



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

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

Releasing Officer:


UNDERSECRETARY RICARDO B JALAD
Executive Director, NDRRMC and
Administrator, OCD

DATE : 20 October 2019, 8:00 AM

Source: DOST-PHIVOLCS 20 October 2019, 08:00 AM

I. SITUATION OVERVIEW

A. ALERT STATUS OF MAYON VOLCANO

Mayon Volcano's seismic monitoring network did not detect any volcanic earthquake during the 24-hour observation period. Moderate emission of white steam-laden plumes that **rose 500 meters before drifting west and north-northwest** was observed. Sulfur dioxide (SO₂) emission was measured at an average of 469 tonnes/day on 12 October 2019. Precise leveling data obtained on 16 – 25 July 2019 indicate a slight inflation of the edifice relative to 9 – 17 April 2019. This is consistent with continuous GPS data showing that the edifice is still inflated since June 2018.

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 aircrafts.

B. ALERT STATUS OF KANLAON VOLCANO

Kanlaon Volcano's seismic monitoring network **recorded one (1)** volcanic earthquake during the 24-hour observation period. **Moderate** emission of white steam-laden

plumes that rose 200 to 400 meters before drifting northwest was observed. Sulfur dioxide (SO₂) emission was measured at an average of 158 tonnes/day on 15 October 2019. Ground deformation data from continuous GPS measurements last 29 September 2019 indicate slight inflation of the edifice.

Alert Level 1 (abnormal) status prevails over Kanlaon 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. The local government units and the public are reminded to avoid entry into the 4-kilometer radius Permanent Danger Zone (PDZ) due to perennial hazards of rockfalls, avalanches, sudden outgassing and steam-driven or phreatic eruption at the summit area. 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. DOST-PHIVOLCS is closely monitoring Kanlaon Volcano's activity and any new development will be relayed to all concerned.

C. ALERT STATUS OF TAAL VOLCANO

Taal Volcano's seismic monitoring network recorded **forty-four (44)** volcanic earthquakes during the 24-hour observation period. Field measurements on 17 October 2019 at the western sector of the Main Crater Lake yielded a decrease in water temperature from 33.0°C to 32.9°C, an **increase** in water level from 0.49 meters to 0.50 meters and a decrease in acidity from a pH of 2.83 to 2.94. Ground deformation measurements through precise leveling surveys from 19 - 26 September 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.

D. 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 from Precise Leveling data obtained on 29 August – 05 September 2019 indicate a slight inflation of the edifice relative to the 21 June – 01 July 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.

II. ACTIONS TAKEN

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