Please see answer to question 7 (b).

7 (e) Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years.

Response:

The results are submitted to the regulators and also form part of the environmental annual reporting and bi-annual 3rd party audits.

Question 8. At our meeting on 14 May 2019 and in the follow-up written communications, you recognized it was not the practice at Metalkol to communicate the results of environmental monitoring with local communities. However, you committed to doing so in future community engagement meetings and said it would become a standard practice. Could you please confirm whether you now report the results of the dusts monitoring and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures. Could you also please provide a copy of the presentations and reports you provide to local communities.

Response:

Yes, this has been implemented and quarterly feedback sessions have been scheduled, and are occurring, to communicate the results of environmental monitoring every three months. Please refer to the response above in relation to dust in the answer to Question 4.

Question 9. We recognize that because the Metalkol mine operates in close proximity to other mining projects, some of your environmental impacts may be cumulative in nature. In these circumstances, how do you assess Metalkol's own contribution to environmental impacts? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?

Response:

The ongoing air, water and noise monitoring programmes are designed to assess the potential for impacts of the Metalkol operations. For example, in 2022, we supplemented our existing air quality measures at Metalkol through the application of 'directional' dust monitoring, to inform more effective and timely control measures and to identify and quantify dust originating from its processing plant and operating activities.

In relation to the impacts of other operations, these have been reviewed as part of the studies for the ESIA updates, the most recent of which was submitted and approved in 2022. Metalkol has engagement with other operators in the area about a range of topics, including environmental matters, both on a direct engagement basis, as well as through various governmental and/or civil society initiatives.

Question 10. In section 7 of Metalkol's EIS report, a range of mitigation measures are set out for the identified environmental impacts. In your CCCPR 2022 you state Metalkol is implementing an environmental management system that is compliant with ISO 14001 standards. Has there been an independent assessment of how effective Metalkol's mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point us to where we can find this assessment. If there is no independent assessment, please describe how Metalkol is measuring the effectiveness of its mitigation strategies.

Response:

Metalkol provides annual reports on the effectiveness of its controls and is subject to an independent bi-annual 3rd party audit on the compliance with the ESIA, including the mitigation measures, which demonstrates compliance with the ESIA requirements, as well as any recommendations for improvements. During the 2022 audit, Metalkol was complying with all requirements except one related to its Community Development Plan Agreement (further information below). The reports and the governmental feedback since 2018 can be found at the DPEM.

Management systems are in place to monitor sustainability measures across the operation and these are reviewed and assured as part of the Clean Cobalt & Copper Framework described above, as well as the RMI RMAP assurance process.

Access to potable water

Question 11. You stated in your letter to RAID dated 14 June 2019 that Metalkol had installed 10 solar water pumping stations for residents of nearby villages and that you were planning to install 11 additional boreholes in 2019, as well as to progressively increase community access to potable water. You also said you would hire consultants to monitor and report on their functionality. During the interviews with affected communities, some people told us they pay 100 Congolese Francs per jerrycan to access Metalkol's wells.

Can you please confirm:

Response:

As part of sustainable development practices, Metalkol drills wells and installs solar powered pumps and installations which feed a set of tanks with a capacity of 20,000 litres. The project is described in more detail in the response to the questions relating to the Community Development Plan Agreement set out below at Question 16. Once completed, the system is handed over to a water committee formed by the community. Water committees are responsible for the operation

and maintenance. Users pay a small fee to the water committee to help with the upkeep of the water supply system. Currently this fee is 100FC (Congolese francs).

The company has recommended that the money generated from water access be allocated to the functioning of the structure and the maintenance of the infrastructure. This approach enables sustainable community development projects, ensuring the autonomy of our beneficiaries and this beyond the life of the mine. We note the same practice is applied by UN agencies in the DRC.

11 (a) The total number of water installations Metalkol has built since restarting operations in 2018.

Response:

20 water points have been installed by Metalkol from the company social budget since 2018.

Nine additional boreholes have been installed by Metalkol through its Community Development Plan Agreement. These have been placed at locations in impacted villages selected on the basis of the population density and size of the villages and geophysics and underground water mapping. This selection process forms part of the community consultations conducted as part of the PRA and are subsequently confirmed through the Community Development Plan Agreement community consultations and authorities' approval processes.

11 (b) The locations where these wells have been installed and the number of people or households covered by each water point.

Response:

Please see response to Question 11(a) and Question 16 below.

11 (c) What further plans Metalkol has for additional water points.

Response:

Through its Community Development Plan Agreement and the 0.3% Committee projects, more water points will be installed if the communities define this as a critical need as detailed above in the response to Question 11(a) and Question 16 below.

11 (d) If all water points installed by Metalkol were functional and operational as of April 2023? If no, which ones were in disrepair, contaminated or not functioning and why?

Response:

All water points installed by Metalkol are operational as of April 2023, other than three. No contamination has been recorded or reported to date. Two wells have dried up and replacement locations are considered as part of the additional wells.

One was destroyed and equipment stolen by the community. Engagement is underway with the community in relation to appropriate protection to be provided around these facilities.

11 (e) Beyond establishing water committees, what other policies and procedures are in place at Metalkol to fix or replace wells that stop functioning or become contaminated?

Response:

Metalkol has an ongoing maintenance service contract with the same entity that installed all the solar borehole systems. Regular maintenance of the boreholes is carried out on a monthly basis. However, the company should not guarantee to replace wells that become inoperable due to sabotage. The security of wells is the community's responsibility, and they are made aware of this fact when the well is handed over.

Metalkol has not recorded any incidents of borehole contamination. Additionally, the water committees have been trained to clean the water tanks.

*11 (f) The usage made of the money that communities pay to access Metalkol's wells.***Response:**

A point of distinction needs to be made. The wells do not belong to Metalkol. All the boreholes are handed over to the communities, and the setup of the water committees is not directed by Metalkol. The water committees are accountable to the communities and Metalkol does not interfere in the management of the money collected from the boreholes.

The company has, however, recommended that the money generated from water access be allocated to the functioning of the structure and the maintenance of the infrastructure. This approach enables sustainable community development projects, ensuring the autonomy of our beneficiaries and this beyond the life of the mine. Again, this management system is inspired by the UN agencies practices in the DRC.

Health risks associated with water pollution

Question 12. In the 2019 EIS, it is stated that Metalkol's activities may result in environmental health impacts as a result of water quality (pages 24-25). Could you please explain this further. Have specific environment-related health impacts linked to your activities been reported to you by affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?

Response:

This was a statement in the ESIA as to potential impacts, which inform the overall water management processes implemented as part of the ESIA and from which the project design was completed. The ESIA process requires a systematic process of risk identification, assessment, and mitigation of physical, ecological, physical aesthetic, and social effects as stipulated in Chapter 1, section 1, art.1, point 19 of the Mining Code. This process is carried out before any project for the development, construction, equipping, installation, or siting of a permanent mining or quarrying operation or processing facility. It enables us to assess the potential direct and indirect consequences for the environment and take necessary measures to mitigate any adverse effects. These have been considered in relation to the project design, construction and operation and the ESIA requirements which are implemented as part of the overall management framework. This is described above in the overview and documents shared in relation to the Clean Cobalt & Copper Framework. Most importantly, as described above, and unlike other operators in the region, Metalkol does not discharge wastewater into the river – see responses to Questions 1 and 2.

A grievance mechanism and regular stakeholder engagement programme are in place and operating effectively. This site-based community grievance mechanisms and its

related procedures are aligned with the International Finance Corporation (IFC) Performance Standards and the UN Guiding Principles on Business and Human Rights. The community is informed about the grievance mechanism procedure on every occasion, and posters displaying this information are put up at prominent public places such as clinics, schools, and churches. We provide multiple channels to raise grievances, including through our community liaison officers and via community based 'drop off points'. Our approach is supported by close, ongoing community engagement.

Question 13. At our meeting of 14 May 2019 and in the follow-up written communications, we informed you of the gynecological problems that local female residents had reported to us. As set out above, our recent interviews with affected communities indicate many women reportedly continue to suffer from these problems, including urogenital infections, vaginal mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water. You previously told us that you were unaware of these incidents but would investigate them further, including taking forward our recommendation that female community liaison workers conduct discussions with female interviewees.

Can you please confirm:

Response:

A female community liaison officer has been hired and engages with female community members. There have been no complaints related to gynecological issues received through the grievance mechanism or otherwise made known to us. If any such cases are reported, we will investigate them.

We participate in, and provide contributions to, regional health initiatives including in relation to malaria, water contamination, HIV and will continue supporting the Health Zone.

13 (a) Whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynecological issues and the links to water pollution.

Response:

Please see response to Question 13 (a).

13 (b) What, if any, mitigation strategies you have put in place to address these concerns.

Response:

We are currently strengthening our relationship with the surrounding clinics and Health Zone workers to jointly investigate on the raised issues.

Question 14. The Lancet journal in April 2020 published an article on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to Metalkol's activities? What steps, if any, has Metalkol taken for its staff and/or communities impacted by Metalkol's activities following this publication? Have local residents reported concerns regarding birth defects to you?

Response:

To date, neither the staff nor community members have reported any complaints related to birth defects associated with copper and cobalt mining activities. We consider that the existing environmental and health controls described above are effective in relation to these potential impacts with respect to the Metalkol operation. We participate in, and provide contributions to,

regional health initiatives including in relation to malaria, water contamination, HIV and will continue to support the Health Zone.

Question 15. Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by Metalkol's activities?

Response:

Our community officers are cognizant of vulnerable groups within the community and always consider the needs of such groups in engagement and assessments. A multitude of literatures demonstrate that the DRC is experiencing a dire situation in terms of mental health and cognitive deficits due to ongoing conflicts, physical violence, malnutrition and barriers to access appropriate care due to lack of education and cultural beliefs. Based on our environmental monitoring programme, we do not have any evidence of any environmental pollution.

Livelihoods risks

Question 16. The EIS recognises that Metalkol's operations may result in negative livelihood impacts, including loss of land/crops and decline in food and nutrition (pages 24-25), as well as loss of natural soil fertility (page 22). The EIS mentions a Social Management Plan to mitigate these impacts and the CCCPR 2022 indicates you have a strategy on social investment, though we could not find a publicly available copy of it. It also mentions that you work in close partnership with communities, regional government and local and international organisations to support sustainable development amongst those communities most affected by our operation. You further state in the CCCPR that the Metalkol Commitments Register (Cahier des Charges), signed in November 2020, contains a set of periodic commitments negotiated and agreed upon between the company and the nine affected communities for the implementation of sustainable development projects. We understand from our previous written correspondence and meetings that you are taking the following actions to address these impacts: (i) provision of seed and fertiliser; (ii) support to the Bon Pasteur Alternative Livelihood Programme to empower young women; (iii) support to the Bon Pasteur business programmes in fish, farming and eggs; and (iv) nurseries and piggery planned for 2020.

Could you please detail:

16 (a) Where we can find a copy of your Social Management Plan. It not available online, please could you send us a copy?

Response:

These are contained in the Community Development Plan Agreement, the requirement for which was established by the DRC's 2018 Mining Code. This requires the establishment of a legally binding CSI framework documented in the Community Development Plan Agreement, to be renewed on a five-yearly basis in parallel with the updating of a mining operation's Environmental and Social Impact Assessment (ESIA). The Community Development Plan Agreement is based on formal public consultation with key stakeholders to identify local development priorities and is reviewed and approved by local authorities. Progress made against these commitments is subject to independent monitoring every 6 months.

This Community Development Plan Agreement outlines the projects selected by the community based on their socio-economic development priorities, including schools, clinics, boreholes for

water access, and agriculture, poultry, and fish-farming initiatives to improve livelihoods. At Metalkol, in 2022, we invested USD 2.1 million in the implementation of several projects under our Community Development Plan Agreement (which was approved in 2020). These projects form part of a multi-year program to help address the development priorities of nine local communities. In 2022, key projects included:

- The ongoing implementation of a sustainable agricultural programme to provide maize seeds, tools and capacity building for 476 households. During the year, 739 tonnes of maize were harvested.
- The construction of 16 fish farming ponds to support alternative livelihoods for 145 households
- The construction of a community health clinic, which we plan to complete in 2023
- The construction of a school for the Kamimbi II community which is in the process of hand over to the education department
- The drilling and installation of four community boreholes and related solar powered water distribution facilities.

A copy of the Cahier des Charges is attached.

The Mining Code also requires all mining companies to contribute 0.3% of annual turnover to a community sustainability fund, which is managed by a multi-stakeholder body. These bodies have been established in late 2023, and the cumulative funds accrued while these were being established are in the progress of being released. The Metalkol sustainability fund amounts to more than USD 12 million and the selection of the community projects is ongoing.

16 (b) The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.

Response:

The total financial contributions are USD 11,940,576.80.

An additional amount of USD 12,966,088 has been accumulated under the 0.3% community funds.

16 (c) What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?

Response:

The Community Development Plan Agreement is a new concept that is in its first cycle of implementation. This cycle that involves regular evaluation of the development projects also includes an evaluation by the local authorities every six months and an investigation by the Congolese Environmental Agency and the DPEM. To date, Metalkol has not received any report or assessment of non-compliance. In addition, Metalkol has undertaken an internal evaluation which considers immediate results and beneficiary ownership of the projects. It also takes into account the long-term impact of the initiatives and resolving any issues encountered in the implementation of projects, while meeting the needs of the community. These are also considered as part of the consultation process for the next Community Development Plan Agreement, as well as in relation to the engagements in respect of the 0.3% community development fund projects.

We believe that this approach will provide us with a comprehensive understanding of the effectiveness of our development actions and help us identify any rooms for improvement.

16 (d) Any other actions you have undertaken to mitigate the identified livelihood risks.

Response:

Please see response to Question 16 (a).

16 (e) How the “Cahier des Charges” signed in November 2020 impacts the Social Management Plan.

Response:

The Community Development Plan Agreement plays a crucial role in upholding Metalkol's commitment to corporate social responsibility, especially in the context of the RTR project's efforts towards sustainable community development. This document provides a comprehensive framework that outlines the company's social obligations and serves as a guide for its operations. By doing so, Metalkol is able to actively contribute towards the long-term growth and well-being of the communities it operates in, making it an integral part of the company's mission. Through the Community Development Plan Agreement, Metalkol can ensure that it is working in a manner that is both ethical and socially responsible, reflecting our values.

16 (f) The progress achieved to date in implementing the Cahier des Charges.

Response:

Please see response to Question 16 (a).

As noted, significant progress has been made in implementing the projects to meet the needs identified by the communities, especially in the following categories:

- Agriculture (100%);
- Clean water supply (100%);
- Education (60%);
- Health (80%);
- Poultry farming (90%).

Community Grievances on pollution and environmental damage

Question 17. In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:

17 (a) What proportion of these concerns relate to (i) health issues, including mental health and gynecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?

Response:

No complaints related to gynecological health issues or water pollution have been recorded over the last five years. Please see previous answers to questions above relating to fishing, agriculture and water.

17 (b) How many of these complaints were accepted and what subsequent actions were taken as a result?

Response:

Please refer to Question 17 (a).

17 (c) For the complaints that were rejected, what were the ground for the rejection?

Response:

Please refer to Question 17 (a).

Environmental damage and/or pollution linked to Metalkol's operations

Question 18. According to information received by RAID/Afrewatch, there have been a number of environmental incidents linked to Metalkol's operations since 2018, including amongst others, chemical spills and tailings storage facility breaches. Information received by RAID includes testimonies from community members, community leaders, ERG whistleblowers, civil society groups, as well as video and photographic materials.

Could you please detail:

18 (a) How many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at Metalkol since operations restarted in 2018? Please provide details on the causes.

Response:

We have recorded three minor chemical spills, within the operational area, which were addressed in accordance with the applicable incident management and environmental procedures. These have had no ongoing impact on the environment or people and did not impact any local communities.

18 (b) How many tailings dam wall failures or similar incidents occurred at Metalkol since 2018? Please indicate the dates and the details about what led to the breaches, including the tailing dam wall breach in January 2019.

Response:

One incident was recorded in 2019 during the construction of the tailings dam, which discharged accumulated water into a small area of the permit following extensive rainfall. This area formed part of the tailings dam construction footprint, and impacted some crops being grown on the area of the permit. Compensation was paid in relation to these crops. In line with our procedures, compensation calculations were determined by the information gathered from the surveys conducted in the field, which assess the areas farmed and the type and the maturity of the crops, amongst other criteria. These calculations are based on the official rates published by AGRIPÉL. Testing was conducted and there were no other environmental or community impacts.

18 (c) For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?

Response:

Please see response to Question 18 (b).

18 (d) What steps were taken to clean up the damage and what compensation, if any, was provided?

Response:

Please see response to Question 18 (b).

18 (e) What reports were submitted to government authorities?

Response:

All required reports were submitted to regulatory agencies. The Environmental Department conducted an investigation and concluded that the discharge was neutral and did not contain harmful elements.

Question 19. RAID/Afrewatch further received information regarding regular breaches of the process water containment system at Metalkol, causing repeated overflows with potential impacts on groundwater, the environment, and nearby communities. According to one source, Metalkol's management is aware of this issue but has not addressed it so far. We would be grateful for your view on this matter.

Could you please clarify:

19 (a) If there is, or has been, a problem as described above. If yes, please detail the problem, including the frequency of overflows and the volumes.

Response:

There has never been a problem of overflow or repeated spillage following a breach. As set out in the responses to Questions 1 and 2, we work in a closed circuit and the wastewater from our treatment plant is not discharged into the environment. In the event of a problem at the treatment plant (linked, for example, to a power cut or breakdown of some kind), we have an event pond enabling us to receive and contain all the solution from the treatment plant.

In the event of an accidental spill, a pollution control pond is available to receive and contain the spilled solutions.

We have stations (points) that enable us to monitor the impact of our activities on the quality of the environment. We monitor the quality of surface water and groundwater. This monitoring is carried out on a daily, weekly, and monthly basis.

In the event of an environmental incident, an investigation is carried out and corrective measures are taken immediately to mitigate or even eradicate the impact. Any spill is investigated. Accidental spills are contained so that they do not exceed the boundaries of the area in which they occurred and are addressed in terms of any remediation and testing required.

19 (b) What steps has Metalkol taken to resolve the regular overflows?

Response:

Please see answer to Question 19 (a).

19 (c) What analysis has Metalkol conducted to determine the extent of any damage to the environment and any impact on ground and surface water, the environment and nearby communities. What were the results?

Response:

Please see answer to question 19 (a).

Question 20. ERG Africa's SHS Policy mentions the group's commitment to progressive rehabilitation of areas affected by mining operations. Apart from the indirect effect of the tailings reclamation process of Metalkol, how are you implementing this policy in Congo? Which waterbodies, if any, have been rehabilitated? Please provide details.

Response:

As set out in the ESIA, after the completion of operations, and decommissioning, the closure plan will be put into effect with the rehabilitation of the project area. A rehabilitation plan is being developed based on these outcomes and progressive rehabilitation has commenced. To start to prepare for rehabilitation, the company has partnered with the agronomical faculty of the University of Lubumbashi to identify tree species tolerant of the environment in order to establish Metalkol's nursery, which will assist with the rehabilitation process and development of a biodiversity monitoring programme.

Currently the Metalkol nursery has around 9 500 trees comprising 23 indigenous species, all grown from seeds from the Kolwezi region. These trees will be planted in the rehabilitation process and form part a biodiversity monitoring programme A Topsoil Management Plan is also in place to enable future rehabilitation.

Question 21. Your operations at one of your other mines in DRC, Boss Mining, were recently suspended by the DRC Minister of Mines due to acute episodes of pollution and non-compliance with Congolese legal obligations pertaining to environmental and social impact assessment. We understand that you rebutted the environmental grievances as non-substantiated and have recently agreed on the Cahier des Charges with local communities.

21 (a) Could you provide further details to your counterargument, including, where possible, the results of your own investigation following the complained pollution?

In March 2023, Boss Mining and the broader Kakanda area received unprecedented levels of rainfall, as well as related flooding from upstream, third-party tailings storage facilities. This also resulted in water flooding into the nearby Kakanda river. These downpours and the subsequent flooding affected Boss Mining and its nearby communities. Testing did not identify any resulting hazardous water pollution. Prior to these events, once being alerted of the increasing water level through its monitoring program, Boss Mining broadcasted public rainfall warnings and alerted the local authorities. It also requested the evacuation of the neighbouring villages, which was carried out (other than a particular illegal ASM community who chose to stay in place).

Following the flooding, Boss Mining immediately liaised with local people, relevant authorities and civil society to identify the victims and took action to provide financial and medical support to those impacted, as well as food and emergency supplies. It subsequently worked with the

relevant authorities to assess the routes of the flooding, its impacts, the remediation and prevention measures that need to be implemented, and to establish the facts around the incident. An independent report by the regional Voluntary Principles Working Group has also confirmed the facts around the incident concluding it to have been an environmental disaster.

