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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

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Bureau of the Standing Committee

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**Possible negative impact of mining activities in Trstionica
– Gornja Bukovica and Vareš (Bosnia & Herzegovina)**

- COMPLAINANT REPORT -

Document prepared by Park prirode Trstionica i Boriva

Complaint No. 2022/07 (Bosnia and Herzegovina) – Complainant’s Update Report for the Summer 2026 Bureau Meeting

May 29, 2026

Dear Secretariat and Bureau Members,

Following the Bureau’s decision of 30 April 2026, and in light of the upcoming summer meeting on 17–18 June 2026, I am submitting an urgent update on behalf of the informal civic group “Park prirode Trstionica i Boriva”.

We have just obtained the official institutional report issued by the Municipality of Vareš on April 27, 2026, titled “Report on the Results of the Action Plan for the Health Protection of the Population of the Municipality of Vareš”.¹

This official document constitutes an admission by the local government of a systemic toxic crisis and contains undeniable data that further justifies an immediate international intervention.

1. Official Institutional Confirmation of Widespread Lead Poisoning

The Municipality’s report confirms that due to detected lead contamination, a municipal Working Group was established to run an emergency Action Plan. A total of 238 residents were tested through the public Health Center Vareš (“Dom zdravlja Vareš”)², alongside over 80 individuals tested via other organized means and independent testing.

The official results, analyzed by the “Medicover” laboratory³, confirm heavy neurotoxic exposure among the population. The state’s own records highlight catastrophic values: µg/l µg/dl

- Patient No. 51 (Daštansko, born 1958): 249 µg/l (24.9 µg/dl) — nearly 9 times above the medical reference limit.
- Patient No. 65 (Daštansko, born 1961): 136 µg/l (13.6 µg/dl)
- Patient No. 102 (Daštansko, born 1954): 122 µg/l (12.2 µg/dl).
- Patient No. 10 (Mir, born 1954): 117 µg/l (11.7 µg/dl).
- Patient No. 93 (Daštansko, born 1973): 114 µg/l (11.4 µg/dl).
- Patient No. 50 (Daštansko, born 1960): 109 µg/l (10.9 µg/dl).
- Patient No. 197 (Borovica Donja, born 1976): 106 µg/l (10.6 µg/dl).

The World Health Organization (WHO) explicitly states that there is no safe level of lead exposure. Despite these alarming figures, the municipal Working Group concluded its operations on April 16, 2026, stating they are “not authorized to interpret the results”, effectively deflecting responsibility while public health remains critically compromised.

¹ https://drive.google.com/file/d/16govqqymvXXJtNORwliMJHoCj42fTiX0/view?usp=drive_link

² See ¹

³ https://drive.google.com/file/d/1tS-6hTR13lt59XZtfA1WQ5qx_op7wU_0/view?usp=drive_link

2. Catastrophic Soil Contamination Along Ore Transport Routes

The report incorporates an official study by the Federal Institute for Agropedology⁴ (“Zavod za agropedologiju”, Report No. 01/03-20-2-932-7/25, dated March 23, 2026).

The data regarding heavy metals along the active ore transport routes reveals ecological devastation:

- At Location 15 (Daštansko - Forestry land): Total lead (Pb) concentrations have reached an astronomical 9,661.67 mg/kg, while Zinc (Zn) has spiked to 2,626.67mg/kg.
- At Location 21 (Vareš - Built-up land): Lead levels are officially recorded at 302.00 mg/kg and Nickel (Ni) at 249.33mg/kg.
- At Location 19 (Borovica - Forestry land): Lead levels are at 296.33mg/kg and Zinc at 332.00mg/kg .

This unprecedented level of soil contamination on high-value forestry land directly threatens the surrounding wild flora and fauna, causing irreversible damage to the habitats protected under the Bern Convention.

3. State Collusion: Environmental Permit Renewed Despite Toxic Crisis

In a shocking display of bad faith, instead of invoking the precautionary principle (Article 6 of the FBiH Law on Environmental Protection) or issuing an emergency suspension, the Federal Ministry of Environment and Tourism (FMOIT) renewed the environmental permit⁵ for the operator DPMetals BH d.o.o. on March 27, 2026, for another five years.

This renewal directly ignores community objections, warnings of toxic dust, and an unauthorized tailings dam expansion at the Rupice site.

