Mandates of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes; the Working Group on the issue of human rights and transnational corporations and other business enterprises; and the Special Rapporteur on the rights of indigenous peoples

REFERENCE:
AL OTH 189/2021

19 April 2021

Dear Mr. Mair,

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; Working Group on the issue of human rights and transnational corporations and other business enterprises; and Special Rapporteur on the rights of indigenous peoples, pursuant to Human Rights Council resolutions 45/17, 44/15 and 42/20.

We are independent human rights experts appointed and mandated by the United Nations Human Rights Council to report and advise on human rights issues from a thematic or country-specific perspective. We are part of the special procedures system of the United Nations, which has 56 thematic and country mandates on a broad range of human rights issues. We are sending this letter under the communications procedure of the Special Procedures of the United Nations Human Rights Council to seek clarification on information we have received of a human rights violation that has already occurred, is ongoing, or has a high risk of occurring. The process involves sending a letter to the concerned actor: identifying facts of the allegation, applicable international human rights norms and standards, the concerns and questions of the mandate-holder(s), and a request for follow-up action. Communications may deal with individual cases, genera patterns and trends of human rights violations, cases affecting a particular group or community, or the content of draft or existing legislation, policy or practice considered not to be fully compatible with international human rights standards.

In this connection, we would like to bring to the attention of your company information we have received concerning potential human rights violations an environmentally damaging consequences of the uranium mining project known as Kuanersuit or Kvanefjeld in Southern Greenland, which your company is seeking to implement through its subsidiary Greenland Minerals A/S, headquartered in Narsaq, Greenland.

The planned open pit mining site is located on a mountain ridge in close vicinity of Inuit farming, hunting and fishing communities, including the town of Narsaq. Concerns have been raised over the lack of access to adequate information, failure to consult and seek the free, prior and informed consent of the local indigenous community, insufficient documentation and recognition of environmental risks of toxic and radioactive pollution and wastes and damage to the nearby UNESCO Greenland Minerals Ltd.
heritage listed site, Kujaata.

According to the information received:

Narsaq is a town in the Kujalleq municipality in southern Greenland, inhabited by approximately 1300 mostly Inuit indigenous people. The company led by you has a licence to conduct a feasibility study for a mine of uranium, thorium, zinc and rare earth elements in Kuannersuit, an area 8 km away from the town of Narsaq. The open-pit mine would entail mechanical drilling and blasting as well as chemical processing. Radioactive tailings would be deposited in the Taseq Lake, located 5 kilometres from Narsaq.

The mining project would require extensive supporting infrastructure including the construction of a shipping port 1 kilometre from the town of Narsaq, a dedicated 10 kilometres road for transportation of radioactive minerals, a power station, a chlor-alkali plant as well as a sulphuric acid plant where large amounts of caustic soda, hydrochloric acid and concentrated sulphuric acid would be used. The mining project would furthermore would entail dust and gaseous emissions, significant noise levels and artificial light emissions, in addition to increasing Greenland’s CO2 emissions by 45%.

The construction and operation of the mine would result in the disturbance and potential contamination of habitat for terrestrial, freshwater and marine fauna and flora. The project could also endanger several plants and animals which are listed as Vulnerable or Near Threatened in the International Union of Conservation of Nature’s Red List.

The plans to pursue the Kuannersuit mining project have resulted in a situation of significant concern and uncertainty among the Inuit indigenous community of Narsaq regarding the future and the ways in which their lives will be impacted.

Local context

Southern Greenland is considered the ‘bread basket’ of Greenland. Sheep, cattle and reindeer farming, hunting on land and water and fishing are livelihood activities that constitute an important source of income and subsistence to many households in the area. If the project is pursued, no-hunting and no-fishing zones would be implemented around the project and the port area. Tourism activities such as kayaking would be impacted. Reportedly, the threat of uranium mining has already stalled commercial ventures in the fields of agriculture, tourism and fishing in the area.

A number of Inuit archaeological sites are located in the vicinity of the uranium mining project. In 2017, five areas representing sub-Arctic farming landscapes in Greenland, collectively referred to as Kujaata, were admitted to the UNESCO World Heritage List. The closest of these is 18 kilometres from the project site.

