



Greenland Minerals A/S

Decision regarding application for an exploitation licence on the basis of exploration licence 2010-02

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INTRODUCTION

As stated in the letter of 5 May 2022, the Government of Greenland has found there to be sufficient information available to make a decision in the matter of Greenland Minerals A/S's ("GM") application dated 17 June 2019 for an exploitation licence at Kuannersuit in South Greenland.

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This is to inform you that the Government of Greenland's processing of the application dated 17 June 2019 has been completed. In this decision, the Government of Greenland has not decided GM's alternative application for an exploitation licence of 16 December 2022. The Government of Greenland will make a separate decision in this regard after having conducted a clarification of the matter and a prior consultation.

REFUSAL OF APPLICATION FOR EXPLOITATION LICENCE

The Government of Greenland refuses the application dated 17 June 2019 for an exploitation licence for the Kuannersuit project.

The decision is final and cannot be appealed to another administrative authority. The decision may be appealed to the Court of Greenland as the court of first instance within one year from today's date, see section 3d(1) and (4) of the Mineral Resources Act.

The main facts of the case and the reasons for the refusal are set out below.

STATEMENT OF FACTS

In 2005, the company Rimbal Pty Ltd. was granted an exclusive licence, licence no. 2005/17, for exploration from areas near Nakkaalaaq in West Greenland. Article 1 of the licence refers to section 101 of the Standard Terms for Exploration and Prospecting Licences for Minerals in Greenland which applied to the licence. Section 101 of the Standard Terms reads as follows:

“101. The licence covers exploration for all mineral resources except hydrocarbons, radioactive elements and hydro-power, unless otherwise provided in the licence, cf. chapter 3 of the Mineral Resources Act.”

Licence no. 2005/17 was subsequently split into two new exploration licences, licence no. 2005/28 and no. 2005/29, respectively. Exploration licence no. 2005/28 was transferred to GM in 2008. In April 2010, following a decision by the Government of Greenland, this licence was extended to years 6-10 by licence no. 2010/02. The licence was thus valid from the date of signing of the Government of Greenland on 21 April 2010 until 31 December 2014. Article 101 of licence no. 2010/02 reads as follows:

“The licence covers the mineral resources stated in section 101 of the Standard Terms, which reads: The licence covers exploration for all mineral resources except hydrocarbons, radioactive elements and hydro-power, unless otherwise provided in the licence.”

The exclusion of radioactive elements in the Standard Terms was the implementation of the “zero tolerance policy” in force at the time, which meant that no licence could be granted for the exploration and exploitation of minerals from deposits containing radioactive elements above natural background levels. In the presentational memorandum provided to the Greenland Parliament on 8 October 2013 in connection with the first reading of the proposal for a decision by the Greenland Parliament to abandon the zero tolerance policy, the zero tolerance policy in force is described as follows:

“In 2009, the responsibility for the area of mineral resources and mineral resource activities transferred to the Greenland Self-Government. Highly symbolically, it was the first area of responsibility which transferred to the Greenland Self-Government after the introduction of the Greenland Self-Government in 2009.

The mineral resources area includes all minerals as nothing in the legislative basis separates the mining of ore containing radioactive minerals from the mining of ore containing non-radioactive minerals.

For historical reasons, a political decision was made to introduce a “zero tolerance” policy towards mining of uranium and other radioactive materials. The zero tolerance policy has meant that all exploration licences specify that the companies are allowed to explore for all minerals except for radioactive minerals.”

On 6 June 2008, the Bureau of Minerals and Petroleum requested GM to confirm that the exploration was carried out in accordance with the applicable rules and conditions, including that no uranium exploration took place.

By letter of 8 June 2008, GM confirmed that all activities were carried out in accordance with the Mineral Resources Act and the exploration licence granted.

The Standard Terms applicable to the exploration licence were revised on 9 September 2010, following prior dialogue with GM, and the following sections were added:

“709. In order to be able to prepare a complete feasibility study, with assessments of environmental impacts and social sustainability, within the framework provided in section 101, [the Bureau of Minerals and Petroleum] can, upon application, approve that for use in a feasibility study of a deposit exploration can include minerals containing radioactive elements above normal background radiation. Exploration and feasibility study must emphasise, in particular, the extraction-technical, environmental, and health-and-safety aspects of deposits with a possible content of radioactive elements. The application must contain a description of the studies planned for the period, as stated in section 710.

710. Approval in accordance with section 709 is granted for a period of one year from the date of approval. Upon application from the licensee, the period may be extended for a period of one year at a time, provided that [the Bureau of Minerals and Petroleum] has received reports in accordance with section 1001-1002 with a

description of the studies, which have been carried out in accordance with section 709 and provided that all terms of the licence have been complied with.

711. Approval pursuant to section 709-710 does not entitle a licensee to be granted a licence to explore for and exploit radioactive elements.” (Emphasis added)

The amendment of the Standard Terms was motivated by GM’s wish to be able to prepare feasibility studies as well as EIA and SIA studies and health impact assessments of a deposit containing radioactive minerals above the normal background levels. This is also the reason why the Standard Terms were amended in dialogue with GM.

On 18 October 2010, the then Minister for Labour and Mineral Resources, Ove Karl Berthelsen, provided the following answer to section 36 question no. 2010-201 concerning uranium:

“As of 1 October 2010, 113 active licences for mineral resources have been granted in Greenland (prospecting, exploration, exploitation and small-scale licences combined). Information on uranium values has been recorded from 19 of these licences.

When conducting mineral exploration activities, one can never be sure not to encounter areas with elevated uranium values. In these cases, it will be possible to obtain an exploitation licence, if it is demonstrated that the deposit can be mined without including uranium.

In other areas, it would not be possible to mine a deposit without including uranium using current technology, and a licence could not be granted in these cases. An example of such an area is Kvanefjeldet.” (emphasis added)

The answer to section 36 question no. 2010-201 was accompanied by a press release dated 12 September 2010 issued by the Minister for Labour and Mineral Resources, Ove Karl Berthelsen, to the mining industry under the heading “Zero-tolerance policy on uranium remains unchanged”. With reference to the aforementioned amendments to sections 709-711 of the Standard Terms, the following was, among other things, stated in the press:

“With the new additions to the Standard Terms, the Government of Greenland has wanted to provide more knowledge about the safety and health issues regarding radioactive elements in deposits, the target being metals other than the radioactive ones. This addition is in line with the Government of Greenland’s wish to obtain more knowledge about the consequences of exploration and exploitation of radioactive elements.