4. Institutional Collapse: Constitutional Review and Request for Interim Measures

To demonstrate the total capture of the state apparatus, an official Request for Constitutional Review accompanied by a Motion for an Urgent Interim Measure⁶ was filed before the Constitutional Court of Bosnia and Herzegovina on January 19th, 2026 under Article VI/3.a of the Constitution by Representative Damir Nikšić⁷ on behalf of 1/4 of the members of the House of Representatives of the FBiH Parliament.

The submission challenges the illegal, unconstitutional land conversion of 6,055.8 hectares of state-owned forestry land into construction land and the illegal issuance of concessions to

⁴ https://drive.google.com/file/d/1uB89vEYgRzESCD-uOxG8XBsZynYTc_oW/view?usp=drive_link

⁵ https://drive.google.com/file/d/1pi1mmHY9xOkSy9U5zbOdes9C16afo2z0/view?usp=drive_link

⁶ https://drive.google.com/file/d/142LkEoZqUGT4Jm77TAHLpmMVUVlv_cHs/view?usp=drive_link

⁷ https://drive.google.com/file/d/1t47Do3ZxBqThaap5CNjmCTtg8c8ShhKc/view?usp=drive_link

private mining entities (such as Eastern Mining/Adriatic Metals BH/DPM d.o.o.), in direct violation of the Constitutional Court's landmark ruling No. U-3/24.

The constitutional appeal highlights catastrophic facts that are directly relevant to the Bern Convention:

- **Plunder of Strategic Water Resources:** The mining operations are unconstitutionally consuming 28 liters per second of pure, drinking source-water from the Bukovica River. Over the 30-year concession period, this amounts to 26.46 billion liters of drinking water permanently removed from public circulation for industrial processing without proper compensation to the state.
- **Ecological Ruin of Protected Rivers⁸:** Mining wastewater is actively being discharged via the Vrući potok stream directly into the Trstionica River. Prior to mining, these waters were pristine habitats for strictly protected and sensitive species, including the European crayfish (*Austropotamobius pallipes*) and native brown trout (*Salmo trutta*). Today, Vrući potok has been completely biological deadened, turned into an open industrial sewer.

Despite the immediate, irreversible threat to public health and protected habitats, the Constitutional Court has failed to issue the requested Interim Measure to freeze these activities. Faced with total institutional silence, on May 5, 2026, civil society organizations filed formal Criminal Charges⁹ against the operator's management and top-tier state officials (including the FBiH Prime Minister and FMOIT Minister) for heavy offenses against public health and organized crime.

5. Institutional Erasure of the Transboundary Impact: The Destruction of the "Trstionica - Gornja Bukovica" Protected Area (Kakanj Municipality)

The Complainant strongly alerts the Bureau to a calculated, bad-faith strategy of "geographical blindness" and spatial data manipulation employed by the FBiH authorities even presented to the Secretariat. While recent municipal interventions focus heavily on the transport routes strictly within the Vareš municipality, the state institutions completely ignore the catastrophic ecological impacts on the adjacent Municipality of Kakanj. The mining project is strategically positioned on the mountain slopes directly above the "Gornja Trstionica - Bukovica" area, ensuring that core excavation, toxic dust emission, and heavy metal-laden wastewater discharge gravitate directly into this high-value watershed and sensitive ecosystem (as presented in previous Complainant reports through photos and documents). We urge the Bureau to note the following crucial facts and institutional deceptions, backed by the official

⁸ https://drive.google.com/file/d/1bW_SSkXkfR6Wt5gEe3holh5rsnXB02J7/view?usp=drive_link

⁹ 1. https://docs.google.com/document/d/1ReqKAm-pvMGHMS4fSkC1IKCiMUX_Gkwm/edit?usp=drive_link&oid=100025188355678722538&rtpof=true&sd=true

2. https://docs.google.com/document/d/1CziV-xrWXugjX8YxkjTsJB56PBTUGuW/edit?usp=drive_link&oid=100025188355678722538&rtpof=true&sd=true

decision of the Kakanj Municipal Council¹⁰ (Odluka o davanju saglasnosti za uspostavu zaštićenog područja “Gornja Trstionica - Bukovica”):

- **Illegal Revision of Protected Status:**

Under the official Spatial Plan of the Zenica-Doboj Canton (2009–2029)¹¹ (pdf page 103), the "Trstionica - Gornja Bukovica" area was explicitly designated for high-level institutional protection. However, to accommodate the investor's mining ambitions, authorities are now intentionally manipulating spatial data. They are attempting to reduce this vast, interconnected ecosystem to a mere 30-hectare nucleus of primeval forest (prašuma), deliberately erasing the remaining thousands of hectares from protection maps to justify open-pit mining.