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Concerns related to the Environmental Impact Assessment and project impacts

The applicable legislation in Greenland, the Mineral Resources Act of 2009, requires that companies submit an EIA about envisaged mining operations detailing what impacts the mine could be expected to cause during its construction and operation, as well as problems that could be anticipated after operations cease. The Greenlandic Environmental Agency for Mineral Resource Activities (EAMRA) and its scientific advisors then review the EIA and provide feedback. Once the EIA is revised and resubmitted by your company, the EIA is then published by the Mineral Resources Authority for public consultations to initiate.

Greenland Minerals Ltd. lodged an EIA in 2015. In 2017 the EAMRA of Greenland evaluated the draft EIA and decided in April 2017 to request your company to provide supplementary data. In August 2018, Greenland Minerals Ltd. provided an updated EIA and in March 2019 after having evaluated it, the EAMRA again decided that supplementary information was needed. Furthermore, EAMRA has raised concerns that it was ‘a highly complex project involving substantial environmental risks’ and that ‘the project is of a unique character as the applicants intend to extract radioactive materials, uranium and thorium, and this will make it necessary to consider the long-term disposal of radioactive tailings’.  

Greenland Minerals Ltd. has accused EAMRA of making exaggerated and redundant requests, questioned the scientific professionalism of EAMRA’s consultants and claimed that the project is “a simple mineral concentration process”. The Government of Greenland in response has expressed concerns that Greenland Minerals Ltd. has ‘failed to comply in good faith with the requests and instructions of EAMRA’ and that the company has ‘frequently contacted high-ranking civil servants and ministers who have no competence within the EIA review process and that these contacts sought to undermine the authority of EAMRA. The Government allegedly found such behaviour to be unacceptable and requested your company to abstain from this practice.’

In December 2020, the Government of Greenland, Naalakkersuisut, published revised EIA and SIA and opened the public consultations process.

In February 2021 the Government of Greenland initiated public information activities with the aim to inform the local indigenous community about the health and environmental risks associated with the mining project. The population was allegedly reassured during these meetings that the mining project was essentially without risks. The information shared with the United Nations independent experts, however, indicates that the concerns of the local indigenous community members were not sufficiently addressed in these meetings.

In February 2021 Greenland’s government decided to extend the deadline for the public to submit comments until 1 June 2021.

3 Ibid.
Inuit community members have repeatedly raised concerns that approval of the uranium mining project could take place against their free, prior and informed consent. The local Inuit community has mobilised against the project through the organisation Urani Naamik/No to Uranium Society. They claim the information provided in the project’s EIA is inadequate and unreliable, the timeframe for public consultations has been too short, public meetings have been negatively impacted by restrictions related to the COVID pandemic and that international experts cannot travel to Greenland to attend the consultations due to the travel ban.

On 10 February 2021, 141 environmental organisations from around the world signed a petition calling for a moratorium on large-scale mining and for reinstating the uranium zero tolerance policy. Concerns were raised that uranium mining would contaminate the vulnerable Arctic environment, destroy biodiversity and precious habitats and contribute significantly to global warming, thereby going against the aims of the Paris Agreement.

In March 2021 a national survey based on a sample of 706 individuals, representative of Greenland’s population in terms of sex, geography and education, indicated that 63% of the respondents were against the Kuannersuit uranium mine project.

The EIA, lodged by your company, observes that impacts to marine habitat and fauna would not occur at a population level, disturbance impact of terrestrial mammals and birds is assessed as low, and the significance of lost terrestrial habitat due to the project is assessed to be very low. Even in a catastrophic failure scenario, the EIA excludes population level effects.

The EIA notes that an oil spill in fresh water could potentially affect the spawning and migration of char fish in the Narsaq river, but that the likelihood of a major spill occurring on land or into fresh water sources is not high. The EIA further notes that the project does not anticipate economic displacement of fishermen, either commercial or subsistence.