In April 2023, the Ministry of Mines' Directorate for the Protection of the Mining Environment (DPEM), the local authorities, and Boss Mining worked together on implementing an action plan to improve the environment around the concession and the Kakanda community. This required the submission of a 90-day action plan in this regard by 15 June 2023, which has been submitted. Nonetheless, on 29 May 2023 (i.e. before the deadline given to Boss Mining to submit its action plan) the Ministry of Mines ordered a three-month suspension of operations that has been renewed once by decision dated 29 August 2023. Boss Mining has appealed these suspension decisions and, at the time of writing, is awaiting a response from the Ministry regarding its requests to lift suspension. In the meantime, we are focusing on the finalisation of the action plan implementation; as well as the enhancement of the ASM stakeholders' safety practices.

Boss Mining signed two Community Development Plan Agreements in August, that will benefit 27 communities, and impact approximately 104,000 people, in the Haut-Katanga and Lualaba provinces in the DRC over the next five years. The focus areas identified by our communities comprise health, water supply, education, agriculture, commerce, road infrastructure and communications. As such, the combined Community Development Plan Agreements include, amongst others, the construction and equipping of clinics and healthcare centres; primary, secondary and technical schools; solar-powered borehole systems; a market with vendor stalls; administrative offices; sanitation facilities; a community radio station; refurbishment of an essential connective road and the purchase of a new ambulance. In addition, Boss Mining will expand its existing agriculture programme to reach more people and equip farmers with additional materials, tools, and capacity building to aid the transition from subsistence farming to profitable and sustainable agriculture.

21 (b) Are you taking any steps with the Congolese government to identify those harmed by the complained pollution and provide remedy if appropriate?

Response:

Please see response to Question 21 (a).

21 (c) As a result of this incident and in light of the recommendations you received from the Mining Environment Protection Service, are you planning to review your environmental policies in Congo? If yes, please provide more details, especially how this will relate to the Metalkol mine?

Response:

Sustainability policies and procedures that are in place at all ERG Africa operations are subject to regular review, and any external or internal developments or learnings are incorporated as part of the review process.

Prevention and due diligence

Question 22. Which international standards and best practice do Metalkol and ERG apply in relation to their environmental commitments and management? How has ERG applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?

Response:

We comply with all applicable laws and regulations, the OECD Guidelines for Multinational Enterprises, the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, the UN Guiding Principles on Business and Human Rights and strives to adhere to the International Council on Mining and Metals Mining Principles (ICMM). We have used IFC and UN standards in informing environmental policies and procedures. We review policies and procedures in light of any developments in relation to these standards.

Question 23. In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to ERG's human rights and environmental policies as a result?

Response:

ERG's commitment in relation to these is set out in our Human Rights Policy, which has been revised in 2023 and is attached. As set out in the policy, ERG (and its subsidiaries, including Metalkol) considers as fundamental to ERG's sustainability and the sustainability of the communities in which we operate. This policy recognises environmental aspects and sets out ERG's policy to manage its operations in accordance with national environmental laws and regulations, and to work towards optimising the sustainability and minimising the potentially negative environmental impact of its operations, drawing on emerging international best practices.

Question 24. Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?

Response:

We are compliant with the yearly reporting requirements.

Question 25. In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the Metalkol mine every two years. We have seen the EIS conducted from September 2019, which is on your website. Please could you clarify if this is the audit for 2019? Could you please direct us to where we can find the audit for 2021?

Response:

The ESIA update is a separate process from the bi-annual audits. The bi-annual audits are conducted by an independent consultant and the reports are submitted in accordance with the mining regulations. These are submitted to DPEM, FNSS and ACE.

Question 26. In ERG's 2021 Sustainable Development Report, you detail the example of cleaning up historic tailings at Metalkol. Could you please provide further information, including written documentation, on how Metalkol manages and seeks to minimize concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

Response:

Metalkol is commercially reprocessing the historical cobalt and copper tailings previously deposited by other operators in the Kingamyambo Tailings Dam and Musonoi River Valley. Waste generated during the production process is deposited in a modern RSF. As set out in the ESIA, after the completion of operations, and decommissioning, the closure plan will be put into effect with the rehabilitation of the project area - see answer to Question 20 above.

The implementation and maintenance of Metalkol's Safety, Health and Sustainability (SHS) management System provides the means to manage and minimise risks, comply with legislation, International Finance Corporations (IFC) Performance Standards and, provides the framework for continuous improvement in SHS management systems and performance.

The framework for the SHS meets the requirements of ISO 45001 :2018 for Occupational Health and Safety Management Systems, ISO 14001 :2015 Environmental Management Systems and ISO 26001 :201 OSocial responsibility.

The SHS framework subscribes to the Plan-Do-Check-Act (POCA) methodology used in international management standards to ensure continuous improvement SHS performance through the implementation and maintenance of sixteen management system Standards.

Suggested follow up

We trust this has answered the questions raised in this letter and we would be grateful for the opportunity to further understand the context of the claims made to RAID in order to deliver positive impacts to the communities we both serve.

Yours sincerely,



Katrina White
Head of Compliance International
Eurasian Resources Group S.a r.l.

Re: Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [Redacted]

[Redacted]

0 1 attachments (241 KB)

Follow-up Questions to ERG 15-12-2023.pdf;

Dear Katrina,

Thank you for your letter to us dated 20 November 2023 in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the Metalkol RTR mine. We appreciate the efforts you have made in setting out ERG's perspectives and inputs regarding these matters.

We would like to seek further clarification on a number of your answers. Please find attached correspondence from us with a few follow-up questions. We hope you will be in a position to respond by 12 January 2024.

In the meantime, we wish you all happy holidays and look forward to hearing from you.

With my best regards,

Anneke Van Woudenberg

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Email [Redacted]

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15 December 2023

Katrina White

Head of Compliance International
Eurasian Resources Group (ERG)
9 , rue Sainte Zithe
L-2763
Luxembourg

Via email

Dear Ms. White

Re: Water pollution and environmental risks at the Metalkol Mine in DRC – Follow-up questions

Thank you for your letter to us dated 20 November 2023 in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the Metalkol RTR mine in the Democratic Republic of Congo (DRC). We appreciate the efforts you have made in setting out ERG’s perspectives and inputs regarding these matters.

We would like to seek further clarification on a number of your answers. Please see below a list of follow-up questions, to which we hope you will be in a position to respond:

Environmental incidents

1. Your response says you recorded “three minor chemical spills” at the Metalkol mine, which were addressed through your existing “incident management and environmental procedures”.
 - a) Can you please explain what these procedures are and where we can find a copy of them?
 - b) Can you please provide further details on these incidents? For example, when and how did they happen? Did you measure the levels of chemicals and contaminants released in water, soil or air for each of these incidents? If yes, what were the results?
 - c) We understand that you rated these incidents as “minor”. Video footage and photos which have been shared with us of one of these incidents appears to show a substantial incident. Can you please detail the methods and criteria you use to determine the severity of an environmental incident?
 - d) You further mentioned that these incidents had no negative impacts on the environment and local residents (p. 20). Can you please explain what techniques and criteria you used to reach this conclusion? For instance, did you analyse water, air, and/or soil samples, or did you engage with potentially affected communities, or did you conduct any other relevant activity? If so, could you please share with us the results of your investigations?

- e) How do you reconcile these three chemical incidents with your statement on page 5 that “No cases of acid pollution have been reported”?
2. We understand that Boss Mining’s suspension has been extended for a second time by the Congolese Ministry of Mines for its failure to implement the ministry’s recommendations to address environmental and safety concerns. In your letter to us, you mentioned four documents that underlie Boss Mining’s response namely the “independent report” of a *regional Voluntary Principles Working Group*, an “Action Plan” agreed upon with the *Ministry of Mines’ Directorate for the Protection of the Mining Environment (DPEM)*, and “two Community Development Plan Agreements” signed in August 2023 with local communities.
- a) Can you please provide us with a copy of these four documents?
- b) We also understand that you have appealed this order on the basis that “substantial progress” had been made in implementing the Ministry’s recommendations. Could you please detail the remediation measures undertaken? As part of these measures, have you conducted or are you conducting any assessment to gauge the effectiveness of the adopted measures? If so, what are your findings?

Dust exceedances

3. On pages six and eleven of your letter to us, you mention a case of “dust exceedances” due to very dry weather conditions between July and September 2022” at Metalkol.
- a) Can you please share these results and indicate by how much dust levels were exceeded on a daily basis over this period.
- b) Was this the only time you have ever recorded “dust exceedances” above South Africa standards for residential areas since 2018? If so, how do you reconcile this with the findings in your Environmental Impact Study (EIS) – Executive Summary 2019 that “PM2.5 concentrations exceeded the WB/IFC guideline on several occasions” (p. 19)?

Potable water

4. You answered that Metalkol has installed 29 water points since 2018, and that three (3) are currently in disrepair. Can you please provide us with a list setting out the locations of these water points and how many litres of water each water point provides per day? If not, please explain why you can’t provide this information.

Health issues

5. We understand from your response that part of your investment in health programmes for local residents concerns “water contamination” (p. 16). Can you please explain what this entails? Have water-related health issues been reported to you or been recorded by the health clinics you partner with? If so, please detail them.
6. You indicate not having recorded specific female health issues such as gynaecological problems despite hiring a female community liaison officer to engage with female community members (p. 16). Can you please tell us what health-related issues this female officer has identified? Has this employee received training to investigate gender-specific health problems? What methods and practices does she employ to engage with women and girls?

Grievance mechanisms

7. You state on page 19 that there have been no complaints to the Community Grievance Mechanism on gynaecological health issues or water pollution, but you did not answer as to whether there had been any grievances lodged on other pollution or environmental damage. Please could you confirm there have been zero (0) grievances lodged on any matter relating to pollution or environmental damage to the Metalkol grievance mechanism. If there are none, how were matters related to the “three minor chemical spills” resolved? Were there no complaints to the grievance mechanism in relation to these or other spills?

Third-party audits

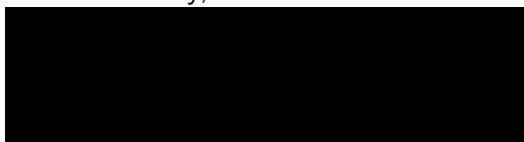
8. In your response you say that many of your activities are subject to third-party audits, including in relation to assessing the EIS against international standards (p. 2), water quality tests (p. 10), dust levels (p. 12), and compliance with the EIS (p. 13). Can you please share copies of the results of these third-party audits? If not, can you please explain the reasons why such results cannot be shared with us.

Communication with the community

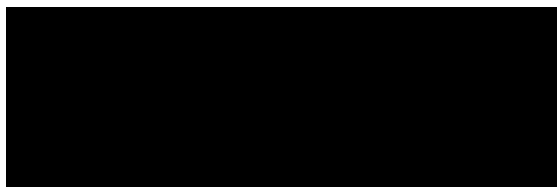
9. On relations with local communities your letter states that Metalkol “communicate the results of environmental monitoring every three months” to local communities (p11 and 12), including in relation to the water and dust monitoring results. Can you please share copies of the results that you provide to local communities quarterly since our meeting in May 2019, including any presentations and/or written communications that accompany and explain the results? If not, can you please explain the reasons why this cannot be shared with us.

We would be grateful to receive your additional response by 12 January 2024. In the meantime, we wish you all happy holidays and look forward to hearing from you.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

RE: Water pollution and environmental risks at Metalkol RTR

Katrina White

Wed 28/02/2024 07:37

To: Anneke Van Woudenberg

2 attachments (584 KB)

L RAID 28 Feb 2024.pdf; CRMD and Environment Joint community engagement.pdf;

Dear Anneke,
Please find the response attached.
Kind regards
Katrina

Katrina White

Head of Compliance International
Eurasian Resources Group



M:

UP Office Building
Piel Heinkade 55, Amsterdam
1019 GM, The Netherlands
www.eurasianresources.lu

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28 February 2024

Ms Anneke van Woudenberg
Executive Director
RAID

By email: [REDACTED]



Eurasian Resources Group

9, rue Sainte Zithe
L-2763 Luxembourg
Grand-Duché de Luxembourg
T: +352 24 84 53 1
F: +352 26 84 58 99

Dear Ms van Woudenberg,

Re: Metalkol

We confirm receipt of your letter dated 15 December 2023 following up on our earlier correspondence in relation to Metalkol.

As set out in our earlier letter dated 20 November 2023, an integral part of ERG's business is to ensure that we have sustainable community development practices in place to help the surrounding communities benefit from our operations and to manage any potential adverse impacts on those communities, including environmental-related. We set out in that letter our approach to environmental management and community engagement in relation to a number of areas (copy attached).

You have requested further information on some of these topics, which is set out below.

Responses to specific queries

1. Your response says you recorded "three minor chemical spills" at the Metalkol mine, which were addressed through your existing "incident management and environmental procedures".
 - a) Can you please explain what these procedures are and where we can find a copy of them?

These internal procedures are part of the Metalkol environmental, safety and community management procedures referred to in our previous response. In relation to spills, the relevant procedures include the Environmental Incidents Reporting Procedure as well as other environmental, safety and emergency response procedures, which provide for the reporting, response and investigation in relation to any spill. The procedure includes an

assessment of the risks, including clearing people from the area, the deployment of appropriately qualified responders with appropriate personal protective equipment (PPE), containment of the spill, and stopping the source. Following the immediate response, the procedures provide for a full assessment of the incident and actions for the management of the spill including testing and rehabilitation of the site. The incident report is then completed, which includes the risk/impact assessment, mitigating actions, responsible persons for completion of actions, and appropriate information sharing with relevant stakeholders.

b) Can you please provide further details on these incidents? For example, when and how did they happen? Did you measure the levels of chemicals and contaminants released in water, soil or air for each of these incidents? If yes, what were the results?

As noted above, these spills occurred in the operational area of the site connected with plant activities. The summary records in relation to these are set out below:

Date & Time	Description	Root cause	Correction action taken	Lab results
22 Aug 2023 11:00am	Acidic solution (spent electrolyte) spill on the ground causing soil pollution	Wear of pipe	Using lime to neutralise the spilled solution. Clean contaminated soil Fixing the worn pipe. Planned inspection of HDPE pipes as part of preventive maintenance to detect pipe wear in advance.	pH=1 Cu=4g/l Co=4g/l
17 Aug 2023 10:30am	The HBF pipeline flushing operation resulted in the spillage of an acidic solution, causing soil pollution	No proper environmental risk assessment Flushing operation procedure not followed.	Stop operation and contain the spilled solution. Use of lime to neutralise the spilled solution. Clean contaminated soil Completing the appropriate environmental risk assessment before flushing. Implementing the control measures before the flushing.	pH=1.5 Cu=0.15g/l Co=2.9g/l
23 Aug 2023 2:45pm	Iron removal tank bund area overflowed the raffinate low grade solution causing soil pollution	Pump malfunction Level Indicator Detector (LIT) issue Bund area size	Stop operation and contain the overflow solution. Using lime to neutralise the overflowed solution. Clean contaminated soil Fixing the LIT issue. Fixing the pump malfunction. Extending the bund wall area	pH=1.6 Cu=3g/l Co=4.56g/l

c) We understand that you rated these incidents as “minor”. Video footage and photos which have been shared with us of one of these incidents appears to show a substantial incident. Can you please detail the methods and criteria you use to determine the severity of an environmental incident?

The incidents referred to above were assessed on the basis of the impact assessed on a number of factors including environmental, safety and community impact, regulatory categorisation and financial impact, as well as a risk assessment of the potential for occurrence of such an incident.

As set out above, these were within the operational area, immediately reported and assessed and the spills neutralised. Investigations in relation to the cause, impacts and necessary mitigation/remediation actions were conducted and the action items implemented.

If you can provide the videos and photos referred to in your response, we will review these.

d) You further mentioned that these incidents had no negative impacts on the environment and local residents (p. 20). Can you please explain what techniques and criteria you used to reach this conclusion?

The procedures described above ensures that any environmental incident is reported and dealt with immediately. This allows us to intervene in time, minimise the impact and take the necessary corrective action. Any incident involving a spill, leak or overflow of solutions is stopped, contained, and in relation to these incidents, the solution was neutralized with lime. These occurred within the operational plant area and the impact was confined to this area and remediated.

For instance, did you analyze water, air, and/or soil samples, or did you engage with potentially affected communities, or did you conduct any other relevant activity? If so, could you please share with us the results of your investigations?

Air and water (surface water and groundwater) are analysed in accordance with the regulatory programme and the results are recorded. The investigation report records this information and the necessary internal and external regulatory reporting is completed. The community team conducts engagement with the local communities in relation to statutory monitoring.

(e) How do you reconcile these three chemical incidents with your statement on page 5 that “No cases of acid pollution have been reported”?

We do not consider this caused any acidic pollution because all these incidents occurred in the process plant, were controlled, neutralised and the area covered was small. The results from monitoring for surface water, groundwater and air quality showed no exceedance of applicable standards.

Question 2. We understand that Boss Mining's suspension has been extended for a second time by the Congolese Ministry of Mines for its failure to implement the ministry's recommendations to address environmental and safety concerns. In your letter to us, you mentioned four documents that underlie Boss Mining's response namely the "independent report" of a regional Voluntary Principles Working Group, an "Action Plan" agreed upon with the Ministry of Mines' Directorate for the Protection of the Mining Environment (DPEM), and "two Community Development Plan Agreements" signed in August 2023 with local communities.

a) Can you please provide us with a copy of these four documents?

b) We also understand that you have appealed this order on the basis that "substantial progress" had been made in implementing the Ministry's recommendations. Could you please detail the remediation measures undertaken? As part of these measures, have you conducted or are you conducting any assessment to gauge the effectiveness of the adopted measures? If so, what are your findings?

As set out in our previous letter, in March 2023, Boss Mining and the broader Kakanda area received unprecedented levels of rainfall, as well as related flooding from upstream, third-party tailings storage facilities. This also resulted in water flooding into the nearby Kakanda river. These downpours and the subsequent flooding affected Boss Mining and its nearby communities. Testing did not identify any resulting hazardous water pollution. Prior to these events, once being alerted of the increasing water level through its monitoring programme, Boss Mining broadcasted public rainfall warnings and alerted the local authorities. It also requested the evacuation of the neighbouring villages, which was carried out (other than a particular illegal ASM community who chose to stay in place).

Following the flooding, Boss Mining immediately liaised with local people, relevant authorities and civil society to identify the victims and took action to provide financial and medical support to those impacted, as well as food and emergency supplies. It subsequently worked with the relevant authorities to assess the routes of the flooding, its impacts, the remediation and prevention measures that need to be implemented, and to establish the facts around the incident. An independent report by the regional Voluntary Principles Working Group has also confirmed the facts around the incident concluding it to have been an environmental disaster.

In April 2023, the Ministry of Mines' Directorate for the Protection of the Mining Environment (DPEM), the local authorities, and Boss Mining worked together on implementing an action plan to improve the environment around the concession and the Kakanda community. This required the submission of a 90-day action plan in this regard by 15 June 2023, which was submitted on time. Nonetheless, on 29 May 2023 (i.e. before the deadline given to Boss Mining to submit its action plan) the Ministry of Mines ordered a three-month suspension of operations that has been renewed and is still in force.

Boss Mining has continued to engage with the Ministry and has been implementing the findings of the action plan. As part of that implementation it has completed the process of compensation in conjunction with government and local communities. The Ministry has not issued this document publicly at

this stage. The community development plan agreements referenced in the previous letter are the Cahier de Charge agreements in relation to the two provinces. These have been agreed by community representatives and are in the process of review by the Government committees. Boss Mining will publish these once final approval is received.

3. On pages six and eleven of your letter to us, you mention a case of "dust exceedances" due to very dry weather conditions between July and September 2022" at Metalkol.

a) Can you please share these results and indicate by how much dust levels were exceeded on a daily basis over this period.

b) Was this the only time you have ever recorded "dust exceedances" above South Africa standards for residential areas since 2018? If so, how do you reconcile this with the findings in your Environmental Impact Study (EIS) -Executive Summary 2019 that "PM2.5 concentrations exceeded the WBIIFC guideline on several occasions" (p. 19)?

The dust exceedances in 2022 were recorded and investigated in light of these increasing levels. Due to the increased third party activities near UZK, Kamimbi, Tshala and Tshamundenda, there were exceedances recorded in middle of 2022. In relation to residential monitoring points where exceedances were recorded, we held awareness-raising sessions with the communities on environmental aspects and appropriate mitigation measures.

In all these villages, these exceedances are due to the activities being conducted daily by the villagers, including ASM activities. At Metalkol, we have implemented additional measures to reduce dust. During the dry season we have a contractor who applies dust suppression product on 47 km of roads in the concession. On site we have Air Quality Monitoring (AQM 65) recording online data 24/7 and we have not recorded exceedances for the PM 2.5 levels.