- **Severe Deception Regarding Protected Surface Area:**

Based on comprehensive scientific research¹² conducted by the Faculty of Science of the University of Sarajevo (Prirodno-matematički fakultet Sarajevo), the Kakanj Municipality officially approved the establishment of the Protected Landscape "Kraljeva Sutjeska - Trstionica" covering an immense area of 55,108 hectares¹³. However, to unconstitutionally accommodate the private investor's mining operations, authorities are currently manipulating spatial planning data. They are attempting to reduce this vast, interconnected ecosystem of over 55,000 hectares to just its tiny 30-to-80-hectare primeval forest core (Nukleus-1 of 56 ha and Nukleus-2 of 24 ha). By treating only this 2% core as "protected," the state is intentionally erasing the remaining 98% of the designated area—specifically the vital Buffer Zone (52%) and Transition Zone (46%) from active protection maps to legitimize destructive industrial mining right on the boundaries of the core habitat.

- **Deliberate Failure of Buffer Zone Protection:**

The scientific justification explicitly states that “the level of preservation and functionality of the primeval forest ecosystem will be directly threatened unless adequate active protection measures are provided in the neighbouring ecosystems”. By ignoring the 52% Buffer Zone and allowing heavy mining exploitation on these adjacent slopes, the state is causing irreversible damage to a highly vulnerable ecosystem known for its high species diversity and presence of rare, endangered, and endemic species.

- **Zero Environmental Monitoring and Transboundary Contamination:**

While residents of Vareš are suffering from heavy lead poisoning primarily due to ore transport, the Kakanj region is facing a direct, unmonitored toxic influx from the core

¹⁰ https://www.google.com/url?sa=i&source=web&rct=j&url=https://kakanj.gov.ba/v5/wp-content/uploads/2023/09/Odluka-o-za%25C5%25A1ti%25C4%2587enom-podru%25C4%258Dju-Kr-Sutjeska-Trstionica-NOVA-3-Autosaved.doc&ved=2ahUKEwib0o7rwN6UAxUk5QIHhfr0NR4Qy_kOegYIAAgFEAE&opi=89978449&cd&psig=A_OvVaw3fKhAST18nRnIC34ACbyMC&ust=1780144410456000

¹¹ Spatial plan: https://drive.google.com/file/d/1xwFhbnh3qErU5RKW_10vLwN0dnKDeY-C/view?usp=drive_link

¹² 1a https://drive.google.com/file/d/1T868a3HHxM4YggHfKUc0DqOq--hZmN6m/view?usp=drive_link
1b https://drive.google.com/file/d/15GPKATYL7x4b0N2_hXCfTMolHzBratnm/view?usp=drive_link

¹³ Media report: <https://www.akta.ba/vijesti/bih/168043/kakanj-ce-zastititi-55000-hektara-a-zenica-dva-stabla>

extraction site. The authorities are conducting absolutely no monitoring of water, air, or soil quality in the Trstionica and Gornja Bukovica zone, deliberately avoiding the creation of official records that would prove the destruction of this habitat. Despite the official designation of this 55,108-hectare zone, the authorities are conducting absolutely no monitoring of water, air, or soil quality within the Kakanj municipal borders for this area. They are intentionally avoiding the creation of official records that would prove the ongoing destruction. The Vrući potok stream and the Trstionica River the primary water veins of this designated protected area, noted for their high water quality are being used as unmonitored dump sites for toxic mining waste. This directly threatens the public water supply of tens of thousands of citizens and wipes out Bern Convention protected species, such as the European crayfish (*Austropotamobius pallipes*).

- **Ecological Death of Vrući Potok and Trstionica:**

As highlighted in our previous updates, the Vrući potok stream and the Trstionica River which should enjoy strict protection under the 2009 Spatial Plan are being used as unmonitored dump sites for toxic mining waste. The state is completely ignoring the transboundary pollution moving from the Vareš mining peaks down into the Kakanj water basins, threatening the water supply of tens of thousands of citizens and completely wiping out Bern Convention protected species.

