

Mandates of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes and the Special Rapporteur on minority issues

Ref.: AL CHN 17/2025
(Please use this reference in your reply)

8 August 2025

Excellency,

We have the honour to address you in our capacities as Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes and Special Rapporteur on minority issues, pursuant to Human Rights Council resolutions 54/10 and 52/5.

In this connection, we would like to bring to the attention of your Excellency's Government information we have received concerning **the allegations of severe environmental contamination and human rights violations in the village of Krivelj, Bor district, Serbia, resulting from the mining activities of Serbia Zijin Copper DOO.**

According to the information received:

The majority of Vlachs, a Romanian-speaking minority, are situated in Eastern Serbia, including the region of Bor.

The Bor district has a long history of mining, but in August 2018 the acquisition of the mines by the Chinese multinational Zijin Mining Group marked a turning point for the region. Serbia Zijin Copper DOO, own at 67% by the Zijin Mining and 37% by the Republic of Serbia, intensified mining operations, significantly increasing copper production. By 2023, Zijin Mining Group had become the second-largest copper producer in Europe, with plans to expand production capacity to 450,000 tons per year.¹ Most of the copper produced is exported to China.

The intensification of mining and related activities has reportedly generated serious adverse environmental and social impacts in the Bor region. Reportedly, increased mining and copper production has worsened air, water, and soil pollution, posing serious risks to human health and the environment. The expansion of operations has led to the displacement of villagers, often without adequate compensation or rehabilitation, and has restricted access to natural resources. The lack of effective government oversight has further compounded the challenges faced by local communities.

The pollution has had a significant impact on the local ecosystem, particularly through the contamination of water sources such as the Krivelj, Borska, and Brestovačka rivers, affecting drinking water supplies, livestock, and agriculture. Moreover, tensions over access to water are growing as mining

¹ Zijin Mining Group company ltd., Annual Report 2024,
<https://www.zijinmining.com/upload/file/2025/04/25/3091791b98ac4361a5de4a3a393cecc49.pdf>

operations increasingly draw from local supplies, reducing the availability of clean water for nearby communities.

Around 60% of the inhabitants of the village of Krivelj, in the Bor district, are from the Vlach community. The village is located near the Veliki Krivelj and Cerovo copper mines.

The Vlach communities, present in significant numbers in the region, bear a disproportionate burden of these adverse impacts. The Borska River, found in the immediate vicinity of the mining and smelting complex for the exploitation of copper ore, is one of the most heavily polluted watercourses in Serbia.² The Borska river runs through Slatina which is also the home to the Vlach community. The Kriveljska river is a tributary to the Borska river, runs through the Krivelj. The village of Oštrelj, also home to the Vlach community, is also affected.

The expansion of mining and related activities includes projects at its Bor smelter, which has a constructed capacity of 200,000 tons per year. It is reported that, in 2023, the smelter began trial operations to assess its readiness for full-scale use, although some parts of the expanded facility are currently operating without an official operational permit. In November 2024, the Ministry of Environmental Protection issued a decision approving a study for the expansion of the Veliki Krivelj open-pit mine to the northwest.³ In December 2024, Serbia Zijin Copper DOO applied for operational permits for five of the eight phases of the smelter complex, but these applications were rejected due to incomplete documentation, and they haven't been obtained to date.

Reportedly, Serbia Zijin Copper DOO continued the expansion of the mining activities in Krivelj without permits. On 30 January 2025, upon complaints of the local community, the Ministry of Mining and Energy conducted an inspection and determined that Serbia Zijin Copper DOO operations without mining permits in Krivelj should be halted. However, according to the local community members the operations are still ongoing.

Environmental Impacts: Heavy Metals and Other Hazardous Substances in Water, Air, Soils, and Noise

In 2018, the Zijin Mining Group acquired 63% of Mining Smelter Basin Bor's shares. Since then, their activities have caused severe environmental pollution. Reportedly, Serbia Zijin Copper DOO's industrial activities have caused the release of high concentrations of sulfur dioxide (SO₂), arsenic, lead, nickel, and cadmium to the environment. This has significantly degraded air quality and harmed the health of the local population. According to official reports, in 2019

² Ministry of Construction, Transport, and Infrastructure, *Draft Spatial Plan of the Republic of Serbia 2021–2035*, public consultation document, April–May 2021, <https://www.mgsi.gov.rs/sites/default/files/PPRS%20Nact.pdf>

³ Environmental impact assessment (EIA) approval for the project of expanding the Veliki Krivelj open-pit mine towards the northwest for a capacity of 10.6 x 106 tons of ore per year, <https://www.ekologija.gov.rs/obavestjenja/procena-uticaja-na-zivotnu-sredinu/doneta-resenja-i-zakljucci/resenje-o-saglasnosti-na-studije-o-proceni-uticaja/resenje-o-davanju-saglasnosti-na-studiju-o-proceni-uticaja-na-zivotnu-sredinu-projekta-prosirenja-povrsinskog-kopa-veliki-0>.

alone, high concentrations of SO₂, dangerous for human health, were recorded as many as 13 times. Additionally, the annual average arsenic concentration at one monitoring station reached 554 ng/m³, which is more than 92 times higher than the target value established by the Regulation on Conditions for Monitoring and Air Quality Requirements ("Official Gazette of RS," nos. 11/10, 75/10, and 63/13).⁴ This regulation, adopted under the legal framework of Serbia's Law on Air Protection, prescribes a target value of 6 ng/m³ for arsenic to avoid, prevent, or reduce harmful effects on human health and the environment as a whole.

