



31 March 2018

MEMORANDUM

FOR : SECRETARY OF NATIONAL DEFENSE AND
CHAIRMAN, NDRRMC

USEC CARDOZO M LUNA
USND

THRU : USEC REYNALDO B MAPAGU
USCVRA

SUBJECT : Alert Status and Activities of Bulusan, Kanlaon, and Mayon
Volcanoes

Source: DOST-PHIVOLCS

SITUATION OVERVIEW

A. ALERT STATUS OF MAYON VOLCANO

Mayon Volcano's seismic monitoring network recorded **three (3) volcanic earthquakes** during the past 24 hours. **Degassing at the crater could not be observed due to thick clouds covering the summit. At night time, fair to faint crater glow could be observed.**

Sulfur dioxide (SO₂) emission was measured at an average of 1062 tonnes / day on 26 March 2018. Medium-term deflation has been recorded by electronic tiltmeter and Precise Leveling (PL) surveys since 20 February 2018 despite short-term episodes of inflation at the lower and middle slopes. However, overall ground deformation data indicate that the edifice is still swollen or inflated relative to pre-eruption baselines.

Alert Level 2 currently prevails over Mayon Volcano. This means that Mayon is at a moderate level of unrest. PHIVOLCS-DOST reminds the public of 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. PHIVOLCS-DOST 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 river channels and those perennially identified as lahar prone areas in the southern and eastern sectors should also be avoided especially during bad weather conditions or 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. PHIVOLCS-DOST is closely monitoring Mayon Volcano's activity and any new significant development will be immediately communicated to all stakeholders.

B. ALERT STATUS OF KANLAON VOLCANO

Kanlaon Volcano's seismic monitoring network recorded **two (2) volcanic earthquakes** during the past 24 hours. Moderate emission of white steam-laden plumes that rose **300 meters** from the summit before drifting southwest was observed. Ground deformation data from continuous GPS measurements indicate a more pronounced inflation of the edifice since December 2015, signifying pressurization deep beneath the edifice. Sulfur dioxide (SO₂) emission was measured at an average of **261 tonnes/day on 30 March 2018**.

Alert Level 2 status prevails over Kanlaon Volcano, which means that the volcano is undergoing a moderate level of unrest due to probable intrusion of magma at depth that may or may not lead to a magmatic eruption. The local government units and the public are strictly reminded that entry into the 4-kilometer radius Permanent Danger Zone (PDZ) is 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. DOST-PHIVOLCS is closely monitoring Kanlaon Volcano's activity and any new development will be relayed to all concerned.

C. ALERT STATUS OF BULUSAN VOLCANO

Bulusan Volcano's seismic monitoring network **did not detect any volcanic earthquake** during the past 24 hours. Degassing at the active vents could not be observed due to thick clouds covering the summit. Precise leveling data obtained on February 19 – March 1, 2018 indicated a slight deflation of the edifice. **However, pronounced inflation of the upper slopes that began on 28 December 2017 is still being recorded by electronic tiltmeter, consistent with the latest GPS results. Overall ground deformation data indicate that the edifice is still swollen or inflated relative to July 2016.**

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. NDRRMC Operations Center prepared NDRRMC Advisory and Update, and disseminated the same to OCD Regional Centers 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 Bulusan, Kanlaon and Mayon Volcanoes and any new development will be relayed to all concerned.

For the information of the SND / Chairperson, NDRRMC.


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

NOTED

USCVRA
Date:

NOTED

USND
Date:

NOTED

SND
Date: