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Finlands miljöcentral
Finnish Environment Institute

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Swedish Environmental Protection Agency
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Finland's response to the notification in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) regarding Kaunis Iron AB's upcoming application for exploitation concession in Pajala Municipality, Norrbotten county, Sweden

The Finnish Environment Institute acknowledges that Finland has received the notification, dated 22 October 2025, and the consultation documents from Sweden in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), regarding Kaunis Iron AB's upcoming application for exploitation concession in Pajala Municipality, Norrbotten county, Sweden.

In accordance with the Swedish Mineral Act (SFS 1991:45), Kaunis Iron AB is applying for exploitation rights in the Tapuli K No. 3 area. The area, which covers over 30 hectares, is located near the Tapuli mine owned by Kaunis Iron AB, approximately 25 kilometres from the municipality of Pajala in Norrbotten County. Kaunis Iron AB's current mining and industrial area is located to the north and east of this area. If the exploitation rights are granted, the project developer intends to apply for a permit under the Environmental Code to extract mineral resources from the area. Operations will consist of open pit mining and iron ore enrichment at the Kaunisvaara processing plant, with the aim of producing magnetite concentrate.

Consultation in Finland

According to the Finnish Act on Environmental Impact Assessment (252/2017), the Finnish Environment Institute is the competent authority and responsible for information and consultation tasks under the Espoo Convention.

In the notification, the Swedish Environmental Protection Agency requested an indication whether Finland intends to participate in the EIA procedure for the upcoming application for exploitation concession, to provide comments concerning the scope for the assessment of the environmental impacts of the project affecting Finland and submit comments from the public and the authorities in Finland.

The public and the authorities were given the opportunity to comment on the consultation documents from 27 October to 27 November 2025, which were available on the website of Finland's environmental administration (ymparisto.fi) and a platform by Ministry of Justice in Finland for requesting and submitting statements electronically (lausuntopalvelu.fi).

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Remarks received during the consultation

The Finnish Environment Institute received 16 statements. The Finnish Environment Institute has prepared a summary of the original statements in English below. However, the original statements in Finnish or Swedish, which are enclosed to this letter, include important and detailed remarks which need to be examined and taken into consideration in their entirety.

Ministry of Agriculture and Forestry

Based on the information available on the project, it may have significant transboundary environmental impacts on the Muonio River and Torne River systems. The Ministry of Agriculture and Forestry considers that Finland should participate in the EIA procedure for the project.

Centre for Economic Development, Transport and Environment of Lapland

The Torne River-Muonio River basin is part of the protected Natura 2000 area. According to the appendices the mining expansion project will affect the mentioned river basin through the formation of discharge waters and possibly also through the Mella River basin. In addition, the discharge water from Kaunis Iron AB's mine may have an impact on the Torne River-Muonio River waterway area in terms of fisheries interests and the assessment of impacts on fisheries.

The Lapland ELY Centre's view on the submitted document: "Yhteisneuvotteluasiakirja kaivospiirislupahakemusta varten" is general in nature and does not necessarily provide an opportunity to comprehensively comment on matters related to the environmental impact assessment procedure. However, the Lapland ELY Centre considers it very positive that the document has been translated into Finnish.

Regional Council of Lapland

Regional Council of Lapland states that Finland should participate in the environmental impact assessment procedure for the expansion of mining operations by Kaunis Iron AB in Sweden, as the project may have significant transboundary environmental impacts on the Torne River and Muonio River waterways. The Torne-Muonio River is Europe's most important salmon river and is of significant ecological, economic, tourist and cultural importance. In addition, traditional dip net fishing culture (håvning/lippoaminen) on the Torne River is a candidate for inclusion in UNESCO's list of intangible cultural heritage.

In the opinion of the Regional Council of Lapland, the likely significant impacts of the project are related to the mine's water management and treatment and will affect the Muonio and Torne Rivers and, consequently, the Bothnian Bay. The impacts of the mining project must be assessed appropriately, taking into account climate change and extreme weather events. The EIA procedure should address the possible cumulative impacts of other mining projects in the surrounding areas on the Torne–Muonio River water system.