Question 4.

You answered that Metalkol has installed 29 water points since 2018, and that three (3) are currently in disrepair. Can you please provide us with a list setting out the locations of these water points and how many litres of water each water point provides per day? If not, please explain why you can't provide this information.

Please see below:

COMMUNITY	GÉO-LOCALISATION	#	TANK CAPACITY
Samukonga	325342-8822395	1	20 000 L
Kamimbi 2	324870-8822008	4	20 000 L
	325597-8822381		20 000 L
	324177-8821779		20 000 L

	325389-8823029		20 000 L
Tshamundenda	326046-8820533	3	20 000 L
	326054-8821320		10 000 L
	326976-8821990		20 000 L
Tshala	328950-8819890	3	10 000 L
	328779-8820201		5000 L
	328867-8820204		20 000 L
UCK	330103-8818591	2	20 000 L
	329868-8818775		20 000 L
Samukinda	332185-8821352	4	20 000 L
	331955-8823277		10 000 L
	332448-8821924		10 000 L
	332144-8821779		20 000 L
Kamimbi	321606-8823815	3	20 000 L
	331899-8823870		10 000 L
	331829-8823497		20 000 L
Kashala	328569-8829035	1	20 000 L
Kipepa	326851-8828902	2	20 000 L
	326961-8828935		20 000 L
Kisangama	332152-8828042	1	20 000 L
Ngonzo	317714-8817537	1	20 000 L
GSS	333781-8812201	1	20 000 L
Clinique Lumumba	336249-8815220	1	20 000 L
Sanka	314889-8819114	2	10 000 L
	314909-8818849		10 000 L

Question 5. We understand from your response that part of your investment in health programmes for local residents concerns “water contamination” (p. 16). Can you please explain what this entails? Have water-related health issues been reported to you or been recorded by the health clinics you partner with? If so, please detail them.

Metalkol’s investment in health programmes for the local community incorporates measures to address the issue of clean water access, with a view to mitigating the impact of water contamination. This involves conducting geophysics studies to determine optimal locations for additional boreholes within the community, and drilling new boreholes, which are powered by a solar system for distribution. The department also collaborates with the Environment Department to provide training to the communities on borehole maintenance and tank cleaning. There have not been any documented incidences of water-related health issues either reported to the company or recorded by the health clinics that the company partners with, in relation to these systems.

We participate in health awareness campaigns in relation to wider issues relating to water quality and disease. In response to the ongoing cholera outbreak in Kolwezi, Metalkol has launched a comprehensive awareness campaign to educate employees and the community about cholera and other waterborne diseases and conducted workshops for more than 1,000 employees and are collaborating in community awareness projects with the Health Department. Metalkol's doctors maintain constant communication with the Kolwezi health authorities through weekly calls and ad hoc meetings. We actively share updated case numbers, surveillance data, and treatment protocols, and participate in joint initiatives to control the outbreak. All our medical staff were trained on cholera and typhoid diagnosis, treatment, and surveillance procedures. We are also implementing refresher training in liaison with the Health Department in response to the outbreak.

Question 6. You indicate not having recorded specific female health issues such as gynaecological problems despite hiring a female community liaison officer to engage with female community members (p. 16). Can you please tell us what health-related issues this female officer has identified? Has this employee received training to investigate gender-specific health problems? What methods and practices does she employ to engage with women and girls?

As noted in our previous response, our female community liaison officer has not recorded any specific female health issues during community engagement meetings. She has experience in relation to engagement on community issues and a focus on engagement with women and girls.

Question 7. Mechanism on gynaecological health issues or water pollution, but you did not answer as to whether there had been any grievances lodged on other pollution or environmental damage. Please could you confirm there have been zero (0) grievances lodged on any matter relating to pollution or environmental damage to the Metalkol grievance mechanism. If there are none, how were matters related to the “three minor chemical spills” resolved? Were there no complaints to the grievance mechanism in relation to these or other spills?

We have recorded some environmental grievances, however none related to water pollution. As set out above, the spills were within operational areas and did not impact the surrounding communities.

Question 8. In your response you say that many of your activities are subject to third-party audits, including in relation to assessing the EIS against international standards (p. 2), water quality tests (p. 10), dust levels (p. 12), and compliance with the EIS (p. 13). Can you please share copies of the results of these third-party audits? If not, can you please explain the reasons why such results cannot be shared with us.

The reports are submitted to the applicable regulators as required and would need to be requested from them.

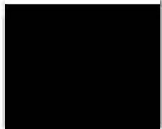
Question 9. On relations with local communities your letter states that Metalkol "communicate the results of environmental monitoring every three months" to local communities (p11 and 12), including in relation to the water and dust monitoring results. Can you please share copies of the results that you provide to local communities quarterly since our meeting in May 2019, including any presentations and/or written communications that accompany and explain the results? If not, can you please explain the reasons why this cannot be shared with us.

As a responsible corporate entity, we believe in engaging with the local communities and taking measures to protect the environment. To achieve this, the CSR and Environment Departments regularly organise information sessions with the community. This helps us to address any concerns related to environmental discomfort that may arise due to our activities at Metalkol. Samples of engagements are attached.

We have also installed equipment and materials in the community to monitor dust, noise, and water pollution levels. This is to ensure that the values are within the recommended standards and do not pose any harm to the health of the community.

We trust this has answered the questions raised in this letter and we would be grateful for the opportunity to further understand the context of the claims made to RAID in order to deliver positive impacts to the communities we both serve.

Yours sincerely,



Katrina White
Head of Compliance International
Eurasian Resources Group S.a r.l.

Re: Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [Redacted]

[Redacted]

0 1 attachments (175 KB)

Follow-up Questions ERG March 2024.pdf;

Dear Katrina,

Thank you for your correspondence.

Please find attached a response to your request to review and comment on the video footage and images of alleged spills, including a link to the images. Please note that we are nearing our publication deadline and would be grateful to receive your comments by end of business on March 8.

With my best regards,

Anneke Van Woudenberg

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Email: [Redacted]

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[!!!IP.s://raid-uk.org/](http://IP.s://raid-uk.org/)

From: Katrina White [Redacted]

Subject: RE: Water pollution and environmental risks at Metalkol RTR

Dear Anneke,
Please find the response attached.
Kind regards
Katrina

Katrina White

Head of Compliance International
Eurasian Resources Group





5 March 2024

Katrina White

Head of Compliance International
Eurasian Resources Group (ERG)
9 , rue Sainte Zithe
L-2763
Luxembourg

Via email

Dear Ms. White

Re: Water pollution and environmental risks at the Metalkol Mine in DRC – Further Follow-up questions

Thank you for your letter to us dated 28 February 2024.

In your correspondence, you provided details of spills in the operational area of the site in August 2023. Can you confirm there were no other incidents between 2018 and August 2023?

We wanted to respond to your request to review and comment on the video footage and images of alleged spills and contamination at Metalkol that we have received and which an expert has analysed. For your convenience we have uploaded these to a G-drive so you can view them.

██████████

You will see images (images 6, 7 and 8) and the associated video of a tailings dam breach in January 2019. In your letter of 20 November 2023, you referenced this incident and said this breach impacted some crops and that compensation was paid. There was no further information on the type of tests that were conducted at the time, the results, or how you reached the conclusion that there were no other environmental or community impacts. From the video and images it is clear the flooding from the tailings dam is considerable. We would be grateful for your comment on this video and the images, and for any further responses you wish to provide.

Images 4 and 5 are from Google Earth of the dry excavation which we understand Metalkol is currently undertaking to process the tailings in the Musonoi River. An expert has studied these images and raised concerns about environmental harms and the resulting impacts on local populations. We would be grateful for further details about what risks you have identified from the switch from dredging to dry excavation. Also, how many monitoring points has Metalkol installed by these dams and what are the results over the past year. Can you confirm on how many occasions pollutants, including sulphuric acid, has leached from these dams and related activity into the Musonoi river and/or surrounding areas? What steps are you taking to mitigate the impacts and what auditing has been conducted to verify its effectiveness. Please share any auditing reports.

Images 1, 2 and 3 are also from Google Earth of spillage at the belt filter buildings, identified as "filter press" in image 2. The images show a Cofferd Dam by the buildings with a considerable amount of waste water, for example in Images 1 and 2, and a dry hole in Image 3, with considerable depth, indicating ground water contamination. Looking back through older images indicates the accumulation of raw product in this area may have been a problem for some time. Image 3, from 19 December 2023, also shows what appears to be an excavation canal from the belt filter buildings to the road and into the wildlife area opposite. A white substance just across the road from the canal indicates this area may have been covered in a lime treatment, possibly to neutralise the contamination from sulphuric acid. We note from your earlier response on 20 November 2023 to question 19 that there has never been a problem of overflow or repeated spillage at Metalkol. These images indicate a repeated problem. We would be grateful for your observations and explanations.

Image 4 also shows older containment ponds on the bottom left of photo with what appears to be considerable amounts of residue, which could be dangerous to people and the environment. What testing is being conducted on these ponds? Are any preventative measures in place to stop any acidic or other pollutants seeping from these ponds?

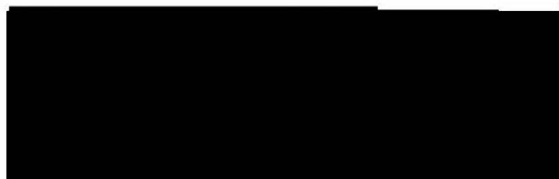
We are nearing publication for our report. In order to include your observations and responses in our upcoming publication, we will need a response by close of business on 8 March.

Thank you for your attention to this matter.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Re: Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [REDACTED].org>

Wed 06/03/2024 14:28

To: Katrina White [REDACTED]

Dear Katrina,

We have added one additional image (image 9) to the folder we sent you yesterday. This image was recently taken from Google Earth and appears to show two spills of raw material from Metalkol's pipe leading to its processing plant. We would be grateful for your comments and observations on this.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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We have a new look! Check out our website:

<http://raid-uk.org>

Re: Water pollution and environmental risks at Metalkol RTR

Anneke Van Woudenberg [REDACTED]

Wed 13/03/2024 22:54

To: Katrina White [REDACTED]

Dear Katrina,

We intend to publish before the end of the month and would like to include ERG's response in our publication. As you may recall, we requested information about the incidents in the photos in our correspondence to ERG on 6 October 2023 (please see questions 13 and 14) and asked for further clarifying details about your answers on 15 December (Question 1). You requested us to share the videos and photos which we did so promptly a few days later.

We would be very grateful for any further comments from ERG and can extend the time by a further 5 days, but will need to receive any further comments by close of business on 18 March if we are to include them in our publication.

I trust you will find this extension reasonable.

With my best regards,
Anneke

From: Katrina White [REDACTED]

Date: Wednesday, 13 March 2024 at 11:03

To: Anneke Van Woudenberg [REDACTED]

Subject: RE: Water pollution and environmental risks at Metalkol RTR

Dear Anneke

Hope you are doing well. Yes, we plan to provide a response but would need additional time until the end of the month to appropriately respond to these important questions.

Please note we have just received the request from RAID on the 5th of March, with a further question and document sent on 6 March only.

Kind regards

Katrina

Katrina White

Head of Compliance International
Eurasian Resources Group



[REDACTED]
UP Office Building

Piel Heinkade 55, Amsterdam

1019 GM, The Netherlands

www.eurasianresources.lu

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From: Anneke Van Woudenberg [REDACTED]

[REDACTED]

Subject: Re: Water pollution and environmental risks at Metalkol RTR

CAUTION: This email originated from outside of ERG. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Katrina,

I am following up to ask if ERG will be providing a response to our letter of last week including the images of spills from the Metalkol site.

With my best regards,

Anneke

From: Anneke Van Woudenberg [REDACTED]

[REDACTED]

Subject: Re: Water pollution and environmental risks at Metalkol RTR

[REDACTED]

Wednesday, March 20, 2024 at 20:21 :31 Greenwich Mean Time

Subject: Fwd: Water pollution and environmental risks at Metalkol RTR
Date: Wednesday, 20 March 2024 at 09:14:24 Greenwich Mean Time
From: Anneke Van Woudenberg
To: Ana1s Tobalagba, Zainab Rahim, Bonheur Minzoto
Attachments: er!Logo-resized_987d86d6-7d50-47e7-ad37-65c466101734.png, image001.png, image002.png, image003.png, image004.png, image005.png, image00G.png, L RAID 20 Mar 2024.pdf, LABORATORY RESULTS FOR MONITORING POINTS AROUND MUSONOI RIVER-2023 YTD.pdf

[Redacted]

[Redacted]

[Redacted]

From: Katrina White [Redacted]
Date: 20 March 2024 at 08:43:03 GMT
To: Anneke Van Woudenberg [Redacted]
 [Redacted]
Subject: RE: Water pollution and environmental risks at Metalkol RTR

Dear Anneke,
 Please find the response to the queries below attached.
 Kind regards
 Katrina

Katrina White
Head of Compliance International
Eurasian Resources Group

M: [Redacted]
 [Redacted]
 P'el Heinkade 55, Amsterdam
 1019 GM, The Netherlands
www.eurasianresources.lu [www.eurasianresources.lu]

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20 March 2024

Ms Anneke van Woudenberg
Executive Director
RAID

By email: [REDACTED]

Eurasian Resources Group

9, rue Sainte Zithe
L-2763 Luxembourg
Grand-Duché de Luxembourg
T: +352 24 84 53 1
F: +352 26 84 58 99

Dear Ms van Woudenberg,

Re: Metalkol

We confirm receipt of your email dated 5 March 2023 following up on our earlier correspondence in relation to Metalkol.

As set out in our earlier letters dated 20 November 2023 and 14 February 2024, an integral part of ERG's business is to ensure that we have sustainable community development practices in place to support the surrounding communities to benefit from our operations and to manage any potential adverse impacts on those communities, including environmental impacts. In these letters we outlined our approach to environmental management and community engagement in relation to a number of areas.

You have requested further information on some of these topics, which is set out below.

Question 1. You will see images (images 6, 7 and 8) and the associated video of a tailings dam breach in January 2019. In your letter of 20 November 2023, you referenced this incident and said this breach impacted some crops and that compensation was paid. There was no further information on the type of tests that were conducted at the time, the results, or how you reached the conclusion that there were no other environmental or community impacts. From the video and images it is clear the flooding from the tailings dam is considerable. We would be grateful for your comment on this video and the images, and for any further responses you wish to provide.

The referenced images (images number 6 and 8) depict the Residue Storage Facility (RSF) in its early stages and represents normal operations within the parameters outlined in our environmental and social impact assessment (ESIA), conducted by a qualified third party against International Finance Corporation's

(IFC) Performance Standards on Environmental and Social Sustainability - approved by the DRC Government in 2018. One incident was recorded in 2019 during the construction of the tailings dam, which discharged accumulated water into a small area of the permit following extensive rainfall. This area formed part of the tailings dam construction footprint, and impacted some crops being grown on the area of the permit. All resettlements required in relation to the area had already been conducted as required by the DRC Mining Code and international standards. This was the Samakonga resettlement outlined in our letter of 20 November 2023.

However, as you may know, in the DRC, it is unfortunately common to identify seasonal intruders into mining permits which result in increased social and environmental risks. Compensation was paid in relation to these crops. In line with our procedures, compensation calculations were determined by the information gathered from surveys conducted in the field, which assess the areas farmed, the type and the maturity of the crops, amongst other criteria. These calculations are based on official rates published by the Provincial Division of Agriculture (AGRIPEL). Testing was conducted and there were no further environmental or community impacts. We reported this to the DRC authorities and they provided a response indicating that there was no lasting impact on the environment and to continue with the statutory monitoring programme, which has been done. The RSF is continuously monitored by a third-party consultant, Epoch, who is the appointed engineer of record.

Regarding Image 7 We acknowledge the inclusion of image 7 in the inquiry. However, as it depicts an unfamiliar location and isn't related to our operations at Metalkol, we are unable to comment.

Question 2. Images 4 and 5 are from Google Earth of the dry excavation which we understand Metalkol is currently undertaking to process the tailings in the Musonoi River. An expert has studied these images and raised concerns about environmental harms and the resulting impacts on local populations. We would be grateful for further details about what risks you have identified from the switch from dredging to dry excavation. Also, how many monitoring points has Metalkol installed by these dams and what are the results over the past year. Can you confirm on how many occasions pollutants, including sulphuric acid, has leached from these dams and related activity into the Musonoi river and/or surrounding areas? What steps are you taking to mitigate the impacts and what auditing has been conducted to verify its effectiveness. Please share any auditing reports.

During the feasibility study for processing the tailings in the Musonoi River, various options were considered, including dredging. However, due to the following reasons, dry excavation was chosen for the current phase:

- **Historical Impact:** The study identified that the river had already sustained significant environmental damage over time due to the historical damage caused by the tailings in the river.
- **Shallow Waters:** Dredging was deemed infeasible due to the river's shallow depth.

While dry excavation is the primary method for now, there is potential for dredging in the future. Our long-term plans include incorporating dredging once it becomes technically feasible.

As we excavate tailings from the river we are attempting to repair historical environmental damages to the river and in adjacent areas. However, once the excavation and recovery of tailings has been completed, it is likely that tailings would again accumulate in the river, due to upstream mining operators' indiscriminate release of tailings and other residues into the river, resulting in a condition similar to pre-excavation of the river. For this reason, complete reinstatement and rehabilitation of the river would be futile, as pre-rehabilitation conditions would again set in. We would be delighted to compare our baseline data with your experts to confirm the latter.

In addition to the above, the following measures relating to excavation and open ditches will be implemented until the site reaches complete closure:

- Infill excavations from where foundations/footings/plinths have been removed, preferably with crushed concrete from infrastructure demolition, if too large to be done as part of routine shaping and levelling of the of disturbed infrastructure footprint areas; and
- Fill excavations by means of cut to fill.

We have four monitoring points in this location as set out in previous correspondence and there have been no exceedances – please find the monitoring results attached.

We have a closed water system to reuse water and to ensure that no pollutants from these dams enter the environment. All water from the RSF is collected at the RSF return water dam and recirculated in the process. All tailings are treated through a neutralisation plant before being stored in the RSF.

Question 3 - Images 1, 2 and 3 are also from Google Earth of spillage at the belt filter buildings, identified as “filter press” in image 2. The images show a Coffey Dam by the buildings with a considerable amount of waste water, for example in Images 1 and 2, and a dry hole in Image 3, with considerable depth, indicating ground water contamination. Looking back through older images indicates the accumulation of raw product in this area may have been a problem for some time. Image 3, from 19 December 2023, also shows what appears to be an excavation canal from the belt filter buildings to the road and into the wildlife area opposite. A white substance just across the road from the canal indicates this area may have been covered in a lime treatment, possibly to neutralise the contamination from sulphuric acid. We note from your earlier response on 20 November 2023 to question 19 that there has never been a problem of overflow or repeated spillage at Metalkol. These images indicate a repeated problem. We would be grateful for your observations and explanations.

These images depict a settling pond constructed during Phase 2 of the Project. This pond was designed to capture sediment-laden clean rainwater runoff from the construction activities and clean stormwater catchments. The pond allowed for slow, controlled release into the surrounding wetlands, preventing direct discharge and protecting the environment. The pond is solely for managing rainwater. However, the water was tested and if the PH was deemed out of the limits it would be treated using quicklime.

In relation to the horizontal belt filter building, this is located within a bunded area. This bund is designed to contain any potential spills, minimising environmental impact.

We have a wetland monitoring point and have not recorded any exceedances or impacts – as per the attached results.

Question 4 – Image 4 also shows older containment ponds on the bottom left of photo with what appears to be considerable amounts of residue, which could be dangerous to people and the environment. What testing is being conducted on these ponds? Are any preventative measures in place to stop any acidic or other pollutants seeping from these ponds?

The settling ponds in question are not part of Metalkol's operations. They belong are associated with an older zinc mine and are unrelated to Metalkol's activities.

Question 5 – Additional image 9. This image was recently taken from Google Earth. We would be grateful for your comments on this.

From the status of the facilities, we are not clear on the time period in which this was taken as the "dry pond" referred to above in the top left is now lined and there is more infrastructure in the area. These pipes are used for pumping tailings and water from the Kinganyambo reserve. There are no chemicals added before the tailings slurry enters the plant.

We trust this has answered the questions raised in this letter and we would be grateful for the opportunity to further understand the context of the claims made to RAID in order to deliver positive impacts to the communities we both serve.

Yours sincerely,

A black rectangular redaction box covering the signature of Katrina White.

Katrina White

Head of Compliance International

Eurasian Resources Group S.a r.l.