Harmful contamination has persisted in subsequent years, with SO₂ and arsenic continuing to exceed permissible levels in 2020 and 2021. In 2020, SO₂ concentrations were recorded 25 times at levels dangerous to human health even from short-term exposure, which require immediate implementation of measures, almost double the frequency compared to 2019.⁵

Reportedly, at the request from NGO, a certified Laboratory carried out the sampling and laboratory analyses of water, sediments and ichthyofauna in the rivers of the Crni Timok, the Veliki Timok, the Borska reka, the Pek, the Dunav at the confluence of the Timok.⁶ The studies indicated that water and sediments quality has deteriorated, with significant pollution in several rivers, including the Borska River, Veliki Timok, and the Krivelj River. Heavy metals, including copper, arsenic, and cadmium, have been found at levels far exceeding safe limits.⁷ For instance, in 2021, copper levels in the Borska River were nearly seven times higher than allowed, and arsenic concentrations were three times the permissible limits. Similarly, the Mali Pek River saw copper concentrations 17 times higher than allowed in 2021.⁸

Official reports in 2024⁹ indicate that the Cerovo River, near the Cerovo Copper Mine, was classified as fifth-class water, meaning it is unsuitable for any use. The maximum measured sulfate concentration was 646 mg/l, double the permitted limit. Additionally, due to severe drought and high temperatures, parts of the Cerovo riverbed were dry during July, August, and September 2024. Similarly, in August and September 2024, the Borska River at the Slatina village measuring point showed signs of poor ecological status, with sulphate and ammonia concentrations exceeding permissible limits.¹⁰

In 2022, air pollution worsened, with sulfur dioxide, arsenic, and lead levels

⁴ Serbian Environmental Protection Agency (SEPA), Air Quality Report for 2019, <https://sepa.gov.rs/wp-content/uploads/2024/10/Vazduh2019.pdf>, p. 26

⁵ SEPA, Air Quality Report for 2020, <https://sepa.gov.rs/wp-content/uploads/2024/10/Vazduh2020.pdf>, p.42

⁶ Laboratory analysis reports from 2022, 2023 and 2024, respectively https://ekoloskiodgovor.rs/wp-content/uploads/2024/08/12051609-Drinking-Fountains-Timocka-krajina_povrsinska-sediment_x_FHRO_BA-4_engleski.pdf, https://ekoloskiodgovor.rs/wp-content/uploads/2023/10/1309019853090198_dl_Drinking-Fountains-Timocka-krajina_povrsinska-sediment_x_FHRO_BA-4_13.pdf and https://ekoloskiodgovor.rs/wp-content/uploads/2024/01/Engl-131208505312085043120850_dl_Drinking-Fountains-Timocka-krajina_BA-4_04.pdf. See also Report no.1 by the Institute for occupational safety in 2022, available at: <https://bor.rs/wp-content/uploads/2023/06/Izvestaj-o-analizi-vode.pdf>

⁷ Ibidem.

⁸ Report no. 45372, Sludge analyze from Pek River, Institute of Mining and Metallurgy Bor, p. 2

⁹ Monthly Report no. 3497/24 for July 2024, Monitoring of the surface waters, Institute of Mining and Metallurgy Bor, p. 9; <https://bor.rs/wp-content/uploads/2024/08/3497-24-GU-Bor-vode-Mesecni-izvestaj-za-JUL-2024.pdf>

¹⁰ Weekly Report no. 3746/24, Monitoring of surface waters, from 16th until 23rd September 2024, Institute of Mining and Metallurgy Bor, p. 9; <https://bor.rs/wp-content/uploads/2024/09/3746-24-GU-Bor-vode-16.09.2024.pdf>

regularly exceeding the values determined to avoid, prevent or reduce harmful effects on human health and/or the environment.¹¹ By 2023, the company's operations had led to higher concentrations of heavy metals, including cadmium, arsenic, and lead, in both air and water. The water quality of the Cerovo River recorded a drastic increase in copper and nickel concentrations in 2023 due to mining activities at the Cerovo Copper Mine.¹² A report by the Institute for Mining and Metallurgy, a Serbian government research institution specializing in mining, metallurgy and technology, dated October 2023 shows that at the measuring point before the Cerovo Copper Mine, the value of the copper concentration was 25 µg/l, while at the measuring point after the mine, it was 57900 µg/l, which limit value for copper is 1000 µg/l.¹³

The pollution has had a lasting impact on the local ecosystem, particularly through soil contamination with heavy metals such as arsenic, cadmium, lead, nickel, chromium, and mercury, which have degraded soil fertility and harmed local flora and fauna. A 2023 report from the Institute for Mining and Metallurgy Bor found arsenic concentrations two to three times higher than permitted at 7 out of 25 locations, with cadmium levels exceeding limits at one site. Toluene, a carcinogen, was detected at 22 sites, and xylene was recorded in areas near the Krivelj and Cerovo mines.¹⁴

According to experts, soil pollution in Bor has been long-term, with harmful effects on human health, flora, fauna, and other resources within at least an 8-km radius of the pollution source.