In the addition to the Standard Terms, it is explicitly stated that a licence to complete such environmental impact assessments etc. does not confer on a licensee the right to be granted a licence to explore for and exploit radioactive elements.

Uranium policy in Greenland thus remains unchanged, and there is still zero tolerance for exploration and exploitation of radioactive element.”

On 22 December 2011, a stock exchange announcement was made by GM stating inter alia the following:

“Greenland Minerals and Energy Limited (GMEL; ASX: GGG) recently announced that the government of Greenland has amended GMEL’s current exploration license, EL 2010/02 covering the Kvanefjeld Project (GGG 61%), to include uranium. What is the significance of this to the Kvanefjeld Project feasibility modelling? Is this decision likely to impact the current project schedule?

[...]

This is one of the most significant developments in the history of the Kvanefjeld Project. The project’s licensing conditions are now inclusive of uranium and we have the legal right to apply to exploit it. It represents the first exploration license issued in Greenland to incorporate uranium, and demonstrates that there is now clear political support for the project to advance. We now have the backing of the government which is committed to establishing a strong minerals sector and this is one of the headline projects.”
(emphasis added)

An addendum to GM's exploration licence no. 2010/02 was signed in the spring of 2012 by the Government of Greenland and GM and came into effect on 3 April 2012. It appears from the addendum, among other things:

“1. Mineral resources covered by the licence

101. The licence covers the mineral resources stated in section 101 of the Standard Terms. These include all mineral resources except hydrocarbons, radioactive elements and hydro-power, unless otherwise provided in the licence.

102. During the licence period for this exploration licence, the licence also covers radioactive elements, but see sections 201-202.

2. No right to exploitation of radioactive elements or to an exploitation licence thereto

201. The licensee has no right to, and may not carry out, exploitation of radioactive elements. The licensee also has no other right as regards exploitation of radioactive elements.

202. The licensee is not entitled to be granted a licence to exploit radioactive elements. This applies regardless of the licensee having established the presence of and delineated commercially viable deposits of radioactive elements and complied with the terms set out in this exploration licence.

3. Application for grant of licence for exploitation of radioactive elements

301. If the licensee applies for an exploitation licence on the basis of this exploration licence, see sections 1401-1408 of the Standard Terms, the licensee may furthermore apply for the grant of a licence to exploit radioactive elements under the exploitation licence.

302. If the licensee applies for a licence to exploit radioactive elements, see section 301, the Government of Greenland may freely and without any reason or for any reason reject the application. An application may be rejected on the basis of a political or administrative decision not to grant a licence to exploit radioactive elements. Rejection of an application creates no obligation and no liability, including no liability in damages, for the Greenland Self-

Government, the Government of Greenland or the Bureau of Minerals and Petroleum.

303. If the licensee applies for a licence to exploit radioactive elements, see section 301, the Government of Greenland may freely and without any limitation lay down any term for granting a licence to exploit radioactive elements. The Government of Greenland may for example lay down terms for exploitation activities, health and safety, the environment, resource utilisation and social sustainability and for the licensee's payment of consideration to the Greenland Self-Government. [...]

304. Sections 301-303 do not apply if sections 201-202 provide otherwise. Sections 301-303 do not have the effect that the licensee has a right to be granted a licence to exploit radioactive elements."
(emphasis added)

On 7 May 2012, GM asked the Bureau of Minerals and Petroleum to clarify a number of issues relating to GM's licences etc., to which the Bureau of Minerals and Petroleum replied on 1 June 2012, that GM's exploration licence no. 2010/02 was revised in January 2012 to include radioactive elements. The Bureau of Minerals and Petroleum stressed in that connection that the revision in question did not give GM the right to exploit radioactive elements, nor did it give GM the right to be granted an exploitation licence in the future.

By letter of 28 June 2012, NUNA Law Firm contacted the Bureau of Minerals and Petroleum on behalf of GM, the law firm having been requested to prepare a legal opinion for GM in support of GM's efforts to raise capital for the project. The law firm requested the Bureau of Minerals and Petroleum to answer a number of questions concerning GM's licences. In its reply of 4 July 2012, the Bureau of Minerals and Petroleum provided details of GM's licences etc.. It stated, among other things, that GM's exploration licence did not at the same time entitle GM to exploit or be granted an exploitation licence for radioactive elements.

By letter of 19 October 2012 from GM to the Bureau of Minerals and Petroleum, GM stated that no application for an exploitation licence would be submitted until the issue of the potential abandonment of the zero tolerance policy had been resolved. GM stated in this connection that its shareholders were reluctant to spend any more money on the project until the issue was resolved. GM also

stated that it had spent DKK 450 million on the project over a period of six years and that the future of the project needed to be clarified before further activities could be financed. GM also stated that it was fully aware that the abandonment of the zero tolerance policy did not alter the fact that the Government of Greenland and the Bureau of Minerals and Petroleum could reject an application for an exploitation licence if the application did not comply with the requirements that the authorities might have for the project.

Changing or abandoning the zero tolerance policy was discussed several times by the Greenland Parliament. During the second reading on 21 November 2012 of a motion before the Greenland Parliament to instruct the Government of Greenland to work towards the introduction of an upper threshold of 0.1% for the permitted content of uranium in mineral extraction, the then Minister for Labour and Mineral Resources stated as follows about Addendum No. 1 to GM's exploration licence:

“The Government of Greenland has in the meantime conducted a number of activities and public meetings related to further clarification of the uranium issue.

We have approved Greenland Minerals and Energy's performance of EIA and SIA studies of the Kvanefjeldet deposit, including uranium-bearing minerals. The purpose of this approval is to obtain specific knowledge about the consequences of uranium mining, rather than to continue political discussions at a more theoretical level. These studies are not yet complete.”

