



REPUBLIC OF THE PHILIPPINES
NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

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

NDRRMC ADVISORY

TO : CHAIRPERSONS, RDRRMCs/OCD CALABARZON, OCD RV

FROM : Executive Director, NDRRMC and Administrator, OCD

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

DATE : 22 January 2020, 8:00 AM

Source: DOST-PHIVOLCS 22 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. Moderate emission of white steam-laden plumes that crept downslope before drifting west, south-southwest and southeast was observed. 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 emission of white steam-laden plumes 50 to 500 meters high from the Main Crater that drifted southwest**. Sulfur dioxide (SO₂) emission was measured at an average of **153 tonnes/day**.

The Philippine Seismic Network (PSN) plotted a total of **seven hundred twenty-five (725) 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 21, 2020 until 6:00 AM** today, there were **six (6) volcanic earthquakes** plotted, registered at magnitudes **M1.5-M2.4** 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 eighty-one (481) volcanic earthquakes** including **eight (8) low-frequency earthquakes**. Such intense 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 **below 3.0 km, ash will be drifted to the municipalities west and southwest** of the Main Crater. However, if a major eruption occurs during the day and the eruption column exceeds 5.0 km, ash may also be drifted over the eastern part of Laguna, and some parts of Rizal and


Marinduque. 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.

In order to better inform/warn communities, you are reminded to disseminate these through local/community leaders and through your local media, including community radio stations. Conduct press briefings as often as needed. This local effort will complement and reinforce efforts at the national level. Emphasis should be on proactive actions – evacuation rather than rescue.

Let's untiringly aim for zero casualty.

Submit report on actions taken.

BY AUTHORITY OF THE CHAIRPERSON, NDRRMC:


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