By pretending that the mining impacts stop at the municipal border, the state is committing a severe breach of the Bern Convention's core principles regarding habitat integrity and transboundary environmental assessments.

Conclusion and Immediate Requests

The domestic legal system has completely collapsed. The authorities are actively prioritizing investor profits over the lives of their citizens, the rule of law, and their international obligations under the Bern and Aarhus Conventions.

Therefore, the Complainant respectfully requests the Standing Committee's Bureau to:

1. Immediately open a formal Case-File regarding Complaint No. 2022/07 during the June 17–18 meeting.
2. Issue an urgent international demand to Bosnia and Herzegovina for the immediate suspension of all mining activities at the Rupice/Vareš site until independent, transparent toxicology and biodiversity baselines are established.

Some of the documents in English:

https://drive.google.com/drive/folders/1NIqTHmYXlyxQGILScJBcyOcc_z3OyLVr?usp=drive_link

Evidence folder(BOS):

https://drive.google.com/drive/folders/1cs-E_b25DX_KEafnepE30Y21j6EgNTpc?usp=drive_link

Respectfully submitted,

Hajrija Čobo

Representative, Informal Civic Group “Park prirode Trstionica i Boriva”

Kakanj

**Update Report February 2026
To the Bern Convention Secretariat**

February 13th, 2026

Dear Sir/Madam,

Please find below my Report for the Spring 2026 Bureau meeting.

Subject: Complaint No. 2022/07, Possible File, Bosnia and Herzegovina: Possible negative impact of mining activities in Trstionica – Gornja Bukovica and Vareš

Abstract

This report documents ongoing environmental and public health impacts linked to mining operations in the Vareš–Kakanj region of Bosnia and Herzegovina, with particular concern for the Rupice site and downstream watercourses (Vrući Potok and the Trstionica River). Community observations and official monitoring data indicate persistent water pollution, repeated exceedances of particulate matter and heavy metal deposition, and significant soil contamination, alongside reports of wildlife mortality and widespread lead poisoning among local residents, including children. These impacts suggest continued habitat degradation and risks to protected wild fauna, raising serious concerns regarding compliance with obligations under the Bern Convention, particularly Articles 4 and 6. The report calls for urgent investigation, enforcement measures, and international follow-up to prevent further ecological damage and protect human health.

INTRODUCTION – SUMMARY OF BACKGROUND FACTS

Hajrija Čobo is an environmental human rights defender from Kakanj and representative of the informal civic group Park prirode Trstionica i Boriva. She advocates for the protection of forests and rivers that constitute the primary source of drinking water for local communities. Since May 2022, she has raised concerns about deforestation, pollution of watercourses, and health risks connected to heavy metal mining activities. Her advocacy has also resulted in a strategic lawsuit against public participation (SLAPP) filed by Adriatic Metals BH d.o.o.

Adriatic Metals (now DPM) holds concessions for exploration and exploitation of lead, zinc, barite and associated metals at the Rupice site in Vareš, on the border with Kakanj. This project has also been marketed internationally as the “Silver Project”.

This report highlights ongoing water pollution, public health risks, wildlife impacts, and compliance issues under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).

1. CONTINUED WATER POLLUTION OF VRUĆI POTOK AND TRSTIONICA

Field observations and community monitoring indicate that the mining operation continues to discharge polluted and toxic wastewater into Vrući Potok on a daily basis. This contamination flows directly into the Trstionica River. The river frequently appears persistently turbid, with a muddy, clay-grey and whitish coloration, suggesting heavy sediment and chemical contamination. Such conditions threaten aquatic ecosystems, fish, amphibians, and drinking water sources.

Official environmental documentation also recognizes risks associated with mining effluents:

<https://kakanj.gov.ba/v5/wp-content/uploads/2025/11/DPMetals-Vares-Zahtjev-za-obnovu-OD-za-rudnik-Rupice-Final.pdf>

These impacts represent degradation of habitats protected under the Bern Convention.

2. LEAD POISONING OF THE POPULATION IN VAREŠ (2025–2026)¹⁴

Independent testing in December 2025 and early 2026 revealed widespread lead contamination in the blood of residents of Vareš, including children.