Prior to the reading of a motion before the Greenland Parliament on abandoning the zero tolerance policy, the then Minister for Labour and Mineral Resources, Jens-Erik Kirkegaard, on 17 September 2013 answered question no. 167 in relation to the potential abandonment of the zero tolerance. With reference to GM's licence, the then Minister replied, among other things, as follows:

“No uranium exploration licence has been granted to any licensee entitling the licensee to be granted a uranium exploitation licence. The Government of Greenland has granted a number of mineral resource licenses under the Mineral Resources Act, including a licence to explore for uranium and other radioactive minerals, etc.,

but these licences do not entitle the licensee to be granted an exploitation licence either if the radioactive content exceeds natural background levels.” (emphasis added)

In connection with the reading of the aforementioned proposal on 8 October 2013 for a decision by the Greenland Parliament to abandon the zero tolerance policy, the then Minister for Labour and Mineral Resources, Jens-Erik Kirkegaard, answered a number of questions from the Committee for Trade, Commerce, Mineral and Oil Resources on 16 October 2013. Among other things, the minister stated that the zero tolerance policy applied to exploration and exploitation activities and related licences concerning minerals whose radioactive content exceeded natural background levels, which was stated to be 4-60 ppm uranium in granitic rock.

The minister then explained the Government of Greenland’s wish to abandon the zero tolerance policy by saying that it would pave the way for Greenland to exploit, for example, rare earths, which were reportedly present in Southwest Greenland, but where radioactive elements also occurred in concentrations above the natural background levels. The parliamentary motion to abandon the zero tolerance policy was then adopted by the Greenland Parliament.

On 6 November 2014, the Mineral Licence and Safety Authority requested GM to provide a timetable for the submission of a ‘white book’ for consultation on the project. On the same day, the Director of GM replied that, due to the upcoming elections and doubts about the possible reintroduction of the zero tolerance policy, the company would not submit anything at that time.

In March 2015, GM was granted an extension of exploration licence no. 2010/02. The extension was valid from the date of signing of the Government of Greenland (8 April 2015) until 31 December 2017. The document referred to the additional documents that applied to licence no. 2010/02, including Addendum No. 1 containing the proviso that GM was not entitled to be granted an exploitation licence of radioactive elements.

In a reply dated 13 May 2016 to section 37 question no. 2016-115 asked by Múte B. Egede, member of the Greenland Parliament for the Inuit Ataqatigiit party, the then Minister for Mineral Resources, Randi Vestergaard Evaldsen, stated that GM’s licence terms to the effect that GM was not entitled to be granted an

exploitation licence and could not claim damages from the Self-Government still applied. Minister Randi Vestergaard Evaldsen stated in this connection that GM would not be able to claim damages if the Government of Greenland “*for example, on the basis of a referendum on radioactive elements, rejects an application for the granting of a licence to exploit radioactive elements*”.

In a newsletter of October 2016, Minex, the following is stated about the Kuannersuit project:

”The project has progressed significantly on a number of fronts in 2016. GMEL has completed draft documentation of the maritime study and social impact assessment (SIA), with updates nearing completion. Sections of the Environmental Impact Assessment (EIA) have been sent to independent expert groups for review and this process is nearing completion. Following this, it is expected that GMEL will submit a full exploitation licence application in the near future, which will be followed by a public hearing process. An important step in 2016 has been the passing of legislation in both Greenland and Denmark to regulate the production and export of uranium from Greenland, in accordance with best practice. Greenland’s parliament passed four bills that will ensure that uranium mining and export meets the Kingdom of Denmark’s international non-proliferation commitments. This is a key step that allows GMEL to work toward establishing an off-take agreement for uranium, in close dialogue with the respective governments.”

In November 2016, Kalistat Lund, member of the Greenland Parliament, asked the Minister for Mineral Resources in a section 37 question whether GM was prepared to submit an application for an exploitation licence. The minister answered the question on 30 November 2016, detailing the status of the Kuannersuit project. It was stated, among other things, that in August 2014 GM had submitted a project description containing a first draft EIA and SIA reports, which had been put out for mandatory consultation. According to the Government of Greenland’s website, the consultation process took place between 29 August 2014 and 6 October 2014.

On 7 April 2017, the Environmental Agency for Mineral Resource Activities (“EAMRA”) notified GM of its refusal to send the draft EIA report dated 2 December 2015 out for public consultation, see Part 18a of the Mineral Resources Act. In its decision, EAMRA furthermore referred to sections 1409(a) and (b) of the Standard Terms, which form part of section 14 of the Standard Terms on the transition from exploration to exploitation.

It can be seen from the decision, among other things, that the purpose of the EIA process was to identify potential risks in the transition from exploration to exploitation activities and to describe the measures envisaged to mitigate those risks. It was stressed in the decision that the environmental risk analyses and the choice of mitigating measures had to be in line with, among other things, international best practice. According to the decision, EAMRA had relied on the assessments and draft decisions of its technical advisors, the Danish Centre for Environment and Energy at Aarhus University (DCE) and the Greenland Institute of Natural Resources (GINR).

A new extension of GM’s exploration licence was announced in June 2018. The extension was granted by Addendum No. 4 to exploration licence no. 2010/02, which was valid from the date of signing of the Government of Greenland (31 July 2018) until 31 December 2020. Addendum No. 4 referred to the additional documents that applied to licence no. 2010/02, including Addendum No. 1 which, as mentioned above, contained the provision that GM was not entitled to be granted a licence to exploit radioactive elements.

On 17 June 2019, GM applied for an exploitation licence for the project, referring to exploration licence no. 2010/02. By way of example, according to the non-technical summary of the EIA report, the project involves the exploitation of REE (rare earth elements) resources, uranium, zinc concentrate and fluorspar. According to the EIA project summary, regarding the uranium content of the licence area, the ore contains approximately 300 ppm uranium. In support of its application, GM stated, among other things, that the deposit covered by the exploration licence was commercially viable and that GM intended to exploit the deposit. According to the application, it was accompanied by EIA and SIA reports as well as a navigational safety investigation study.

On 18 February 2020, EAMRA issued a decision concerning GM’s draft EIA report of June 2019. According to the decision, GM had submitted additional

material to the EIA report in July 2019. Furthermore, according to the decision, the submitted report was GM's 4th draft EIA report. In its decision, EAMRA decided that the draft had to be amended and updated before the EIA report could go out for public consultation.