Water pollution and environmental risks at KCC and MUMI

Anneke Van Woudenberg [REDACTED]

Fri 13/10/2023 14:25

To [REDACTED]

1 attachments (236 KB)

Letter to Glencore from RAID + Afrewatch 13-10-2023.pdf;

Dear Anna and Glencore team,

We are reaching out to you and your team to requests Glencore's response to concerns we have recently received regarding water pollution and environmental risks related to Glencore's operations at KCC and MUMI in the Democratic Republic of Congo. We hope you and your team will be in a position to respond to our questions, which you will find in the enclosed correspondence.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning the Glencore's mines as well as efforts to ensure mining for cobalt and other critical miners is responsible, clean and sustainable. We view these matters as bearing the utmost public interest.

We look forward to hearing back from you.

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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<http://raid-uk.org/>



13 October 2023

Anna Krutikov

Head of Sustainable Development

Glencore

Baarermattstrasse 3

6340 Baar,

Switzerland

Via email

Dear Ms Krutikov,

Re: Water pollution and environmental risks at Kamoto Copper Company (KCC) and Mutanda Mining (MUMI) Mines in DRC

Following our exchanges over the past few years, we are reaching out to you on this occasion to seek your response to concerns we have received regarding water pollution and environmental risks related to KCC and MUMU's operations in the Democratic Republic of Congo.

We have appreciated our dialogue to date and very much hope this will continue, both about matters concerning Glencore's operations in DRC as well as efforts to ensure cobalt mining is clean. We view these matters as bearing the utmost public interest. We hope you will be in a position to respond to our questions regarding KCC and MUMI's environmental practices, which you will find in the enclosed attached.

As you know, we are two civil society organisations with a long history of research on human rights and environmental concerns in the mining sector in the DRC. [RAID](#) is a UK-based corporate watchdog NGO, partnering with civil society actors in Africa for more than 25 years. [African Resources Watch \(AFREWATCH\)](#) is a Congolese charity based in Lubumbashi which advocates for fair and equitable exploitation of natural resources.

During our research missions over the past few years, we have repeatedly received concerns from local communities regarding environmental pollution linked to industrial copper and cobalt mining in the Lualaba province. In mid-2022 and early 2023, our organisations conducted field research to look into environmental risks and their impacts on people's human rights at six industrial mines, including at KCC and MUMI. Our joint team interviewed more than 140 persons across 25 communities located in close proximity to these mines, as well as medical professionals, academic researchers, lawyers and government officials, amongst others.

As set out below, our preliminary findings across the six industrial copper and cobalt operations were alarming and indicate the following:

1. The activities of industrial copper and cobalt mines appear to have had severe – possibly irreversible – adverse effects on the water quality of surrounding lakes, rivers, swamps and groundwater reserves. While some of this may be linked to historical pollution, local residents and others we interviewed consistently detailed more recent acute periodic episodes of pollution as well as ongoing pollution which they attributed to toxic waste and contaminated water being released by mining companies in adjacent land and water bodies.
2. The damage to local ecosystems has had significant consequences on people's livelihoods. Scores of interviewees told us that since the increase in industrial cobalt and copper mining in 2018, including activities at KCC and MUMI:
 - a) The lakes and rivers used by fishermen and women have become so polluted that fish populations have decreased dramatically, and they have lost their capacity to retain aquatic life;
 - b) Farmers have seen a sharp decrease in their crop production. They told us that due to mining pollution, their crops rot before they are fully grown, and plants and vegetables no longer grow to full maturity.
3. An increase in health problems, which were confirmed by medical doctors we interviewed:
 - a) Consistently across the villages, interviewees reported dermatological diseases that they associate with the use of contaminated surface water. Some recounted cases of people being severely burnt after entering water containing acid-filled mining waste.
 - b) Most women, including teenage girls, complained of gynaecological and reproductive issues. They reported suffering from urogenital infections, vaginal mycoses and warts, frequent miscarriages, and birth defects. They all linked these conditions to sitting or standing in contaminated water to wash clothes or for hygiene purposes.
 - c) Some interviewees complained of digestive problems, including nausea, stomach pain and diarrhea, after drinking surface or well water, or after eating food prepared with contaminated water.
4. A significant negative impact on the mental health of people living around the mines or in a polluted area. Many of those we interviewed expressed living in constant state of fear of the impact of the pollution on their health and that of their children, and described feeling stressed, depressed and anxious.
5. The loss of livelihoods attributed by local residents to pollution appears to have had profound impacts on people's human rights, including their right to a clean and healthy environment, the right to food, the right to water, the right to education, as well as others. For example:
 - a) The dramatic drop in agricultural and fish yields has forced many people we interviewed to modify their eating patterns by reducing their food portions and the number of meals they eat. Many we spoke to were living on one meal a day, and sometimes even less.

- b) Unless they considered having no choice, most interviewees said they had stopped using lake, river, and sometimes spring water due to the impacts on their health. Instead, they reported being dependent for their water needs on a small number of boreholes, sometimes located at a considerable distance from their homes.
- c) Parents reported having to remove their children from school or sending them only occasionally because of reduced incomes.
- d) Several interviewees were worried about the loss of their historical and traditional knowledge which they tied to the pollution caused by mining activities, and associated risks of relocation.

We note that the mining industry has created new employment in the region, though you will be aware that we have [raised concerns](#) about working conditions and the low pay for subcontracted workers. However, in this research, our focus has been on the impact of mining activities on local residents not officially employed in the mining sector and who continue to rely on small-scale agriculture, such as fishing or farming. We trust you will agree that this continues to account for the vast majority of people who live near the large-scale mines.

While not all of the above relate to KCC and MUMI, the overall picture that appears to be emerging is troubling and has the potential to reflect negatively on the cobalt and copper industry as a whole. In effect, Congolese residents we interviewed who live near the industrial mines and rely on farming, fishing and small commerce for their livelihoods consistently told us they believed they were poorer and sicker due to the activities of large-scale copper and cobalt mining.

We would be most grateful for your perspective and input regarding the concerns reported to us. You will find attached our list of questions relating to the KCC and MUMI mines in particular. We are writing separately to the other main industrial mines covered by our research seeking their input and response. Your response will help us to better understand the situation and to accurately report on it.

We plan to publish a public report on our research. In the interest of balanced and fair reporting, we strive to reflect all relevant information in our research and publications. Your response, as well as those from the other industrial mines, will be taken into account in our forthcoming publication. We would welcome any information you wish to share with us on the matters raised or anything else you consider relevant.

Please send any information to RAID at [REDACTED] If you require any further clarifications or if you have questions, please do not hesitate to contact us. We would welcome an opportunity to discuss these concerns with you.

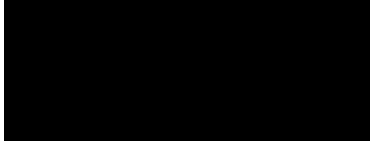
We would be grateful to receive your response by 10 November 2023.

Thank you and we look forward to hearing from you.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc:

Clint Donkin, Managing Director, Kamoto Copper Company SA
Christian Rampa Luhembwe, CEO, Mutanda Mining S.A.R.L
Placide Kalala Basidiwa, CEO, Gécamines, DRC

Questions from RAID and AFREWATCH to Glencore (KCC & MUMI Mines)

To: Glencore/Kamoto Copper Company & Mutanda Mining

Date: 13 October 2023

Subject: Water pollution and environmental changes at the Kamoto Copper Company (KCC) and Mutanda Mining (MUMI) mines in DRC

In light of our recent findings, we would welcome responses to the questions set out below. Please note that we have reviewed KCC's 2018 *Environmental Impact Study and Environmental Management Plan*, KCC's 2022 *Responsible Supply Chains Report*, KCC's *Health, Safety and Environmental Policy Statement*, MUMI's 2021 *Environmental and Social Impact Assessment*, and MUMI's 2022 *Responsible Supply Chains Report*. We have also reviewed Glencore's 2022 *Sustainability Report*, Glencore's *Social Performance Policy*, Glencore's *Environmental Policy*, Glencore's [Water Policy](#), and Glencore's 2018 and 2019 Water Reports. If there are any other relevant documents we should take into consideration, do please let us know.

We understand from your *Water Report 2018* that Glencore has a sustainable development database through which, *inter alia*, you track your water-related impacts. We trust that will assist in answering some of our questions set out below. We have indicated the detail we are seeking in each area to assist you in your response.

Water and Air quality

1. KCC 2018 EIS states that you undertake periodic monitoring of surface and groundwater (pages 3-31 & 9-7), with indicative locations of boreholes and surface water monitoring points (pages [5-43] - [5-46]). MUMI 2019 EIS (at pp. 170 & 186-187) equally recommends a monthly water monitoring and assessment and indicates monitoring site locations (pp. 79-80, groundwater monitoring sites), p. 81 (water quality monitoring sites), p. 83 (potable water monitoring sites), pp. 117-118 (aquatic monitoring sites).

Could you please answer the following points:

- (a) Provide a condensed list and the precise location of your water monitoring stations. Could you please indicate the reasons why these locations have been selected?
- (b) Please detail the results of your monthly water quality tests since 2020 per station. To what extent do they differ from the 2014-2019 tests which, as you indicate, mostly exceeded DRC legal limits (MUMI EIS, p. 82 & 84)? Have you continued to see the improvement in water quality as you observed in 2019 (MUMI EIS, p. 79)? What do you associate these improvements with?
- (c) At what frequency do you monitor leachate from the landfill site? What are the results?
- (d) In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by KCC and MUMI mines' activities? If not, which other waterbodies are impacted and what are the monitoring results of these water bodies since 2018.

- (e) Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?
 - (f) Can you also please detail who undertakes these tests (including their qualifications and whether they are Glencore staff or external personnel)?
 - (g) Do you communicate the results of the water testing to local communities? If so, how and when?
2. Your EISs recommend a monthly dust fallout monitoring (KCC EIS, p. 9-7; MUMI EIS, p. 163) and provide a map of initial locations and proposed locations. KCC EIS states (at pp. [5-23] - [5-29], 8-17 & 8-35) that the baseline showed dust fallout concentrations exceeded the Residential Area guidelines (600mg/m²/day) on several occasions for up to 1177mg/m²/day, including during much of the wet season. MUMI's EIS too recognises potential increase in dust fallout as a result of preconstruction activities but rates the risk low.

Can you please detail the following:

- (a) The monitoring locations of dust fallout for the MUMI project.
 - (b) The dust generating sources at the MUMI mine. We note that KCC already includes these in its EIS (at pp 8-17).
 - (c) If you deviated from the monitoring locations set out on page 5-24 of KCC EIS, please could you provide an updated map and explain why the locations changed.
 - (d) What have been the result of the monthly dust monitoring since 2018 for KCC and 2019 for MUMI? Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.
 - (e) Since 2018 at KCC and 2019 at MUMI, has the dust monitoring continued to exceed the South Africa standards for residential areas? If yes, at which locations? What steps has Glencore taken to reduce the levels?
 - (f) Have you monitored the health impacts of the harmful dust, which you recognise in KCC EIS (at pp. 8-26 & 8-35)? If yes, please describe these impacts.
 - (g) Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.
 - (h) Why, in the absence of dusts fallout standards in DRC, did you decide to use the South African National Ambient Air Quality Standards p (KCC EIS, 5-14; MUMI EIS, 163), as opposed to any other standards?
 - (i) Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years?
3. Do you report the results of the dusts levels and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures.
4. We recognise that because the KCC and MUMI mines operate in close proximity to other mining projects, some of your environmental impacts may be cumulative in nature (which you also highlight in the KCC EIS at page 8-2). In these circumstances, how do you assess KCC and MUMI contributions to an environmental impact? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?
5. KCC and MUMI EISs include a range of mitigation and rehabilitation measures for the identified environmental impacts (KCC section 9.5 and MUMI Title V). Has there been an independent assessment of how effective KCC and MUMI's mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point

us to where we can find this assessment? If there is no independent assessment, please describe how KCC and MUMI are measuring the effectiveness of their mitigation strategies.

Access to potable water

6. During discussions with affected communities, some people in Kahindu told us a water well built by MUMI became dysfunctional, and said MUMI refused to repair it, reportedly because the company said it had already done so in the past. We understand from Glencore's *Water Policy* that MUMI "is targeting increasing its supply of drinking water to local communities by 20% by 2024, against a 2020 baseline. This includes installing boreholes and associated equipment, such as pumps, tanks and pipes." Currently, a steering committee has been set up to monitor this project and we understand you were next planning to "involve a community groundwater modelling to identify the right locations for the required boreholes".

Can you please confirm:

- (a) The total number of water installations KCC and MUMI has each built to date.
 - (b) The locations where these wells/water points have been installed and the number of people or households covered by each water point.
 - (c) What progress have you made to date in implementing the MUMI 2024 water supply agenda?
 - (d) What further plans KCC and MUMI have for additional water points.
 - (e) If water points installed by KCC and MUMI were all functional and operational as of April 2023? If no, which ones were in disrepair, contaminated or not functioning and why?
 - (f) What policies and procedures are in place at KCC and MUMI to fix or replace wells that stop functioning or become contaminated? Please include any further information about the water point at Kahindu and if that remains dysfunctional.
7. MUMI's 2019 EIS states that in 2019 the limit of drinking water pH exceeded the WHO Drinking Water Standards Test of potable water (pp. 83-86). The EIS recommends that potable water quality be monitored monthly to meet the required standards (p. 188).

Can you please answer the following points:

- (a) Do you conduct potable water monitoring at the KCC project? At what frequency? What are the results? Please detail the results since 2018 per station.
- (b) What are the results of your potable water monitoring at MUMI since 2020? Please detail the results per station.
- (c) Can you also please detail who undertakes these tests (including their qualifications and whether they are KCC and MUMI staff or external personnel)?

Health risks associated with water pollution

8. Throughout the KCC and MUMI EISs, you recognise that the KCC and MUMI projects may result in environmental health impacts from water quality or dusts fallout (KCC EIS, pp 8-35; MUMI EIS, pp 143 & 149 – though MUMI EIS does not make the link between water quality and possible health impacts). Could you please explain this further. Have specific environment-related health impacts linked to your activities been reported to you by

affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?

9. KCC's EIS describes KCC's programme of providing support to health zones and hospitals (at pp 11-10). MUMI's EIS likewise mentions possible investments in health infrastructures and training (at p 200).
 - (a) Can you confirm what health programmes you have undertaken in the KCC and MUMI surrounding communities and their impacts to date?
 - (b) During our discussions with affected communities, we were told that the MUMI-built health centre in Rianda has limited its access to children under five. Can you please confirm whether this is correct? If yes, please explain why.
10. As set out above, our recent interviews with affected communities indicate many women reportedly continue to suffer from gynaecological problems, including urogenital infections, vaginal mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water.

Can you please confirm:

- (a) Whether these cases have been reported to you by local populations or others and whether you considered them in your health impact assessment? If so, please indicate how many complaints you have received, whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynaecological issues and the links to water pollution.
 - (b) What, if any, mitigation strategies have you put in place to address these concerns?
11. The Lancet journal in April 2020 published an [article](#) on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to KCC and MUMI activities? What steps, if any, have KCC and MUMI taken for its staff and/or communities impacted by KCC or MUMI's activities following this publication? Have local residents reported concerns regarding birth defects to you?
12. Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by KCC and MUMI activities?

Livelihoods risks

13. We note that in both EISs, you assess that there will be minimal potential negative livelihood impacts of your activities. In the KCC EIS, for example, you write that "the potential loss will be confined to soil resources only and not the loss of production resources, with a resultant low potential risk of impact on livelihoods. No current agricultural land will be impacted" (at pp. 8-14). You assess your socio-economic footprint in profitable terms (see KCC EIS, pp. 8-36; MUMI EIS, p. 149). At the same time, we note that you did make a connection between dust fallout and the ecological health of indigenous fauna and flora (KCC EIS, pp. 8-18). We recognise that you have a range of socio-economic programmes for the benefit

of local residents, such as farming assistance, education, investments in non-agricultural activities, etc. (KCC EIS, pp. [11-11] - [11-12]; MUMI EIS, pp. 199-120).

Could you please confirm:

- (a) The nature of these interventions? For example, are they purely philanthropic, based on DRC legal requirements of the *Cahiers des Charges*, or a response to the potential negative mining footprint of your operations?
- (b) Where we can find a copy of your Social Management Plan. If not available online, please could you send us a copy?
- (c) The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.
- (d) What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?
- (e) Any other actions you have undertaken to mitigate the identified livelihood risks.
- (f) How the KCC and MUMI "*Cahier des charges*" signed in 2022 impact the Social Management Plan and when MUMI.
- (g) The progress achieved to date in implementing the KCC *Cahier des charges*.

Community Grievances on pollution and environmental damage

14. In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:

- (a) What proportion of these concerns relate to: (i) health issues, including mental health and gynaecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?
- (b) How many of these complaints were accepted and what subsequent actions were taken as a result?
- (c) For the complaints that were rejected, what were the ground for the rejection?

Environmental damage and/or pollution linked to KCC and MUMI operations

15. According to the information we have received there have been a number of environmental spills by MUMI and KCC. For example, during our fieldwork, several interviewees reported that in April 2017, MUMI spilled acid in the Luakusha River which had a considerable impact and has left the water unusable to date. People we interviewed said that MUMI agents spread limestone on the day of the acid spill and asked local residents not to cross the river. Moreover, Glencore 2018 *Water Report* (p. 20) highlights a water-related environmental incident at KCC caused by leaking sodium hydro-sulphide drums that affected, among others, farmers' crops. In response, the Report indicates that you provided compensation to affected farmers. In March and April 2021, according to local residents, there was another incident of acid spill affecting the Luilu, Musonoie and Kanamwanfwe rivers and surrounding farmland. Our interviewees have told us that while KCC had spread lime to limit the toxicity of the acid and paid the medical fee of one burnt victim, it had refuted any negative environmental impact on communities. Those we interviewed also told us KCC has not rebuilt affected fish farms which it had promised to do.

Could you please detail:

- (a) Beyond spreading limestone to lessen acid toxicity in relation to the April 2017 events, what other mitigation measures did you take to respond to the concerns about the water pollution? Do you agree that the water remains unusable for drinking or other human use? If not, what evidence do you have that the water is safe? If it is still not safe, what steps are you taking to make it safe?
 - (b) The evidence you have collected to confirm there were no negative environmental impacts on local communities as a result of the 2021 acid spill. Have you re-considered your commitment to rebuilding affected fish farms? If so, why? If not, what are your current plans and timeframe for undertaking the work on the affected fish farms?
 - (c) Did you track your responses to the 2017, 2018 and 2021 acid spills to evaluate their effectiveness? If yes, please provide more details.
 - (d) In total, how many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at KCC since 2018 and at MUMI since operations restarted in 2021? Please provide details on the causes.
 - (e) How many tailings dam wall failures or similar incidents occurred at KCC since 2019 and at MUMI since operations restarted in 2021? Please indicate the dates and the details about what led to the breaches.
 - (f) For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?
 - (g) What steps were taken to clean up the damage and what compensation, if any, was provided?
 - (h) What reports were submitted to government authorities?
16. Glencore's 2022 *Sustainability Report* features an exemplary case study of a nursery project to restore the forest ecosystem at the KCC mine. Are there any similar projects for the rehabilitation of water bodies? Glencore's *Water Policy* states that "The next phase of the pilot project will consist of cultivating individuals of the selected species in trial ponds filled with contact water from Katanga mine to assess their ability to reduce metal loading and improve pH". Have you made any progress towards implementing this project? What other procedures or projects were put in place for the environmental rehabilitation of affected areas at the KCC and MUMI's mines? Could you please detail what these are and how they were implemented?

Prevention and due diligence

17. Which international standards and best practice do KCC, MUMI and Glencore apply in relation to its environmental commitments and management? How has Glencore applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?
18. In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to Glencore's human rights and environmental policies as a result?

19. Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?
20. In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the KCC and MUMI mines every two years. Could you please direct us to where we can find the audits for the past six years?
21. Could you please provide information, including written documentation, on how KCC and MUMI manage and seek to minimise concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

Thank you.

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Anneke Van Woudenberg
 Executive Director, Rights and Accountability in
 Development (RAID)
 Emmanuel Umpala
 Executive Director, African Resources Watch (AFREWATCH)

Baar, 10th November, 2023

Environmental and social performance management at Glencore operations in DRC

Dear Ms. Van Woudenberg and Mr. Umpala,

Thank you for reaching out to Glencore as part of your research into the environmental impacts of copper and cobalt industrial operations in the DRC. We have reviewed your questions and have set out responses below.

1. Glencore Policy and Standard Framework

In 2019, we commenced a comprehensive review of our Group policy framework, which included developing and/or updating supporting internal standards. Our Group policies and standards align with the requirements of the ICM's Performance Expectations.