Relevant media reports:

<https://n1info.hr/regija/masovno-trovanje-u-bih-alarmanantni-nalazi-medju-zarazenima-i-djeca/>

<https://n1info.ba/english/news/vares-lead-poisoning-crisis-escalates-as-toxic-contamination-spreads-to-city-centre/>

<https://sarajevotimes.com/increase-in-the-number-of-lead-poisoning-cases-in-vares/>

Despite these findings, official communications have often minimized or relativized the problem, emphasizing technicalities rather than public health protection.¹⁵ Such responses have confused and misled the public.¹⁶

Under the Federation of Bosnia and Herzegovina Mining Law, when mining operations endanger human health or contaminate land and water, the competent authorities must suspend or revoke exploitation. Nevertheless, no suspension has occurred.

3. ADDITIONAL COMMUNITY EVIDENCE

¹⁴ Lead poisoning: https://drive.google.com/file/d/1UgMfZXYBvN8u85xCON78paqhPyFU4l-N/view?usp=drive_link

¹⁵ TRANSCRIPT_EN Statements for the media by the Federal Minister of Health Nediljko RImac after his visit to the Vareš Health Center:

https://drive.google.com/file/d/1DDflumolQHfAZj7iodRAZ_JjRG1JoNYV/view?usp=drive_link

¹⁶ Original article: https://www.radiobobovac.com/portal/index.php/podcast/item/6830-izjave-za-medije-federalnog-ministra-zdravstva-nediljka-rimca-nakon-posjete-domu-zdravlja-vares?fbclid=IwB21leAP7Or5jbGNrA_s6tmV4dG4DYWVtAjExAHNydGMGYXBwX2lkDDM1MDY4NTUzMTcyOAA_BHrWGNCsDFs6woI-42Z_HpuDfRIksPB_KTNHGBnWmWo2pq630OdKmrqIGvFk__aem_pbPtOfa6UVLPu8z_bcHiQ

Additional documentation from residents indicates repeated ecological degradation, fish mortality, and visible pollution along the Trstionica and Vrući Potok. These concerns warrant formal investigation.

4. WILDLIFE IMPACTS

Reports from 2024–2025 describe numerous poisoned or deceased roe deer and other wildlife found near Vareš and along the Trstionica corridor. No effective institutional response or investigation has followed. These events constitute a serious threat to protected wild fauna and habitats under the Bern Convention.

5. ENVIRONMENTAL IMPACTS OF MINING ACTIVITIES IN THE VAREŠ AREA¹⁷

In the Context of the Bern Convention on the Conservation of European Wildlife and Natural Habitats

5.1. Official Air and Soil Quality Monitoring and Heavy Metal Deposition (2022–2024)

Official monitoring reports issued by the Federal Administration for Inspection Affairs and the Public Health Institute (SQS Pale) confirm repeated exceeding of legally prescribed limit values for air pollutants and heavy metal deposition in the Vareš area, in the immediate vicinity of mining activities.

Monitoring conducted during the period 2022–2024 recorded concentrations significantly above permitted limits at several locations, including Rupice, Semizova Ponikva, Pržići, Bijelo Borje, Tisovci, and the Vareš Primary School area. **Read more in Annex 1**

CONCLUSIONS

The information presented in this report demonstrates persistent and serious environmental pressures arising from mining operations in the Vareš–Kakanj area, particularly in the Rupice mining zone and downstream watercourses (Vrući Potok and Trstionica River). The evidence includes continuous turbidity and suspected toxic wastewater discharge, repeated exceedances of particulate matter and heavy metal deposition, extensive soil contamination, and credible community reports of wildlife mortality.

The documented impacts and risks are directly relevant to the obligations of Bosnia and Herzegovina under the Convention on the Conservation of European Wildlife and Natural

¹⁷ Federal inspection findings: https://drive.google.com/file/d/1NY-t1rkaQzV2hBl4o_zpmog0-lzbIRAw/view?usp=drive_link

Habitats (Bern Convention). In particular, the situation indicates an ongoing risk of habitat degradation, disturbance of wild fauna, and pollution-driven ecosystem decline, contrary to the objectives of the Convention.