By e-mail of 21 April 2020 to GM, the mineral resource authorities stated that they had now completed their assessment of GM's documentation for mineral finds under exploration licence no. 2010/02. The e-mail includes the following:

“The Ministry of Mineral Resources (the ministry) has finalised its assessment of the documentation of mineral resources provided by Greenland Minerals A/S (GM) to the ministry under GM's exclusive licence No 2010/02 for exploration for minerals.

Under section 29(2) of the Mineral Resources Act, one of the main requirements for the granting of a mineral exploitation licence to GM is that GM has documented (substantiated) a deposit of exploitable minerals in the licence area and that this has been approved by the Greenland Government.

The ministry has now approved that GM has documented mineral resources comprising 16 oxides and one metal in the licence area of GM's exclusive licence No 2010/02 for exploration for minerals.

A table showing the 16 oxides and the one metal is stated on page 7, in the section 'Updated Conclusion - April 2020', of the attached memorandum from the ministry's consultant Auralia Mining Consulting.

The ministry's approval of the documentation of the 16 oxides and the one metal is subject to the Greenland Government's final approval which will be made if and then when the Greenland Government grants an exploitation licence to GM under sections 16 and 29 of the Mineral Resources Act.”

The mineral resource deposits documented by the report are divided into three categories: light rare earth oxides (LREO), heavy rare earth oxides (HREO) and 'others', which cover yttrium, uranium and zinc.

In August 2020, GM submitted a new draft EIA report. The authorities' advisors, DCE and GINR, issued an assessment on 17 September 2020, stating that GM's draft EIA report met the minimum requirements for EIA reports and could therefore form the basis for a public consultation process. According to the assessment, however, the EIA report still contained environmental issues etc. that needed to be mitigated or resolved before any approvals process in connection with the application for an exploitation licence could begin. It can be inferred from section C1.1 of the assessment that the issues and uncertainties referred to had not at that stage been mitigated or resolved in such a way as to form the basis for an approvals process in connection with an application for an exploitation licence. Part 2 made a number of specific recommendations for further studies and part 3 contained recommended clarifications: R1-R22.

The authorities' advisors, DCE and GINR, prepared a memorandum dated 9 October 2020 on key environmental issues concerning the Kuannersuit project.

A new draft EIA report was submitted on 13 December 2020. On 18 December 2020, the Government of Greenland published the consultation material for the Kuannersuit project. In that connection, the EIA report, the SIA report and other project materials were put out for public consultation.

According to the project description (section 3.4), the ore would be mined in an open pit with blasting of the rock and crushing of the ore. The ore would then be processed in a concentrator and a refinery.

The concentrator was to produce two marketable products, zinc concentrate and fluor spar. The residual waste product is flotation tailings (F-tailings) which, according to EAMRA's technical advisors, represent about 90% of the original ore and contain about half of the original uranium content of the ore. Tailings will have a residual uranium concentration of about 0.015%.

In the refinery, the flotation concentrate is treated with different types of acid, which releases concentrates of rare earth metals and uranium oxide (yellow cake). The resulting waste is chemical residue tailings (K-tailings). According to

EAMRA's technical advisors, the saleable mineral concentrates will represent about 1% of the total quantity of mined ore. The remaining approximately 99% would have to be disposed of as F- or K-tailings, both of which are classified as low-level radioactive waste by the International Atomic Energy Agency. According to the report, F- and K-tailings would be disposed of in Lake Taseq in two reservoirs for F-tailings and K-tailings, respectively. It is expected that about 100 million tonnes of F-tailings and about 10 million tonnes of K-tailings will be disposed of during the life of the mine. Two large dams would have to be built at the outlet of the lake to retain the seawater containing the tailings.

The project would also produce grey rock in connection with the mining of the ore. Approximately 100 million tonnes of grey rock would be produced during the life of the mine. The grey rock would be deposited in large piles on the mountain. Like the ore, the grey rock contains elevated concentrations of elements such as fluorine, rare earth metals and radioactive substances such as uranium/thorium.

The EIA report presented the expected impacts of the project on the surrounding environment, and assessed the environmental risks to ecology, air quality, surface water, groundwater, soil and land surface, landscape and visual impact and public health. The assessment described ten hazard types with 35 different impacts, of which 27 were assessed to pose a low residual risk after mitigation measures and eight were assessed to pose a medium residual risk.

The risk of outflow of supernatants and solids from the FTFSF after closure, involving a risk of loss of freshwater flora and fauna and impact on freshwater habitats and corresponding loss of marine flora and fauna and impact on marine habitat due to water quality, water flow or radiological impact, was categorised as a medium risk, considered unlikely but with a high-risk consequence.

Risk of bursting of FTFSF dam after closure, involving a risk of loss of terrestrial flora and fauna, fresh-water flora and fauna and marine flora and fauna was also considered as medium risk, unlikely but with a high-risk consequence. The same risk involving impacts on water quality and potential loss of life due to dam bursting was also categorised a medium risk, very unlikely but with a very high risk consequence.

Risk of dam bursting in the FTSF and CSRF post-closure phase with consequence in terms of physical impacts on terrestrial, marine and freshwater species due to combined tailwater was also categorised a medium risk, unlikely but with high-risk consequence.

The risk of accidental release of tailings sludge with consequences in terms of impacts on water quality was also categorised a medium risk, unlikely but with high-risk consequences.

EAMRA's technical advisors, DCE and GINR, provided a memorandum on 26 January 2021 containing general comments on the latest version of the project description and the EIA report. According to section 1 of the advisors' memorandum, the EIA report was considered to have been prepared in accordance with the guidelines for the preparation of an EIA report and to be accurate and complete in relation to the project description. In addition, the advisors stated that the project would most likely be implemented without more significant environmental impacts than those described in the EIA report. This would require the planning and implementation of the project to be focused on (1) minimising the release of pollutants, (2) monitoring the state of the environment, and (3) adequate regulatory control capacity.

In section 2 of the memorandum, the advisors highlighted as a specific environmental aspect of the project that during the construction and operation of the mining project approximately 100 million tonnes of grey rock would be blasted away, which would have to be stored in landfills on the mountain and which would contain various minerals and elements that could affect the environment if released. The landfills would be affected by wind and weather, which over time could release contaminants into the environment. This would lead to a need for special attention to prevent the spread of this contamination through water and dust.