At least every three years, we require our industrial assets to complete self-assessments against the Performance Expectations and our own internal standards, which are more prescriptive and cover more requirements. The findings of these self-assessments feed into our industrial assets plans to improve their performance. The self-assessments are also subject to third-party assurance, pursuant to a schedule determined based on certain prioritisation criteria.

In response to the questions raised by RAID/Afrewatch, we have provided an overview of Glencore's management of Health, Safety, Environment, Social Performance and Human Rights (HSEC & HR) performance with a particular focus on:

- Environmental impact management
- Social performance management
- Community health and safety
- Assurance and reporting
- Social investment

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1.1 Environmental impact management

Glencore's [Environmental Policy](#) articulates our commitment to minimise harm to the environment through environmental stewardship and responsible resource management. It contains specific commitments for Glencore operations to:

- Understand and address environmental challenges.
- Consider industry best practice in the design, operation, and monitoring of industrial assets for effective environmental management.
- Communicate with stakeholders, including governments, on our environmental performance.

These commitments are broken down in more detailed requirements in supporting internal standards, particularly those relating to environment, tailings storage and dam management, and closure planning.

In addition to the Glencore policy and standard framework, Kamoto Copper Company S.A. (KCC) and Mutanda Mining Sari (MUMI) are legally obliged to respect DRC regulatory requirements relating to environmental management. Both KCC and MUMI have Environmental and Social Impact Assessments (ESIA) in place which are regularly updated in accordance with the DRC Mining Code and prepared with third-party support. MUMI's most recent ESIA was prepared and filed in 2021 and received a favourable advice from the Environmental Mining authorities in July 2021; KCC's ESIA was prepared and filed in early 2023 and received a favourable advice from the Environmental Mining authorities in July 2023. These documents outline how the operations will manage environmental and social impacts. They are monitored by the DRC government on an on-going basis, including regular reporting and site-level assurance by third-parties that are certified by the government.

1.1.1 KCC/MUMI Water Management

KCC and MUMI's ESIA's include water management plans that outline how the operations monitor and report on surface, ground, and potable water both in terms of quality and quantity.

Surface water monitoring sites are located across KCC and MUMI's operational footprint and include permitted discharge points as well as monitoring locations up and downstream. These sites have been selected based on modelling simulations that ensure all high-risk areas are adequately monitored.

Groundwater monitoring sites are based on local groundwater flow models which help understand the extent of a potential contamination plume. On the basis of the modelling results, optimal locations for monitoring sites have been established and boreholes have been drilled to tap into shallow and deep aquifers.

KCC and MUMI perform water monitoring activities in line with their water management plans. A water monitoring programme is in place for both sites indicating the weekly and monthly sampling that must take place for surface and ground water. Groundwater monitoring is undertaken on a monthly basis. Ad hoc sampling may also occur.

At both sites, water monitoring results are measured against DRC government regulations and international best practice. Samples are analysed by accredited laboratories both in the DRC and South Africa. Costs associated with environmental management activities included in the ESIA are included in

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environmental registers provided to the DRC government on a monthly basis. Monitoring results are also included in the annual environmental management reports sent to the authorities by both operations.

KCC and MUMI conduct water quality and water level monitoring of community boreholes on a monthly basis. If an exceedance in water quality against WHO standards or reduction in water level in community wells is observed, monitoring frequencies are adapted and corrective actions implemented. In addition, support is given to communities for the cleaning and maintenance of boreholes – neither asset has refused to repair a borehole that has been provided to the community.

With regards to the disclosure of water monitoring results to local communities, MUMI posts water monitoring results on noticeboards in 15 communities weekly. Water is also covered in the monthly environmental management meetings with communities. At KCC, water management was covered as part of the ESIA community consultation that took place in 2022–2023. The operation is currently finalising awareness raising tools on water management but has not communicated water monitoring results to communities to date.

In addition to the requirements of their ESIA water management plan, KCC also carried out a Community Groundwater Impact Assessment (CGIA) in 2022. This study was implemented following community feedback regarding potable water quality and quantity and identified communities potentially impacted by mine dewatering. Based on the study, a response plan has been developed outlining the actions needed to address potential water quality and quantity issues in community boreholes. KCC intends to share the plan with communities as part of the awareness raising campaign that the asset is currently preparing.

1.1.2 KCC/MUMI Air Monitoring

The KCC and MUMI ESIA contain Air Quality Management Plans and specify monitoring sites for dust, particulate matter and gases. The monitoring sites and mitigation measures included in the Air Quality Management Plans are based on air dispersion models to assess the air quality risks that may impact receptors, including surrounding communities. Permitted air monitoring sites may change over time based on site activities. In the event of a change, the regulator would be contacted to notify and seek approval.

Air quality monitoring activities conducted by the operations aim to identify exceedances and ensure appropriate mitigation measures are in place. However, it should be noted that given the existence of factors influencing air quality (e.g. existence of other industrial activities; use of public infrastructure) it can be difficult to differentiate sources influencing air quality. Mitigation measures applied in accordance with the operations' Air Quality Management Plans may include pollution abatement technologies, dust filters, dust suppression, and revegetation.

In the absence of DRC regulatory limits, air monitoring results are measured against South African standards. Dust particles from KCC and MUMI air monitoring locations are sent to accredited laboratories in DRC and South Africa for analysis. Samples are screened for metals including (but not limited to) copper, cobalt, iron, nickel, lead, and arsenic. Air monitoring and mitigation measures are included in the operations' annual environmental report transmitted to government.

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With regards to community engagement regarding air monitoring, some KCC air monitoring equipment is located in communities close to the site and, in the past, community members have received training on the functionality of the equipment. At MUMI, air monitoring is also included in the monthly environmental management sessions carried out with local communities.

1.1.3 Closure Planning

Both KCC and MUMI are developing closure plans in accordance with the Glencore Closure Planning Standard. These plans include stakeholder engagement.

1.1.4 Cumulative impacts

Both KCC and MUMI monitor water both upstream and downstream of their discharge points to make sure that any cumulative impacts related to their operations can be identified and managed. KCC maintains on-going dialogue with other operations with which it shares downstream water monitoring sites. With one operation they have recently agreed to meet on a quarterly basis to discuss shared environmental monitoring sites. MUMI engages with neighbouring operations as needed, based on environmental monitoring results.

1.1.5 Environmental Incident Management

In the event of an environmental incident, KCC and MUMI apply the Glencore HSEC and Human Rights Incident Management Procedure. In accordance with the procedure, incidents are investigated, root causes identified, and corrective and preventative actions implemented. Depending on the incident classification, incidents are reported to Glencore at a corporate level and/or the government. Grievances associated with environmental incidents are managed in accordance with the operational grievance mechanisms.

Following the 2017 loss of containment incident from the pipeline between the MUMI processing plant and the tailings storage facility, two booster stations have been decommissioned and replaced. The impacted land was rehabilitated and is currently used by community members for agricultural purposes.

Following the 2021 loss of containment incident, Afreewatch shared a report on the community impacts of the incident with Glencore. As a result of this report, KCC exchanged with Afreewatch and hosted a site visit.

As part of the evaluation of this incident's community impacts, the provincial division of the Ministry of Agriculture, Fishing, and Livestock (AGRIPEL) investigated agricultural impacts, including on fish farms. The report produced by AGRIPEL did not identify impacts on fish farms as a result of the loss of containment incident. Nevertheless, KCC noted the interest shown by local community members in fish farming and launched a pilot project. Community members have continued to show interest in fish farming and KCC is intending to scale-up this project later this year by providing technical support, training, and equipment.

1.2 Social Performance Management

Glencore's [Social Performance Policy](#) recognises that whilst our activities make a contribution to society, they may also have adverse social and environmental impacts. Therefore, our approach to social

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performance management is grounded in avoiding or minimising adverse impacts; engaging openly and honestly; building lasting relationships; and fostering socio-economic resilience. The policy contains specific commitments to:

- Assess and manage social risks associated with our activities.
- Get to know local communities and implement engagement activities that are relevant and appropriate for different stakeholders, including vulnerable groups.
- Implement processes for stakeholders to raise concerns and complaints and record and investigate all concerns and complaints and seek to resolve them in a timely manner.
- Investigate social incidents to understand causes and contributing factors and take remedial actions to avoid them being repeated.

Commitments made in the Social Performance Policy are supported by the approach to human rights management outlined in the Glencore [Human Rights Policy](#). This approach is grounded in raising awareness of human rights; carrying out human rights due diligence; building strong and trusting relationships; and operating grievance mechanisms. Social Performance and Human Rights policy commitments are broken down into specific performance requirements in the respective standards.

1.2.1 KCC/MUMI Complaints and Grievance Mechanisms

The Glencore Social Performance standard requires that each asset have a functioning complaints and grievance mechanism. The complaints and grievance mechanisms at both KCC and MUMI were reviewed against the UNGP effectiveness criteria as part of a third-party expert-led human rights impact assessment in 2022. Areas for improvement will be included in action plans by the assets. KCC and MUMI report monthly to asset leadership and the Copper department on complaints and grievance performance. This reporting includes the status of open and closed complaints, ensuring continued senior oversight and visibility. Complaints and grievances received by both assets are also included in the annual environmental and social reports sent to the DRC government.

1.2.2 KCC/MUMI Environmental and Social Impact engagement

The Glencore Social Performance standard requires operations to identify and engage relevant stakeholders on identified social impacts, risks, and opportunities, and any mitigation measures. Both KCC and MUMI recognise this is an area of improvement for them. As mentioned previously, MUMI has implemented monthly engagement sessions with 15 local communities to discuss environmental impacts. KCC is currently preparing a similar type of session with communities in their area of influence.

1.3 Community Health and Safety

As mentioned previously, KCC and MUMI regularly collect environmental monitoring samples and monitoring outputs in accordance with their respective ESIA. The ESIA also specify measures to mitigate environmental impacts.

KCC and MUMI also support a range of community health awareness initiatives relating to communicable and non-communicable diseases. With regards to women's health, MUMI supports a menstrual hygiene campaign. As part of their social investment initiatives, KCC has also supported the construction of the Kapata maternity clinic to improve obstetric and post-natal care in Kolwezi.

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2. Assurance and reporting

In accordance with DRC legal requirements, KCC and **MUMI** submit an annual report to the government covering environmental and social management. In addition, the operations undergo twice yearly site inspections and are audited every two years by the DRC government. The audit verifies if the commitments made in the ESIA have been implemented at the operations. In the event there are findings, these are included in the audit report and followed up on in the subsequent audit. Audits took place at KCC and MUMI in Q3 2023. MUMI has received the audit report and is working on addressing findings; KCC is still waiting for the final audit report.

Both KCC and MUMI are working on the implementation of Glencore's policy and standard framework. Assurance activities are conducted in accordance with an assurance plan that cover all copper/cobalt assets. The assurance activities carried out by the sites not only support continuous improvement in HSEC&HR performance, but also help meet Glencore's external stakeholder due diligence requirements including **ICMM**.

In addition, both KCC and **MUMI** have been subject to third-party assessments of smelter and refinery management system and sourcing practices to validate conformance with the Joint Due Diligence Standard for Copper, Lead, Molybdenum, Nickel and Zinc and with the Cobalt Refiner Supply Chain Due Diligence Standard. KCC and **MUMI** are Responsible Minerals Assurance Process (**RMAP**) conformant for both cobalt and copper.

3. Social Investment

Glencore's social investment initiatives are driven by a commitment to deliver lasting and positive change in host countries and communities; and be a trusted community partner and supporter of socio-economic opportunity.

Social investment at KCC and MUMI is divided between:

- Cahier des charges contributions
- Contributions to the 0.3% community development fund required by the DRC 2018 Mining Code
- Discretionary social investment contributions

Both KCC and **MUMI** developed their Cahier des charges following its launch in 2022. The development process was based on a consultative process with local stakeholders, enabling them to identify and decide on projects they would like to develop in their communities. The Cahier des charges for each operation reflects their area of influences - this includes 13 communities for KCC and 9 for **MUMI**.

Through the cahier des charges Glencore expects its social investment in the DRC to increase to around \$40 million over the next 5 years for KCC and \$13 million for MUMI. Whilst the Cahier des charges will become the principal channel for social investment, both KCC and MUMI will continue to support discretionary social investment initiatives.

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The projects identified and selected by communities as part of KCC and MUMI's Cahier des charges cover infrastructure, education, electrification, agriculture, and health. KCC and MUMI are responsible for the implementation of these projects, which need to be delivered within the agreed timeframes. There are opportunities for local contractors to participate in the tendering process, which will provide indirect economic benefits.

The final approval of KCC's Cahier des charges projects is in process and is expected to be finalised in 2023. The tendering process for the community projects relating to MUMI's cahier des charges is complete, and the team is now working on the implementation of projects.

3.1 Cahier des Charges Water, Health and Livelihoods Projects

Both KCC and MUMI will undertake water, health and livelihoods projects as part of their Cahier des Charges:

	MUMI	KCC
Health	<ul style="list-style-type: none"> Rehabilitation and extension of 1 health centre Construction of 7 health facilities. 	<ul style="list-style-type: none"> Construction of 8 health facilities
Water	<ul style="list-style-type: none"> 16 boreholes 	<ul style="list-style-type: none"> 84 boreholes and some water networking projects.
Livelihoods	<ul style="list-style-type: none"> MUMI has long-standing relationships with agricultural associations in the operation's area of influence. As part of the Cahier des charges, MUMI will continue to provide support to these organisations through the provision of equipment, seeds, fertilizer, and capacity building. 	<ul style="list-style-type: none"> KCC has worked with agricultural associations in the operation's area of influence for a number of years. Through the Cahier des charges, KCC will further develop this support. Through the Cahier des charges KCC will continue their livelihood development training programmes, offering community members the opportunity to develop new skills to increase income generating activities.

It should be noted that water projects are also under discussion as part of the 0.3% community development fund. For instance, a further 16 boreholes are planned to be drilled in communities surrounding MUMI and a water treatment facility is under discussion in Kolwezi.

With regard to the Rianda health centre, in the past, doctors from the MUMI site clinic used to offer consultations to community members in this health centre. When the MUMI site clinic integrated with the Watu Wetu hospital in Kolwezi, this support was no longer possible. Currently, the Rianda health centre doesn't have the necessary government authorizations to operate. MUMI has started discussions with Watu Wetu management and the provincial health authorities to support the Rianda health centre in obtaining its authorizations to operate.

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We are available to discuss our responses in more detail, providing additional input and perspectives on content.

Yours sincerely,

Anna Krutikov
Group Head of Sustainable Development

Re: Water pollution and environmental risks at KCC and MUMI

Anneke Van Woudenberg

Fri 12/01/2024 16:03

To: [REDACTED]

Dear Anna,

Happy New Year to you and your colleagues.

Thank you for your letter to us dated 10 November 2023 in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the KCC and MUMI mines in the DRC. We have gone through your response and related documents carefully and appreciate the efforts you have made in setting out Glencore's general perspectives and inputs regarding these matters.

We would like to seek further clarification on a number of your answers. Please see our attached correspondence with further questions. We would be most grateful for a response by 31 January.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))



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From: [REDACTED]

Date: Friday, 10 November 2023 at 15:33

To: Anneke Van Woudenberg [REDACTED]

Subject: RE: Water pollution and environmental risks at KCC and MUMI

Dear Anneke,

Thank you for reaching out to us. Please see attached our response, which I hope answers your questions.

Separately, please note that Nicol is not working at Glencore anymore. I have instead copied my colleague Lydia from the Copper team, whom I believe you have also met.



12 January 2024

Anna Krutikov

Head of Sustainable Development
Glencore
Baarermattstrasse 3
6340 Baar,
Switzerland

Via email

Dear Ms Krutikov,

Re: Water pollution and environmental risks at the Kamoto Copper Company (KCC) and Mutanda Mining (MUMI) Mines in DRC – Follow-up questions

Thank you for your letter to us dated 10 November 2023 in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the Kamoto Copper Company (KCC) and Mutanda Mining (MUMI) mines in the Democratic Republic of Congo (DRC). We have gone through your response carefully and appreciate the efforts you have made in setting out Glencore's general perspectives and inputs regarding these matters.

We would like to seek further clarification on a number of your answers. Your response provided us with Glencore's general policies, but it unfortunately did not answer many of the specific questions we had raised in our correspondence of 13 October, including how Glencore's policies are applied in DRC and their effectiveness. We would be grateful for more detailed answers to the questions set out below so we can accurately report our research findings in our upcoming publication.

Documents mentioned in your response

1. In your 10 November letter, you mentioned a number of documents that underlie your response and which would be helpful for us to consult. These include:
 - a) KCC's "Environmental and Social Impact Assessment" 2023 (p. 2);
 - b) The monthly "environmental registers" to the DRC government (p.3);
 - c) The "annual environmental management reports" (p. 3);
 - d) The "Community Groundwater Impact Assessment (CGIA)" 2022 (p.3);
 - e) The "human rights impact assessment" 2022 (p. 5 & 6);
 - f) The "annual environmental and social reports" (p. 5);
 - g) The *Cahiers des Charges* (p. 6).

Could you please share copies of these documents with us? If you cannot share any or some of these, could you please outline the reasons for not doing so.

Environmental management

2. We understand that you select potential water monitoring sites *“based on modelling that ensures all high-risk areas are adequately monitored”* (p. 2).
 - a) Can you please explain what this *modelling* is and indicate the methods and criteria you use to determine the risk level of an area, including what is meant by “high risk”?
 - b) Can you please share the locations subject to your periodic monitoring?
 - c) Can you also share the results of water monitoring as analysed by “accredited laboratories” (p. 2) and shared on noticeboards in the communities covered by MUMI (p.3)? It would be helpful to have these results from 2018 to 2023.
 - d) Do you only monitor these areas which you have identified as high-risk?

3. Glencore’s *Sustainability Report 2022* states that *“Our industrial assets have completed a comprehensive gap analysis against the requirements of our Environment Standard and they are progressing the implementation of the Standard by taking actions to address the identified gaps. Through using a risk-based approach, over 70% of our industrial assets have completed the development of water management plans and set catchment context based local water targets.”* Can you please confirm whether you have undertaken this “comprehensive gap analysis” at both KCC and MUMI? If so, what gaps have you found, and how do you plan to address them?

4. You mention conducting air monitoring on page 3 of your letter. Can you please confirm whether there has been dust exceedance of any of the measurements for residential and non-residential areas? If yes, at which locations, and what steps are you taking to reduce these levels?

Potable water

5. Your letter mentions general water management plans and the provision of potable water on pages 2 and 3. However, we did not receive information regarding access to potable water for local residents. As mentioned previously, local resident we interviewed repeatedly raised concerns about the lack of access to potable water during our research. We would be grateful for answers to the following questions, or an explanation as to why you cannot share this information:
 - a) What is the total number of water installations (boreholes, water wells, water pumping stations or other water points) installed by KCC and MUMI to provide potable water to local communities impacted by Glencore’s operations? Please provide the location of these water points and the water capacity of each installation.
 - b) Are all the above water points operational as of April 2023? If no, which ones were not functioning and why? What policies are in place to repair water points?
 - c) What further plans do KCC and MUMI have for additional water points?
 - d) What progress have you made to date in implementing the MUMI 2024 water supply agenda?

Please note that we have received detailed information from other mines responding to the above questions and we trust Glencore can provide the same.

6. On page 3 of your response, we understand that you recognise that the quality and quantity of potable water is not always at the required standard. Your letter states that *“If an exceedance in water quality against WHO standards or reduction in water level in*

community wells is observed, monitoring frequencies are adapted and corrective actions implemented”.

- a) Can you please explain where and how often WHO water standards have not been met, including reductions in water levels, over the past five years? We would appreciate receiving this information per location.
- b) Did Glencore conduct investigations into the causes and impacts of the exceedances, including any impacts on the health of local residents? If yes, what were the results of these investigations?
- c) Can you please detail what “corrective actions” are implemented to remediate issues of water quality and/or quantity?

Environmental incidents

7. We would like to seek further information on MUMI’s “loss of containment” incident of 2017, as explained on page 4 of your correspondence.
 - a) Please, can you detail what toxic product was released into the environment and the volume of the spill?
 - b) We understand that Glencore’s HSEC and Human Rights Incident Management Procedures was followed in this case. Is that correct? Based on the investigations conducted as part of this procedure, what were the resulting human and environmental impacts?
 - c) Please could you confirm the impacts on the Luakusha River, the Kando Lake, and any other water bodies as a result of the incident. Are these water sources now potable and fit for human consumption? If yes, what evidence do you have to support this?

8. We would also like further clarification on the 2021 incident at KCC. We understand that this “loss of containment” incident to which you refer was, according to Glencore’s own press statements, “a limited release of acid from Tank Farm 1 during maintenance work” on 16 March 2021, and that there was a further spill of acid on 4 April 2021 from another basin following heavy rains. KCC confirmed in correspondence to AFRWATCH on 12 July 2021 that it had spread 2,500 tons of lime to seek to neutralise the impact of the spills, but said it was unable to confirm precisely how much acid had been released.