The Finnish-Swedish Transboundary River Commission

In addition to its national significance for mineral exploitation, the area is also nationally important for reindeer husbandry. It is also located in the Mella River basin, which is part of the Natura 2000 area (the nationally significant Torne and Kalix River basins). The mining concession area is not located within any designated groundwater formation or water intake protection area. However, two groundwater formations – Aleniemikangas (WA86724327) and Haumajakangas (WA30730409) – are located less than 4 km from the concession area.

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The mining area is not expected to have a significant impact on the protected sites in the area, which are protected under Chapters 3 and 4, Sections 1–7 of the Environmental Code (miljöbalken). The company intends to present a detailed report on this in the environmental impact assessment, which will be prepared after the joint consultation on the delimitation. Other environmental aspects will be addressed later as part of the future permit application in accordance with the Environmental Code (miljöbalken).

The consultation document states that the impact of the project on surface waters will be assessed in more detail in the forthcoming environmental permit application, which will provide a more detailed explanation of the matter. The environmental assessment to be attached to the mining concession application includes a general description of water treatment in the operation, including water treatment and purification needs, as well as an assessment of the impacts on receiving surface waters resulting from changes in flow and emissions from the operations.

The Transboundary River Commission states that Finland should be involved in the future permit processes for the project due to the potential transboundary impacts of the project located in the international border water area of the Torne-Muonio River. The future environmental impact assessment to be carried out for the project should include, in addition to the information presented in the consultation document (Chapter 7, p. 32 https://www.ymparisto.fi/sites/default/files/documents/K%C3%A4%C3%A4nn%C3%B6s%20Samr%C3%A5dsunderlag%20Kaunis%20Tapuli%20K%20nr%203.pdf) must also include an assessment of potential transboundary impacts, taking into account the water status objectives (Muonio River).

Reindeer Herder's Association

The Reindeer Herders' Association considers it necessary for Finland to participate in the environmental impact assessment procedure. Mining operations already have an impact on the Muonio reindeer herding cooperative on the Finnish side, as the noise and dust caused by mining extend to Finland. In addition, reindeer from the Muonio Sami village regularly cross into the Muonio reindeer herding cooperative area, causing additional work for reindeer herders on both sides of the border. These impacts can be expected to increase as a result of the expansion project.

The expansion project is also likely to have transboundary impacts on the Torne-Muonio River. In assessing the impacts, particular attention should be paid to the cumulative impacts with existing and other planned mining activities.

Changes in the environment always affect reindeer herding, especially when the changes are caused by industrial land use. The impacts on reindeer herding may be significant and must therefore be investigated in the EIA procedure in cooperation with the Muonio reindeer herding cooperative. Information on the reindeer herding practices of the reindeer herding cooperative must be utilised in the assessment.

The Finnish Association for Nature Conservation

Finland must participate in the EIA procedure for the project. In this case, the obligation to identify the cumulative impacts of different projects imposes specific requirements on the EIA procedure. The importance of assessing cumulative impacts is particularly emphasised due to the combined impact area of the Kaunisvaara, Hannukainen and other mining projects affecting the same river system. The obligation to assess cumulative impacts is based not only on the

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EIA Directive but also on the Nature and Water Framework Directives. Cumulative impacts must be assessed appropriately.

The project may have significant impacts on the Finnish side of the Torne-Muonio River basin (FI 1301912). The project may cause deterioration of Natura nature values. The impacts of the Hannukainen mining project on the Finnish side will also affect the Torne-Muonio River basin and important salmon (*Salmo salar*) spawning areas in the Kuerjoki, Äkäsjoki, Valkeajoki and Niesajoki catchment areas and, like the Kaunisvaara mine, may extend as far as the Baltic Sea. Therefore, the impacts on the conservation values of Natura areas must also be considered as cumulative impacts.

The project may cause concentrations of harmful substances that are harmful or even lethal to aquatic organisms, even if the annual averages remain below the quality standards and limit values. There are already significant uncertainties associated with the emission values, and their impact on the ecological status of the water body has not been assessed.