The advisors also pointed out that the ore would contain zinc, fluorine, uranium and thorium, which could affect the environment. Approximately 110 million tonnes of ore would be processed during operation, producing dust that could spread pollution to the surrounding environment. Special attention would be needed to reduce this dust pollution to a minimum through the use of dust-laying technology.

Finally, the advisors pointed out that 98% of the ore that would be mined would end up as tailings, which would be stored in landfills in and around Lake Taseq. Tailings would contain residues of both radioactive and non-radioactive elements as well as chemicals, and special attention would be needed to prevent the spread of contamination from the tailings deposits.

In the advisors' assessment (section 3 of the memorandum), it was still relevant to carry out the studies recommended in the memorandum of 17 September 2020 (reference in Appendix 1) before the construction phase of the project. These recommendations were for further field studies to be carried out to confirm some of the assumptions made in the report and for further studies to be carried out on the concentrations of radioactive and non-radioactive elements in areas of sensitive land use. Additional documentation should also be provided on technical solutions and their application to reduce contamination from the project. According to the appendix to the memorandum, the technical recommendations R1-R22 are considered to be adequately addressed.

In January 2021, GM was granted another extension of exploration licence no. 2010/02. The extension was granted by Addendum No. 7 to the licence, which was valid from the date of signing of the Government of Greenland (1 February 2021) until 31 December 2022.

At a meeting on 15 December 2021, the Ministry advised GM that, if the application was upheld, GM should expect a rejection of the application for an exploitation licence as GM indicated in the project description that it intended to carry out mineral resource activities directed at uranium.

The Ministry advised GM on this issue again at the meeting held on 8 February 2022.

In both cases, the Ministry advised GM that instead of maintaining the application in its current form, GM had the option of withdrawing the application for an exploitation licence and reapplying. The Ministry stated that a new application would need to include a project description that took into account the provisions of the Uranium Act.

In its letter of 15 February 2022, GM protested the Ministry's position articulated at the meetings, stating, among other things:

“As foreshadowed in the meetings, GM finds the position that Naalakkersuisut has taken to be at odds with the plain wording of the Act and the Preparatory Works. The wording of the Act and the Preparatory Works shows that the Act is not intended to apply (i) to licenses already issued, and (ii) in circumstances where its application would have the effect of an expropriation. When we put this interpretation of the Act to you in the meeting on 8 February 2022, your external counsel, Mr Fruerlund, agreed.

As you know, GM’s exploration license (the Exploration License) was issued many years before the Act entered into force. Given that the Exploration License embodied a clear entitlement for GM to be granted an exploitation license under Section 14 of the Standard Terms, any deprivation of this entitlement would constitute an expropriation under the applicable laws. It follows that, in GM’s case, both conditions for the non-application of the Act are satisfied.

[...]

Finally, GM confirms, for the record, that it declines your invitation to withdraw the Application. GM maintains the Application and expects Naalakkersuisut to progress with the outstanding tasks on the White Paper process and the Impact Benefit Agreement, with all due expedition.”

The Government of Greenland informed GM by letter of 5 May 2022 that there is sufficient information available in the case to make a decision on the application for an exploitation licence. The same was communicated to the public by press release dated 6 May 2022.

By press release dated 10 May 2022, GM stated, among other things, that:

“The Company is assessing the implications of the Greenland Government's notification (and press release), including in the context of the Company's ongoing arbitration proceedings against the Government of Greenland and the Government of Denmark. The

Company intends to write to the Greenland Government to formally protest the approach outlined in the notification and press release.”

By letter of 3 June 2022 to the Ministry of Mineral Resources and Justice, GM objected to the Ministry’s statement that there was sufficient information to make a decision on the application for an exploitation licence. GM further made a number of objections against the Ministry’s processing of GM’s application for an exploitation licence.

By letters of, respectively, 17 August and 19 August 2022, GM inter alia reserved the right to submit alternative applications for an exploitation licence. On 16 December 2022, GM formally submitted an addendum to the application of 17 June 2019 for an exploitation licence at Kuannersuit. The following is stated about the addendum to the application in the letter of 16 December 2022:

“The alternative licence solution contained in this documentation is one in which only rare earths (fluorspar and zinc) are exploited, and uranium is not exploited but is, instead, removed as an impurity and placed in the TSF. As described above, we can confirm that the documentation (for which external technical consultants were engaged) demonstrates that the treatment of uranium in the alternative licence solution will not materially alter any radiological impact of the Kvanefield Project.”

In February 2023, GM was granted an extension of exploration licence no. 2010/02. The extension was valid from the Government of Greenland’s signature (10 April 2023) until 31 December 2025. The document referred to the additional documents that applied to licence no. 2010/02, including Addendum No. 1 containing the proviso that GM was not entitled to be granted a licence for exploitation of radioactive elements.

CONSULTATION PROCESS

By letter of 22 July 2022, the Ministry of Mineral Resources and Justice submitted a draft decision on GM’s application of 17 June 2019 for an exploitation licence at Kuannersuit. The Government of Greenland requested to receive GM’s comments, if any, within four weeks from 22 July 2022.

On 17 August 2022, GM requested the Ministry of Mineral Resources and Justice for access to all documents and information in relation to the processing of GM's application for an exploitation licence. In this connection, GM requested that the processing of its application of 17 June 2019 for an exploitation licence be suspended until the Ministry of Mineral Resources and Justice had finalised the processing of GM's request for access to documents.

By decision of 28 December 2022, the Ministry of Mineral Resources and Justice granted, in part, GM's request for access to documents. The decision concerned access to documents in the matter 2015 – 441 201244 MEL Greenland Minerals A/S Udnyttelsesansøgning (“application for an exploitation licence”) and the matter 2022 – 5057 Greenland Minerals, decision, etc. In the decision, the Ministry also stated that the Ministry needed more time to assess whether access could be granted to the documents in the matter 2021 – Act on zero tolerance (the “Act matter”).

In the decision of 28 December 2022, the Ministry requested GM to submit its comments, if any, to the draft decision relating to GM's application of 17 June 2019 for an exploitation licence within four weeks from 28 December 2022.