The scale and persistence of pollution, combined with the lack of effective institutional response, suggests systemic weaknesses in prevention, monitoring, enforcement, and public health protection. These shortcomings are incompatible with the preventive and protective standards required under the Bern Convention, especially regarding the obligation to avoid deterioration of natural habitats and to ensure strict protection of wild fauna.

The reported lead poisoning cases among residents (including children) further confirm that contamination is not confined to industrial zones but has spread into inhabited areas, raising concerns about the broader ecological and human health consequences of heavy metal pollution. Such contamination is particularly alarming in the Bern Convention context due to the long-term impacts of heavy metals through bioaccumulation and biomagnifications across food chains, affecting birds, mammals, amphibians, and freshwater biodiversity.

RECOMMENDATIONS

In light of the above, and in accordance with the Bern Convention's aims and obligations, the following measures are recommended:

1. Immediate assessment under the Bern Convention framework

The Bern Convention Standing Committee should consider this case as a matter of urgency and request a formal response from the authorities of Bosnia and Herzegovina regarding compliance with obligations related to habitat conservation and protection of wild fauna.

2. Independent investigation of water pollution and habitat degradation

An independent investigation should be conducted into the daily discharge of wastewater into Vrući Potok and the Trstionica River, including:

- identification of pollution sources,
- chemical analysis of water and sediment (including heavy metals),
- assessment of impacts on aquatic habitats and species,
- evaluation of downstream impacts on protected ecosystems and drinking water sources.

3. Emergency suspension of activities where pollution risk is confirmed

Where evidence confirms ongoing pollution or serious risk to habitats and wildlife, mining activities should be suspended until effective prevention measures are implemented, in line with the precautionary principle and the Bern Convention's conservation objectives.

4. Comprehensive biodiversity and wildlife mortality monitoring

Authorities should establish a systematic monitoring programme for:

- fish and aquatic biodiversity,
- amphibians and invertebrates,
- mammals and birds (including bioaccumulation monitoring),
- investigation of wildlife deaths (roe deer and other species reported in the area).

This should include transparent reporting and involvement of independent experts.

5. Establishment of baseline (“zero-state”) ecological and soil data

Given the documented absence of baseline soil monitoring, a full baseline ecological assessment should be conducted, including:

- soil contamination mapping,
- vegetation and forest ecosystem surveys,
- identification of sensitive habitats and ecological corridors.

6. Strengthening of air pollution controls and enforcement

Given repeated exceedances of PM2.5, PM10, UTM, and heavy metal deposition, urgent measures are required to ensure:

- continuous monitoring in residential and ecologically sensitive areas,
- effective dust suppression systems functioning at all times,
- enforcement actions where mitigation is inconsistent or inadequate.

7. Public health protection and transparent communication

Authorities should ensure that public health protection measures are prioritized, including:

- transparent reporting of blood lead findings,
- medical screening and support for affected residents,
- clear public warnings where exposure risks exist,
- coordination between environmental, health, and inspection bodies.

8. Protection of environmental human rights defenders

Given the SLAPP case described in this report, the Standing Committee should urge Bosnia and Herzegovina to ensure a safe enabling environment for public participation and environmental defenders, in line with international standards and the principle that environmental protection depends on civic oversight.

9. Long-term ecosystem restoration and remediation obligations

Where contamination is confirmed, the operator and responsible authorities should be required to:

- remediate polluted soils and sediments,
- restore affected habitats,
- prevent further spread of contamination,
- provide long-term monitoring and ecological recovery plans.

10. Consideration of opening a Bern Convention case-file

If adequate corrective measures are not taken, the Bern Convention Standing Committee should consider opening a case-file and applying relevant follow-up mechanisms to ensure compliance with the Convention.

Respectfully submitted,

Hajrija Čobo

Representative, informal civic group Park prirode Trstionica i Boriva
Kakanj, Bosnia and Herzegovina

Date: February 2026

ANNEX 1

5. ENVIRONMENTAL IMPACTS OF MINING ACTIVITIES IN THE VAREŠ AREA

In the Context of the Bern Convention on the Conservation of European Wildlife and Natural Habitats

5.1. Official Air Quality Monitoring and Heavy Metal Deposition (2022–2024)

Official monitoring reports issued by the Federal Administration for Inspection Affairs and the Public Health Institute (SQS Pale) confirm repeated exceedances of legally prescribed limit values for air pollutants and heavy metal deposition in the Vareš area, in the immediate vicinity of mining activities.