In July 2024, public authorities imposed drinking water restrictions in Krivelj due to reduced water availability and increased consumption.¹⁵ While authorities claimed Serbia Zijin Copper DOO didn't use the village's water source, documents obtained from the Bor public water supply company show that Serbia Zijin Copper DOO consumed approximately 31.000 m³ of water in the first half of 2024 alone.¹⁶ The documents also reveal that the company has two connections at the water source from which the village of Krivelj is supplied.¹⁷ During May and June, Serbia Zijin Copper DOO used 11,122 m³

¹¹ SEPA, Annual Air Quality Report for 2022, <https://sepa.gov.rs/wp-content/uploads/2024/10/Vazduh2022.pdf>

¹² See Institute for Mining and Metallurgy Bor, Report No. 4779/23, "Monitoring of Surface Waters from October 9th to November 5th 2023", Monthly Report for October, <https://bor.rs/wp-content/uploads/2023/12/4779-23-GU-Bor-vode-Mesečni-izvestaj-za-oktobar-.pdf>, p. 11 (Declaration of conformity of test results no. 4779/23 p. 2) and Institute for Mining and Metallurgy Bor, Monitoring of the surface waters, Monthly Report no. 5192/23 for November 2023, <https://bor.rs/wp-content/uploads/2023/12/5192-23-GU-Bor-vode-Mesečni-izvestaj-za-novembar-2023-.pdf> p. 10 (Declaration of conformity of report results 5192/23 p. 4)

¹³ Institute for Mining and Metallurgy Bor, Report No. 4779/23, "Monitoring of Surface Waters from October 9th to November 5th 2023", Monthly Report for October, <https://bor.rs/wp-content/uploads/2023/12/4779-23-GU-Bor-vode-Mesečni-izvestaj-za-oktobar-.pdf> p. 11 and 35 (Declaration of conformity of test results p. 2 and 15).

¹⁴ Report on the soil examination No. 1440/23 of the Institute for Mining and Metallurgy Bor; p. 6-12

¹⁵ Notice on water restriction from 07.09.2024 indicates that "Due to the reduced yield of water-springs, the water restrictions will be introduced starting from 07/09/2024 between 24:00 to 05:00, the consumers of the Krivelj village will not have water supply", <https://vodovodbor.com/obavestenje-o-restrikciji-vode-od-09-07-2024-god/>.

¹⁶ Information obtained through free access to information request number 2436/3 from 24 July 2024. In this document, the Head of the legal department of public water utility company "Vodovod Bor" indicated that "the total consumption achieved through the connections at the mentioned source is shown based on the water meter readings, which are carried out every even month: January 2024 – 1,140 m³ February 2024 – 8,523 m³ March 2024 – 674 m³ April 2024 – 9,468 m³ May 2024 – 1,008 m³ June 2024 – 10,114 m³.

¹⁷ *Ibidem*. The document indicated that: "ZiJin Cooper Bor has two connections at the source in question: for the "Kamenolom" plant and for the "Cerovo" plant." Non official translation.

(58% of the total consumption), while the entire population of Krivelj used 8,035 m³ (42%).¹⁸

In the village of Krivelj, home to around 400 households, the expansion of the Veliki Krivelj mine has led to significant disruptions. Ground shaking from blasting, heavy vehicles, and machinery has caused considerable dust and noise pollution. The intensity of the noise during blasting, ranging from 115 to 125 dB (A) at a distance of 382 meters, has affected residential buildings and a school in Krivelj.¹⁹ This noise, along with seismic vibrations from blasting (M1.5–1.9 magnitude), has damaged residential buildings and contributed to a decline in the quality of life for local residents. These disturbances, caused by pollution, have directly impacted the private and family life of the community, including health, the living environment, and safety. Additionally, the vibrations and dust pollution have harmed agricultural crops.

High rainfall has further exacerbated the problem by washing ore material from excavation into water courses and soil. The situation is compounded by the lack of a Spatial Plan for the Bor-Majdanpek Mining Basin, which has yet to be adopted, despite a government decision for its development in 2014.

Adverse Health Impacts

Pollution from industrial mining activities in Bor has resulted in significant adverse health consequences for the local population. A study conducted in 2020 by the Ministry of Health and the Ministry of Environmental Protection²⁰ shows a substantially increased risk of various cancers, including lung, liver, kidney, and prostate cancers, as well as respiratory and circulatory diseases. According to a medical expert, the risk of cancer, particularly lung cancer, has escalated due to elevated arsenic levels in the air, with the risk increasing more than 92 times between 2019 and 2021.

It is reported that life expectancy in Bor has decreased by over two years, from 74 years in 2018 to 71.99 years in 2022,²¹ largely due to pollution-related health issues. Chronic arsenic exposure has led to severe health effects, especially in children, who are more vulnerable to suffering developmental problems, such as reduced intellectual function, low birth weights, and increased infant mortality.

Reportedly, lead exposure has caused neurological damage, particularly in children, resulting in lifelong cognitive and behavioral issues. Cadmium has

¹⁸ Ibidem.

¹⁹ EIA study for the project of expansion of surface mine Veliki Krivelj for the capacity 10,6 x 106 ton of ores yearly, https://www.ekologija.gov.rs/sites/default/files/inline-files/Studija%20EIA%20Prosirenje%20PK%20VK_rev.pdf, picture no. 6.10. on page 149

²⁰ Improving the management of contaminated sites in Serbian areas - Strengthening national capacities and intersectoral synergies in the field of safe management of contaminated sites and hazardous chemicals to prevent harmful effects on human health and the environment in the Republic of Serbia" prepared by the Ministry of Health, the Ministry of Environmental Protection, and Institute for Public Health of Serbia "Dr Milan Jovanović Batut" from 2020, p.30.

²¹ Analysis of the health status of the population of Bor district in the period from 2018 to 2022 p.14, https://zavodzajecar.rs/wp-content/uploads/2024/08/AnalizazdravstvenogstanjaokrugBor2018-2022_compressed.pdf.

led to kidney damage, lung cancer, and other organ cancers, while nickel exposure has raised the risk of lung and nasal cancers.²²

Sulfur dioxide (SO₂), released from copper smelting, has increased respiratory diseases, heart disease, stroke, and lung cancer.²³ On days with high SO₂ levels, the risk of respiratory illnesses has been 32 times higher than normal, and prolonged exposure is expected to cause further health problems in the future. Water pollution has also impacted residents living near the Krivelj, Borska, and Brestovačka rivers, with contaminated water affecting drinking supplies, livestock, and agriculture. This has led to economic hardship for farmers, who have lost access to fertile land and income from agricultural activities.