AFREWATCH was part of a site visit on 21 April, wrote a detailed report on the impacts of the two spills in the affected communities, and published results of its own water testing. We note your reference to the AGRIPPEL report, and trust you have seen the concerns expressed about AGRIPPEL’s findings at the time since its assessment was conducted some 26 days after the spills and during the rainy season. AGRIPPEL’s findings were at odds with a report of an earlier site visit by the provincial division of the DRC Ministry of Mines, which was submitted to the prosecutor of the Kolwezi appeal court, which said that the mining division’s delegation had found a number of “serious infringements on the environment and the health of surrounding communities”, and lists impacts such as fields burned and the destruction of aquatic life due to the spill. KCC’s July 2021 correspondence to AFRWATCH also confirmed it had received a collective complaint about the impacts of the spills from the Luilu and Tshamudenda communities.

Your November 2023 response to us set-out some action taken by KCC in relation to the fish farms, but it did not respond to our other questions. We would be grateful for further clarity on the following:

- a. Please could you confirm if Glencore's HSEC and Human Rights Incident Management Procedure was implemented by KCC to respond to this incident? If yes, what were the results of KCC's own investigations in relation to the human rights and environmental impacts of the two acid spills? If no, why not?
 - b. Apart from the AGRIPPEL assessment, what evidence did KCC collect to confirm there have been no negative impacts on local communities and the environment?
 - c. What action, if any, did KCC take in response to the community complaint it received? If no action was taken, please explain why not.
 - d. Was the community complaint registered under KCC's grievance process or was this handled via a different process? If it was handled under the grievance process, please could you explain the process of how it was handled and the outcome.
 - e. What action did KCC take in response to the AFREWATCH's December 2021 report and its recommendations, including on compensating further people injured or otherwise impacted by the acid spill?
 - f. Please could you confirm if KCC paid for medical expenses and/or provided any other compensation (please specify) to individuals affected by burns or other health impacts? If yes, for how many individuals?
 - g. Did KCC cover medical expenses for the family of Kayombo Yava (12 yrs old) and Pasi Katolo (10 years old) for their injuries? If not, please explain why not.
 - h. Did you track your response to the 2021 acid spills at KCC to assess its effectiveness? If yes, please provide more details on your learnings.
9. Your response did not include reference to the acid spill in February 2019 when a truck carrying acid to MUMI was involved in a collision resulting in the deaths of some 20 people and spillage of acid into the environment.
- a. What investigations did Glencore conduct to determine the cause and the impacts on people and the environment of this incident? Please detail the impacts you found.
 - b. What steps did MUMI take to address the consequences? Were medical expenses, compensation or other forms of redress provided to the victims?
10. Your response did not include answers in relation to the incident reported in Glencore's 2018 *Water Report* (p. 20) concerning a water-related environmental incident at KCC caused by leaking sodium hydro-sulphide drums. We understand the spill ran along a 4 km drain outside of the KCC concession into the village of Tshamundenda, damaging crops, field and gardens. Following the spill, KCC compensated 460 households as well as the owners of a number of fish farms, and suggested that those impacted form an association to which it would provide fertiliser and seeds. We understand KCC cleaned up the drain, but took no further action to clean up the fields or the gardens.
- a. Please could you confirm if our understanding above is correct?
 - b. Please confirm the volume of sodium hydro-sulphide that was released?
 - c. In the years following the spill, has KCC assessed if there was any ongoing impact of the spill on human health and the environment (including on water, soil and fields)? If yes, when were these assessments conducted and what were the results?
 - d. Did you track the effectiveness of your intervention? If yes, when and what were the results?

11. In addition to the 4 incidents described above, have there been any other episodes of accidental spillages of chemical and reagents, tailings breaches, or similar spills causing damage to the environment which have occurred at KCC since 2018 and at MUMI since operations restarted in 2021? If yes, please provide details.
12. Since 2018, has KCC or MUMI received any summons or non-compliance penalties from DRC government authorities for breaches of environmental requirements as set out under the DRC mining code and its regulations? If yes, please provide the number, reasons and the penalty.

Grievance mechanisms

13. In your November 10 letter and in Glencore's publicly available documents, we could find no detailed information on community grievances relating to water, air and/or other environmental concerns. You state on page 3 of your response to us that KCC implemented the *Community Groundwater Impact Assessment (CGIA)* in 2022 "following community feedback regarding potable water quality and quantity and identified communities potentially impacted by mine dewatering".
 - a) Can you please provide further details about these and any other complaints regarding water/air quality and water quantity? How many such grievances have you received over the past 5 years? When? What problems did the complaints detail? In which locations? How many complaints were accepted? How many were rejected and why?
 - b) What corrective measures did you adopt in the CGIA to remediate the identified negative impacts? How many complaints are now closed and how many are still ongoing?

Engagement with other mines

14. Due to the cumulative nature of some of your impacts, we understand that both KCC and MUMI have established cooperation with other mining companies, a development which we welcome.
 - a) Can you please detail which other companies you collaborate with, including the operation KCC is meeting with on a quarterly basis?
 - b) What are the outcomes of these dialogues to date?

Industry Standards

15. We understand that the industry standards you apply in your operations are those set out in the *Mining Principles: Performance Expectations* of the International Council on Mining and Metals (ICMM), and that you seek to go beyond these. Is our understanding correct? Can you please specify instances where you have gone beyond these principles?
16. In June 2023, the OECD Guidelines for Multinational Enterprises was updated, including on the human rights and environment chapters. Can you please outline how you apply the Guidelines and its updates in DRC in relation to KCC and MUMI's operations?

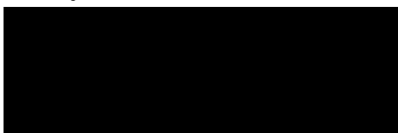
Labour Rights

On a separate matter, we would also like to follow-up with you on developments in relation to labour rights at KCC and MUMI.

17. When RAID last met with you and your colleagues in 2023, you said you would be able to share the human rights audit/assessment being conducted by Triple R Alliance. Could you please share a copy of this report?
18. We would also be grateful for information regarding labour rights concerns with two sub-contractors of Glencore's operations in DRC:
- a) **Congo Invest Corporation (CIC):** As you may know, on 28 October 2022, the Kolwezi Labour Tribunal decided against CIC for unlawfully ending the contract of workers and for failing to pay salaries when MUMI was on care and maintenance between 2019-2021. In its defence, CIC said that, because of the COVID-19 pandemic, it was requested by MUMI to reduce its workforce. The defence was dismissed by the tribunal, which ordered CIC to pay \$9,000 in compensation to the impacted worker(s). CIC has since appealed the decision. Could you please confirm if MUMI or KCC still employs Congo Invest Corporation as a subcontractor? Also, please detail Glencore's policies in relation to subcontracted workers during the time an operation is on care and maintenance. Does Glencore make provision to pay or otherwise support such subcontracted workers?
 - a) **Elias and Matis Trading.** In November 2023 a lawsuit was initiated by a group of workers at the Lualaba Court of Appeal against Elias & Matis Trading for widespread violations of the Congolese Labour Code, including blocking unionisation, lack of medical benefits, unlawful firing of workers, and failure to provide administrative documents such as pay slips. Our research indicates Elias & Matis Trade are a subcontractor of KCC. Could you please confirm if this is correct? If yes, was the company assessed for its compliance with Glencore's policies and with Congolese labour law? When was the last assessment? What were the findings?

We would be grateful to receive your additional response by 31 January 2024. In the meantime, if you have any questions, please do not hesitate to contact us.

Sincerely,



Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc: Placide Kalala Basidiwa, CEO, Gécamines, DRC

RE: Water pollution and environmental risks at KCC and MUMI

[REDACTED]

Tue 30/01/2024 16:58

To: Anneke Van Woudenberg [REDACTED]

[REDACTED]

1 attachments (304 KB)

RAID_Afrewatch_Glencore response_3012024.pdf;

Dear Anneke, dear Emmanuel,

Please see attached the response to the additional questions you sent us. Can you advise when you anticipate to finish the report, and whether you'd be able to share it with us prior to publications?

Regards,
Anna

from: Anneke Van Woudenberg [REDACTED]
Sent: Friday, January 12, 2024 5:05 PM
To: Krutikov, Anna [REDACTED]

[REDACTED]

Subject: Re: Water pollution and environmental risks at KCC and MUMI

External sender

[Resending with the attachment this time.]

Dear Anna,

Happy New Year to you and your colleagues.

Thank you for your letter to us dated 10 November 2023 in which you provided responses to concerns reported to RAID and AFREWATCH regarding water pollution and environmental risks at the KCC and MUMI mines in the DRC. We have gone through your response and related documents carefully and appreciate the efforts you have made in setting out Glencore's general perspectives and inputs regarding these matters.

We would like to seek further clarification on a number of your answers. Please see our attached correspondence with further questions. We would be most grateful for a response by 31 January.

With my best regards,

Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))

 **RAID** Holding business to account
Standline up for human rights!

Anneke Van Woudenberg
Executive Director, Rights and Accountability in
Development (RAID)
Emmanuel Umpala
Executive Director, African Resources Watch (AFREWATCH)

Baar, 30 January 2024

Additional questions re. Glencore environmental and social performance management in DRC

Dear Ms. Van Woudenberg & Mr. Umpala,

Thank you for your letter dated 12th January 2024.

As outlined in Glencore's [Sustainability Report](#), we support transparent and constructive stakeholder engagement; this includes NGOs interested in our activities. We welcome constructive feedback on our activities and seek to engage with our critics.

In accordance with Glencore's approach to stakeholder engagement and consultation, our DRC operations regularly engage with Congolese civil society. In this regard, we would like to highlight the site visit that took place in September 2023, including Afrewatch and a number of Congolese civil society organisations. During this visit, the organisations had opportunity to visit the operations, engage with the management teams, and raise their questions and concerns with the CEO Copper Africa and members of the senior management team.

With regards to your request for additional information on environmental management at KCC and MUMI, our understanding was that you were looking for general information from various companies and we spent considerable time providing responses to your initial questions. We note your request for additional information following our original response. Given the significant volume of information already provided to your respective organisations, we do not consider it practical to provide further details.

We thank you for your continued engagement with us.

Yours sincerely,

Glencore International AG


Anna Krutikov
Group Head of Sustainable Development

Re: Water pollution and environmental risks at KCC and MUMI

Anneke Van Woudenberg

Wed 06/03/2024 14:37

To: [REDACTED]

Dear Anna,

Thank you for your response sent to us on 30 January. We are nearly complete with our report and intend to publish it at the end of the month. While it is our policy not to share the full report prior to publication, we have already shared our preliminary findings, and have incorporated your responses, as well as those from other mining companies. We would be very happy to discuss it in detail with you and your colleagues once it's out. We will be in touch with some suggested dates for that soon.

In the meantime, I would like to circle back on KCC's 2023 Environmental and Social Impact Assessment, which you said had been approved by the government in July 2023. We would be grateful if you could share this version with us. As you know, ESIA's are public documents, though unfortunately the DRC government is behind in putting these reports on its website, especially since the ministry is in the process of upgrading it. Having the 2023 ESIA would permit us to have the latest information from KCC reflected in our report.

Could I also ask you to confirm the villages and towns that are impacted by operations at MUMI. We currently have Kisenda, Kahindu, Kapaso, Mibanze and Rianda. Please let us know if any of these are incorrect and if there are others we should include.

Finally, could you please let us know how many water points for local communities have been installed by Glencore at KCC and also at MUMI? We have this for other companies but the information from Glencore is currently incomplete.

Thank you.

All the best,
Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))

 A blue and orange circle with text Description automatically generated

Email: [REDACTED]

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<https://raid-uk.org/>

From: [REDACTED]
Date: Tuesday, 30 January 2024 at 16:58
To: Anneke Van Woudenberg [REDACTED]
Cc: Anaïs Tobalagba [REDACTED]

RE: Water pollution and environmental risks at KCC and MUMI

[REDACTED]

Tue 12/03/2024 07:15

To: Anneke Van Woudenberg [REDACTED]

[REDACTED]

Dear Anneke, thank you for letting us know of the progress of the report. With regards to your questions below:

- We are not able to share the ESIA for KCC, as it has not yet been approved;
- The areas in Mumi's impact area are set out in the Mumi ESIA, which I believe you have received;
- Both KCC and Mumi support its host communities with a number of projects supporting infrastructure. In line with our standards, we regularly review our approach and evaluate opportunities for improvement.

I look forward to reading the final report.

Regards
Anna

Re: Water pollution and environmental risks at KCC and MUMI

Anneke Van Woudenberg

Tue 12/03/2024 14:27

To: [REDACTED]

Dear Anna,

Thank you for your response.

Could I please clarify the current status of KCC's ESIA? In your correspondence to us on 10 November 2023, you said "*KCC's ESIA was prepared and filed in early 2023 and received a favourable advice from the Environmental Mining authorities in July 2023.*" (page 2, section 1.1). This is at odds with your email from yesterday.

If the ESIA has been approved, we would be grateful to receive a copy.

With my best regards,

Anneke

From: [REDACTED]**Date:** Tuesday, 12 March 2024 at 07:15**To:** Anneke Van Woudenberg [REDACTED]**Subject:** RE: Water pollution and environmental risks at KCC and MUMI

Dear Anneke, thank you for letting us know of the progress of the report. With regards to your questions below:

- We are not able to share the ESIA for KCC, as it has not yet been approved;
- The areas in Mumi's impact area are set out in the Mumi ESIA, which I believe you have received;
- Both KCC and Mumi support its host communities with a number of projects supporting infrastructure. In line with our standards, we regularly review our approach and evaluate opportunities for improvement.

I look forward to reading the final report.

Regards

Anna

刚果矿山的水污染与环境风险

Anneke Van Woudenberg [Redacted]

Wed 15/11/2023 18:26

To [Redacted]

1 attachments (299 KB)

Letter to COMMUS from RAID+ Afrewatch 14-11-2023.pdf;

Dear Sir/Madame,

Please find attached important correspondence for Mr Jinghe Chen, the executive director of Zijin Mining Group, regarding concerns about environmental pollution at the COMMUS mine in the Democratic Republic of Congo. We would be very grateful if you could forward this to him for his response.

With my best regards,

Anneke Van Woudenberg

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!!J!ft 1E f iti ftB, FFtt ;lt

非常感谢!

安妮克*范*沃登伯格

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development [\(RAID\)](#)



Email: [Redacted]

X IG I B @raidukorg

[LinkedIn](#) |

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<http://raid-uk.org>



15 November 2023

Jinghe Chen

Executive Director
Zijin Mining Group
Zijin Tower, Zijin Road,
Shanghang, Longyan,
Fujian Province, China
364200

Via email

Dear Mr Chen,

Re: Water pollution and environmental risks at Zijin Musonoie Mining Mine in DRC

We are two civil society organisations writing to seek your response to concerns we have received regarding water pollution and environmental risks related to the operations of the Zijin Musonoie Mining¹ (COMMUS) mine in the Democratic Republic of Congo (DRC).

We view matters concerning COMMUS' operations in DRC as well as efforts to ensure cobalt mining is clean as bearing the utmost public interest. We hope you will be in a position to respond to our questions regarding COMMUS' environmental practices, which you will find in the enclosed attached.

Our two organisations have a long history of research on human rights and environmental concerns in the mining sector in the DRC. [RAID](#) is a UK-based corporate watchdog NGO, partnering with civil society actors in Africa for more than 25 years. [African Resources Watch \(AFREWATCH\)](#) is a Congolese charity based in Lubumbashi which advocates for fair and equitable exploitation of natural resources.

During our research missions over the past few years, we have repeatedly received concerns from local communities regarding environmental pollution linked to industrial copper and cobalt mining in the Lualaba province. In mid-2022 and early 2023, our organisations conducted field research to look into environmental risks and their impacts on people's human rights at six industrial mines, including at COMMUS. Our joint team interviewed more than 140 persons across 25 communities located in close proximity to these mines, as well as medical professionals, academic researchers, lawyers and government officials, amongst others.

¹ We understand from Zijin 2021 Annual Report (p. 3) that COMMUS' name has changed from *La Compagnie Minière de Musonoie Global Société par Actions Simplifiée* to *Zijin Musonoie Mining Société par Actions Simplifiée*. However, the name *La Compagnie Minière de Musonoie Global Société par Actions Simplifiée* is still present in the 2022 Annual Report (p. 3). Please advise us on the correct company's name.

As set out below, our preliminary findings across the six industrial copper and cobalt operations were alarming and indicate the following:

1. The activities of industrial copper and cobalt mines appear to have had severe – possibly irreversible – adverse effects on the water quality of surrounding lakes, rivers, swamps and groundwater reserves. While some of this may be linked to historical pollution, local residents and others we interviewed consistently detailed more recent acute periodic episodes of pollution as well as ongoing pollution which they attributed to toxic waste and contaminated water being released by mining companies in adjacent land and water bodies.
2. The damage to local ecosystems has had significant consequences on people’s livelihoods. Scores of interviewees told us that since the increase in industrial cobalt and copper mining in 2018, including activities at COMMUS:
 - a. The lakes and rivers used by fishermen and women have become so polluted that fish populations have decreased dramatically, and they have lost their capacity to retain aquatic life;
 - b. Farmers have seen a sharp decrease in their crop production. They told us that due to mining pollution, their crops rot before they are fully grown, and plants and vegetables no longer grow to full maturity.
3. An increase in health problems, which were confirmed by medical doctors we interviewed:
 - a. Consistently across the villages, interviewees reported dermatological diseases that they associate with the use of contaminated surface water. Some recounted cases of people being severely burnt after entering water containing acid-filled mining waste.
 - b. Most women, including teenage girls, complained of gynaecological and reproductive issues. They reported suffering from urogenital infections, vaginal mycoses and warts, frequent miscarriages, and birth defects. They all linked these conditions to sitting or standing in contaminated water to wash clothes or for hygiene purposes.
 - c. Some interviewees complained of digestive problems, including nausea, stomach pain and diarrhea, after drinking surface or well water, or after eating food prepared with contaminated water.
4. A significant negative impact on the mental health of people living around the mines or in a polluted area. Many of those we interviewed expressed living in constant state of fear of the impact of the pollution on their health and that of their children, and described feeling stressed, depressed and anxious.
5. The loss of livelihoods attributed by local residents to pollution appears to have had profound impacts on people’s human rights, including their right to a clean and healthy environment, the right to food, the right to water, the right to education, as well as others. For example:
 - a. The dramatic drop in agricultural and fish yields has forced many people we interviewed to modify their eating patterns by reducing their food portions and the number of meals they eat. Many we spoke to were living on one meal a day, and sometimes even less.

- b. Unless they considered having no choice, most interviewees said they had stopped using lake, river, and sometimes spring water due to the impacts on their health. Instead, they reported being dependent for their water needs on a small number of boreholes, sometimes located at a considerable distance from their homes.
- c. Parents reported having to remove their children from school or sending them only occasionally because of reduced incomes.
- d. Several interviewees were worried about the loss of their historical and traditional knowledge which they tied to the pollution caused by mining activities, and associated risks of relocation.

We note that the mining industry has created new employment in the region, though we have previously [raised concerns](#) about working conditions and the low pay for subcontracted workers. However, in this research, our focus has been on the impact of mining activities on local residents not officially employed in the mining sector and who continue to rely on small-scale agriculture, such as fishing or farming. We trust you will agree that this continues to account for the vast majority of people who live near the large-scale mines.

While not all of the above relate to COMMUS, the overall picture that appears to be emerging is troubling and has the potential to reflect negatively on the cobalt and copper industry as a whole. In effect, Congolese residents we interviewed who live near the industrial mines and rely on farming, fishing and small commerce for their livelihoods consistently told us they believed they were poorer and sicker due to the activities of large-scale copper and cobalt mining.

We would be most grateful for your perspective and input regarding the concerns reported to us. You will find attached our list of questions relating to COMMUS in particular. We are writing separately to the other main industrial mines covered by our research seeking their input and response. Your response will help us to better understand the situation and to accurately report on it.

We plan to publish a public report on our research. In the interest of balanced and fair reporting, we strive to reflect all relevant information in our research and publications. Your response, as well as those from the other industrial mines, will be taken into account in our forthcoming publication. We would welcome any information you wish to share with us on the matters raised or anything else you consider relevant.

Please send any information to RAID at [REDACTED] If you require any further clarifications or if you have questions, please do not hesitate to contact us. We would welcome an opportunity to discuss these concerns with you.

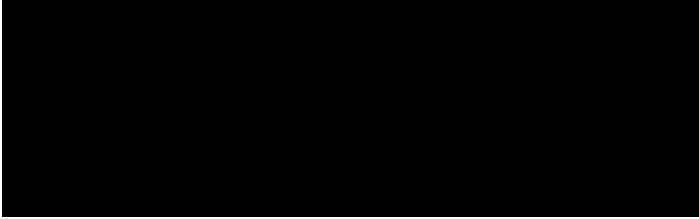
We would be grateful to receive your response by 6 December 2023.

