



## **NDRRMC UPDATE**

### **Update on Alert Status and Activity of Mayon, Taal, and Bulusan Volcanoes**

**Releasing Officer:**

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#### **I. SITUATION OVERVIEW**

##### **A. ALERT STATUS OF MAYON VOLCANO**

Mayon Volcano's seismic monitoring network did not detect any volcanic earthquake event during the 24-hour observation period. **Moderate emission of white steam-laden plumes that crept downslope before drifting West-Southwest to West-Northwest was observed.** Sulfur dioxide (SO<sub>2</sub>) emission was measured at an average of 306 tonnes/day on 19 November 2019. Ground deformation data from Precise Leveling surveys obtained on 23 – 30 October 2019 indicate a slight deflation of the edifice relative to 16 – 25 July 2019. However, the volcano generally remains inflated relative to the early 2019 baseline level. This is consistent with recent electronic tilt data. Continuous GPS data also showed inflation of the edifice since February 2019.

**Alert Level 2** currently prevails over Mayon Volcano. This means that Mayon is at a moderate level of unrest. DOST-PHIVOLCS reminds the public that sudden explosions, lava collapses, pyroclastic density currents or PDCs and ashfall can still occur and threaten areas in the upper to middle slopes of Mayon. DOST-PHIVOLCS recommends that entry into the six kilometer-radius Permanent Danger Zone or PDZ and a precautionary seven kilometer-radius Extended Danger Zone or EDZ in the south-southwest to east-northeast sector, stretching from Anoling, Camalig to Sta. Misericordia, Sto. Domingo must be strictly prohibited. People residing close to these danger areas are also advised to observe precautions associated with rockfalls, PDCs, and ashfall. Active stream/river channels and those identified as perennially lahar-prone areas on all sectors of the volcano should also be avoided especially during extreme weather conditions when there is heavy and prolonged rainfall. Civil aviation authorities must advise pilots to avoid flying close to the volcano's summit as airborne ash and ballistic fragments from sudden explosions and PDCs may pose hazards to aircraft.



## **B. ALERT STATUS OF BULUSAN VOLCANO**

Bulusan Volcano's seismic monitoring network did not detect any volcanic earthquake during the 24-hour observation period. Ground deformation data from Precise Leveling surveys obtained on 20 – 28 October 2019 indicate slight inflation of the edifice relative to the 29 August – 05 September 2019 surveys. However, data recorded by Bulusan's continuous GPS network show continued deflation of the edifice since July 2018.

**Alert Level 1 (abnormal)** status remains in effect over Bulusan Volcano, which means that it is currently in a state of unrest probably driven by hydrothermal processes that could generate steam-driven or phreatic eruptions. Local government units and the public are reminded that entry into the 4-kilometer radius Permanent Danger Zone (PDZ) is strictly prohibited and that vigilance in the Extended Danger Zone (EDZ) must be exercised due to the increased possibilities of sudden and hazardous phreatic eruptions. Civil aviation authorities must also advise pilots to avoid flying close to the volcano's summit as ash from any sudden phreatic eruption can be hazardous to aircraft. Furthermore, people living within valleys and along river/stream channels especially on the southeast, southwest and northwest sector of the edifice should be vigilant against sediment-laden stream flows and lahars in the event of heavy and prolonged rainfall. DOST-PHIVOLCS is closely monitoring Bulusan Volcano's condition and any new development will be communicated to all concerned stakeholders.

## **C. ALERT STATUS OF TAAL VOLCANO**

Taal Volcano's seismic monitoring network recorded **fifty-three (53) volcanic earthquakes** during the 24-hour observation period. **Two (2) of these events, which occurred at 11:17 AM and 3:47 PM yesterday, were felt at intensity II by resident in Pira-piraso, Caluit and Alas-as at the North, East and West sectors of the volcano island, respectively. Intensity I was also felt by resident in Bucu, Talisay, Batangas for the 3:47 PM event.** Field measurements on 12 December 2019 at the western sector of the Main Crater Lake yielded a decrease in water temperature from 32.5°C to 30.4°C, a decrease in water level from 0.50 meters to 0.46 meters, and a slight decrease in acidity from a pH of 2.83 to 2.84. Ground deformation measurements through precise leveling surveys from 21 - 29 November 2019 indicated inflation of the edifice consistent with recent results from continuous GPS data.

**Alert Level 1** remains in effect over Taal Volcano. This means that hazardous eruption is not imminent. The public, however, is reminded that the Main Crater should be strictly off-limits because sudden steam explosions may occur and high concentrations of toxic gases may accumulate. The northern portion of the Main Crater rim, in the vicinity of Daang Kastila Trail, may also become hazardous when steam emission along existing fissures suddenly increases. Furthermore, the public is also reminded that the entire Volcano Island is a Permanent Danger Zone (PDZ), and permanent settlement in the island is strongly not recommended.

## **II. ACTIONS TAKEN**

1. NDRRM Operations Center prepared NDRRMC Advisory and Update, and disseminated the same to OCD Regional Centers IV-A and V through NDRRMC website in order to closely monitor the situation and take appropriate actions for any new development.
  2. Concerned NDRRMC member-agencies were provided with a copy of the Memorandum for the SND.
  3. DOST-PHIVOLCS is closely monitoring the activities of Mayon, Taal, and Bulusan Volcanoes and any new development will be relayed to all concerned.
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