By letter of 10 January 2023, GM again requested an extension of time to provide comments to the Government of Greenland's draft decision of 22 July 2022 on an exploitation licence.

On 16 January 2023, the Ministry made its decision on access to documents relating to GM's request for access to documents of 17 August 2022, granting full access to a number of documents involving the Act matter. In this connection, the Ministry of Mineral Resources and Justice partially granted GM's request and extended the deadline for GM's submission of comments to 10 February 2023.

By letters of 19 January and 24 January 2023, GM submitted a request to the Ministry of Mineral Resources and Justice for a further extension of the deadline for comments to the draft decision relating to GM's application of 17 June 2019.

By decision of 3 February 2023, the Ministry of Mineral Resources and Justice finalised the processing of GM's request for access to documents of 17 August 2022, extending the deadline for GM's submission of comments to 17 February 2023.

By letter of 10 February 2023, GM submitted a request to the Ministry of Mineral Resources and Justice for a further extension of the deadline for comments to the draft decision of 22 July 2022. By letter of 16 February 2023, the Ministry refused to grant any further extension of the deadline for GM's comments.

By letter of 17 February 2023, GM submitted its preliminary comments to the draft decision of 22 July 2022.

On 29 March 2023, GM again requested a further extension of the deadline for submission of additional comments to the draft decision of 22 July 2022.

LEGAL FRAMEWORK

The Mineral Resources Act

Exploration and exploitation licences

Pursuant to section 16 of the Mineral Resources Act, the Government of Greenland may for a specified area and on specific terms grant an exclusive licence to explore for and exploit one or more mineral resources. According to the provision, exploration and exploitation licence may be granted separately.

According to section 29(1) of the Mineral Resources Act, as regards minerals, licences are granted under section 16 for a period of up to ten years or, in exceptional circumstances, up to 16 years.

Subsection (2) of the provision provides that a licensee who under a licence under subsection (1) has substantiated and delineate deposits which the licensee intends to exploit, and who has otherwise complied with the terms of the licence, is also entitled to be granted an exploitation licence.

Environmental protection, climate protection and nature conservation

Section 1 of the Mineral Resources Act provides that activities falling within the scope of the Act must be carried out in a sound manner as regards health and safety, the environment, resource exploitation and social sustainability.

Part 13 of the Mineral Resources Act contains general rules on environmental protection, climate protection and nature conservation. According to section 51, the rules on environmental protection aim to help protect nature and the environment and subsection (2) provides that the environmental protection rules aim to prevent, limit and combat pollution of and other impact on nature and the environment caused by activities that may:

- (i) Endanger human health.
- (ii) Damage animal or plant life or natural or cultural values above or below ground or sea level or in the subsoil.
- (iii) Obstruct the rightful utilisation of the soil, the sea, the subsoil or natural resources.
- (iv) Impair recreational values or activities.

Furthermore, according to subsection (3) of the provision, the aim of subsection (2) is specifically to prevent, limit and combat pollution of the soil, the sea, etc. and to limit the use and waste of mineral resources and other resources.

In addition, it follows from section 52 that in administering the rules of the Act on environmental protection, weight must be given to what is attainable through, for example, the best available techniques. And it follows from section 53 that an undertaking must choose such a place for carrying on the activities as to minimise the risk of pollution. Regard must also be had to the nature of the area, including its present and planned future utilisation, as well as to the possibilities for appropriate disposal of waste water, waste and other pollutants.

According to section 55, the provisions on climate protection aim to prevent, reduce and control pollution of and other impact on the climate caused by activities which may directly or indirectly endanger human health or which may directly or indirectly damage fauna or flora or natural or cultural assets above or below ground or sea level or in the subsoil.

According to section 59, the rules on nature conservation aim to help protect nature and the environment. In decisions under the Act, the Government of Greenland must give weight to the need to avoid deterioration of nature and the habitats of species in designated national and international nature conservation areas and disturbance of the species for which the areas are designated.

EIA and SIA reports

Under section 73(1)(ii) of the Mineral Resources Act, minerals may be exploited only after an assessment has been made of the impact on the environment of the performance of the activity and a report thereon (EIA report) has been approved by the Government of Greenland. The rules are based on the Danish and European EIA regulations.

It follows from section 74 that the applicant must make an environmental impact assessment, prepare the EIA report and submit it to the Government of Greenland. Reference is made to the “Guidelines for preparing an Environmental Impact Assessment (EIA) Report for Mineral Exploitation in Greenland”¹, which sets out the detailed guidelines for the EIA process and preparation of the report.

According to section 74(2) of the Act, the Government of Greenland may decide that additional material for the environmental impact assessment (EIA) must be provided, or that the person responsible for the EIA must carry out additional studies or assessments of specific circumstances that are relevant to the assessment of the environmental impact. Section 75 requires the Government of Greenland to publish information about the submission of an EIA report.

In addition, section 76 of the Mineral Resources Act provides that a licence for and approval of an activity can be obtained only for an activity that is likely to have a significant impact on social conditions when a social impact assessment (SIA) of carrying out the activity has been made and a report thereon (SIA report) has been approved by the Government of Greenland.

Similar rules apply to the SIA report as to the EIA report, according to which the Government of Greenland may require that additional information etc. be provided, just as information on the submission of a SIA report must be published.

The Uranium Act

Greenland Parliament Act no. 20 of 1 December 2021 to ban uranium prospecting, exploration and exploitation, etc. (the “Uranium Act”) was adopted at the autumn session 2021 and promulgated on 1 December 2021. The Greenland Parliament Act supplements the provisions of the Uranium Act and

¹ Mineral Resources Authority, 2015.

thus applies to mineral resource prospecting, exploration and exploitation licences granted under the Mineral Resources Act.

According to section 1(1) of the Uranium Act, uranium prospecting, exploration and exploitation is not permitted. Section 1(2) of the Act also provides that prospecting, exploration and exploitation for minerals other than uranium are permitted only if the average uranium content of the total resource is less than 100 ppm by weight.

According to the Bill on which the Uranium Act is based, uranium may spread into the surrounding environment and such uranium leaks may potentially have critical impacts on the environment. Also, in connection with activities targeted at uranium resources, high-risk uranium leaks, e.g. from yellow cake, may occur in connection with production, transport, process water spills, etc. By banning activities targeted at uranium, several of these risks are eliminated.