The EIA recognises that the consequences of a large oil spill caused by a shipping accident could be very high. However, it adds that, while hydrocarbon spills in Arctic ecosystems can have large impacts which are long lasting when compared with temperate ecosystems, ‘if appropriate mitigation strategies are implemented the overall risk of large-scale ecological impacts is low’

Concerns from various sources have been raised that the EIA is not reliable and that the company led by you downplays the variety of risks associated with the project. The EIA foresees a 37 years’ operating phase in an area of 80 square kilometres with a mining rate of 3 million tons per annum. Furthermore, an additional 9 years would be required for construction and decommissioning, bringing the total period of works to a duration of 46 years.

The radioactive dust produced by uranium mining could be harmful to residents of Narsaq and the agricultural, hunting and fishing activity in Southern Greenland. Warm foehn winds (dry, warm, down-slope wind that occurs in the lee of a mountain range) would increase the risk of radioactive
contamination due to snow melts and dust. The Kuannersuit mine could also contaminate and damage the lands used by the local Inuit community, for example sheep farms.

A point of concern is the management of toxic mining waste including radioactive rubble, which could leak. According to the EIA, after project closure, associated wastes would be chemically stable and non-polluting or contaminating and that any deposits remaining on the surface or in lakes would not release substances at a concentration that would significantly harm the environment. Yet concerns, including by geologists, have been raised over the lack of documentation in the EIA of the risks posed by thorium in the Narsaq drinking water and marine environment and over the absence of long-term monitoring measures of radioactive thorium waste in Taseq lake. Thorium, which is a more potent radioactive element than uranium could remain on the site after closure of the mine and could potentially pollute local drinking water and jeopardise future agriculture and fishing in the region.

The Danish Centre for Environment and Energy (DCE) and the Greenland Institute of Natural Resources (GINR) are the independent scientific advisors of the Greenlandic Environmental Agency for Mineral Resource Activities. DCE/GINR have raised several concerns over potential significant environmental uncertainty that should be addressed to meet the requirements of the approval process, notably because parts of the EIA report’s conclusions are based on either theoretical assumptions, desktop studies and/or modelling studies.

The DCE/GINR assessment notes that improved empirical knowledge is needed for several issues carrying significant uncertainty in relation to environmental impacts, including studies regarding the hydrogeology of Taseq Lake, geotechnical studies of the open pit mine and the waste rock dump. The assessment also recommends studies focusing on how the water treatment techniques can be practically implemented. It also recommends that a legal condition is included to implement technically proven mitigation strategies and treatment techniques in case the observed discharges, emissions and environmental impacts are worse than the expected impacts presented in the EIA report. Furthermore, the DCE/GINR assessment recommends extended environmental monitoring prior to any approval, including of uranium, thorium, radium, lead and polonium in the drinking water, of the water quality in the marine environment near the fjord outlet, and also of environmental impacts on local flora and animal species as well as grazing sheep.

Regarding Inuit archaeological site Kujaata on the UNESCO World Heritage List, the EIA claims that the project would have no impact on any protected areas. IUCN has however raised concerns over the potential threat from the potential mineral extraction and that the area is already clearly vulnerable to

4 https://ing.dk/artikel/debat-thoriumforurening-overdet-problem-kyanefield-244522; https://sermitsiaq.aq/chefredaktoeren-anb af fajlegeogloegor-efterlyser-loeening-ophevating-thorium; https://naalakkersuisut.gl/~media/Nanoq/Files/Hearings/2020/1812_kuannersuit/Answers/Uafhaengig/010221_DCE%20op%20GN%20-%20Overordnede%20kommentarer%20til%20Kvanefield%20REE%20projekt%20DK.pdf; https://naalakkersuisut.gl/~media/Nanoq/Files/Attachments/20Files/Raastofof2021/Kuannersuaq/5%20-%20DK%20Vigtige%20mijl%20C3%20emner%20ved%20projektet%20-%20Pr%20-%20Assentation%20a%20Christian%20J%20%C3%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%2
climate change. Information received also raises concerns that the mining project could result in Kujaata being placed on UNESCO’s World Heritage in danger list and eventually losing its designation.

