

REPUBLIC OF THE PHILIPPINES

NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

National Disaster Risk Reduction and Management Center, Camp Aguinaldo, Quezon City, Philippines

NDRRMC UPDATE

Taal, Mayon, Kanlaon, and Bulusan Volcano Bulletin

Releasing Officer:

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Source: DOST-PHIVOLCS

I. SITUATION OVERVIEW

A. ALERT STATUS OF TAAL VOLCANO

In the past 24-hour period, the Taal Volcano Network recorded **one (1) volcanic earthquake**. **Very weak** steaming or fumarolic activity rising 5 meters high before drifting southwest was observed from fissure vents along the Daang Kastila Trail.

Alert Level 1 (Abnormal) is maintained over Taal Volcano. DOST-PHIVOLCS reminds the public that at Alert Level 1, sudden steam-driven or phreatic explosions, volcanic earthquakes, minor ashfall, and lethal accumulations or expulsions of volcanic gas can occur and threaten areas within the Taal Volcano Island (TVI). DOST-PHIVOLCS strongly recommends that entry into TVI, Taal's Permanent Danger Zone or PDZ, especially the vicinities of the Main Crater and the Daang Kastila fissure, must remain strictly prohibited. Local government units are advised to continuously assess previously evacuated barangays around Taal Lake for damages and road accessibilities and to strengthen preparedness, contingency, and communication measures in case of renewed unrest. People are also advised to observe precautions due to ground displacement across fissures, possible ashfall, and minor earthquakes. Civil aviation authorities must advise pilots to avoid flying close to the volcano as airborne ash and ballistic fragments from sudden explosions and wind-remobilized ash may pose hazards to aircraft.

B. ALERT STATUS OF MAYON VOLCANO

Mayon Volcano's monitoring network did not detect any volcanic earthquake during the 24-hour observation period. Moderate emission of white steam-laden plumes that **crept downslope before drifting southwest and west** was observed. **Faint crater glow from summit could be observed at night.** Sulfur dioxide (SO₂) emission was last measured at an average of **506 tonnes/day on 20 September 2020**. Ground deformation data from Precise Leveling surveys on 12–19 June 2020 indicated slight inflation of the edifice relative to the February 2020 survey. Electronic tilt data also indicated non-steady inflation

of the middle to upper edifice that began in late 2019. This follows an inflationary trend that has been recorded by continuous GPS monitoring since the middle of 2019.

DOST-PHIVOLCS would like to remind the public that Mayon Volcano is at **Alert Level 1**, which means that it is at an abnormal condition. Although this means that presently no magmatic eruption is imminent, it is strongly advised that the public refrain from entering the 6-kilometer radius Permanent Danger Zone (PDZ) due to the perennial life-threatening dangers of rockfalls, landslides/avalanches at the middle to upper slope, sudden ash puffs and steam-driven or phreatic eruptions from the summit. 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.

C. ALERT STATUS OF KANLAON VOLCANO

Kanlaon Volcano's monitoring network recorded **sixteen (16) volcanic earthquakes** during the 24-hour observation period. Moderate emission of white steam-laden plumes that rose **500 meters** before drifting **southwest** was observed. Sulfur dioxide (SO₂) emission was measured at an average of 416 tonnes/day on 14 September 2020. Ground deformation data from continuous GPS measurements indicate slight inflation of the lower and mid slopes since May 2020, while short-term electronic tilt monitoring on the southeastern flanks recorded inflation on the lower to mid slopes that began on 21 June 2020. These parameters may indicate hydrothermal or magmatic processes occurring beneath the edifice.

DOST-PHIVOLCS would like to remind the public that Kanlaon Volcano is at **Alert Level 1**, which means that it is at an abnormal condition and has entered a period of unrest. The local government units and the public are strongly reminded that entry into the 4-kilometer radius Permanent Danger Zone (PDZ) must be strictly prohibited due to the further possibilities of sudden and hazardous steam-driven or phreatic eruptions. Civil aviation authorities must also advise pilots to avoid flying close to the volcano's summit as ejecta from any sudden phreatic eruption can be hazardous to aircraft.

D. ALERT STATUS OF BULUSAN VOLCANO

Bulusan Volcano's monitoring network recorded **one** (1) **volcanic earthquake** during the 24-hour observation period. **Very weak emission of white steam-laden plumes from the southeast vents was observed**. Ground deformation data from continuous GPS measurements indicate slight inflation on the edifice since July 2020, while the long-term trend since May 2019 denotes that the edifice is still deflated. These parameters indicate that volcanic processes are underway beneath the edifice that may be caused by deep-seated degassing or hydrothermal activity or magmatic intrusion.

Alert Level 1 (abnormal) status prevails over Bulusan Volcano, which means that it is currently in an abnormal condition. Local government units and the public are reminded that entry into the four-kilometer radius Permanent Danger Zone (PDZ) is strictly prohibited and that vigilance within the two-kilometer Extended Danger Zone (EDZ) on the southeastern sector 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.

II. ACTIONS TAKEN

- 1. NDRRM Operations Center prepared NDRRMC Advisory and Update, and disseminated the same to OCD Regional Centers CALABARZON, V, VI, and VII 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 Taal, Mayon, Kanlaon, and Bulusan Volcanoes and any new development will be relayed to all concerned.