An accident caused by the project or its operations could cause great harm to the genetically diverse and viable salmon population in the Torne-Muonio River. The salmon population is important not only for recreational use of the river, tourism and livelihoods, but also for the rights of the Sámi people and fish stocks in the Baltic Sea.

The Espoo Convention requires the party responsible for the accident to notify the parties that it considers may be affected as early as possible and no later than when it informs its own citizens about the project, including “information on the proposed project, including all available information on its possible transboundary effects” (see Article 3(2)). The minimum content of EIA documents is specified in Article 4 of the agreement.

The EIA procedure must give stakeholders the opportunity to assess the project’s impacts and alternatives on the basis of comprehensive information. The Finnish-language material cannot be incomplete, for example by failing to include statements from key Swedish authorities.

According to Article 6(4) of the EIA directive (2011/92/EU), “the public concerned shall be given early and effective opportunities to participate in the environmental decision-making procedure referred to in Article 2(2) and, for the purpose, shall be entitled to submit their observation and opinions to the competent authority or authorities before a decision is taken on the application for authorisation, while the alternatives are still open”.

The European Commission has stated, among other things, that the EIA report must specifically identify and assess the impacts that the project may have on the environment during the procedure and that are relevant to reaching a reasoned conclusion on the significant environmental impacts of the project. The obligation to identify the impacts to be specified is stated in a binding form. The Commission also emphasises that the adequacy of the EIA must be assessed in relation to the information needed to reach a reasoned conclusion. The competent authority must also ensure that the reasoned conclusion is still up to date when the decision on granting a permit is made.

Metsähallitus

In Metsähallitus' view, Finland should participate in Sweden's environmental impact assessment procedure because the project is likely to have significant transboundary environmental impacts, particularly on the Torne-Muonio River and the Bothnian Bay, both during and after the mine's operation.

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Metsähallitus pays particular attention to the handling of flotation tailings in the mining area. Flotation tailings contain sulphur and other substances used in flotation, and Kaunis Iron AB plans to deposit them either in the Navettamaa quarry or in an old mine. Metsähallitus draws attention to the fact that both locations may be connected to groundwater. On the other hand, if the flotation tailings are deposited in the old tailings pond, the substances may end up in the Muonio River via the pond's permeable moraine edges.

The Torne-Muonio River is the most significant natural breeding and spawning area for the vulnerable (VU) Atlantic salmon (*Salmo salar*) in the Baltic Sea basin, as well as a significant breeding and spawning area for the critically endangered (EN) sea trout (*Salmo trutta m. trutta*). In addition to salmon and trout, the river area is home to grayling (*Thymallus thymallus*) and whitefish (*Coregonus lavaretus*), among other species. The Torne-Muonio River is also part of the Natura 2000 network of protected areas. In recent years, salmon and trout stocks in the area have shown signs of decline, and the adverse effects of the mining industry, among other things, have been identified as threats. Therefore, the principle of caution must be applied in the use of these areas, and additional pressure on water bodies and aquatic organisms must be avoided. The water quality of the Torne-Muonio River must not deteriorate from its current level, even in exceptional circumstances. The well-being and improvement of migratory fish and other aquatic organisms should be a common goal for Finland and Sweden. Mining operations should take into account future climate scenarios, which have several worrying aspects from a water perspective. Increased precipitation will change the water balance in mining areas, and this must be taken into account at the planning stage, as the life cycle of mines is typically decades long.

Water management planning is guided by the EU Water Framework Directive, which has been implemented in national legislation. The objective of water management is to prevent the deterioration of surface water and groundwater and to strive for at least good status for all waters. According to the water management plan for the Torne River water management area, the ecological status of the Muonio River has been assessed as excellent, but there is a risk that it will deteriorate due to the impact of mining water. In the lower parts of the water area, the status of the water body has been assessed as poorer. In the water management plan, the Swedish Water Management Authority has assessed that the chemical load from the Kaunisvaara mine may pose a risk to the Muonio River's ecological status. The water management plan proposes the following measure: "Develop the environmental permit procedure and monitoring of mining operations to prevent harmful effects on water bodies and groundwater. Implement research projects to improve the sustainability of mining operations and support cooperation between operators and licensing and supervisory authorities in the management of environmental issues in mines. Particular attention will be paid to water management in mining areas under various hydrological conditions, sustainable storage of water and waste in reservoirs, the introduction of advanced wastewater treatment methods, and effective management of water emissions in the event of accidents and incidents."

