Dr. Clarie Cousins University of St. Andrews Irvine Building, North Street Fife, UK, KY169AL



Vestmannaeyjum 26. ágúst 2016 UST201608-094/Þ.V.B. 09.05.01

Subject: Research permit

The Environment Agency of Iceland has received a request from Dr. Claire Cousins on behalf of University of St. Andrews, dated 18th of August 2016, regarding permits to collect water and mud samples (and biomat if it is present) at Krýsuvík and Námafjall from the period 1st to the 5th of September 2016.

Krýsuvík is located within Reykjanes Country Park. Disturbance to geological formations in the protected area is prohibited without permission from the Environment Agency of Iceland. That also includes sampling for scientific research.

Námafjall is not a protected area therefore a permit from the Environment Agency is not needed. However, you need permission from the landowner to collect samples in Námafjall.

Description of the project

Mud, sediment and water samples will be collected aseptically and anaerobically using pre-sterilised sample bottles and appropriate pipettes and spatulas. Sampling will be undertaken in a manner that will have minimal effect on the hydrothermal environments, and only necessary quantities of material will be taken. All sampling materials and waste reagents will be removed from the site following fieldwork for proper disposal in the UK, and care will be taken to not disturb particularly fragile areas. Sampling will be preferentially done in areas that are in limited view of tourist visitors. All sampling will be done very early in the morning or late in the evening to minimize disturbance to tourism. Sampling of geothermal springs will be preferably limited to designated paths/boardwalks. Where/if necessary, one person may need to go off-path (where safe to do so) to reach a sample site. At Krýsuvík 4 water/mud samples (100-200 ml each) and 1 biomat sample if present will be collected. Five person will participate in the sampling.

Conditions

The Environmental Agency of Iceland grants you permission to collect samples in Krýsuvík. The research permit is subject to the following conditions:

- This permit is granted for the period 1st to the 5th of September 2016.
- The Environment Agency requests that the researcher contacts the ranger working in the Krýsuvík area before field work begins and informs the ranger on his intensions.
- Sampling should be conducted while visitor number is at minimum.
- Keep the signed permit with you during your research.
- Sample quantity is restricted to 4 samples of water/mud and one biomat as described above.
- 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 the purpose of commercial use.

- Every measure should be taken to avoid damage to the sites and unnecessary disturbance while collecting the samples. Please do not walk on the sinter.
- Off road driving is prohibited in all circumstances.

The Environment Agency notes the following:

- A separate permit from the National Energy Authority in Iceland, <u>os@os.is</u> is needed to conduct research at geothermal sites in Iceland which should also be kept with you at the research site.
- If you wish to transport the samples from Iceland you will need a permission from the Icelandic Institute of Natural History (www.ni.is), e-mail: ni@ni.is
- According to the Nature Conservation Act, no. 60/2013 it is prohibited to remove fossil, including silicon. Minister for the Environment and Natural Resources may grant exemption from this provision.
- The Environment Agency of Iceland wishes to be secured, free of charge, a copy of all reports and scientific articles that result from the research project.

The Environment Agency of Iceland charges a fee for processing applications for permits in protected areas on the basis of Article 92 of Act No. 60/2013 on Nature Conservation. The fee for a research permit in protected areas is kr. 39,400. Invoice will be sent following this letter.

Sincerely

Sigrún Ágústsdóttir

Director

Svava Pétursdóttir

Lawyer