

Since January 2011, instrumentally and visually derived data showed the following observations at Taal Volcano:

1. The number of volcanic earthquakes recorded daily remained above the background level of up to 14 events per day. Felt earthquakes of varying intensities from Intensity I to III and rumbling sounds occasionally occur. Hypocenters of plotted volcanic earthquakes were shallow, ranging from a depth of 1.0 to 5.0 kms.

2. Occasional intensification of steaming activities was observed at the northern portion of the Main Crater Lake and at the upper Daang Kastila. Increased steaming and bubbling activities at the 1998 reactivated thermal vent were also noticed from time to time.

3. Gas measurements conducted at Taal Main Crater Lake last January and March 2011 showed CO₂ emission flux increased from 2,250 tonnes per day (t/d) to 4,670 t/d. The remarkable increase in CO₂ concentration indicates anomalous gas release from the magma at depth.

4. Precise leveling measurements conducted in February 2011 around the flanks of Volcano Island showed that the volcano edifice is slightly inflated as compared with the December 2010 survey. Since June 2010, the volcano exhibited a general inflationary trend.

In view of the above observations, PHIVOLCS reiterates *Alert Level 1* and its recommendation over Taal Volcano. At present, no imminent eruption is indicated. However, the public is advised to strictly observe some safety precautions. PHIVOLCS reminds the general public that the Main Crater should remain strictly off-limits because sudden hazardous steam-driven explosions may occur and high concentrations of toxic gases may accumulate. Inhaling CO₂ gas can cause negative effects such as headache, dizziness, muscular weakness and fainting. Breathing air with high concentration can be lethal to human, animals and even cause damage to vegetation. The northern portion of the Main Crater rim in the vicinity of Daang Kastila trail, may also be dangerous when increase steam emission is reactivated along existing fissures. Furthermore, the public is also reminded that entire Volcano Island is a Permanent Danger Zone (PDZ), and permanent settlement in the island is strictly not recommended.

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