



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, Taal, and Bulusan Volcanoes

Releasing Officer:

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

DATE : 21 January 2020, 8:00 AM

Source: DOST-PHIVOLCS 21 January 2020, 08:00 AM

I. SITUATION OVERVIEW

A. ALERT STATUS OF MAYON VOLCANO

Mayon Volcano's seismic monitoring network did not record any volcanic earthquakes during the 24-hour observation period. Sulfur dioxide (SO₂) emission was measured at an average of 115 tonnes/day on 10 January 2020. 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 earthquakes 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

Activity in the Main Crater in the past 24 hours has been characterized by weak steam emission that generated ash plumes 500-600 meters tall and dispersed ash southwest of the main Crater. Sulfur dioxide (SO₂) emission was measured at an average of 344 tonnes/day.

The Philippine Seismic Network (PSN) plotted a total of **seven hundred fourteen (718) volcanic earthquakes since 1:00 PM, January 12, 2020**. One hundred seventy-six (176) of these registered at magnitudes M1.2 – M4.1 and were felt at Intensities I – V. Since 5:00 AM on January 20, 2020 until 5:00 AM today, there were five (5) volcanic earthquakes plotted, registered at magnitudes M1.6-M2.5 with no felt event.

For the past 24 hours, the Taal Volcano Network, which can record small earthquakes undetectable by the PSN, recorded four hundred forty-eight (448) volcanic earthquakes including seventeen (17) low-frequency earthquakes. Such intense seismic activity likely signifies continuous magmatic intrusion beneath the Taal edifice, which may lead to further eruptive activity.

Alert Level 4 still remains in effect over Taal Volcano. This means that hazardous explosive eruption is possible within hours to days. DOST-PHIVOLCS strongly reiterates total evacuation of Taal Volcano Island and high-risk areas as identified in the hazard maps within the 14-km radius from Taal Main Crater and along the Pansipit River Valley where fissuring has been observed. Based on PAGASA wind forecast, if the eruption plume remains at 3.0 km or below, ash may be drifted to the municipalities south, southwest, west and northwest of Taal Volcano; if the eruption plume is between 3.0 and 5.0 km, ash may also be drifted to some towns of Cavite and western Laguna. However, if a major eruption occurs within the forecast period and the eruption column exceeds 5.0 km, ash may also be drifted over Metro Manila and parts of Laguna, Rizal, Marinduque and Quezon provinces. Residents around the volcano are advised to guard against the effects of heavy and prolonged ashfall. Civil aviation authorities must advise pilots to avoid the airspace around Taal Volcano as airborne ash and ballistic fragments from the eruption column pose hazards to aircraft. DOST-PHIVOLCS is continually monitoring the eruption and will update all stakeholders of further developments.

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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