The background to the threshold value laid down in section 1(2) of the Uranium Act is explained as follows in the Bill on which the Uranium Act is based

“An uranium threshold content of 100 ppm (parts per million) by weight is proposed, which corresponds to 0.01 per cent. This threshold corresponds to the threshold that applies in Nova Scotia, Canada, which introduced a similar uranium ban in 2009.

Additionally, the threshold is set on the basis of the fact that the natural uranium background values depend on the rock type(s) and therefore vary a lot in Greenland. For granitic rock types, the background value (i.e. the naturally occurring amount) is typically 4-60 ppm by weight. The natural background value for uranium is thus estimated to be less than 100 ppm by weight. By setting the permitted threshold at 100 ppm by weight, it is ensured that this Bill will not limit the possibility of realising projects where the uranium content does not exceed natural background values. It is also ensured that this Bill will not limit the possibility of realising projects that could have been realised under the zero tolerance policy previously in force. Conversely, the assessment is that a threshold of 100 ppm by weight is sufficiently low to ensure the purpose of the Act.”

The following is stated in the explanatory notes to the individual provisions of the Bill about the connection between section (1) and (2) of the Uranium Act:

“Uranium occurs naturally in rocks and sediments, and any licence area or potential licence area will therefore always include a certain amount of uranium. A genuine zero tolerance policy in respect of any uranium extraction would therefore prevent the realisation of mining projects even where the uranium content is so low that it must be assumed that the project may be realised without significant radiation or risk of other effects impacting on health, nature, the environment, etc.

The ban imposed in subsection (1) should therefore be read with subsection (2) of the Bill, which provides that mining projects fall outside the scope of the prohibitory regime if it is necessary to extract uranium under the permitted threshold in order to realise projects which are directed against resources other than uranium.”

As regards the relationship to the rules of the Mineral Resources Act, the following is stated, among other things, in the Bill on which the Uranium Act is based (see the general explanatory notes, section 3.3):

“The activities which will be comprised by this Bill will still be regulated by the Mineral Resources Act in all other respects. This Bill therefore will not abolish any of the provisions of the Mineral Resources Act. Thus, licences for activities comprised by this Bill are also only available under the Mineral Resources Act. For the same reason, for example, an application for a licence under the provisions of the Mineral Resources Act may be refused even though a given project is not contrary to this Bill.

In specific cases, the Bill may lead to a departure from the general principle of the Mineral Resources Act. Under section 29(2) of the Mineral Resources Act, a licensee under an exploration licence who has substantiated and delineated deposits which the licensee intends to exploit and who has otherwise complied with the terms of the licence is entitled to be granted an exploitation licence. A licensee under an exploration licence which includes uranium is not entitled to be granted an exploitation licence for uranium after the effective date of

this Bill, regardless that the licensee has substantiated and delineated an uranium deposit. The same applies to the grant of an exploitation licence for other substantiated deposits which are in violation of the ban in section 1. This also applies to deposits of any radioactive elements for which the Government of Greenland has set provisions, see section 2 of the Bill.”

The Uranium Act provides no statutory basis for granting exemption from the ban in section 1(1). However, as the Uranium Act is not a compulsory acquisition act and therefore does not provide for the compulsory acquisition of protected property rights, the ban in section 1(1) and (2) of the Uranium Act does not apply to the extent that the ban may be considered an intrusion on property, see section 3.3 of the Bill of 17 September 2021.

Furthermore, according to the legislative history of the Act, the prohibitory regime of the provision does not include small-scale projects and the collection and extraction of minerals without a licence, see Parts 8 and 11 of the Mineral Resources Act. Radioactive minerals, including uranium, are already excluded from such activities under the Mineral Resources Act. Finally, the prohibitory regime of the provision does not apply to scientific surveys falling within the scope of section 2(3) and (4) as well as Part 12 of the Mineral Resources Act.

The Uranium Act came into force on the day after its promulgation, see section 5(1), i.e. on 2 December 2021. The Act then applies to all licences issued *after* its effective date, see section 5(2) of the Act.

According to the explanatory notes to section 5, this applies even if the exploitation licence is granted “in continuation of” an exploration licence and the exploration licence has been granted *prior to* the effective date of the Act. Exploration licences and exploitation licences are thus considered as separate licences in the Uranium Act, which is in line with the principle of the Mineral Resources Act, see section 16(1)(2) of that Act.

The Constitution

According to section 73(1) of the Constitution, no person shall be ordered to surrender his property except when required in the public interest. Furthermore, this shall be done only as provided by statute and against full compensation.

In order for a matter to be considered as covered by section 73, it must involve the transfer of property within the meaning of the provision. The concept of property includes, in addition to immovable property, movable property, rights of claim, etc., *inter alia*, rights of access and permits granted by law, see, for example, the supreme court case reported in the Danish Weekly Law reports, 1981, p. 394 (U 1981.394 H) (the Milk Concession Judgment), in which the Supreme Court held that the permission of two dairies to market milk exclusively in a certain area was a protected right covered by section 73.

The assessment of whether a given regulation interferes with a protected property right depends largely on whether the regulation interferes with an existing right or whether the regulation interferes only with a more abstract or uncertain expectation of a right.

An abstract or uncertain expectation of a right could be a general possibility to apply for a licence under the legislation which has not yet been exercised or communicated to the authority. As a general rule, an abstract or more uncertain expectation of a right would not be protected by section 73 of the Constitution.

However, an intrusion on a right protected under section 73 of the Constitution does not constitute compulsory acquisition. It is also a requirement that the intrusion is in the nature of a disposal within the meaning of the provision. Whether a particular intrusion on a property right constitutes a disposal depends on an overall assessment. Reference is made in this respect to the literature on constitutional law, see Jens Peter Christensen et al, *Danish Constitutional Law*, 3rd edition, 2020, page 349 et seq.

REASONING

The application for an exploitation licence is covered by the Uranium Act

According to section 1(1) of the Uranium Act, uranium prospecting, exploration and exploitation is not permitted, unless the activity is directed at non-uranium resources and the average uranium content of the total resource is less than 100 ppm by weight, see subsection (2) of the provision.

