

LMU Munich Earth & Environmental Sciences Theresienstrasse 41 Munich Germany

> Reykjavík, April 24<sup>th</sup> 2024 UST202404-082/I.M.B. 09.04.00

# Subject: Application for a research permit at Geysir natural monument

The Environment Agency of Iceland has received an application from LMU Munich, Earth & Environmental Sciences, dated on the 5<sup>th</sup> of April 2024, for a research permit at Geysir natural monument for the period of the 17<sup>th</sup> to the 22<sup>nd</sup> of May 2024.

Geysir is protected as natural monument, cf. regulation no. 660/2020. All disturbance of geological monuments is prohibited and subject to a permit from the Environmental Agency of Iceland, incl. any inscriptions and disturbance of the activity and water level of the hot spring area, disturbance of hot springs, soils and rocks. Operating an unmanned aircraft/drone within the protected area is subjected to a permit from the Environment Agency of Iceland. Research results should be accessible to the Environment Agency of Iceland at to the Icelandic institute of natural history.

### **Description of the project:**

The project applied for is a continuation of a previous research project in the area with permissions from the Environment Agency of Iceland (UST202207-110/P.B.S. and UST202305-289/P.B.S.). The project will take place for maximum 6 days with 3 researchers. Measurement will be carried out continuously depending on weather conditions. The project focuses on geophysical measurements at Strokkur geyser. The measurements will look at variations of the atmospheric electric field during the geyser activity using a very low frequency antenna detector (dimension 150x30x30 cm), five microphones, and two video cameras. All the instruments will be deployed on movable tripods to minimise the impact on the site and to adjust the measurements to the varying activity of the geyser system. The instrumentations are thought to leave no impact on the protected area. Each instrument is positioned on movable tripods and do not require excavations at the site. Each instrument is powered by chargeable batteries, and they also have a minimal visual impact on the environment. There will be no need to go off the paths and the instruments will be placed in places where they will have low disturbance to visitors. No sampling will be carried out, only measurements.

## Impact assessment:

The Environment Agency of Iceland considers the project not likely to have negative impact on the protected area nor to have a negative impact on the experience of other visitors.



#### **Conclusions and conditions:**

The Environment Agency of Iceland hereby grants LMU Munich, Earth & Environmental Sciences permission on its behalf to conduct research as described above during the period of the 17<sup>th</sup> to the 22<sup>nd</sup> of May 2024 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 Environment Agency shall be notified as soon as possible.
- Crew members should always stay on authorized paths.
- The crew must follow rules of conduct that apply to the area.
- If any complications occur during the project, please contact the ranger or the Environment Agency of Iceland, tel. +354 591 2000.
- This permit is only valid for research purposes.

The Environment 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 Environment Agency can withdraw the permit if conditions of the permit are not complied to.

Permit from the National Energy Authority is needed for research in geothermal areas (www.os.is).

## Permission fee:

Environment Agency of Iceland charges a fee for processing applications for permits in protected areas based on Article 92 of Act no. 61/2013 on Nature Conservation. The fee for operational, events, research and other activities is **62.400 ISK** according to art. 29. a. in the agency's tariff no. 1410/2023.

### Supervision:

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

Sincerely

Daníel Freyr Jónsson advisor

Þórdís Vilhelmína Bragadóttir **advisor**