

NATIONAL COMMISSIONER OF THE ICELANDIC POLICE

DEPARTMENT OF CIVIL PROTECTION AND EMERGENCY MANAGEMENT



STATUS REPORT FROM THE NATIONAL CRISIS COORDINATION CENTRE

Date: 15.09.2014 at 16:00 Regarding: Volcanic Eruption north of Vatnajökull, in Holuhraun

Main Points:

- The eruption in Holuhraun continues
- The subsidence in Bárðarbunga continues
- Three likely scenarios
- Increased volcanic gas in inhabited areas
- SMS warning messages sent to highly polluted areas

Volcanic and Seismic Activity:

Volcanic activity: The eruptive activity at Holuhraun and the subsidence of the Bárðarbunga caldera continues at similar intensity as yesterday. The subsidence of the Bárðarbunga caldera continues. According to GPS measurements the subsidence in the centre of the caldera is about 50 cm over the last 24 hours.

Seismic activity: Seismic activity is similar to what it has been in the past few days. The biggest earthquake, of magnitude 5.0, was detected today at around 08:00 in the south of Bárðarbunga. Four other earthquakes of 3.0 in magnitude or more have been detected since midnight.

GPS observations GPS monitoring shows insignificant crustal movements north of Vatnajökull

Air quality

Air quality in urban areas in East of Iceland: High air pollution was detected yesterday in Mývatnssveit. The highest peak was measured 1250 micrograms per cubic meter. The area likely affected by air pollution from the eruptoin is now marked by Bárðardalur to the west to Hólasandur/Merlakkaslétta platou in the east. This evening the affected area more to the east from Mývatn-area in the west to Vopnafjordur bay in the east. Tomorrow lighter westerly winds are expected and likely effected area will be from Vopnafjörður bay, and south towards Djúpivogur.

Air quality at the eruption site: Gas emissions at the eruption site remain high. Scientists had to leave the area because of bad conditions at the site yesterday. At the eruption site, local wind anomalies can occur due to thermal convection from the hot lava. This makes the conditions on site extremely dangerous as winds can change suddenly and unpredictably.

Precautionary measures:

SMS warning messages were sent from the Civil Protection on Friday night to all mobile phones around Reyðarfjörður in the eastern fjords when the concentration of SO2 reached 4.000 μ g/m3. This morning SMS warning messages were sent to mobile phones in the area around Kópasker in the northeast due to increased concentration of SO2. The Environmental Agency and The Chief Epidemiologist advise people to stay indoors, close windows and turn off the air conditioning if they experience symptoms from the volcanic gas. More information http://www.ust.is/einstaklingar/loftgaedi/so2/#Tab4 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 <u>www.ust.is</u> and <u>www.landlaeknir.is</u>
- 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.



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Information and any questions on air pollution can be sent to The Environment Agency through the email <code>gos@ust.is</code>. 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.

The Aviation Colour Code for Bárðarbunga remains at 'orange' and the code for Askja at 'yellow. The Civil Protection Alert phase is in effect.

Risk assessment

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 Dyngjujökull, 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.

Risk of floods:

There is still a risk of flood in the area north of Vatnajökull.

Cooperation and coordination:

The coordination of the operation and information continues at the National Crisis Coordination Center (NCCC). Every morning there is a meeting in the Icelandic Civil Protection Scientific Advisory Board to evaluate the situation, followed by a teleconference with local authorities and District Commissioners in Húsavik, Seyðisfjördur and Eskifjördur to coordinate measures. This morning there was a meeting with Akureyri Hospital in the North, The Chief Epidemiologist and the Environmental Agency on measures to deal with increased volcanic gas in the atmosphere and air quality. A welfare group has met to coordinate measures during the eruption.

Tourist information

Most roads in Iceland are open and accessible including the Ring road (nr. 1) around Iceland and safe for travelling. However, due to the volcanic eruption in the area north of Vatnajökull glacier, the highland north of Vatnajökull glacier is closed for all traffic. The website on safe travel in Iceland www.safetravel.is is updated regularly and so are their information screens around Iceland. A live webcam of the eruption can be found at www.livefromiceland.is. All airports in Iceland are open.

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 and webpage for Bárðarbunga and the eruption north of Vatnajökull is www.avd.is/en.

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