In addition, a valuable fishing culture has developed around the Torne-Muonio River, which has also been included in the National Inventory of Living Heritage. By including it in the inventory, Finland is implementing the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage. The Torne-Muonio River water system is an important fishing and fishing tourism area, where 10,000 to 15,000 fishermen fish annually, generating significant economic benefits for the region. This economic impact is generated exclusively by migratory fish and is dependent on viable fish stocks.

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In Metsähallitus' view, the likely significant impacts of the project are related to the mine's water management and treatment and will affect the Muonio and Torne Rivers and the Bothnian Bay. On the basis of the above, Metsähallitus considers it necessary for Finland to participate in the transboundary consultation procedure to assess the environmental impacts.

City of Rovaniemi

The city of Rovaniemi considers that Finland needs to participate in the environmental impact assessment of the project.

The reason for this is that the mine will take the raw water needed for enrichment from the Muonio River in the Aarea area and discharge the used and purified wastewater back into the Muonio River. This will have an impact on water quality.

The Muonio and Torne Rivers are part of the Natura 2000 network. These rivers are the largest undeveloped flowing rivers in Western Europe. Both rivers are important breeding grounds for fish species such as salmon (*Salmo salar*), whitefish (*Coregonus lavaretus*) and lamprey (*Lampetra fluviatilis*). Fishing and related tourism and accommodation activities are important livelihoods for people living along the rivers. Any activity that could harm water quality, or even just the suspicion of this, could affect these livelihoods. This could happen through damage to reputation.

For this reason, the city of Rovaniemi considers the matter to be important for the general and economic interests of the municipalities in the area and their residents. The EIA procedure must be carried out well so that it is also acceptable to Finland and that those most affected by the matter, i.e. the residents of the Torne and Muonio Rivers, have the opportunity to be heard on the matter.

There is nothing further to state about the actual mining project. The project utilises the region’s natural resources and provides employment and other opportunities also on the Finnish side.

The expansion of mining operations would also have significant environmental impacts on the Finnish side, particularly in the Torne-Muonio River basin. This would jeopardise the nature values of Natura 2000 areas and endangered migratory fish stocks.

The Finnish translation of the EIA must be completed in time to enable Finns to participate effectively in the decision-making process.

The Museum of Torne Valley

The governments of Sweden and Finland have jointly nominated the Torne River dip net fishing culture (håvning/lippoaminen) for inclusion in UNESCO's list of intangible cultural heritage. The Swedish Institutet för Språk och folk-minnen (ISOF) was responsible for coordinating the multinational application. The Museum of Torne Valley – Tornedalens museum was responsible for preparing the application in Finland in cooperation with the Finnish Heritage Agency and relevant organisations. The preservation of migratory fish stocks is a prerequisite for the preservation of fishing culture, and this has also been highlighted in the UNESCO nomination. Ensuring the sustainability of fish stocks in the future must be taken into account, especially as the stocks of Baltic salmon (*Salmo salar*) and whitefish (*Coregonus lavaretus*) have declined in recent years.

The Museum of Torne Valley points out that the expansion of the Kaunisvaara mine and mining operations, together with their cumulative effects with other projects, may jeopardise the Torne

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River dip net fishing culture's UNESCO-status and, in particular, its future sustainability if the preservation of migratory fish stocks and the sustainable development of traditional fishing culture cannot be guaranteed. Mining and quarrying projects are measures that affect the protection of natural environments and important sites that are central to the expression of intangible cultural heritage as mentioned in the UNESCO Convention.