According to the Bill on which the Uranium Act is based, the ban is intended to eliminate the risk of uranium spreading into the surrounding environment.

However, non-uranium resource activities are allowed if the resource contains only very limited amounts of uranium, i.e. an uranium threshold content of 100 ppm (parts per million) by weight, which corresponds to 0.01%. The legislature has decided that a threshold value of 100 ppm by weight is sufficiently low to ensure the purpose of the Act, while allowing projects to continue to be carried out where the uranium content does not exceed natural background levels.

The ban of the Uranium Act on uranium exploitation is thus justified by the decision to eliminate risks associated with mining operations where uranium leaks may occur. It falls within the competence of the Greenland Parliament as legislator within the mineral resource area to adopt a ban on the exploitation of uranium based on the principle not only of reducing risks but also of eliminating risks associated with the exploitation of uranium.

The Uranium Act came into force on the day after its promulgation, see section 5(1), i.e. on 2 December 2021. The Act then applies to all licences issued after its effective date, see section 5(2) of the Act.

According to the explanatory notes to section 5, this applies even if the exploitation licence is granted in continuation of an exploration licence and the exploration licence has been granted prior to the effective date of the Act. Exploration licences and exploitation licences are thus considered as separate licences in the Uranium Act, which is in line with the principle of the Mineral Resources Act, see section 16(1)(2) of that Act.

The application for an exploitation licence of 17 June 2019 for the Kuannersuit project is based on a project similar to the one described in exploration licence no. 2010/02. The exploration licence covers a licence area located in the Municipality of Kujalleq, near the town of Narsaq, totalling 80 km², which is further delineated by corner coordinates as specified in Article 201 of exploration licence no. 2010/02.

According to the project description in the EIA report for the application dated 17 June 2019, rare earth elements (REE) are intended to be extracted and the project will produce the by-products uranium, zinc concentrates and fluorspar. It is stated in the EIA project summary regarding the uranium content of the licence area that the ore contains approximately 300 ppm uranium. The by-products are stated to produce “*small but commercially valuable quantities of*

uranium, zinc concentrates and fluorspar". Furthermore, according to the EIA report, an average of approximately 500 tonnes of uranium oxide will be produced per year, and the uranium oxide produced by the project will be sold to power plants for use as fuel in nuclear power plants.

It follows that the project involves the exploitation of uranium as defined in section 1(1) of the Uranium Act. In addition, the average uranium content of the total resource is estimated to be 300 ppm by weight. Even if the activity, within the meaning of the Uranium Act, was directed at non-uranium minerals, the exploitation would not fall below the threshold of section 1(2) of the Uranium Act.

The application of 17 June 2019 for an exploitation licence for the Kuannersuit project thus falls within the ban of section 1(1) of the Uranium Act on uranium prospecting, exploration and exploitation. This applies even if exploration licence no. 2010/02 for the Kuannersuit project was granted prior to the effective date of the Uranium Act. The Uranium Act does not provide for the granting of exemptions from the ban in section 1 of the Act.

Refusal of exploitation licence is not an intrusion on property

According to the legislative history of the Uranium Act, the Act is not in the nature of a compulsory acquisition act and therefore does not provide for the compulsory acquisition of protected property rights. Against this basis, a licence may therefore not be refused, restricted or revoked if this is deemed to constitute an intrusion on property protected by section 73 of the Danish Constitution.

However, refusal of the application for an exploitation licence does not constitute an intrusion on property protected by section 73(1) of the Danish Constitution. This is because there is no intrusion on an existing right. Furthermore, there is no legitimate expectation that the application of 17 June 2019 would be granted.

It should be noted that Addendum No. 1, sections 201-202, to the exploration licence provides that the extension of the licence to radioactive elements does not confer on GM the right to be granted a licence for exploitation of radioactive elements. This is repeated in section 304 of the Addendum. At the same time, according to section 302 of the Addendum, the Government of Greenland may

freely and without any reason reject an application for a licence for exploitation of radioactive elements.

The Addendum thereby explicitly states that the granting of a licence for the exploration of radioactive elements does not give rise to the right to be granted a licence for exploitation of radioactive elements. GM did not thereby acquire, by virtue of the Addendum to the exploration licence, a property right protected under section 73 of the Constitution.

Moreover, the subsequent course of events does not give rise to a legitimate expectation that a licence for exploitation of radioactive elements will be granted.

In particular, it is noted that on 1 June 2012 and 4 July 2012, the Bureau of Minerals and Petroleum confirmed to GM that the addendum to the exploration licence did not confer on GM a right to exploit radioactive elements, nor did it confer on GM a right to be granted a licence for exploitation of radioactive elements. On 19 October 2012, GM confirmed to the Bureau of Minerals and Petroleum that the submission of an application for an exploitation licence was subject to the abandonment of the zero tolerance policy. In this connection, reference is also made to the fact that on 17 September 2013, in response to question no. 167, prior to the abandonment of the zero tolerance policy, the Minister for Labour and Mineral Resources, Jens-Erik Kirkegaard, stated that the existing exploration licences comprising uranium were granted under conditions that did not at the same time confer a right to be granted an exploitation licence if the radioactive content exceeded natural background levels.

GM has thus proceeded with the project knowing quite well that there was and is no legal claim to obtain a licence for the exploitation of radioactive elements, as also acknowledged in GM's letters of 19 October 2012 and 6 November 2014.

The Ministry further advised GM at meetings held on 15 December 2021 and 8 February 2022 that GM should expect a refusal of the application for an exploitation licence if the application was maintained in its current form.

In the light of the above, it can therefore be concluded that GM has not obtained a property right protected under section 73 of the Constitution, even by virtue of

the subsequent course of events. What is stated in GM's preliminary consultation response of 17 February 2023 leads to no other result.

The Government of Greenland therefore refuses the application of 17 June 2019, as the granting of a licence is contrary to section 1(1) of the Uranium Act.

The Government of Greenland has hereby not taken a position on whether the application could be granted on the basis of the rules of the Mineral Resources Act on environmental protection, climate protection and nature conservation as well as GM's EIA report and SIA report with consultation responses received.

Inussiarnersumik inuulluaqqusillunga
Kind regards

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Ministry of Mineral Resources
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Permanent Secretary
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