Thank you and we look forward to hearing from you.

Sincerely,

[REDACTED]

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development (RAID)



Emmanuel Umpula
Executive Director
African Resources Watch (AFREWATCH)

Cc:

Placide Kalala Basidiwa, CEO, Gécamines, DRC
Jean-Luc Kahamba Mukenge, Deputy General Manager Zijin Musonoie Mining SAS, DRC

Questions from RAID and AFREWATCH to Zijin/COMMUS

To: Zijin/COMMUS

Date: 15 November 2023

Subject: Water pollution and environmental risks at the COMMUS mine in DRC

In light of our recent findings, we would welcome responses to the questions set out below. We have indicated the detail we are seeking in each area to assist you in your response.

Please note that we have reviewed Zijin Mining Group Co. (Zijin) 2022, 2021 and 2020 ESG Reports and Zijin's policies on *Ecological Conservation, Water, Waste and Air Emissions, Environment, and Community*. We would appreciate it if you can please share with us other documents we should take into consideration, including COMMUS' latest Environmental Impact Assessment study.

Water and Air quality

1. Zijin's policy on *Water* states that water risk analysis is conducted annually across the company's subsidiaries using the Aqueduct Water Risk Atlas. Could you please detail whether and in what frequency does COMMUS monitor surface water quality, groundwater quality, potable water quality as well as the extent to which you consider community health issues related to water quality? What are the results? In addition, could you please answer the following points:
 - (a) Provide a condensed, and where possible, an updated list and the precise location of your water monitoring stations. Please indicate the reasons why these locations have been selected.
 - (b) Please detail the results of your monthly water quality tests since 2020 per station.
 - (c) At what frequency do you monitor leachate from the landfill site? What are the results?
 - (d) In your view, do these cover all the waterbodies (rivers, lakes, swamps, streams) impacted by the COMMUS mine's activities? If not, which other waterbodies you have not identified in your environmental impact assessment, and what are the results of their monitoring since 2018.
 - (e) Do you conduct ad hoc water quality tests at any other locations? If yes, which ones and what are the results?
 - (f) Can you also please detail who undertakes these tests (including their qualifications and whether they are COMMUS/Zijin staff or external personnel)?
 - (g) Do you communicate the results of the water testing to local communities? If so, how and when?

2. We would like to know whether and in what frequency do you conduct dust fallout monitoring. What are the results? We understand from Zijin's *Waste and Air Emissions* that

the group undertakes “leaching tests on mining waste according to the standard requirements” of a host country. Could you please explain the following:

- (a) The monitoring locations of dust fallout for the COMMUS project.
 - (b) What have been the result of the monthly dust monitoring since 2019? Please detail this per month and per monitoring location for all measurements, including PM_{2.5}.
 - (c) Where dust levels have exceeded the standards for residential areas or where they have posed livelihood disturbances, what steps has COMMUS taken to reduce such levels?
 - (d) Have you tested for specific heavy metal traces in your dust analysis? If yes, please specify what elements were identified and in what quantities.
 - (e) Where can we find a copy of your annual reporting on dust levels to DRC authorities? If no link is available, could you please send us a copy of your reports for the past 5 years.
3. Do you report the results of the dust levels and water quality back to communities and other relevant stakeholders? If so, please detail through which procedures.
 4. We recognise that because the COMMUS mine operates near to other mining projects, some of your environmental impacts may be cumulative in nature. In these circumstances, how do you assess COMMUS contributions to an environmental impact? Do you cooperate with other mining companies to assess environmental impacts and how they can be mitigated?
 5. Zijin’s policy on *Water* indicates that all subsidiaries are required to “set up physical procedures or measures such as seep-proof walls to protect the rivers and groundwater resources of mine areas from being polluted”. Can you please detail specific environmental prevention and mitigation measures in place at COMMUS? Has there been an independent assessment of how effective COMMUS’ mitigation measures have been? If yes, when was this conducted and what were the findings? Please could you point us to where we can find this assessment. If there is no independent assessment, please describe how is COMMUS measuring the effectiveness of its mitigation strategies?
 6. Zijin’s 2021 ESG Report mentions that COMMUS had incorporated socio-economic assessment in the environmental impact assessment which will result, among others, in investment in drinking water stations (p. 74).

Can you please confirm:

- (a) The total number of water installations COMMUS has built since 2018.
- (b) The locations where these wells have been installed and the number of people or households covered by each water point.
- (c) What further plans COMMUS has for additional water points.
- (d) If all water points installed by COMMUS were functional and operational as of April 2023? If not, which ones were in disrepair, contaminated or not functioning and why?
- (e) What policies and procedures are in place at COMMUS to fix or replace wells that stop functioning or become contaminated?

Health risks associated with water pollution

7. COMMUS' 2021-2025 Community Project Task Document, mentioned in Zijin 2021 ESG report (p. 74), includes a reference to investment in community health and pandemic prevention. Could you please explain whether specific environment-related health impacts linked to your activities been reported to you by affected communities? If yes, how many and when. Please describe the health impacts. What steps have you taken to reduce the identified risks, apart from installing water wells?

In addition, could you please provide details about the terms agreed with local health clinics and/or hospitals in the "Community Project Task Document" (Zijin 2020 ESG Report, p. 99) to ensure affected communities access health services?

8. As set out above, our recent interviews with affected communities indicate many women reported they continue to suffer from these problems, including urogenital infections, vaginal mycoses and warts, and frequent miscarriages. The women we spoke to link these female health issues to polluted water.

Can you please confirm:

- (a) Whether these cases have been reported to you by local populations or whether you considered them in your health impact assessment? If so, please indicate whether you have undertaken investigations into these concerns and what you found, including any causes you may have identified of the reported gynaecological issues and the links to water pollution.
- (b) What, if any, mitigation strategies you have put in place to address these concerns.
9. The Lancet journal in April 2020 published an [article](#) on metal mining and birth defects in DRC, which raised important concerns about the increase in birth defects linked to copper and cobalt mining. Do you see this research as relevant to COMMUS' activities? What steps, if any, has TCOMMUS taken for its staff and/or communities impacted by COMMUS' activities following this publication? Have local residents reported concerns regarding birth defects to you?
10. Our research found that there are important mental health issues for local communities impacted by environmental pollution. To what extent does your health impact assessment consider the mental health issues of affected communities? Do you train your employees to assess the mental health impacts of local residents impacted by COMMUS' activities?

Livelihoods risks

11. We understand from COMMUS' 2021-2025 Community Project Task Document that your company has planned livelihood investment for the benefit of local communities, such as farming and agricultural development (Zijin 2021 ESG Report, p. 74).

Can you please explain:

- (a) The nature of these interventions? For example, are they purely philanthropic, based on DRC legal requirements of the *Cahiers des Charges*, or a response to the potential negative mining footprint of your operations?

- (b) Do you have a Social Management Plan, besides the Community Project Task Document? If so, where we can find its updated copy. If not available online, please could you send us a copy?
- (c) The total financial contributions you make annually as part of the Social Management Plan from 2018 to present.
- (d) What impacts have these initiatives had to date? Have you had independent verification of these impacts. If yes, please could you share the findings of this assessment?
- (e) Any other actions you have undertaken to mitigate any identified livelihood risks.
- (f) How the 2021 “*Cahier des charges*” (or what you refer to as the Community Project Task Document) impacts the Social Management Plan.
- (g) The progress achieved to date in implementing the *Cahier des charges*.

Community Grievances on pollution and environmental damage

12. Zijin’s policy on *Community* indicates that the group manages community issues through a “community engagement framework” that follows the order of “Avoid-Reduce-Compensate/Offset”. In the past five years, how many concerns related to pollution and environmental damage or related concerns as mentioned above have been raised by community members through your grievance mechanism? If any, could you please provide some details about the concerns raised. In addition, could you please detail:

- (a) What proportion of these concerns relate to (i) health issues, including mental health and gynaecological problems; (ii) fishing and agricultural yield; (iii) access to water; or (iv) other relevant issues?
- (b) How many of these complaints were accepted and what subsequent actions were taken as a result?
- (c) For the complaints that were rejected, what were the ground for the rejection?

Environmental damage and/or pollution linked to COMMUS’ operations

13. Could you please detail:

- (a) How many episodes of accidental spillages of chemical and reagents or similar environmental damage spills have occurred at COMMUS since operations restarted in 2018? Please provide details on the causes.
- (b) How many tailings dam wall failures or similar incidents occurred at COMMUS since 2018? Please indicate the dates and the details about what led to the breaches.
- (c) For each incident in (a) and (b) above, what was the extent of the damage? What analysis was conducted on the environmental impacts, including on local communities and water bodies and groundwater? What were the results?
- (d) What steps were taken to clean up the damage and what compensation, if any, was provided?
- (e) What reports were submitted to government authorities?

14. Zijin’s policy on Ecological Conservation states a target of “100% restoration of recoverable land”. Zijin’s 2021 *ESG Report* further mentions an exemplary case of ecological mining at the COMMUS mine that resulted in “the coverage rate of the possible greening areas exceeding 90%” (p. 42). Are there any similar processes for water bodies rehabilitation? Were further procedures put in place for the environmental rehabilitation of affected areas

at the COMMUS mine? If so, could you please detail what these procedures were and how they were implemented?

Prevention and due diligence

15. Which international standards and best practice do COMMUS and Zijin apply in relation to their environmental commitments and management? How has Zijin applied the Environment Chapter of the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and its recent update?
16. In July 2022, in a landmark decision, the United Nations General Assembly set out the human right to a clean, healthy and sustainable environment for all. Do you see this as relevant to your operations? Please could you describe any changes you may have made to Zijin's human rights and environmental policies as a result?
17. Are you compliant with the yearly reporting requirement under Article 458 of the Congolese Mining Regulations? If so, can you please provide us with a copy of each of the annual reports from 2018 to present. If not, can you explain why?
18. In accordance with Article 459 of the Congolese Mining Regulations, you are required to undertake an independent environmental audit of the COMMUS mine every two years. Could you please direct us to where we can find the audit for the past six years?
19. In Zijin's 2022 *ESG Report*, you report investigating "Ecological damage caused by historical operating activities" (p. 37). Could you please provide information, including written documentation, on how COMMUS manages and seeks to minimise concerns related to the environmental legacy? For example, do you work with the government or other mining companies to devise solutions for how the impact of environmental legacy issues could be minimized for local communities? Can you please include references to any relevant Congolese legal framework and industry standards?

From: COMMUS SAS [REDACTED]

Date: Wednesday, 13 December 2023 at 08:58

To: Anneke Van Woudenberg [REDACTED]

Subject: Lettre from COMMUS SAS

Dear Mr. Anneke Van Woudenberg and Mr. Emmanuel Umpula, I would like to inform you that we received your letter on November 15th and to thank Rights and Accountability in Development (RAID) and African Resources Watch (AFREWATCH) for your interest in the activities of La Compagnie Minière de Musonoie Global Société par Actions Simplifiée (COMMUS).

COMMUS is investigating everything you stated in the letter related to water resources management.

However, due to the presidential election in the Democratic Republic of the Congo, we have made many security arrangements to ensure the safety of employees, and suffer a staff shortage. For this reason, I would like to ask for your understanding and additional time to respond.

In addition, I would like to inform you that I will be on a business trip to Lubumbashi on December 14th and 15th and to propose meeting with AFREWATCH.

Please provide me your contact information so that I can contact you regarding further communication and the potential organization of a meeting.

Best regards,

COMMUS SAS

Re: Lettre from COMMUS SAS

Anneke Van Woudenberg

Thu 14/12/2023 10:26

To: COMMUS SAS [REDACTED]

Dear Sir/Madame,

Thank you for your message. We are open to meet, though we are not all based in Lubumbashi. We would suggest a meeting with one of the managers from Afrewatch in person with a RAID representative joining this via phone or video. This will allow us to have a productive discussion.

Can you please let us know who from COMMUS would like to meet us, the position of this person or persons, when it would be convenient to meet and where?

With my best regards,
Anneke

Anneke Van Woudenberg
Executive Director
Rights and Accountability in Development ([RAID](#))



Email: [REDACTED]

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Re: Lettre from COMMUS SAS

COMMUS SAS [REDACTED]

Thu 14/12/2023 12:57

To: Anneke Van Woudenberg [REDACTED]

Dear Anneke,

Thanks for your reply. We will be in Lubumbashi tomorrow, we would like have a meeting with you in Lubumbashi, please send me your telephone number in RDC.

This is my contact: [REDACTED]

See you soon.

Best regards,

[REDACTED]

Re: Lettre from COMMUS SAS

Anneke Van Woudenberg [REDACTED]

Thu 14/12/2023 16:47

To: COMMUS SAS [REDACTED]

Dear [REDACTED]

With the short notice provided to us about your visit, we have been working to try to bring a delegation together to meet with you tomorrow, but unfortunately the key AFREWATCH staff involved in the research are all travelling and are not in Lubumbashi. The AFREWATCH office is also closed from tomorrow for the Christmas holidays.

We are, however, very keen to meet with you and to discuss the concerns raised in our earlier correspondence. We would like to propose a meeting in January, either in person or via video conferencing. This will allow team members from AFREWATCH and RAID to participate and for you to hear directly from those who have been involved in the research. Do please let me know if this is agreeable to you and we can find a date and time that suits us all.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))

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Standing up for human rights

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From: COMMUS SAS [REDACTED]**Date:** Thursday, 14 December 2023 at 12:57**To:** Anneke Van Woudenberg [REDACTED]**Subject:** Re: Lettre from COMMUS SAS

Dear Anneke,

Thanks for your reply. We will be in Lubumbashi tomorrow, we would like have a meeting with you in Lubumbashi, please send me your telephone number in RDC.

Re: Lettre from COMMUS SAS

Anneke Van Woudenberg [REDACTED]

Wed 07/02/2024 19:23

To: COMMUS SAS [REDACTED]

1 attachments (299 KB)

Letter to COMMUS from RAID+ Afrewatch 14-11-2023.pdf;

Dear Sakkim,

I am following up from my previous email to see if you would still like to arrange a meeting.

I also wish to bring to your attention that we have not yet received a response to our letter to COMMUS of 15 November (I attach it again for your convenience). We will shortly be publishing a report with the findings of our research and we believe it is important to include your perspective on the human rights concerns that have been reported to us by local communities. As mentioned in our previous correspondence, we strive to reflect all relevant information in our research and publications and your response will be taken into account.

Please be aware that we have received responses from other companies operating in the copper-cobalt belt in DRC who we contacted about our concerns. To date, COMMUS is the only one not to have provided us with a response. We also await a copy of COMMUS's most recent Environmental Impact Assessment study.

In order to meet our publication deadline, I would be most grateful for a response on or before 14 February 2024.

With my best regards,

Anneke Van Woudenberg

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))



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From: Anneke Van Woudenberg [REDACTED]

Date: Thursday, 14 December 2023 at 16:17

Re: Lettre from COMMUS SAS

COMMUS SAS [REDACTED]

Fri 09/02/2024 07:03

To: Anneke Van Woudenberg [REDACTED]

Dear Ms. Anneke:

It's great to hear from you again. As mentioned in the previous communication, COMMUS is very willing to meet and communicate with RAID and AFREWATCH on the matters mentioned in your letter, so that both parties can have better in-depth exchanges on topics of mutual concern.

The company deeply regrets and apologizes for our failure to communicate in time due to external environment and other restrictions in recent times. In fact, the company has completed the reply to the letter on November 15, but due to the traditional Chinese Spring Festival holiday, the final signature has not yet been made. We will continue to follow up on this and strive to submit it to you before February 14th.

Regarding the communication meeting between the two parties, we suggest that we can amicably agree on a specific time after you receive a formal reply from the company?

Our best wishes!

Re: Lettre from COMMUS SAS

Anneke Van Woudenberg

Fri 09/02/2024 08:57

To: COMMUS SAS [REDACTED]

Dear Sakkim and COMMUS Team,

Thank you for your email and we look forward to receiving your response to our 15 November letter.

In the meantime, could you please send us a copy of COMMUS's Environmental and Social Impact Assessment (ESIA)? The other mines covered by our research have all shared this document with us. We would be grateful to have the one from COMMUS as soon as possible. As you may know, these documents are intended to be public.

Could you also let us know when you might be available for a video conference meeting? I would suggest we have a discussion after we have received your response, but it would be good to fix a date already. Can you let us know your availability the week of 19 February?

With my best regards,
Anneke Van Woudenberg

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))

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Re: Lettre from COMMUS SAS

COMMUS SAS [REDACTED]

Wed 14/02/2024 15:35

To: Anneke Van Woudenberg [REDACTED]

1 attachments (207 KB)

image001.png;

Dear Mr. Anneke Van Woudenberg,

We are very sorry to inform you that because the Chinese New Year holiday has not yet ended, the company's reply letter to you has not yet been signed. According to China's holiday arrangements, normal work will resume next Monday (February 19). Therefore, we estimate that it will take around February 20 to deliver the relevant documents to you. Thank you for your understanding.

Regarding the time of the exchange meeting between the two parties, we hope to hold it at 9 a.m. on February 23, Lubumbashi time in the Democratic Republic of the Congo, so that leaders and colleagues from the Chinese headquarters can participate in the exchange at the same time. Is that a good time for you?

In addition, during this meeting, will the two parties communicate in English or French? Please give your valuable suggestions, thank you!

good luck!

Our best wishes !

Re: Lettre from COMMUS SAS

COMMUS SAS [REDACTED]

Fri 01/03/2024 14:14

To: Anneke Van Woudenberg [REDACTED]
[REDACTED]

1 attachments (372 KB)

Reply to RAID and Afrewatch - Zijin mining and COMMUS sas.pdf;

Dear MS Anneke and Mr Emma Umpula,

Please find attachment our reply for your questions. Thanks for your attention given to us. You are welcome to communicate with us at any time.

Best regards

COMMUS SAS [REDACTED] 于2024年3月1日周五 10:08写道

Dear MS Anneke,

These are the name of 8 communities:

4 districts: Cite GCM/KOLWEZI. BIAHARA. MUSONOIE and KANINA.

4 villages: KAPEPA. TSHIZUZA. TSHABULA. PIERRE MUTEBA.

Ours written responses will send you soon.

Best regards
[REDACTED]

Anneke Van Woudenberg - 2024 2F.1298m! [g

17:12 :

Dear [REDACTED]

This is just a reminder that we are awaiting your written responses to the questions we discussed last week. We will seek to incorporate these in our publications, but will need to receive them by close of business on Friday, 1 March.

Could I also please ask you to confirm the list of the villages/towns which COMMUS considers to be in your area of operation? During our discussion last week you mentioned 8 villages and gave us their names. We just wish to ensure we noted these down correctly and would appreciate clarification.

Thank you.

With my best wishes,

Anneke Van Woudenberg

From: COMMUS SAS [REDACTED]
Date: Thursday, 22 February 2024 at 12:28
To: Anneke Van Woudenberg [REDACTED]

Subject: Re: Lettre from COMMUS SAS

Thank you for your information.

Anneke Van Woudenberg [REDACTED] 于2024年2月22日周四 13:10写道 :

Dear [REDACTED]

We look forward to meeting you virtually tomorrow. I have also sent a calendar invitation.

Below are the details for the online link.

Join Zoom Meeting

Meeting ID: [REDACTED]

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))

 A blue and orange circle with text Description automatically generated

Email: [Redacted]

[Redacted]

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From: COMMUS SAS [Redacted]

Date: Thursday, 22 February 2024 at 06:40

To: Anneke Van Woudenberg [Redacted]

Subject: Re: Lettre from COMMUS SAS

Dear Mr Anneke,

We hope that an online communication meeting will be held as scheduled at 9 a.m. on the 23rd (Friday) lubumbashi time. At the meeting, the company will respond and communicate on the issues mentioned in your previous letter and other issues that may be of concern.

We agree with your suggestion that the meeting be held in French. At the same time, in order to further improve the communication effect and follow-up basis, we sincerely invite AFREWATCH personnel to the company for on-site communication, and we can jointly check the relevant situation after the meeting.

We look forward to receiving the meeting links. The company will also invite relevant leaders and colleagues from Zijin Mining headquarters to participate in the meeting .

Waiting your response

Best regards



Anneke Van Woudenberg [Redacted] 于2024年2月20日周二 21:49写道 :

Dear Sakkim and COMMUS Team,

Thank you for your message. I hope you passed a joyous Chinese New Year holiday.

We await your response to our letter and hope it will still arrive today, as indicated in your email. Please note that we also still await a copy of COMMUS's Environmental and Social Impact Assessment (ESIA).