The Finnish and Swedish governments have jointly committed to protecting the cultural heritage included in the UNESCO nomination process even after it has been listed (listing in December 2026). The governments' need for protection particularly concerns ensuring the vitality of fish stocks. In the museum's view, Kaunis Iron AB's project may have transboundary impacts on cultural heritage, which both countries are committed to preserving, and therefore Finland also needs to participate in the EIA procedure for the project under consideration.

The consultation document points out that the Muonio River is the main receiving water body for the company's mining operations. Both the mine's process water, the process water from the tailings pond and the seepage water from the flotation tailings can be discharged into the Muonio River. Once operations have ceased, the intention is to dismantle all protective structures so that the natural water flow in the area can be restored. According to the Museum of Torne Valley, this means that the water flowing through the area will end up in the Muonio River and from there into the Torne River and the Bothnian Bay.

Mining operations in the Torne-Muonio River basin may therefore cause water pollution, which will affect fish stocks and, in particular, the viability of migratory fish, and thus the preservation of the Torne River's dip net fishing culture and its UNESCO status. The consultation document points out that the chemical status of both the Muonio River and the small waterways flowing into it in the vicinity of the mine has already deteriorated.

According to the museum, there have been signs of decline in the salmon and trout (*Salmo trutta*) populations in the area in recent years. The adverse effects of the mining industry, among other things, have been identified as threats, so the principle of caution must be applied in the use of the areas and additional pressure on water bodies and aquatic organisms must be avoided. In addition, the water management plan for the Torne River water management area has already assessed that the chemical load from the Kaunisvaara mine may pose a risk to the ecological status of the Muonio River. For this reason, the museum believes that the water quality of the Torne-Muonio River must not deteriorate from its current level, even in exceptional circumstances.

The vitality of traditional fishing on the Torne River far into the future depends largely on the vitality of the fish stocks that are the target of fishing. Therefore, projects and decisions that affect the water quality of the Torne River and the sea area, as well as fish stocks and the sustainability of fishing, have an impact not only on biodiversity but also on the preservation of this intangible cultural heritage.

The consultation document assesses the impact of the mine expansion on surface waters and the Muonio River as minor. In the museum's view, the expansion of the mine and mining operations poses threats such as those described above to the ecological and chemical status of the Torne-Muonio River water system and, consequently, to the Torne River dip net fishing culture, which is nominated for inclusion in UNESCO's list of intangible cultural heritage. The potential increase in precipitation brought about by climate change is also a risk factor from the perspective of water management at the operating mine. Climate change and the risks it poses

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are not mentioned in the document. According to the document, there are no plans to conduct studies on surface waters and their condition.

The document mentions the landscape and cultural environment, but it does not identify intangible cultural heritage or the potential impacts of the project and other mines or projects on cultural heritage and its preservation. The Museum of Torne Valley emphasises the importance of assessing the cumulative, or combined, impact of various projects on cultural heritage and fish stocks.

In accordance with the UNESCO Convention, the importance of diversity and preservation of living heritage must also be taken into account and implemented in measures (legal and administrative) outside the fields of culture and education. In the opinion of the Museum of Torne Valley, the potential impacts of the expansion of the Kaunisvaara mine on the flag fishing culture of the Torne River and its future UNESCO status should be assessed as part of the impacts on cultural heritage.

Hannukainen Mining Oy

Hannukainen Mining Oy notes that the discharge waters from Kaunis Iron AB's Kaunisvaara mine are led into Muonio River, which forms the border between Sweden and Finland. Changes in production may also cause changes in the quantity and quality of discharge waters and, consequently, in environmental impacts. There are several industrial projects in operation or in the planning stage in the Torne-Muonio River basin, including the mining project promoted by Hannukainen Mining Oy in Hannukainen, Kolari. In addition, the region's tourism industry is experiencing strong growth, along with other land use, is also contributing to additional loading in the Torne-Muonio River basin.

On the basis of the above, Kaunis Iron AB's Tapuli K No. 3 project may have significant transboundary impacts through the combined effects of water pollution and other land use. The project may also have an impact on projects and land use that are pending or planned in Finland, which may indirectly cause significant local social impacts.

Due to the potential environmental and social impacts mentioned above, Hannukainen Mining Oy considers that Finland should participate in the EIA procedure for the project.

