




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

SitRep No. 11 re Mayon Volcano Phreatic Eruption


EXECUTIVE DIRECTOR RICARDO B. JALAD
Executive Director, NDRRMC and
Administrator, OCD

DATE : 20 January 2018, 8:00 AM

Sources: DOST-PHIVOLCS, DSWD DROMIC, DILG, RDRRMC/OCDRO V

I. SITUATION OVERVIEW

13 January 2018

Mayon Volcano generated a steam driven explosion at 5:06 PM and produced 2.5 km high grayish ash plume that drifted towards the Southwest.

Traces of ash fall were found in the Municipalities of Camalig, Guinobatan, Daraga and Ligao City.

At 8:49 AM, Mayon Volcano had a phreatic eruption. Ash fall was expected at the west and southwest slopes.



14 January 2018

As of 12:30 AM, PHIVOLCS raised the Alert Level of Mayon Volcano from Alert Level 1 (abnormal) to Alert Level 2 (increasing unrest).

At 11:43 AM, another phreatic eruption occurred that lasted approximately 15 minutes based on seismic record. The event produced ash plume that was largely obscured by summit clouds. Sulfuric odor was detected in and traces of ash fell on Camalig, Albay. For the past 24 hours, Mayon Volcano has noticeably increased its unrest.

DOST-PHIVOLCS raised the alert status of Mayon Volcano from Alert Level 2 (increasing unrest) to Alert Level 3 (increased tendency towards hazardous eruption). This means Mayon is exhibiting relatively high unrest and that magma is at the crater and that hazardous eruption is possible within weeks or even days.

Other LGUs with barangays within the 6-km Permanent Danger Zone (PDZ) converted their respective MDRRMCs to discuss proactive actions to be undertaken by their LGU in case situation escalates. Barangays within the 6-km PDZ were alerted and advised to prepare in case of evacuation.

15 January 2018

Two lava collapse events occurred that produced rockfall and small-volume pyroclastic density currents at 9:41 AM and 10:05 AM that lasted 5 and 7 minutes respectively, based on seismic record. Ashfall were reported in Brgys. Travesia, Muladbucad Grande, Maninila, Masarawag, Poblacion, Iraya, Ilawod, Calzada, Inamnan Grande, Inamnan Pequeno, Maguiron, Quitago and Mauraro in the municipality of Guinobatan; Brgys. Cabangan, Anoling, Sua, Tumpa, Quirangay, Gapo, Sumlang, Brgys. 1 to 7 in the Municipality of Camalig.

A degassing event at 11:07 AM that lasted 8 minutes produced a grayish to dirty white ash column with a maximum of height of approximately 1000 meters above the summit before drifting west-southwest.

16 January 2018

A total of nine (9) episodes of tremor, four (4) of which accompanied short-duration lava fountaining, and 75 lava collapse events, corresponding to rockfall along the front and margins of advancing lava and short pyroclastic flows downriver of Miisi Gully within the PDZ were recorded by Mayon's seismic network. Collapse events and some degassing events at the summit crater generated ash that rose to 2 km and fell on barangays of Camalig, Guinobatan, and Polangui. Lava flow on the Miisi Gully has presently advanced to approximately 2km from the crater, while shorter volume lava flows have been emplaced on the upper slopes of the Bonga Gully.



17 January 2018

Lava effusion from the new summit lava dome and lava collapse events characterized Mayon Volcano's eruptive activity in the past 24 hours. One hundred forty-three (143) lava collapse events and one (1) tremor were recorded by Mayon's seismic monitoring network. The lava collapse events corresponded to rockfall along the front and margins of advancing lava and pyroclastic flows downriver of Miisi, Matanag, and Buyuan Gullies within the PDZ.



18 January 2018

Quiet lava effusion from the new summit lava dome and lava collapse events characterized Mayon Volcano's eruptive activity in the past 24 hours. Forty-eight (48) rockfall events, two (2) pyroclastic density currents or PDCs and one (1) volcanic earthquake were recorded by Mayon's seismic monitoring network. Rockfall events were generated by the collapsing lava front and margins of the advancing lava flow on the Miisi Gully and by shedding from the summit dome onto the Matanag and Buyuan Gullies. The Miisi lava flow has advanced to approximately three (3) kilometers from the summit crater whilst PDCs were emplaced roughly within the same reaches on this

drainage, all well within the PDZ. Ash clouds were lofted from the rockfall and PDCs events as well as from the persistent disintegration of lava on the advancing front of the Miisi lava flow before drifting to the southwest.

