



NATIONAL COMMISSIONER OF THE ICELANDIC POLICE

DEPARTMENT OF CIVIL PROTECTION AND EMERGENCY MANAGEMENT



THE SCIENTIFIC ADVISORY BOARD OF THE ICELANDIC CIVIL PROTECTION

Date: 16.09.2014 **Time:** 11:30 **Location:** Björgunarmiðstöðin Skógarhlíð

Regarding: Volcanic activity in the Bárðarbunga system.

Attending: Scientists from Icelandic Met Office and the Institute of Earth Sciences University of Iceland along with representatives from the Icelandic Civil Protection, the Environmental Agency of Iceland and Directorate of Health.

Main points

- Volcanic eruption in Holuhraun
- Air quality
- Scenarios

Notes

- The eruptive activity at Holuhraun continues at similar intensity as last few days.
- The subsidence of the Bárðarbunga caldera continues with the rate of about 50 cm over the last 24 hours.
- Seismic activity is similar to what it has been in the past few days. The main activity is in Bárðarbunga and in the Dyngjufjökull glacier around the dyke. The biggest earthquake since midnight, of magnitude 3,4 was detected today at 09:13 in the North East of Bárðarbunga.
- GPS monitoring shows insignificant crustal movements north of Vatnajökull.
- No change has been detected in water measurement.

- Air quality:
 - Yesterday air pollution was reported in Kópasker.
 - Today (Tuesday) light southwesterly winds are expected. Areas northeast of the eruption site can be affected by pollution. The area is marked by Mt. Herðubreið in the north to Mt. Kárahnjúkar in the south.

- Instructions:
 - People who feel discomfort are advised to stay indoors, close their windows, turn up the heat and turn off air conditioning. Use periods of good air quality to ventilate the house. Measurements of air quality can be found on the webpage www.loftgaedi.is The Meteorological Office issues forecast on its web-page and warnings if conditions change to the worse.
 - Instructions from the office of the Chief Epidemiologist and The Environment Agency can be found on their web-sites www.ust.is and www.landlaeknir.is
 - The Icelandic Met Office will read forecasts for sulphuric gases along with weather news on the national radio and TV.
 - The Environment Agency is working on getting more measuring equipment to better monitor the gases coming from the volcanic eruption.
 - Information and any questions on air pollution can be sent to The Environment Agency through the email gos@ust.is. The Environment Agency is especially looking for information from people who have been in contact with high concentrations of gas; where they were, at what time it happened, how the gas cloud looked (colour and thickness of the cloud) and how they were affected by it. In the near future, there will be a page on the IMO's webpage for this type of information.



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- Three scenarios are considered most likely:
 - Subsidence of the Bárðarbunga caldera stops and the eruption on Holuhraun declines gradually.
 - Large-scale subsidence of the caldera occurs, prolonging or strengthening the eruption on Holuhraun. In this situation, it is likely that the eruptive fissure would lengthen southwards under Dyngjújökull, resulting in a jökulhlaup and an ash-producing eruption. It is also possible that eruptive fissures could develop in another location under the glacier.
 - Large-scale subsidence of the caldera occurs, causing an eruption at the edge of the caldera. Such an eruption would melt large quantities of ice, leading to a major jökulhlaup, accompanied by ashfall.

Other scenarios cannot be excluded.

From the Icelandic Met Office:

The Aviation Colour Code for Bárðarbunga remains at 'orange'.

The National Commissioner of the Icelandic Police, Department of Civil Protection and Emergency Management

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