Impacts on the Ability of Local Communities to Grow crops

The contamination of soil and water in the Bor region has severely impacted the ability of local communities, particularly in Krivelj, to grow crops. Soil in the area is heavily polluted with arsenic, cadmium, nickel, chromium, lead, and mercury, primarily due to mining and smelting activities. In 2023, arsenic concentrations at 7 out of 25 examined locations were found to be two to three times higher than permitted limits, while cadmium levels also exceeded acceptable thresholds.²⁴ These pollutants, originating from mining dust and emissions, have degraded the soil, leading to loss of fertility and making it unsuitable for agricultural use. Additionally, water sources essential for irrigation, such as the Borska and Cerovo rivers, are classified as Class IV or V, meaning they are unsuitable for any purpose without special treatment.²⁵ For instance, copper concentrations in the Borska River were recorded at nearly seven times higher than allowed, while sulphates were 3,000 times above permissible levels. The ecological degradation caused by these pollutants has made it impossible for farmers to produce healthy, non-toxic crops, undermining food security and the livelihoods of agricultural communities in the region.

Legal Framework on Expropriation and Impacts on Local Communities

The Serbian legal framework permits both public and private expropriation, enabling companies like Serbia Zijin Mining and Serbia Zijin Copper DOO to benefit from the Law on Expropriation and the Law on Mining and Geological Research.²⁶ According to these laws, beneficiaries of expropriation gain the right to take possession of expropriated property when the compensation

²² Health effects of low-level lead (National Toxicology Program Monograph). Bethesda (MD): National Institutes of Health, 2012.

²³ M. A. Bhuiyan et al., Measuring the impact of global tropospheric ozone, carbon dioxide and sulfur dioxide concentrations on biodiversity loss, *Environmental Research*, Vol. 160, 2018, <https://doi.org/10.1016/j.envres.2017.10.013>

²⁴ Report on the examination No. 1440/23 of the Institute for Mining and Metallurgy Bor

²⁵ See Monthly Report no. 292/24 for December 2023, Institute for Mining and Metallurgy Bor, Monitoring of surface waters, <https://bor.rs/wp-content/uploads/2024/01/292-24-GU-Bor-vode-Mesečni-izveštaj-za-december-2023.pdf>, p. 10, 12 and 15 (Statement of conformity of report results 292/24 p. 2, 3, 4, 5, 8, 9, 14 and 15) and Monthly Report no. 1262/24 for February 2024, Institute for Mining and Metallurgy Bor, Monitoring of surface waters, <https://bor.rs/wp-content/uploads/2024/03/1262-24-GU-Bor-vode-Mesečni-izveštaj-za-februar-2024.pdf> at pp. 9, 10, 12 and 15 (Statement of conformity of report results 1262/24 pp. 2, 3, 4, 5, 8, 9, 14 and 15).

²⁶ Official Gazette of RS nos. 101/15, 95/18, and 40/21

decision becomes final - i.e., when the agreement on compensation is concluded. However, at the request of the expropriating entity, the Ministry of Finance may grant earlier possession before the compensation agreement is finalized in cases of urgency, such as for construction projects. A series of decisions issued by the Ministry of Finance has facilitated the transfer of property from residents to these companies, despite questions surrounding the legality, urgency and fairness of these procedures. In many instances, the compensation offered was significantly below the market value, leading to extended legal proceedings over fair compensation. Affected landowners initiated court proceedings against Serbia Zijin Mining and Serbia Zijin Copper DOO, seeking fair compensation, placing a significant burden on those displaced.

In addition, the Department for Urban Planning, Construction, Communal, Property-Legal, and Housing Affairs of the City Administration of Bor has issued numerous decisions on expropriation in favor of Serbia Zijin Mining for the purpose of constructing mining facilities and mineral processing infrastructure. These decisions were made in accordance with the Government's declaration of public interest, thereby facilitating property confiscation by the companies. In practice, numerous expropriation decisions have led to the displacement of local residents, violating their rights to property and housing, without adequate compensation or due process.

Relocation and Displacement

Reportedly, the expansion of the Veliki Krivelj mine will displace around 400 households in Krivelj, with residents being relocated to a new settlement called "Trujkanov potok", located about 3 kilometers from Bor's urban construction area. However, the relocation process has been delayed, and there has been little progress in preparing necessary planning documents. Since November 2023, state institutions have not participated in the negotiations between Zijin Mining Group and the local community. In January 2024, locals blocked the road in protest over the slow progress in adopting planning documents and resettlement plans.

The relocation area is near the Čukaru Peki gold mine, which is owned by Zijin Mining. This raises concerns about potential future displacement if the Čukaru Peki mine expands further. Despite the adoption of a detailed regulation plan for the new settlement, there are no guarantees that the relocated residents will not face further displacement.

The draft resettlement program, developed by the Institute of Architecture and Urbanism of the Republic of Serbia, lacks important details, such as the social and environmental impact of mining activities and compensation for expropriated property and land. Residents have been offered compensation prices well below market value for their properties. Those who refuse the offer face lengthy court proceedings to determine fair compensation, during which they are left without their property. The lack of effective dispute resolution mechanisms and the slow pace of legal proceedings have left many residents without recourse or support, exacerbating their financial difficulties and

hindering their ability to rebuild their lives after relocation.