19 January 2018

Quiet lava effusion from the new summit lava dome and lava collapse events characterized Mayon Volcano's eruptive activity in the past 24 hours. Twenty four (24) rockfall events and one (1) volcanic earthquake were recorded by Mayon's seismic monitoring network. Rockfall events were generated by the collapsing lava front and margins of the advancing lava flow on the Miisi Gully and by shedding from the summit dome onto the Bonga Gully. Currently, the Miisi lava flow has advanced to approximately three (3) kilometres from the summit crater well within the PDZ. Ash clouds were lofted from the rockfall events as well as from the persistent disintegration of lava on the advancing front of the Miisi lava flow before drifting to the southwest.

20 January 2018

Quiet lava effusion from the new summit lava dome and lava collapse events characterized Mayon Volcano's eruptive activity in the past 24 hours. Five (5) rockfall events were recorded by Mayon's seismic monitoring network. Rockfall events were generated by the collapsing lava front and margins of the advancing lava flow on the Miisi Gully and by shedding from the summit dome onto the Bonga Gully. Currently, the Miisi lava flow has advanced to three (3) kilometers from the summit crater well within the PDZ. Ash clouds were lofted from the rockfall events as well as from the persistent disintegration of lava on the advancing front of the Miisi lava flow before drifting to the southwest.

Alert Level 3 remains in effect over Mayon Volcano, which means that it is currently in a relatively high level of unrest as magma is at the crater and hazardous eruption is possible within weeks or even days.

II. EFFECTS

A. Pre-Emptive Evacuation (TAB A)

- a. A total of **3,904 families** were pre-emptively evacuated in Region V due to Mt. Mayon phreatic eruption.

Source: DILG SitRep No. 02 as of 15 January 2018, 5:00 PM

B. Affected Population

1. As of **6:00 PM, 19 January 2018**, a total of **10,090 families or 40,244 persons** were affected in **38 barangays** in the municipalities/cities of **Camalig, Guinobatan, Ligao City, Daraga, Tabaco City, Malilipot, Santo Domingo (Libog), and Legazpi City** in the Province of Albay (Region V).
2. Of which **6,430 families / 24,902 persons** are currently being served inside the **25 designated evacuation centers (ECs)**. While, **725 families / 3,074 persons** are served outside ECs.

PROVINCE/CITY/ MUNICIPALITY	AFFECTED			NO. OF ECs	SERVED INSIDE EC		SERVED OUTSIDE EC		TOTAL SERVED (Inside + Outside)	
	BRGY	FAM	PERS		FAM	PERS	FAM	PERS	FAM	PERS
GRAND TOTAL	38	10,090	40,244	25	6,430	24,902	725	3,074	7,155	27,976
ALBAY										
Camalig	6	1,620	6,300	4	1,620	6,300	-	-	1,620	6,300
Guinobatan	4	1,331	4,652	5	1,310	4,652	-	-	1,310	4,547
Ligao City	4	815	3,563	3	810	3,372	-	-	810	3,372
Daraga	5	1,389	5,748	3	907	3,707	482	2,008	1,389	5,715
Tabaco City	6	560	2,185	5	560	2,185	-	-	560	2,185

PROVINCE/CITY/ MUNICIPALITY	AFFECTED			NO. OF ECs	SERVED INSIDE EC		SERVED OUTSIDE EC		TOTAL SERVED (Inside + Outside)	
	BRGY	FAM	PERS		FAM	PERS	FAM	PERS	FAM	PERS
Malilipot	3	842	3,232	3	797	3,064	45	168	842	3,232
Santo Domingo (Libog)	5	624	2,520	2	426	1,622	198	898	624	2,520
Legazpi City (Capital)	5	2,909	12,044	-	-	-	-	-	-	-

Source: DSWD Dromic Report No.9 on the Mayon Phreatic Eruption as of 19 January 2018, 6PM

C. Suspension of Classes

1. Classes were suspended in the following municipalities in the province of Albay:

MUNICIPALITY	LEVEL	REMARKS
Guinobatan	Pre-school to Senior High School	15 January 2018
Camalig		
Tabaco City		
Sto. Domingo	All Levels	
Ligao City	Suspension of Classes at Baligang Elementary School	
Daraga	All Levels	15 January 2018

Sources: DILG SitRep No. 02 as of 15 January 2018, 5:00 PM

D. Declaration of State of Calamity

1. On 16 January 2018, the province of Albay, Region V was declared under the State of Calamity thru Resolution No. 00670-2018.