We are happy to meet with you (virtually) at 9 am on February 23, Lubumbashi time. In order to include our colleagues from AFREWATCH, we would prefer to hold the meeting in French, but can also do so in English if you prefer. We are happy to set up a Zoom link if that is acceptable to you.

I look forward to your response.

With my best regards,

Anneke

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))

Error! Filename not specified.

Email: [Redacted]



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From: COMMUS SAS [REDACTED]
Date: Wednesday, 14 February 2024 at 15:35
To: Anneke Van Woudenberg [REDACTED]

Subject: Re: Lettre from COMMUS SAS

Dear Mr. Anneke Van Woudenberg,

We are very sorry to inform you that because the Chinese New Year holiday has not yet ended, the company's reply letter to you has not yet been signed. According to China's holiday arrangements, normal work will resume next Monday (February 19). Therefore, we estimate that it will take around February 20 to deliver the relevant documents to you. Thank you for your understanding.

Regarding the time of the exchange meeting between the two parties, we hope to hold it at 9 a.m. on February 23, Lubumbashi time in the Democratic Republic of the Congo, so that leaders and colleagues from the Chinese headquarters can participate in the exchange at the same time. Is that a good time for you?

In addition, during this meeting, will the two parties communicate in English or French? Please give your valuable suggestions, thank you!

good luck!

Our best wishes !

Anneke Van Woudenberg [REDACTED] 于2024年2月9日周五 10:57写道 :

Dear [REDACTED] COMMUS Team,

Thank you for your email and we look forward to receiving your response to our 15¹⁸² November letter.

In the meantime, could you please send us a copy of COMMUS's Environmental and Social Impact Assessment (ESIA)? The other mines covered by our research have all shared this document with us. We would be grateful to have the one from COMMUS as soon as possible. As you may know, these documents are intended to be public.

Could you also let us know when you might be available for a video conference meeting? I would suggest we have a discussion after we have received your response, but it would be good to fix a date already. Can you let us know your availability the week of 19 February?

With my best regards,

Anneke Van Woudenberg

Anneke Van Woudenberg

Executive Director

Rights and Accountability in Development ([RAID](#))

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Dear Ms Anneke Van Woudenberg and Mr. Emmanuel Umpula,

I acknowledge the receipt of your letter dated November 16, 2023.

First and foremost, I would like to thank you for the attention given to La Compagnie Minière de Musonoïe Global SAS (COMMUS) by the Rights and Accountability in Development (RAID) and African Resources Watch (AFREWATCH). COMMUS attaches great importance to the environmental issues mentioned in your letter and the issues you referred to at the meeting dated February 23. We checked each of them and have provided a detailed explanation and response in the attachment below.

We apologize for the delayed formal reply. I believe that the COMMUS team has explained the reasons to you. Zijin Mining has consistently adhered to the principle of prioritizing both resource extraction and environmental protection, actively protecting the environment at our mine sites to create value for society and fulfill our social responsibilities. We are therefore ready to maintain active communication and dialogue with RAID, AFREWATCH and other social groups in an open and transparent manner, and work together constructively to help improve the environment and people's lives in the DRC.

You are welcome to contact us at any time.


James Wang Chun,
Vice President
Zijin Mining Group Co., Ltd.
Email 

La Compagnie Minière de Musonoïe Global SAS

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Dear Ms. Anneke Van Woudenberg and Mr. Emmanuel Umpula,

We have read your letter and the attachments carefully and would like to provide the following information and clarifications based on our understanding and our discussions at the meeting on February 23. We hope this will give you a more comprehensive and clearer understanding of COMMUS's green development. As a responsible mining company, we have always put a strong focus on environmental protection. We not only strictly abide by relevant laws and regulations of the Democratic Republic of Congo, but also regard the UN Sustainable Development Goals as the guiding principle for responsible operations. We believe that your organizations share the same goals.

We are convinced that only through diligent environmental conservation work can a company ensure its robust and sustainable development. To this end, we proactively and openly welcome oversight and inspections from mining and environmental authorities at various levels. Furthermore, we engage in continuous dialogue with neighboring communities, local societal groups and the media to address their concerns. Given this, we are keen to engage in a constructive and open dialogue with you about how we can further improve local environmental and living conditions. Such efforts will facilitate the sustainable growth of businesses and enable local residents to enjoy a greener, healthier life through our joint endeavors. Should there be any areas requiring further clarification, please do let us know.

1. Management of Water and Air Quality

The company places great importance on environmental stewardship, particularly emphasizing the meticulous management and preservation of air and water resources right from the project's design stage. We have incorporated comprehensive environmental protection facilities into the production system, ensuring they are intricately designed, constructed, and commissioned in harmony with the production infrastructure. These facilities are managed separately to ensure the secure and safe operation of our processes.

A. Water Monitoring Locations, Frequency, and Results

In order to comprehensively and strictly manage water resources, the company has set up more than ten sampling and observation points for surface water, groundwater and domestic water. They are located in places such as mine drainage outlets, tailings ponds, communities, and wells of the municipal water supply system, covering the mining site and surrounding areas.

In accordance with the company's policies, we regularly sample and test water quality at monitoring points (the online monitoring system provides real-time data 24/7 at the water discharge points of the open pits, while monitoring at other places is conducted monthly, quarterly or annually). While conducting internal tests, the company also engages qualified third parties to conduct independent testing of community and municipal water on a regular basis or as required. In addition, mining and environmental

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authorities at various levels also regularly conduct sampling and analysis of the company's externally discharged water and surrounding water in accordance with legal requirements.

Over the years, whether it is the company's internal tests, third-party external tests, or various government sampling tests, all test results have met the legal standards of the Democratic Republic of the Congo.

B.Physical Anti-Seepage Measures for Water and Their Effectiveness

To effectively prevent wastewater leakage during the production process, the company has primarily implemented the following physical anti-seepage measures and protocols :

All floors in areas where acid and alkali wastewater are generated in the production system have undergone anti-corrosion and anti-seepage treatment; at the same time, cofferdams have been set up around the area for recovery to prevent acid/alkaline overflow to the external environment.

For various pools that store production liquids, double-layer anti-seepage membranes are laid at the bottom and around the pool; at the same time, observation wells are set up around the area for regular tracking and monitoring to ensure environmental safety.

An emergency accident pool has been built in the main production area, equipped with a double-layered anti-seepage membrane. Once a production accident occurs, all relevant liquids can be collected into the emergency pool to eliminate the possibility of spillage.

All floors in the production area are concrete-hardened to ensure that wastewater will not leak directly into the ground, even under extreme circumstances. At the same time, large wastewater collection pools and accident pools are built in separate areas to ensure that even if the wastewater flows out of the production area, it will be effectively stored and recycled in a timely manner.

An anti-seepage membrane is laid at the bottom of the tailings pond and around the dam body, and there are observation wells in nearby areas to conduct regular water quality tracking and monitoring to ensure environmental safety.

C.Health Risks Related to Water Pollution

In May 2023, the company received a report from the Pierre Muteba community regarding allegations of sewage discharge by the company and the health concerns it caused. In response, the company immediately provided explanations of the situation to the community, and under the witness of representatives from the provincial council and government, we visited the communities to communicate with the villagers. In addition, the Provincial Mining Department and the Provincial Environmental Protection Department independently conducted water quality sampling analysis and testing in the surrounding areas, and the results showed that all data met the standards. According to the company's existing archived information, there have been no reports of concerns about women's diseases, but thank you very much for informing us of the observed situation, and we will increase our attention to this issue. We attach great importance to the diseases reported by community residents or their concerns over diseases that may be

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caused by our operations. While actively carrying out self-examination, we also do our utmost to assist communities in analyzing and responding to the source of diseases. In addition, the company has installed risk notice boards in key areas such as tailings ponds, and has employees patrolling the areas 24 hours a day to prevent villagers from unwittingly entering those areas or using production wastewater.

The company not only strives to avoid adverse effects on the health of surrounding residents due to our operations, but also actively assumes corporate social responsibilities and obligations to help surrounding residents live a better life. In addition to vigorously promoting the “Drinking Water Project” and building many water wells for municipal use and communities, the company also actively donates and builds medical centers, health clinics and other facilities for surrounding communities to better protect the health of residents.

The company has noticed the 2020 study *Metal Mining and Birth Defects: A Case-Control Study in Lubumbashi, Democratic Republic of Congo*, published in *The Lancet*. To mitigate associated risks, the company, in addition to maintaining proper employee personal protective equipment, occupational health exams, and annual health check-ups, collaborated with the Ionizing Radiation Commission of DRC (CNPRI) to professionally inspect radiation levels in our mining area. No radioactive elements such as uranium or lead were found, and there were no violations of other standards. To date, the company has not received any concerns or reports from stakeholders regarding this issue.

In order to effectively alleviate and reduce the possible psychological anxiety and concerns of community residents, the company has established a regular communication mechanism with each community to promptly learn about and respond to residents’ concerns and resolve their complaints. In addition, the company continues to improve the transparency of communication. We are currently engaged in negotiations and cooperation on relevant issues with organizations with professional qualifications.

D. Dust Monitoring Locations, Frequency, and Results

In order to ensure dust settlement and strictly monitor dust, the company not only installed dust removal equipment on all dust-generating equipment, such as bag dust collectors, wet dust collectors, and cyclone dust collectors, but also has 8 dust sampling and monitoring points in different zones, such as the power wave chimney of the smelting plant, the wet limestone preparation plant, etc.

In accordance with the company’s policies, we conduct sampling and testing of dust and air quality at the above monitoring points every half month (the online monitoring system monitors in real time 24 hours a day). In addition to dust and solid particles, the measurement content also includes carbon monoxide, sulfur dioxide concentration, and other indicators.

Over the years, our dust and exhaust monitoring data in all production areas have consistently remained well below the legal standards of the DRC. For example, solid particle concentrations have remained below 10 mg/m³ and copper ion concentrations below 1 mg/m³.

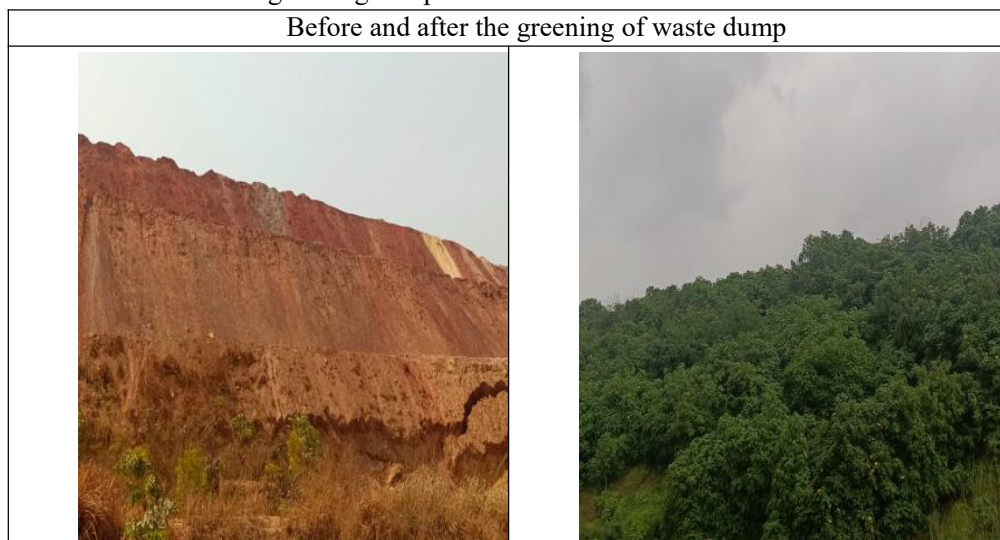
In compliance with the legal requirements of the Democratic Republic of the Congo,

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the above monitoring data are archived by the company, and are subjected to on-site inspections and supervision by mining and environmental authorities at all levels on a regular or ad-hoc basis.

5) To further reduce dust levels and minimize the impact of our operations on surrounding communities and residents, we have taken several measures. Firstly, we have intensified our water sprinkling efforts by adding additional sprinkler trucks (13 in total) and water intake points, ensuring a high frequency and efficiency of water sprinkling. Secondly, we extensively use water-quenched slag or dust suppressants across areas such as waste dump sites, haul roads, and logistics parking lots. Thirdly, we are progressively installing sprinkler systems in critical areas such as dumping sites and mining roads to continuously mitigate dust through sprinkling. Fourthly, we aim for full coverage of areas within the plant that can be hardened or greened, with the current greening area exceeding 410,000 square meters. Lastly, during the rainy season, we have increased financial and personnel investments to continuously beautify and green the slopes of each waste dump, achieving over 700,000 square meters of greened area, a very rare achievement among mining companies in the DRC.



2. Information on community communication and complaint mechanisms

In order to quickly understand residents' needs and requests, the company has set up community offices in our main surrounding communities, where company employees work regularly to meet and communicate with visiting residents. The company also visits the communities every month to communicate with people such as main community leaders and villager representatives on issues of their interest and concern. In addition, mining and environmental protection departments at all levels of the government, as well as provincial and municipal governments, provincial councils, and human rights organizations, all monitor the implementation of the company's environmental protection measures in tandem, and villagers can also use their channels to provide feedback and complaints over the company's problems.

Every two years, independent third-party auditors with government-authorized qualifications visit the communities surrounding the company for communication and

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assessment and issue independent environmental audit reports.

Through the above mechanisms and channels, in 2023, the Company carried out various types of communication with various stakeholders 77 times and received a total of 64 inquiries and complaints. Among them, 54 were related to relocation, law and order, water and electricity supplies, and 10 were related to dust, noise and wastewater (see 1.C for details). Seven of the 64 cases were rejected, mainly due to unreasonable requests for relocation compensation, while the remaining issues and matters were properly resolved and closed through coordination and collaboration between the company, the communities and the government.

3、 On the legacy environmental issues

Even since the beginning of mine construction, the company has had no leakage or pollution incidents. The company has thus not been subject to any accountability and penalties from any government authorities so far.

Regarding the legacy environmental issues, the company's open pits were closed from 1963 to 2014. After Zijin acquired COMMUS and became the operator of the project, COMMUS solved the risks of mine slope collapse and addressed the concerns over the safety of drinking water faced by the surrounding communities. This involved active coordination with relevant government departments with effective measures taken, including relocation and resettlement, and provision of free water supply assistance to provincial and municipal water authorities and surrounding communities.

3、 On livelihood risks and the fulfillment of corporate responsibility

A. Investments to improve community livelihoods

The company determines its investment through joint discussions to help improve the livelihood of the community members, based on the actual demands and future development plans of the communities. These investments include not only those signed at the request of the government and communities, but also charity programs initiated by the company itself. For example, since 2022, the company has been regularly donating agricultural seeds, fertilizers and other materials, and conducting agricultural planting training and assistance programs every year to empower communities in developing industries and protecting livelihoods.

Every year, our company prepares and updates community management plans for the next three years, which include the implementation of projects required by the law, company-initiated donation projects, and ad hoc projects requested by the surrounding communities.

Since 2018, the company has spent a cumulative total of approximately \$28 million on social investments, including about \$10 million for water supply projects, roads and bridges, initiatives for protection against the Covid-19 pandemic, rebuilding for victims of the Goma earthquake and the South Kivu floods, about \$11 million for the DOT COMMUS Fund, and about \$3 million for the construction of projects outlined in the community mission statement (markets, wells, schools, among other projects have been completed and handed over to the communities). The above donations were mostly used

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for the construction of infrastructure and the improvement of people's livelihoods in the surrounding communities. Currently, the Company is in communication with third-party independent organizations for an extensive audit and assessment of completed community projects in 2025, the results of which could be used to guide and improve the company's social programs so that we can bring benefits to more people in the communities.

B. Construction, operation and maintenance of wells

1) Before 2018, we funded the construction of 4 deep water wells (3 of which were damaged and are no longer in use) for our neighboring communities. Since 2018, the company has donated or funded the construction of 10 deep wells and 10 shallow wells for municipal utilities and surrounding communities. Three deep wells and 6 shallow wells are either being planned or constructed.

Five utilities deep wells are located close to the perimeter of the company's pits, five community deep water wells are located in the community of Gecamine, and 10 shallow water wells are distributed among the communities of Kanina, Pierre Muteba, Musonoï and Kapepa. The various types of water well projects built by the company free of charge were based on the actual needs of the communities. The company will continue to increase investments based on the needs of the communities, to better ensure water safety and protect the health of more residents.

Currently, 10 deep wells and 8 shallow wells are fully operational, while 2 shallow wells located in the Musonoï community are temporarily under maintenance due to equipment failure. It is important to note that the company has been providing maintenance services for these water wells over the years free of charge. In addition, to guarantee that the water meets the required standards and ensures water safety for the residents, all wells are subject to sampling and testing by the provincial and municipal water authorities, the local communities and the company, both before and after they become operational (the company uses China's *Standards for Drinking Water Quality* for internal tests, and WHO's *Guidelines for Drinking-Water Quality* are used for tests by external parties).

5. Other matters

A. Environmental remediation and stewardship

Given that all of the company's current water quality indicators remain in compliance, no special remediation program is in place at this time. However, the company is proactively engaged in biodiversity studies to comprehensively assess the impact on surrounding waters, flora and fauna, and other systems. Currently, we are in the contract negotiation stage for these studies.

In addition, as part of our commitment to corporate responsibility for environmental restoration, the company has accelerated the greening of main areas, such as the soil disposal sites. This is being done in strict accordance with the principles of "concurrent production, control and restoration" and "begin revegetation once the land is stable". Lastly, the company diligently accrues and fully pays the "Surêté Financière" (0.5% of annual turnover) in accordance with the law every year. We strictly fulfill our legal

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environmental obligations and responsibilities.

B. COMMUS's Contributions to Reducing Environmental Impact

As mentioned above, both Zijin Mining Group and COMMUS SAS prioritize environmental protection, consistently adhering to the principle of “following higher standards” set by China and the DRC, and rigorously implementing these standards on a daily basis. Through years of sustained efforts, the company has achieved commendable results in greening and beautification, as well as wastewater and exhaust gas treatment. Notably, the company holds the distinction of being the first and only local company to undertake comprehensive greening of dump sites and tailings pond slopes, showcasing a pioneering approach to environmental sustainability. In addition, the company remains dedicated to fulfilling its corporate social responsibilities in the environmental domain. This includes providing free canal dredging services to the municipal government and actively participating in International Arbor Day activities.

C. Joint Environmental Assessment

At present, the Company has not engaged in collaborative environmental impact assessment with other mining companies. However, we maintained close communication and exchange with neighboring companies to keep abreast of their best practices in environmental monitoring and assessment.

D. Compliance with international standards and guidelines

At current, the company primarily adheres to ISO international standards, such as ISO9001 quality management system, ISO14001 environmental management system, ISO45001 occupational health and safety management system, ISO50001 energy management system, etc., and all of them have passed the relevant audits and certifications.

Additionally, the company has integrated principles from Part VI of the Guidelines for Multinational Enterprises on Responsible Business Conduct into our environmental protection policies and its implementation, such as continuous improvement in assessment, formulation of contingency plans, and implementation of necessary training.

In line with global environmental considerations, the company acknowledges the significance of the historic United Nations resolution on access to “a clean, healthy and sustainable environment” as a universal human right, which is crucial to addressing the crisis of “climate change, pollution and loss of biodiversity“. As a member of the global community with a shared future and a responsible company, we are committed to safeguarding our shared home. To this aim, we are making consistent efforts to prevent and control pollution, and have established clear “carbon peaking“ and “carbon emission reduction“ targets. We are also fast-tracking the preparation of an Action Plan to Address Climate Change, and promoting the study of biodiversity. These initiatives align with the concept of ecological civilization, which is “respecting nature, adapting to nature and protecting nature”.

E. Compliance with statutory obligations of the DRC

Our company strictly complies with the requirements outlined in articles 458 and 459 of the Mining Regulations of the DRC. We prepare and submit annual environmental impact reports punctually, and conduct independent environmental audits every two years.

La Compagnie Minière de Musonoïe Global SAS

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Site COMMUS: Localité Pierre MUTEBA, Groupement KAZEMBE, Secteur de LUILU, Territoire de
MUTSHATSHA, Province du LUALABA, République Démocratique du CONGO

The pertinent reports are available in the Ministry of Mining and the Ministry of Environmental Protection of the DRC.

To better perform our corporate environmental responsibility and contribute to the healthy and green development of the communities, the Company is even more open to discussions with various stakeholders on new environmental protection initiatives and methods. We also look forward to more extensive and in-depth cooperation with the government, NGOs, the communities, and other parties.

You are welcome to reach out and communicate with us at any time. We are sincerely open to good-faith guidance and help from all sections of society. This will help us better fulfill our corporate environmental responsibilities, and enable the local communities to benefit more from the opportunities and an elevated quality of life brought about by our green development.

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COMMUS SAS
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