Impact of the relocation on cultural rights

In Serbia, the number of individuals identifying as Vlach has significantly declined over the past two decades, from over 40,000 in 2002 to just over 21,000 in 2022. This decline reflects both demographic shifts and possible underreporting due to social and political pressures. The lack of detailed, village-level ethnic data in the latest census further complicates efforts to advocate for culturally sensitive policies and resettlement plans for minority communities. Krivelj is the home to a predominantly Vlach community which has a distinct cultural and linguistic identity. The village has long-standing cultural institutions, including a church built in 1873, a school, and a cultural center, all of which are central to the community's social and cultural life.

The community has stated its strong preference for a collective rather than individual relocation to preserve their cultural identity, traditions, and social cohesion. They have highlighted that dispersing families across different locations would lead to the loss of their language, customs, and cultural practices, which are already under pressure due to demographic decline and limited institutional support.

Environmental degradation and the pollution of the Kriveljska and Borska rivers, which run through and near the village, has further exacerbated the situation. These environmental harms disproportionately affect the Vlach minority, raising concerns of environmental injustice and discrimination. In addition, the alteration of river courses for mining purposes has also threatened the physical safety of the village and its surrounding areas.

In this context, the community has called for a rights-based approach to resettlement which is both urgent and justified. In view of the specific impact of this displacement on them, women have been strongly advocating for collective relocation, highlighting the intersectionality between environmental justice, gender, and minority rights.

Insufficient Government Action

a. Lack of a Plan and Inability to Bring Legal Action

The Serbian government has not implemented a comprehensive plan to address the environmental and human rights impacts of mining activities in the Bor region. Affected individuals, including members of the Vlach minority, face significant challenges in bringing legal action due to the limitations of the Serbian legal framework. The Serbian Law on General Administrative Dispute restricts the ability of persons to challenge normative acts or omissions, such as the failure to issue spatial plans necessary for the relocation of affected communities. Under this law, only individual administrative acts that directly affect a party's rights or obligations can be challenged before the Administrative Court. Consequently, the Serbian legal system does not offer avenues to address the lack of relocation plans for those impacted by mining activities. This legal

gap leaves affected communities without effective remedies to address the systemic issues caused by mining operations.

b. *Lack of Adequate Sanctions to Motivate Compliance*

Serbia Zijin Copper DOO has been convicted at least fifteen times for various violations including air and water pollution, conducting mining activities without proper permits, and operating without the necessary environmental approvals. For example, in April 2022, Serbia Zijin Copper DOO and one company representative were ordered to pay approximately €8,522 for polluting the Mali Pek River. The company was also fined €3,830 for performing construction works on the expansion of the copper smelter in Bor without prior approval of the Environmental Impact Assessment study and for operating without an integrated environmental permit. Additionally, Zijin was convicted six times for illegal construction in Bor, five times below the minimum penalty prescribed by the law. Despite these convictions, legal charges against the company are often dismissed by the prosecution without adequate explanation, and the sanctions imposed are insufficient to deter further violations.

Preventive measures, such as inspection surveillance and environmental impact assessments, have proven ineffective in preventing and addressing the environmental damage caused by mining activities.

Reportedly, inspections remain one of the weakest points in the environmental protection system in Serbia. Particularly, it is reported that environmental, construction and mining inspection often fails to conduct inspection surveillance upon request of an interested party. For instance, a request for conducting an extraordinary inspection over Serbia Zijin Copper DOO was made in 2022 to the Ministry of Environmental Protection in order to determine whether the company has commenced construction works on the construction of a bypass tunnel of the Kriveljska River, Borska River and Saraka Stream in the zone of the “Veliki Krivelj” flotation tailings pond. The Ministry reportedly refused to act claiming they lack authority to do so.

Although the inspection surveillance procedures are urgent procedures given the potential risk to the environment and people, in multiple cases, inspectors have not acted or have not acted according to established deadlines and have not informed the requesting party of the state or the results of the inspection. Reportedly, request for participation of affected communities and their representatives, including civil society organizations have been denied in contravention to the General Administrative Procedure Law and the Aarhus Convention.²⁷ Administrative authorities issue so-called “conclusions”, which

²⁷ Decision of the Ministry of the Environmental Protection no. 000036594 2024 14850 007 013 042 002, from 9 April 2024, Decision of the Ministry of the Environmental Protection no. 914-480-501-00012/2021-07 from 14 April 2021, Decision of the Ministry of the Environmental Protection no. 914-480-501-00014/2021-07 from 21 April 2021, Decision of the Ministry of the Environmental Protection no. 914-480-501-00063/2021-07 from 18 February 2021, Decision of the Ministry of the Constructing, Transport and Infrastructure no. 363-354-00066/2022-18 from 9 May 2022, Decision of the Ministry of Mining and Energy no. 000408842 2024 14820 007 000 042 002 from 27 March 2024, Decision of the Ministry of Mining and Energy no. 310-07-01078/2023-09 from 25 December 2023, Decision of the Ministry of the Environmental Protection no. 000036594 2024 14850 007 013 042 002 from 9 April 2024.

cannot be appealed.²⁸ Reportedly, the Administrative Court has upheld this interpretation of the law.²⁹ Furthermore, in cases in which the inspection does not act upon a request for initiation of the inspection surveillance, the victims and their representatives are in practice deprived of a legal remedy.³⁰

While we do not wish to prejudge the accuracy of these allegations, we wish to express our grave concern about the significant human rights impacts caused by the ongoing pollution in the Bor region, particularly from the activities of Serbia Zijin Copper DOO and Serbia Zijin Mining. The lack of an adequate response to these issues, especially in addressing the health, environmental, and social consequences of pollution, exacerbates these impacts. The situation requires a human rights-based approach, including strong preventive measures and effective accountability mechanisms, the provision of adequate compensation and rehabilitation for affected communities.

