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Efni: permit to conduct research within Hveravellir, Reykjanes contry park and Vatnajökull national park

The Nature Conservation Agency of Iceland has received an application from University of Twente, dated April 1st 2025, for permit to conduct research at Hvervellir, Reykjanes country park and Vatnajökull national park.

Hveravelir are protected as a natural monument, cf. regulation no. 217/1975. It is forbidden to disturb the appearance of the hot springs, break pieces from their bowls, or throw rocks or other objects into them. All construction and disturbance to geological formation is subject to a permit.

Reykjanes country park is protected cf. regulation 520/1975. Disturbance to geological formations is prohibited.

Vatnajökull National Park is protected according to act no. 60/2007. According to art. 14, it is prohibited to cause damage or disturbance to the wildlife, geological formations, landscape, and cultural heritage sites within Vatnajökull National Park. All activities within the park must align with the conservation objectives of the park according to the provisions of these laws, regulations set in accordance with them, and the park's management and conservation plan. According to art 15(a) of act no. 60/2007, permission must be obtained from the park ranger for organized events and projects that require facilities, manpower, or the use of equipment in the national park, such as film production, art events, gatherings, and research. The park ranger is authorized to set any conditions for the granting of permits that are deemed necessary, as per paragraph 2.

Description of the project:

The research would take place at Hveravellir geothermal area, Krísuvík in Reykjanes country park and near Geitafell within Vatnajökull national park. Various outcrops of the geothermal systems will be scanned using a Hyspex VNIR-SWIR hyperspectral camera. Rock samples of

exposed lithologies would be collected and measurements taken with an ASD Halo field spectrometer along various transects. The collection of rock and soil samples will be performed using standard geological equipment (hammers and a scoop): along each transect, ~5x10x10 cm rock samples will be collected at varying intervals, between about 10 and 500 m dependent on location. Additionally, about 3x100 g of soil will be collected at each rock sample site within the central area of each location. Where possible, loose-lying rocks and soil will be collected instead of sampling from the rock wall. In total about 60 rock samples will be collected: 20 at the Krýsuvík geothermal area, 20 at the Hveravellir geothermal area and 20 at Geitafell. Similarly, about 72 soil samples of 100g will be collected: 24 (8 locations) at the Krýsuvík geothermal area, 24 (8 locations) at the Hveravellir geothermal area and 24 (8 locations) at Geitafell. Number of employee would be 3 persons and the research would take place in the period of July 6th -19th 2025.

Impact assessment:

The Nature Conservation Agency of Iceland considers the project not likely to have negative impact on geological formation, conservation value or other visitors if conditions of the permit are followed.

Conclusions and conditions:

The Nature Conservation Agency of Iceland hereby grants University of Twente permission on its behalf to conduct research within Hveravellir, Reykjanes country park and Vatnajökull national park as described above in the period of July 6th-19th 2025 on the following conditions:

- Keep this letter with you on site during the project. The permit conditions should be introduced to the staff of the project before work begins.
- The applicant shall inform rangers in the area about their arrival and departure. This is to be done 24 hours before entering the area and again before leaving it.
- If the project dates or description changes the Nature Conservation Agency shall be notified as soon as possible.
- When it is necessary to go off-path, extra care must be taken not to cause damage to terrain, including vegetation, soil and geological formation. All traces of activity must be removed afterwards.
- If any complications occur during the project, please contact the ranger or the Nature Conservation Agency of Iceland, tel. +354 556 6800.
- This permit is only valid for research purposes. It does not include permit to utilize the samples for commercial purposes. The samples cannot be signed over to third party for commercial use.
- Every measure should be taken to avoid damage to the sites and unnecessary disturbance while collecting samples.
- Samples should be collected where any resulting disturbance to soil, vegetation or geological formations is not visible to other visitors.

- All participants in the project must wear high-visibility clothing during field work, labelled with the identity of the researcher or the research institute.

If the licensee causes damage to nature, according to art. 87 in the Nature Conservation Act no. 60/2013, the Nature Conservation Agency of Iceland can, according to the Nature Conservation Act, f.e. order the licensee to fix damage to nature and vegetation and/or stop the project.

The Nature Conservation Agency of Iceland can according to art. 89 in the Nature Conservation Act no. 60/2013 change conditions of the permit, add new conditions or withdraw the permit in order to prevent damage to nature if environmental conditions change.

According to art 89. in the Nature Conservation Act no. 60/2013 the Nature Conservation Agency can withdraw the permit if conditions of the permit are not complied to.

A permission from Hafnafjörður municipality is needed for the project at Krísuvík.

A permission from the landowners might be needed for the project at Geitafell outside of Vatnajökull national park.

Permit from the Icelandic Environment and Energy Agency is needed for research projects in geothermal areas (www.os.is).

If you wish to export samples from Iceland a special permit is needed from the Natural Science Institute of Iceland (www.ni.is).

The Nature Conservation Agency of Iceland requests access to reports and scientific articles of the aforementioned studies, which could be used for educational purposes about the area and/or assist in its management, free of charge.

Supervision:

The Nature Conservation Agency will supervise the project. The supervisor will be a ranger from the Nature Conservation Agency.

Charlotte Brzeski

park manager

Ragnheiður Björk Sigurðardóttir

advisor