Monitoring conducted during the period 2022–2024 recorded concentrations significantly above permitted limits at several locations, including Rupice, Semizova Ponikva, Pržići, Bijelo Borje, Tisovci, and the Vareš Primary School area.

5.1.1 Sulphur Dioxide (SO₂)

Tisovci (VP): 251.2 µg/m³ (limit value: 125 µg/m³)

Vareš Primary School: 156.7 µg/m³ (limit value: 125 µg/m³)

Bijelo Borje: episodic pollution recorded at 79.52 µg/m³

5.1.2 Particulate Matter

Rupice:

PM_{2.5} = 50.19 µg/m³ (limit 25 µg/m³)

PM₁₀ = 53.70 µg/m³ (limit 50 µg/m³)

Semizova Ponikva:

PM_{2.5} = 42.84 µg/m³ (limit 25 µg/m³)

Vareš Primary School:

PM_{2.5} = 26.69 µg/m³ (limit 25 µg/m³)

Pržići:

PM_{2.5} = 44.80 µg/m³

S. Ponikva:

PM_{2.5} = 70.07 µg/m³

PM10 = 73.64 $\mu\text{g}/\text{m}^3$

These levels represent continuous exposure to fine particulate pollution known to carry toxic metals and pose serious risks to respiratory and cardiovascular health, particularly among children.

5.1.3 Heavy Metal Deposition in Sediment

Laboratory analyses of deposited sediment identified elevated concentrations of toxic metals:

Cadmium (Cd)

Semizova Ponikva: 0.0042 $\text{mg}/\text{m}^2/\text{day}$

Zagarski Potok: 0.0031 $\text{mg}/\text{m}^2/\text{day}$

Pržiči: 0.0037 $\text{mg}/\text{m}^2/\text{day}$

Vareš Primary School: 0.0039 $\text{mg}/\text{m}^2/\text{day}$

Arsenic (As)

Pržiči: 0.0079 $\text{mg}/\text{m}^2/\text{day}$

Vareš Primary School: 0.0044 $\text{mg}/\text{m}^2/\text{day}$

Later measurements confirmed increased arsenic at all monitoring points

Lead (Pb)

Semizova Ponikva: 0.145 $\text{mg}/\text{m}^2/\text{day}$ → later 4.280 $\text{mg}/\text{m}^2/\text{day}$

Pržiči: 0.123 $\text{mg}/\text{m}^2/\text{day}$ → later 46.05 $\text{mg}/\text{m}^2/\text{day}$

Zinc (Zn)

Semizova Ponikva: 4.840 $\text{mg}/\text{m}^2/\text{day}$

Pržiči: 0.6356 $\text{mg}/\text{m}^2/\text{day}$

The presence of arsenic, cadmium, lead, and zinc in deposited particles indicates atmospheric transport and dispersion of mining-related contamination into residential areas, schools, forests, soils, and watercourses.

5.2. Additional exceeding of Total Settled Matter (UTM) – March Monitoring

Recorded exceeding ($\text{mg}/\text{m}^2/\text{day}$):

Rupice Mine – 238.2

S. Ponikva – 440.9

Vareš Primary School – 250.6

Bijelo Borje – 252.9

Tisovci – 210.3

JKP Vareš – 278.8

Highest recorded value: S. Ponikva (440.9 mg/m²/day).

5.3. Air Quality Monitoring Reports (2024–2025)

Report No. 10-2285/24 (04 October 2024)

S. Ponikva:

PM_{2.5} = 163.38 µg/m³

PM₁₀ = 168.96 µg/m³

UTM = 286.97 mg/m²/day

Report No. 1-68/25 (13 January 2025)

Vareš Primary School:

UTM = 252.19 mg/m²/day

Report No. 8-1766/25 (05 August 2025)

Period: 24 June–01 July 2025

Rupice North: PM_{2.5} = 61.60 µg/m³; PM₁₀ = 66.59 µg/m³

Rupice South: PM_{2.5} = 61.81 µg/m³; PM₁₀ = 68.61 µg/m³

S. Ponikva: PM_{2.5} > 120 µg/m³; PM₁₀ > 150 µg/m³

Report No. 11-2154/25 (03 November 2025)

S. Ponikva:

PM_{2.5} = 33.24 µg/m³

5.4. Inspection Findings – Dust Suppression System

During inspection of the ore crushing plant:

The dust suppression system (water spraying system) was not operational during crusher operation.