Particular attention should be paid to the project's impact on the Muonio River and the combined impact on the water system in conjunction with other land use.

Natural Resource Institute

The Natural Resource Institute (Luke) does not see a need for Finland to participate in the EIA procedure, as there are unlikely to be any additional transboundary impacts beyond those of the existing mining operations.

The Finnish Heritage Agency

From the Finnish Heritage Agency's perspective, Finland does not need to participate in the environmental impact assessment procedure for the expansion of mining operation by Kaunis Iron AB in Sweden.

The Safety and Chemicals Agency TUKES did not have any comments on the matter but wishes to receive the final decision of the environmental impact assessment in English.

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The Ministry of Social Affairs and Health, Finnish Institute for Health and Welfare and **National Supervisory Authority for Welfare and Health** responded but did not have any comments on the matter.

The Finnish Environment Institute's analysis and conclusion

Analysis

The ore reserves in the current Tapuli open pit mine are estimated to be completely depleted by the end of 2027. The consultation document does not indicate how production will change when the current open pit is gradually closed. Kaunis Iron AB began mining operations in the current mining area in 2018 under an old permit dating from 2010. Following a decision by the Umeå Land and Environment Court, the company was granted a new permit in 2022. Due to appeals, operations have been limited (mining rate of approximately six million tonnes of iron ore per year) while the permit is being processed. In its decision of 13 May 2025 (M14695-22), the Svea Court of Appeal upheld the lower courts' decision to grant an environmental permit for the continuation and expansion of mining operations.

The operations will consist of open pit mining and primary crushing, as well as the production of magnetite concentrate at the Kaunisvaara concentrator using the current methods of magnetic separation and chemical flotation. According to the company, the ore in the deposit is low in sulphur, and it is not yet known whether flotation will be needed in the future to separate sulphide ores. The tailings will be disposed of in a tailings area located 3 kilometres east of the planned mining area, where wet tailings will be pumped and stored in a tailings pond. Seepage water from the tailings pond will be led to a clarification pond, from where the water will be recycled back to the process water pond or, if necessary, led through a pipeline to the Muonio River below Aareavaara. Excess water from the process water basin is pumped into the Muonio River or the clarification basin as necessary. In both the current licensed operations and the planned operations, surplus water from the mine is piped into the Muonio River without separate treatment. No changes are proposed to the environmental structures of the current tailings and clarification basins. Water management will concern the drainage arrangements of the open pit and the collection and discharge of water from the mining area. In the consultation document, the company does not propose any additional measures to the current water treatment, but it states that the environmental assessment to be attached to the mining concession application will include a general description of water treatment, including water treatment and purification needs, as well as an assessment of the impacts on receiving surface waters resulting from changes in flow and emissions into water.

The document states that, based on water quality analyses, the impact of current mining operations on the Muonio River below the discharge point has been minor. However, the document does not specify the composition and concentrations of the surplus water discharged into the Muonio River during current mining operations, nor does it specify the concentrations observed in the Muonio River above (reference) and below the discharge point for surplus water. Nor does the document quantify estimates of concentrations and impacts on the water quality or ecological status of the Muonio River once the planned operations commence. The Muonio-Torne River is a border river that has been classified as having an excellent ecological status. In addition, the Muonio-Torne River is the most significant spawning river for Baltic Sea salmon (*Salmo salar*), which is classifies as endangered and whose stocks have declined in recent years. The water system also contains important wild stocks of sea trout (*Salmo trutta*), which is classified as endangered.

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The planned mining operations may have transboundary impacts due to the surplus water from the mine being discharged into the Muonio River. The documents relating to the mining concession application do not describe the quantities, composition or concentrations of the surplus water pumped into the Muonio River from the clarification basins or process water associated with the tailings ponds. These should be described in detail in the EIA procedure. According to the Extractive Waste Directive (2006/21/EC) and the BAT conclusions on the management of extractive waste (Garbarino et al. 2018), seepage water should be collected efficiently and, if necessary, treated before being discharged into water bodies. The treatment and purification of mine wastewater should also be described in detail in the EIA; these have not been described in sufficient detail in the mining concession application documents. The EIA should also take into account the impact of potentially more frequent extreme weather events on the need to discharge surplus water from the mine into the Muonio River. Is it possible to increase the capacity of the tailings and clarification ponds and improve the efficiency of wastewater treatment in connection with the planned commencement of mining operations in order to minimise transboundary impacts on water bodies?

