

Subject: Application for a research permit in Snæfellsjökull national park

The Environment Agency of Iceland has received an application from the National University of Costa Rica, dated on the 3rd of August 2022, for a research permit within Snæfellsjökull national park in November and December 2022.

Snæfellsjökull National Park is protected as a national park cf. regulation no. 935/2021. All nature-related research, that is not legally endorsed by a research institution is subject to permission from the Environment Agency of Iceland.

Description of the project:

The project applied for is a research project at Snæfellsjökull glacier that will take place from November 1st – December 31st, 2022. The equipment used for the project is a drone with a Sniffer4D gas detector attached on the drone to monitor ambient air quality and potential volcanic emissions in the flight area. This is a system designed for volcanic emission detection with SO₂, H₂S and CO₂, HF, HCl, H₂ sensors. The closer to the summit crater with in safe zones are the ideal launch and land points. The videography will be used for generation of Digital Surface Models with Agisoft software. There will most likely be about 4-8 flights for each day of research, and 4 full days if all weather conditions are ideal. Minimal 16 flights maximum 24 flights at 20 minutes each. The drone will never exceed 380 feet (115m) above ground level.

Impact assessment:

The Environment Agency of Iceland considers the project to be minimal and not likely to have negative impact on the area. It might temporarily disturb other guests. To minimize disturbance, it's important to keep flight time to a minimum, keep the drone away from guests and wildlife.

Conclusions and conditions:

The Environment Agency of Iceland hereby grants National University of Costa Rica permission on its behalf to conduct research within Snæfellsjökull National Park as described above from November 1st to December 31st, 2022, 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.

- 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.
- The crew must follow rules of conduct that apply to the area.
- The crew should be conscious of other guests on the sites and make sure that filming causes as little disturbance as possible to other visitors. If the material is meant for public viewing it must be noted in the video/subtext that permission from the Environment Agency was obtained for the filming/photography.
- This permit is only valid for research purposes.
- All participants in the project must wear high-visibility clothing during field work, labelled with the identity of the researcher or the research institute.
- An unmanned aircraft should never be flown near people. Please take precaution not to disturb people's experience, their safety or personal privacy nor the general peace of the protected areas being filmed.
- Flight time should be kept to a minimum and flight should be avoided during the area's busiest times of the day.
- If the use of unmanned aircraft causes disturbance to wildlife in the area, its use should be ceased at once.
- The conductor of the unmanned aircraft is responsible for the aircraft within the protected area. This includes taking responsibility of any possible risk of harm to people, fauna and nature and leaving no permanent marks on the site in question. Should the aircraft crash, all components from it must be collected and removed from the area.
- For safety reasons, the pilot of an unmanned aerial vehicle must wear marked clothing so that the person can be identified.
- All disturbance to animals and wildlife is strictly prohibited.
- Off-road driving in Iceland is strictly prohibited.
- The project's staff is required to prevent all disturbance to the environment and make sure that all litter is removed from the sites.

If the developer causes damage to nature, according to art. 87 in the Nature Conservation Act no. 60/2013, the Environment 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 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.

Unmanned aircraft should take off and land in a safe distance from other visitors according to regulation 990/2017 on unmanned aircrafts.

The usage of a drone shall be according to regulation no. 990/2017 on the operation of remotely piloted aircraft (<https://www.icetra.is/aviation/drones/>).

Please note that according to the regulation all drones used for commercial flight need to be registered at the Icelandic Transport Authority.



The Environment Agency of Iceland wishes to receive, free of charge, a copy of all reports and scientific articles that result from the research project.

Sincerely

Hákon Ásgeirsson
national park manager

Ingibjörg Marta Bjarnadóttir
advisor