



NATIONAL COMMISSIONER OF THE ICELANDIC POLICE
DEPARTMENT OF CIVIL PROTECTION AND EMERGENCY MANAGEMENT



STATUS REPORT FROM THE NATIONAL CRISIS COORDINATION CENTRE

Date: 02.09.2014 at 1600

Regarding: Volcanic Eruption north of Vatnajökull, in Holuhraun

Main Points:

- The lava eruption on Holuhraun continues.
- Seismic activity decreasing
- Risk assessment - Four likely scenarios

Volcanic and Seismic Activity:

The lava eruption on Holuhraun continues. A white plume of steam and gas rises from the eruption on Holuhraun, reaching an elevation of about 4.5 km above sea level. Downwind, a volcanic cloud extends from the eruption site. Yesterday afternoon, a white cloud from the eruption extended 60 km to the north-north-east. The eruption has not created any ash-fall.

A noticeable decrease in seismicity has occurred during the last 24 hours. The level of activity is approximately half of that during recent days. Since midnight today, around 300 earthquakes have occurred. At the same time yesterday, 01 September, around 500 earthquakes had been detected. At 11:26 AM (2 Sept) an earthquake M4.7 occurred by the northern rim of the Bardarbunga caldera. At 13:55 an earthquake M4.3 occurred by the southern rim of the Bardarbunga caldera.

The rate of deformation at GPS sites closest to the dyke intrusion has decreased. Together with an overnight decrease in seismicity, this implies that magma inflow appears to match magma outflow at the eruption site.

Precautionary measures:

Considerable volume of SO₂ has been measured in the eruption cloud. People could be exposed to highly dangerous gas levels close to the eruption. It is essential that those working near the eruption site are equipped with gas sensors and gas masks.

The road to Dettifoss on the West side of Jökulsá á Fjöllum (No 862) has been opened for traffic from the Ringroad to the Dettifoss waterfall. Other roads on the west side are still closed, including hiking trails. The decision is based on the Civil Protection risk reduction measures, increased surveillance of the Vatnajökull National Park rangers, increased scientific monitoring as well as additional law enforcement. The decision does not in any way indicate less flood risk, only increased mitigation and surveillance

All roads leading to the volcanic site are closed based on the risk of a flood if an eruption will start under the glacier.

Information on closures can be found on the Icelandic Road and Coastal Administration web page

<http://www.vegagerdin.is/media/umferd-og-faerd/Halendi.pdf>

The Aviation Colour Code for Bárðarbunga remains at 'orange' and the code for Askja at 'yellow.'

Hazard assessment

It remains unclear how the situation will develop. Four scenarios are considered most likely:

- The migration of magma could stop, resulting in a gradual reduction in seismic activity and no further eruptions.
- The dyke could reach the Earth's surface causing another eruption, possibly on a new fissure. Lava flow and (or) explosive activity cannot be excluded.
- The intrusion reaches the surface and another eruption occurs where either the fissure is partly or entirely beneath Dyngjufökull. This would most likely produce a flood in Jökulsá á Fjöllum and perhaps explosive, ash-producing activity.



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- An eruption in Bárðarbunga. The eruption could cause an outburst flood and possibly an explosive, ash-producing activity. In the event of a subglacial eruption, it is most likely that flooding would affect Jökulsá á Fjöllum. However it is not possible to exclude the following flood paths: Skjálfandaflljót, Kaldakvísl, Skaftá and Grímsvötn.

Other scenarios cannot be excluded.

Risk of floods:

There is still a risk of flood in the area. This is based on the fact that an eruption may begin under the Vatnajökull glacier, either in Dyngjujökull or the Bárðarbunga caldera. The active fissure in Holuhraun may also open to the south and reach Dyngjujökull glacier.

Cooperation and coordination:

The coordination of the operation and information continues at the National Crisis Coordination Center (NCCC). This morning there was a meeting with the Icelandic Civil Protection Scientific Advisory Board. After the meeting a teleconference was held with District Commissioner in Húsavík to coordinate measures. Also, the NCCC is coordinating measures with Vatnajökull National Park regarding traffic, access control points and environmental protection.

Information:

A media unit is placed at the National Crisis Coordination Center, providing information and dealing with media requests. The email address is info@sst.is Tel: +354-5702644/43. The website on safe travel in Iceland is updated regularly: www.safetravel.is

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