In accordance with the Annex II of the Espoo Convention, the EIA should describe the impacts of the zero option (the project is not implemented) and the alternative implementation methods (location and technical implementation methods) of the project. The company does not consider it necessary to carry out a project alternative assessment in accordance with the EIA procedure based on the prevailing geological conditions, which require open pit mining at the site in question. However, this should not preclude the EIA procedure project alternative review, which compares not only mining techniques but also, for example, the locations of waste areas and water basins, waste disposal techniques, water management methods and the location of discharge pipes.

In addition, it should be ensured that any harmful emissions from mining activities into water bodies are limited and monitored using the best available techniques and methods, in accordance with the requirement of the Extractive Waste Directive and the BAT reference document for the management of extractive waste, among other things. It should also be noted that on the Finnish side of the border river, in the municipality of Kolari, there is a mining project (iron, copper-gold and pyrite concentrates) by Hannukainen Mining Oy, which is currently in the permit and planning stage and whose planned discharge point is approximately 10 kilometres downstream from the Kaunisvaara discharge point. The permit applications and EIA for both mines should also assess the potential combined effects of the mines. In particular, the effects of xanthates used in mining operations should be investigated. The effects of xanthate use have recently been studied in both Sweden (Fischer & Jarsjö 2023) and Finland (Suvela 2023). In cold conditions, the slow decomposition of xanthates increases their accumulation and harmfulness to aquatic organisms, including salmonids. Similarly, the combined effects of different metals and other harmful substances should be investigated.

Participation in the transboundary EIA procedure

Based on the statements received and its own deliberations, the Finnish Environment Institute states in accordance with Article 3(3) of the Espoo Convention that Finland intends to participate in the environmental impact assessment procedure of the Kaunis Iron AB's upcoming application for an exploitation concession in Pajala Municipality, Norrbotten County, Sweden.

Conclusions

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The Finnish Environment Institute notes that according to the Espoo Convention, Article 3, paragraph 2a and the EIA Directive Article 7, paragraph 1a, the transboundary environmental impacts on Finland should have been initially mentioned in the notification sent on 23 October 2025, as well as in the consultation material. According to the content requirements of Annex II to the Espoo Convention and the EIA Directive's Article 7, paragraph 2, these impacts must be assessed and included in the EIA report. In addition, the reasonable alternatives to the project and the no-action alternative needs to be described in the EIA report.

The Finnish Environment Institute considers it important that the statements now submitted by Finland are examined, assessed and taken into account in the environmental impact assessment to the extent possible. Considering the location of the project area, it is likely to have a significant transboundary impact, for example, on the Torne-Muonio River, which is a Natura 2000 site and an important venue for cultural traditions. It would be beneficial to include a map showing the project's location in relation to Finland in the EIA report as this would help exercising participation rights.

Head of Services — Jenni Juslén

Senior Officer,
Point of Contact to the Espoo Convention — Julianna Reunanen

This document has been electronically signed. The electronic signatures can be verified from the register office of the Finnish Environment Institute.

Appendices Statements received in Finland

For information
Ministry for Foreign Affairs
Ministry of the Environment
Ministry of Agriculture and Forestry
Ministry of Social Affairs and Health
Centre for Economic Development, Transport and Environment of Lapland
Finnish Heritage Agency
Metsähallitus
Finnish Institute for Health and Welfare
National Supervisory Authority for Welfare and Health
Natural Resources Institute
City of Rovaniemi
Regional Council of Lapland

The Museum of Torne Valley
Reindeer Herder's Association
The Finnish Safety and Chemicals Agency
Finnish-Swedish Transboundary River Commission
The Finnish Association for Nature Conservation
Hannukainen Mining Oy

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