The SIA states that land acquisition and compensation will be undertaken in a manner consistent with leading international practice. It recognises the risk that fewer tourists will visit seeking pristine nature and local hiking opportunities. It furthermore notes that only a proportion of the jobs to be generated would be expected to be filled by Greenlandic labour due to the requirements for a skilled workforce.

In addition, if the project is implemented, Narsaq’s population could more than double due to the influx of predominantly male labourers who will not share local language and culture. Their integration into the small local community could be an additional challenge for the residents. Concerns have been raised by the local indigenous community over the risks that such a massive gender imbalance may result in sexual exploitation and abuse of women.

*The Special Rapporteur on Toxics and Human Rights 2017 official country visit to Denmark and Greenland*

Back in 2017, in the context of his official country visit to Denmark and Greenland, the Special Rapporteur on Toxics and Human Rights already raised alarm about this particular project, the implementation of which was uncertain at the time.

In his official report summarizing the country visit, the Special Rapporteur stated that: “Special concerns exist, for example, regarding a mine for rare earth elements, zinc and uranium in Kvanefjeld, near Narsaq. Worldwide experience has illustrated that such mining projects are associated with a wide range of potential adverse human health and societal risks. In addition to posing risks to workers, the Kvanefjeld mine could potentially contaminate and otherwise disturb areas used by the local indigenous community, for example sheep farms. Depending on the dimensions of the projects considered, an influx of migrant or temporary workers may be required. Special measures must be taken to ensure oversight of working conditions and to promote their integration into local communities. The authorities’ ability to ensure the future close monitoring of waste and tailings dumps might be another source of concern, considering, in particular, the accumulated challenges associated with managing waste on the island.”

Without prejudging the accuracy of these allegations, we express our most serious concern regarding the human rights and environmental impacts of uranium mining activities in Greenland. The mining project would aggravate climate change due to its considerable greenhouse gas emissions. It would furthermore endanger biodiversity through short and long-term impacts on the natural marine and terrestrial habitat of vulnerable animal species and flora.

We reiterate the concerns expressed by the Special Rapporteur on Toxics and Human Rights following his country visit in 2017 regarding the environmental and

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social impact of mining activities and potential human rights abuses of the local community related to the right to a safe and healthy environment. This type of mining projects is associated with a wide range of potential adverse human health and societal risks and could potentially contaminate areas used by the local Inuit community, for traditional activities of farming, hunting and fishing. Special concerns exist regarding the potential high levels of contamination by a wide range of substances in the traditional food sources of communities in Greenland.

We also wish to underline that the local indigenous Inuit community has the right to free, prior and informed and consent, or refusal of consent, regarding the mining activities in its lands. They have the right to determine their development in accordance with their own needs and interests. They have the right to the protection of the environment in their traditional lands, territories and resources, including the right to not suffer from the dumping of hazardous or radioactive wastes.

They have the right to receive the information in the EIA report presented to them in their own language and in a culturally appropriate manner, as well as the right to have all of their questions regarding the future project answered. They equally have the right to be informed on what kind of impacts the mining of radioactive elements would produce on their health, their livelihoods, and the entire Greenlandic coastal area.

In connection with the above alleged facts and concerns, please refer to the Annex on 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 information on the above-mentioned allegations regarding the uranium mining project in Southern Greenland, mentioned above and potential human rights abuses of the local community related to the right to a safe and healthy environment.

2. Please provide information about the human rights due diligence policies and processes put in place by your company to identify, prevent, mitigate and account for how you address adverse human rights impacts of your activities, in line with the UN Guiding Principles on Business and Human Rights (UN Guiding Principles).

3. Please provide information on how your company has conducted meaningful consultation with affected stakeholders on the mining project. Please indicate whether any steps were taken to avoid negative social, cultural and environmental impacts on the communities located in the area of the project, in particular to the indigenous Inuit peoples, including by seeking their free, prior and informed consent for the project on their lands.

4. Please describe the measures that your company has taken, or is planning to take, to prevent recurrence of such situations in the future.
5. Please provide information on whether your company has established or participated in an effective operational-level grievance mechanism to address adverse human rights impacts caused by its operations, in line with the UN Guiding Principles. Please also provide any information as to whether such a mechanism has been used to address any concerns or impacts arising out of the mining project, as well as information on any outcomes or remedies provided as a result.