Particularly concerning is that the Bor region and its surroundings have been described as “sacrifice zones” where vulnerable and marginalized groups bear a disproportionate burden of the health, human rights, and environmental consequences of exposure to pollution and hazardous substances. Article 5 § 1 of the Declaration on the Rights of Persons belonging to National or Ethnic, Religious or Linguistic Minorities expressly specifies that “National policies and programmes shall be planned and implemented with due regard for the legitimate interests of persons belonging to minorities.” The situation described above and its disproportionate impact on the Vlach minority does not seem to meet this requirement.

We are further concerned by the alleged lack of adequate public participation in decision-making processes, insufficient access to environmental information, and inadequate mechanisms to address grievances and ensure the accountability of responsible actors. These factors are said to undermine the rights of affected communities and worsen the environmental and human rights impacts of these activities. Article 3 § 2 of the Declaration on the Rights of Persons belonging to National or Ethnic, Religious or Linguistic Minorities requests that “Persons belonging to minorities have the right to participate effectively in decisions on the national and, where appropriate, regional level concerning the minority to which they belong or the regions in which they live [...]”. Similarly, article 15 of the Council of Europe Framework Convention for the Protection of National Minorities, to which your Country is a party, provides that “The Parties shall create the conditions necessary for the effective participation of persons belonging to national minorities in cultural, social and economic life and in public affairs, in particular those affecting them.” These requirements do not seem to be effectively implemented by your Excellency’s Government regarding the participation of the Vlach community in decisions affecting

²⁸ Conclusion of the Ministry of the Construction, Transport and Infrastructure no. 363-354-00066/2022-18 from 09 May 2022, Decision of the Ministry of the Mining and Energy no. 310-07-01078/2023-09 from 25 December 2023, Decision of the Ministry of the Mining and Energy no. 00485466 2023 003 006 000 001 from 13 November 2023.

²⁹ Decision of the Administrative Court 1 U 29031/21 from 13 August 2024, Decision of the Administrative Court 10 U 29277/21 from 26 June 2024 and Decision of the Administrative Court 26 U ću 46484/23 from 12 January 2024.

³⁰ Decision of the Ministry of Mining and Energy no. 310-07-752/2021-09 from 18 August 2023, Decision of the Ministry of the Environmental Protection No. 353-03-03733/2023-07 from 18 October 2023, Decision of the Ministry of the Construction, Transport and Infrastructure no. 000211105 2024 14810 009 002 011 004 from 18 March 2024.

them.

In connection with the above alleged facts and concerns, please refer to the **Annex on Reference to international human rights law** attached to this letter which cites international human rights instruments and standards relevant to these allegations.

As it is our responsibility, under the mandates provided to us by the Human Rights Council, to seek to clarify all cases brought to our attention, we would be grateful for your observations on the following matters:

1. Please provide any additional information and/or comment(s) you may have on the above-mentioned allegations.
2. Please provide any information on any interactions of your Excellency's Government with the Zijin Mining Group, domiciled in your country, in relation to its operations in the Bor district in Serbia, and any assessment of the impact of the mining activities of Serbia Zijin Copper DOO on human rights and the environment in the Bor district of Serbia.
3. Please highlight the steps that your Excellency's Government has taken, or is considering taking, including policies, legislation, and regulations, to prevent human rights abuses abroad by business enterprises under its jurisdiction, in line with the UN Guiding Principles on Business and Human Rights (UNGPs). In this context, please provide information on the steps taken to ensure that businesses conduct human rights due diligence to identify, prevent, mitigate and account for how they address their impacts on human rights throughout their activities, including requiring human rights due diligence. Please provide information on any steps taken by your Excellency's Government to ensure that businesses domiciled in its territory provide for or cooperate in the remediation of adverse impacts they have caused or contributed to in their operations abroad, in line with the corporate responsibility of business enterprises to respect human rights.

Please provide information on preventative measures your Excellency's Government has taken, or is considering taking, to mitigate environmental and human rights harm in other countries by business enterprises domiciled in your country.

This communication and any response received from your Excellency's Government will be made public via the communications reporting [website](#) within 60 days. They will also subsequently be made available in the usual report to be presented to the Human Rights Council.

While awaiting a reply, we urge that all necessary interim measures be taken to halt the alleged violations and prevent their re-occurrence and in the event that the investigations support or suggest the allegations to be correct, to ensure the accountability of any person(s) responsible for the alleged violations.

We may publicly express our concerns as, in our view, the information upon which the press release will be based is sufficiently reliable to indicate a matter

warranting immediate attention. We also believe that the wider public should be alerted to the potential implications of the above-mentioned allegations. The press release will indicate that we have been in contact with your Excellency's Government's to clarify the issues in question.

Please be informed that a letter on this subject matter has also been sent to Serbia, the Zijin Mining Group and Serbia Zijin Copper DOO.

Please accept, Excellency, the assurances of our highest consideration.

Marcos A. Orellana
Special Rapporteur on the implications for human rights of the environmentally sound
management and disposal of hazardous substances and wastes

Nicolas Levrat
Special Rapporteur on minority issues

Annex

Reference to international human rights law

We would like to draw the attention of your Excellency's Government to article 12 of the CESCER, which enshrines the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. The right to health is also guaranteed as a part of the UDHR under article 25 which considers the individual's potential, the social and the environmental conditions affecting the health of the individual, and the availability of health services. General comment No. 14 describes the normative content of CESCER article 12 and the legal obligations undertaken by the States parties to respect, protect and fulfil the right to physical and mental health. In paragraph 11 of general comment No. 14, the Committee on Economic, Social and Cultural Rights (CESCR) interprets the right to health as "an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health, such as access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information". Furthermore, article 24(2)(c) of the UN Convention on the Rights of the Child requires States to take appropriate measures to combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the provision of clean drinking water, taking into consideration the dangers and risks of environmental pollution.