According to the operator, it is activated “as needed” depending on production capacity.

This indicates inconsistent mitigation of airborne emissions.

5.5. Soil Quality Monitoring (2025)

Important observations:

No baseline (zero-state) soil quality assessment was conducted prior to exploitation.

Some locations with elevated heavy metal concentrations are situated outside the exploitation field.

The operator conducts testing twice annually. Multiple locations do not meet prescribed limit values.

5.1 Report No. 856/25 (December 2025)

Daštansko:

Hg = 1.32 mg/kg (GVI = 0.01 mg/kg)

Veovača TSF:

Hg = 3.76 mg/kg

Cd = 1.717 mg/kg

Pb = 352 mg/kg (GVI = 3.80 mg/kg)

Zn = 837 mg/kg (GVI = 4.80 mg/kg)

Tisovci:

Hg = 1.821 mg/kg

Cd = 1.44 mg/kg

Cr = 64.3 mg/kg (GVI = 3.10 mg/kg)

Pb = 57.5 mg/kg (GVI = 3.80 mg/kg)

Ni = 96.8 mg/kg (GVI = 4.55 mg/kg)

VPP:

Hg = 5.244 mg/kg

Pb = 241 mg/kg

Zn = 595 mg/kg

Ni = 97.5 mg/kg

5.2 Report No. 562/25 (August 2025)

Daštansko:

Hg = 1.44 mg/kg

Veovača TSF:

Hg = 4.82 mg/kg

Cd = 1.525 mg/kg

Pb = 334 mg/kg

Zn = 865 mg/kg

Tisovci:

Hg = 2.075 mg/kg

Cd = 1.38 mg/kg

Cr = 88.2 mg/kg

Pb = 87.5 mg/kg

Ni = 114 mg/kg

VPP:

Hg = 4.176 mg/kg

Pb = 205 mg/kg

Zn = 621 mg/kg

Ni = 88.2 mg/kg

Rupice North:

Hg = 1.211 mg/kg

Rupice East:

Hg = 1.684 mg/kg

Cu = 72.5 mg/kg

Pb = 162 mg/kg

Ni = 66.1 mg/kg

5.6. Federal Mining Inspectorate Findings

Exploitation began August 2024 (ADRIATIC METALS BH d.o.o.).

Ownership change in October 2025; now DPMETALS BH d.o.o.

Mining permits issued by competent Federal Ministry.

Underground mine air: no exceeding detected.

Soil samples (09 December 2025): non-compliant regarding Mercury, Chromium, Zinc, Nickel and other metals.

Surface water (Veovača and Rupice): compliant.

5.7. Relevance to the Bern Convention

Persistent air and sediment contamination directly threaten:

Terrestrial and freshwater habitats

Soil organisms and vegetation

Wild mammals and birds through bioaccumulation

Overall ecosystem integrity

Repeated exceeding of particulate matter and heavy metal deposition demonstrate systemic environmental pressure incompatible with conservation obligations under the Bern Convention, particularly:

Article 4 – Conservation of habitats

Article 6 – Strict protection of wild fauna

Prevention of habitat degradation and ecological disturbance

Heavy metals such as mercury, arsenic, cadmium and lead pose long-term ecological risks due to bioaccumulation and biomagnifications.

5.8. Conclusion

The collected official data demonstrate:

Repeated exceeding of air pollutant limits

Significant heavy metal deposition in residential and natural areas

Extensive soil contamination across multiple sites

Contamination detected outside exploitation fields

Absence of baseline soil data

Inconsistent emission mitigation practices

These findings indicate ongoing environmental pressure with potential adverse impacts on habitats and protected wildlife species, raising serious concerns regarding compliance with the Bern Convention.

The evidence demonstrates persistent pollution, risks to biodiversity, and documented human health impacts. These conditions conflict with the objectives of the Bern Convention.

It is recommended that the Secretariat request official monitoring data, encourage independent assessments, consider precautionary suspension of polluting activities, and ensure thorough investigation of wildlife deaths.