This communication and any response received from your company will be made public via the communication’s reporting website within 60 days. They will also subsequently be made available in the usual report to be presented to the Human Rights Council.

We may publicly express our concerns in the near future 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 company to clarify the issue/s in question.

Please be informed that a letter on this subject matter has been also sent to the Governments of Denmark and Australia.

Please accept, Mr. Mair, 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

Dante Pesce
Chair-Rapporteur of the Working Group on the issue of human rights and transnational corporations and other business enterprises

José Francisco Cali Tzay
Special Rapporteur on the rights of indigenous peoples
Annex

Reference to international human rights law

In relation to the above-mentioned facts and concerns, we would like to draw your attention to the United Nations Guiding Principles on Business and Human Rights (A/HRC/17/31), which were unanimously endorsed by the Human Rights Council in June 2011, and which are relevant to the impact of business activities on human rights.

The Guiding Principles have been established as the authoritative global standard for all States and business enterprises with regard to preventing and addressing adverse business-related human rights impacts. These Guiding Principles are grounded in recognition of:

a. “States’ existing obligations to respect, protect and fulfil human rights and fundamental freedoms;

b. 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;

c. The need for rights and obligations to be matched to appropriate and effective remedies when breached.”

According to the Guiding Principles, States have a duty to protect against human rights abuses within their territory and/or jurisdiction by third parties, including business enterprises. States may be considered to have breached their international human law obligations where they fail to take appropriate steps to prevent, investigate and redress human rights violations committed by private actors. While States generally have discretion in deciding upon these steps, they should consider the full range of permissible preventative and remedial measures.

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 fulfil 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.

The 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 cause or contributed to adverse impacts. Moreover, the commentary of the Principle 11 states that “business enterprises should not undermine States’ abilities to meet their own human rights obligations, including by actions that might weaken the integrity of judicial processes”. The commentary of Guiding Principle 13 notes that business enterprises may be involved with adverse human rights impacts either through their own activities or as a result of their business
relationships with other parties. (...) Business enterprise’s “activities” are understood to include both actions and omissions; and its “business relationships” are understood to include relationships with business partners, entities in its value chain, and any other non-State or State entity directly linked to its business operations, products or services”.

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 lays down 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).

We also wish to recall Article 3 of the Universal Declaration of Human Rights (UDHR) and Article 6(1) of the International Covenant on Civil and Political Rights (ICCPR), which guarantee the right of every individual to life, liberty and security.

We find it opportune to recall to Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR). The Article enshrines the right to the highest attainable standard of physical and mental health, which is also guaranteed as a part of the UDHR, Article 25 read in terms of the individual's potential, the social and environmental conditions affecting the health of the individual, and in terms of health care services. In its 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". Accordingly, States have a duty to adopt measures against environmental and occupational health hazards and against any other threat as demonstrated by epidemiological data.

We specifically wish to highlight the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted by the General Assembly in 2007, which sets out international human rights standards relating to indigenous peoples’ rights. Article 26 of UNDRIP asserts the right of indigenous peoples to ‘the lands, territories and
resources which they have traditionally owned, occupied or otherwise used or acquired’. Article 32 affirms that indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and resources and that ‘States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources’. UNDRIP furthermore underlines that States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

With regard to the environment, Article 29(1) of the UN Declaration on the Rights of Indigenous Peoples clearly states that 'indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources'. Furthermore, as detailed in the Framework Principles on Human Rights and the Environment (A/HRC/37/59), annex), which outline human rights obligations related to the enjoyment of a safe, clean, healthy and sustainable environment, States must ensure a safe, clean, healthy and sustainable environment in order to respect, protect and fulfil human rights (Framework Principle 1). In addition, States should respect, protect and fulfil human rights in order to ensure a safe, clean, healthy and sustainable environment (Principle 2). States should also ensure effective enforcement of their environmental standards against public and private actors (Principle 12), and should take additional measures to protect the rights of those most vulnerable to or at particular risk of environmental harm, taking into account their needs, risks and capacities (Principle 14).