We would further like to bring to the attention of your Excellency's Government the information that adverse impacts on human rights of the release of hazardous substances into the environment disproportionately affect children and women, as reported by the Special Rapporteur on toxics and human rights in his report, "Gender and hazardous substances" (16 July 2024, A/79/163).

General comment No. 26 (CRC/C/GC/26) by the Committee on the Rights of the Child, which states that children's right to a clean, healthy and sustainable environment is implicit in the Convention on the Rights of the Child and directly linked to, in particular, the rights to life, survival and development (article 6), to the highest attainable standard of health, including taking into consideration the dangers and risks of environmental pollution (article 24), to an adequate standard of living (article 27), and to education (article 28), including the development of respect for the natural environment (article 29, para. 63).

We would also like to draw the attention of your Excellency's Government to article 11 of the CESCER, which recognizes the right of everyone to an adequate standard of living, including food and housing. General comment No. 15 on the right to water stresses that the right to water "clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival" (para. 3), with the right to an adequate standard of living enshrined in article 11 of the CESCER, and that the right to water is also "inextricably related to the right to the highest attainable standard of health" (para. 3) guaranteed under article 12(1). A sufficient and continuous water supply must be available for personal and domestic use, and "water is necessary to produce food (right to adequate food) and ensure environmental hygiene (right to health)" (para. 6).

Moreover, water required for each personal or domestic use must be safe, i.e., free from chemical substances that constitute a threat to a person's health. Water facilities and services must be accessible to everyone, both physically and economically, and must be free from discrimination. Further, water accessibility includes the right to seek, receive, and impart information on water issues. Lastly, "access to traditional water sources in rural areas should be protected from unlawful encroachment and pollution" (para. 16(c)).

Furthermore, general comment No. 4 underlined that the right to housing should not be interpreted in a narrow or restrictive sense, such as merely having a roof over one's head; rather, it should be seen as the right to live somewhere in security, peace, and dignity. Notwithstanding the type of tenure, all persons should possess a degree of security of tenure which guarantees legal protection against forced eviction, harassment and other threats. We wish to recall that, as clarified by the CESCR in its general comment No. 7, forced evictions are a gross violation of the right to adequate housing and may also result in violations of other human rights, such as the right to life, the right to security of the person, the right to noninterference with privacy, family and home and the right to the peaceful enjoyment of possessions. The Basic Principles and Guidelines on development-based evictions and displacement (A/HRC/4/18) further establish that comprehensive and holistic impact assessments should be carried out prior to the initiation of any project that could result in development-based eviction and displacement, with a view to securing fully the human rights of all potentially affected persons, groups and communities, including their protection against forced evictions.

We would also like to bring to your Excellency's Government's attention article 27 of the ICCPR, establishing that in those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities have the right, in community with the other members of their group, "to profess and practice their own religion, or to use their own language".

Moreover, the 1992 UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities refers to the obligation of States to protect the existence and the identity of minorities within their territories and to adopt the measures to that end (article 1), as well as to adopt the required measures to ensure that persons belonging to minorities can exercise their human rights without discrimination and in full equality before the law, and to create favourable conditions to enable persons belonging to minorities to express their characteristics and to develop, inter alia, their culture, traditions and customs (article 4). Article 4.1 establishes that "States will take measures where required, to ensure that persons belonging to minorities may exercise fully and effectively all their human rights and fundamental freedoms without any discrimination and in full equality before the law". The declaration further provides that national policies and programmes shall be planned and implemented with due regard for the legitimate interests of persons belonging to minorities (article 5).

In this regard, the Special Rapporteur on the human right to a clean, healthy and sustainable environment, in its report (A/HRC/37/59), underlined that States should prohibit discrimination in relation to the enjoyment of a safe, clean, healthy and sustainable environment. The Special Rapporteur emphasized that discrimination can

be indirect when it includes measures such as authorizing toxic and hazardous facilities in large numbers in communities that are predominantly composed of racial or other minorities, thereby disproportionately interfering with their rights, including their rights to life, health, food and water. Consequently, States must pay attention to historical or persistent prejudice against groups of individuals, recognize that environmental harm can both result from and reinforce existing patterns of discrimination, and take effective measures against the underlying conditions that cause or help to perpetuate discrimination.

Both the General Assembly and the Human Rights Council recognized the right to a clean, healthy and sustainable environment with the adoption of resolutions A/RES/76/300 and A/HRC/RES/48/13. In this regard, we would like to draw the attention of your Excellency's Government to the 2024 report of the Special Rapporteur on the human right to a healthy environment (A/79/270) including an overview of the right, highlighting the obligation of States to respect, protect and fulfill the right to a healthy environment, including in relation to the right of everyone to enjoy a non-toxic environment in which to live, study and play, as well as the right to access to information, public participation and access to justice.

States have a duty to prevent exposure to hazardous substances and wastes, as detailed in the 2019 report of the Special Rapporteur on the human rights implications of the environmentally sound management and disposal of hazardous substances and wastes to the General Assembly (A/74/480). This obligation derives implicitly, but clearly, from a range of rights and duties enshrined in the global human rights framework, under which States are obliged to respect and fulfill recognized human rights, and to protect those rights, including from the consequences of exposure to toxic substances. These rights include the human rights to life, health, food and safe drinking water, a healthy environment, adequate housing, and safe and healthy working conditions.

