

Mount St. Helens Update

U.S. Geological Survey, Vancouver, Washington
University of Washington, Pacific Northwest Seismograph Network, Seattle,
Washington

Mount St. Helens Volcano Advisory (Alert Level Two)
September 29, 2004 10:40A.M., PDT

Over night, seismic activity at Mount St. Helens has accelerated significantly, which increases our level of concern that current unrest could culminate in an eruption. We are increasing the alert level to the second of three levels, which is similar to Color Code Orange of the alert system used by the Alaska Volcano Observatory and analogous to the National Weather Service's hazard watch. Earthquakes are occurring at about four per minute. The largest events are approaching Magnitude 2.5 and they are becoming more frequent. All are still at shallow levels in and below the lava dome that grew in the crater between 1980 and 1986. This suggests that the ongoing intense earthquake activity has weakened the dome, increasing the likelihood of explosions or perhaps the extrusion of lava from the dome.

The cause and outcome of the accelerating unrest is uncertain. Explosions from the lava dome could occur suddenly and without further warning. During such explosions the dome and crater floor are at greatest risk from ballistic projectiles, but the rim of the crater and flanks of the volcano could also be at risk. Explosions would also be expected to produce ash clouds that rise several thousand feet above the crater rim and drift downwind. During today, wind forecasts from the National Weather Service, combined with eruption models, show that ash clouds will move in a southeasterly direction and could dust areas tens of miles or more from the volcano with ash. Landslides and debris flows from the crater that are large enough to reach the Pumice Plain are also possible. If the current unrest is being driven by a small slug of magma at shallow depth, extrusion of lava could also occur. At present there is no evidence that new gas-rich magma has ascended to shallow levels and could generate a large sustained eruption. But we are being especially vigilant to become aware of such evidence should it appear.

We continue to monitor the situation closely and will issue additional updates as warranted, whether activity escalates or returns to background levels. Daily updates of earthquake data and other information can be found on the WORLD WIDE WEB at URL: <http://vulcan.wr.usgs.gov/Volcanoes/MSH/CurrentActivity> (CVO Menu - Monthly Summaries and Updates)

and

<http://www.pnsn.org/HELENS/welcome.html>
(University of Washington - Earthquake Update)

see also:

http://story.news.yahoo.com/fc?cid=34&tmpl=fc&in=Science&cat=Earthquakes_and_Volcanoes

"Mount St. Helens on Higher Eruption Alert"

excerpt:

SEATTLE (Reuters) - Mount St. Helens could erupt within days, government scientists said on Wednesday, raising the alert after movement in the volcano's lava crust was detected following a week of small earthquakes.

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To unsubscribe from the volcano list, send the message:
signoff volcano to: listserv@asu.edu, or write to: <mailto:volcano-request@asu.edu>.

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[mailto: volcano@asu.edu](mailto:volcano@asu.edu). *Please do not send attachments.*