In this regard, we would like to remind your Excellency's Government of the Framework Principles on Human Rights and the Environment detailed in the report of the Special Rapporteur on Human Rights and the Environment (A/HRC/37/59). The principles provide that States must ensure a safe, clean, healthy, and sustainable environment in order to respect, protect and fulfill human rights (principle 1) and must respect, protect and fulfill human rights in order to ensure a safe, clean, healthy and sustainable environment (principle 2). The commentary on principle 2 details that States should therefore protect against harmful environmental interference from business enterprises, other private actors and natural causes.

We would also like to bring to the attention of your Excellency's Government principle 7 of the Framework, which concerns the right of access to information on environmental matters and requires that States regularly collect, update and disseminate environmental information, including information about: the quality of the environment, including air and water; pollution, waste, chemicals and other potentially harmful substances introduced into the environment; threatened and actual environmental impacts on human health and well-being; and relevant laws and policies. Moreover, States should provide affordable, effective and timely access to environmental information held by public authorities, upon the request of any person or association, without the need to show a legal or other interest.

Concerning access to effective remedies for violations of human rights and domestic laws relating to the environment, Framework principle 10 requires States to ensure that individuals have access to judicial and administrative procedures that meet basic requirements, including that the procedures: (a) are impartial, independent, affordable, transparent and fair; (b) review claims in a timely manner; (c) have the necessary expertise and resources; (d) incorporate a right of appeal to a higher body; and (e) issue binding decisions, including for interim measures, compensation, restitution and reparation, as necessary to provide effective remedies for violations.

In this context, the Special Rapporteur on toxics and human rights, highlighted the critical importance of full and timely compliance with judicial decisions in cases of toxic exposure (A/HRC/60/34). To achieve this, judicial and administrative orders must be practicable and enforceable, and national courts must be empowered to oversee compliance with their decisions and impose sanctions for non-compliance or delay. Reparations must be comprehensive, incorporating interim measures of protection, due process guarantees, and remedies that go beyond compensation to include the cessation of pollution and clean-up of contaminated areas. These processes must be rooted in a recognition of the deep interconnection between communities, notably of Indigenous peoples, and their ecosystems.

Also, the principle 12 of the Framework Principles on Human Rights and the Environment establishes that States should ensure the effective enforcement of their environmental standards against public and private actors. This requires States to monitor and effectively enforce compliance with the standards by preventing, investigating, punishing and redressing violations of the standards by private actors as well as governmental authorities and to take effective steps to prevent corruption from undermining the implementation and enforcement of environmental laws.

We would like to highlight the UN Guiding Principles on Business and Human Rights (A/HRC/17/31), which were unanimously endorsed by the Human Rights Council in June 2011, are relevant to the impact of business activities on human rights. These Guiding Principles are grounded in recognition of:

1. “States’ existing obligations to respect, protect and fulfill human rights and fundamental freedoms;
2. The role of business enterprises as specialized organs or society performing specialized functions, required to comply with all applicable laws and to respect human rights;
3. The need for rights and obligations to be matched to appropriate and effective remedies when breached.”

The guiding principle 1 reiterates the State's duty to "protect against human rights abuses by business enterprises on its territory and/or under its jurisdiction". The guiding principle 2 provides that States should make clear that all companies domiciled on their territory and/or under their jurisdiction are expected to respect human rights in all their activities. In addition, the guiding principle 3 reiterates that States must take appropriate measures to "prevent, investigate, punish and remedy such abuses through

effective policies, laws, regulations and adjudication". In addition, it requires, among other things, that a State "provide effective guidance to business enterprises on how to respect human rights throughout their operations".

Furthermore, on access to remedy, the guiding principle 25 stresses that the State must take appropriate steps to ensure, through judicial, administrative, legislative and other appropriate means that when business-related human rights abuses occur within their territory and/or jurisdiction, those affected have access to effective remedy. According to guiding principle 26, States should take appropriate measures to ensure the effectiveness of domestic judicial mechanisms when dealing with business-related human rights abuses, including by considering how to limit legal, practical and other obstacles that may lead to denial of access to remedy.

Furthermore, we would like to note that, as set forth in the United Nations Guiding Principles on Business and Human Rights, all business enterprises have a responsibility to respect human rights, which requires them to avoid infringing on the human rights of others to address adverse human rights impacts with which they are involved. The responsibility to respect human rights is a global standard of expected conduct for all business enterprises wherever they operate. It exists independently of States' abilities and/or willingness to fulfill their own human rights obligations, and does not diminish those obligations. Furthermore, it exists over and above compliance with national laws and regulations protecting human rights.

Principles 11 to 24 and principles 29 to 31 provide guidance to business enterprises on how to meet their responsibility to respect human rights and to provide for remedies when they have caused or contributed to adverse impacts.

It is also important to recall that the Committee on Economic, Social and Cultural Rights, in its general recommendation 24 (2017), states that "the extraterritorial obligation to protect requires States parties to take measures to prevent and remedy violations of Covenant rights that occur outside their territory as a result of the activities of business entities over which they may exercise control, in particular in cases where remedies available to victims before the domestic courts of the State where the harm occurs are unavailable or ineffective. "

The guiding principles have identified two main components to the business responsibility to respect human rights, which require that "business enterprises: (a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; [and] (b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts" (guiding principle 13).

Principles 17-21 provide the four-step human rights due diligence process that all business enterprises should take to identify, prevent, mitigate, and account for how they address their adverse human rights impacts. Principle 22 further provides that when "business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes."

Furthermore, business enterprises should remedy any actual adverse impact that they cause or to which they contribute. Remedies can take a variety of forms and may include apologies, restitution, rehabilitation, financial or non-financial compensation and punitive sanctions (whether criminal or administrative, such as fines), as well as the prevention of harm through, for example, injunctions or guarantees of non-repetition. Procedures for the provision of remedy should be impartial, protected from corruption and free from political or other attempts to influence the outcome (commentary to guiding principle 25).