III. ACTIONS TAKEN

A. National Disaster Risk Reduction and Management Council (NDRRMC)

1. NDRRM Operations Center (NDRRMOC)

- Activated the alert status to BLUE ALERT effective 8:00 AM, 15 January 2018.
- Coordinated with RDRRMC V re PHIVOLCS Eruption Notification Form for Mayon Volcano.
- Disseminated information/notification thru Short Messaging System
- Prepared and disseminated Emergency Alert and Warning Message (EAWM) to provide information and warning to the public regarding the phreatic eruption.

2. Philippine Institute of Volcanology and Seismology (PHIVOLCS)

- a. Provision of Mayon Volcano Eruption Notification.
- b. Continuous monitoring of the situation.

3. Department of Social Welfare and Development (DSWD)

- a. DSWD-DReaMB raised alert status from Green to Red.
- b. Continuously coordinating with DSWD FO V for significant reports on the status of displacement and assistance and relief efforts.

4. Telecommunications Service Providers (ABS-CBN, GLOBE, and SMART)

- a. Disseminated EAWM to Region V.

5. Department of the Interior and Local Government (DILG)

- a. Continuously coordinating with DILG Regional Office V on the preparedness actions of LGUs affected by the Mt. Mayon phreatic eruption
- b. Continuously updates the SILG on the preparedness actions of LGUs affected by the Mt. Mayon phreatic eruption.

- c. Closely monitors the situation on the ground with regard to the raising the alert level 2 of Mayon Volcano into alert level 3.

B. Regional/Local Disaster Risk Reduction and Management Councils (R/LDRRMC)

1. RDRRMC V

Office of Civil Defense (OCD) V

- a. Disseminated to all concerned the PHIVOLCS Bulletin raising the Alert Status of Mayon Volcano from Alert Level 2 to Alert Level 3.
- b. Attended the Updates Meeting of PHIVOLCS re Status of Mayon Volcano on 14 January 2017.
- c. OCD-RDRRMC Bicol on Red Alert Status for Mayon Volcano since 14 January 2018, 1:00 AM.
- d. Continuous coordination with DOST- PHIVOLCS re – status of Mayon Volcano.
- e. Sent through SMS the status of volcanic activity of Mayon Volcano to RDRRMC members and stakeholders.
- f. Coordinated with MDRRMO Camalig, Guinobatan and Daraga and sent to PDRRMO – Albay through SMS status of volcanic activity of Mayon Volcano.
- g. On close monitoring.
- h. Conducted RDRRMC Emergency Meeting re Updates for Mayon Volcano Operations 2018 at Tactical Operations Group – Philippine Air Force, Airport Site, Legazpi City.
- i. Continuous coordination with LDRRMOs and RDRRMC Member Agencies.
- j. Conducted Aerial Survey regarding the extent of lava flow with member agencies on 17 January 2018.

DILG V

- a. Attended the Emergency Meeting at TOG5 for Mayon updates.
- b. Reported/presented real-time situation to RDRRMC Bicol for coordination assistance and provision of needed intervention of particular agency.
- c. Ensure the LCEs of affected LGUs located within the 7-km PDZ are provided with necessary precautionary measures, particularly to undertake immediate evacuation.
- d. Mobilize field operating units to provide timely updates for any untoward and significant incidents.
- e. Advised the DILG field operating units to constantly coordinate with PDRRMCs/PDRRMOs.
- f. Maintained and intensified open-line coordination with preparedness and response agencies.

DSWD V

- a. Has standby funds amounting to ₱5,662,702.15 and stockpiles of 13,352 family food packs (FFPs) and Non-Food items (NFIs) consist of 37,242 pcs malong, 382 rolls laminated sacks, 7,327 dignity kits and 54,832 blankets ready for augmentation to LGUs.
- b. PAT and MAT members in the province of Albay are on standby and continuously coordinating with the P/C/MDRRMOs for status reports and updates. EMT of the Field Office is already activated and rendered its duty today.
- c. As of 18 January 2018, DWSD-FO QRT is still on red alert status. Emergency Telecom Equipment is on standby and is ready for deployment as the need arises.

DOST – PHIVOLCS V

- a. Hosted a meeting regarding the status of Mayon Volcano.
- b. Close monitoring of Mayon Volcano activities.
- c. Disseminate Mayon Volcano Bulletins and advisories to LGUs and other stakeholders.
- d. Close coordination with OCD5, PDRRMO Albay and LGUs of the province.
- e. As of 16 January 2018, a 7-km Extended Danger Zone is implemented.

Bureau of Fire Protection (BFP) V

- a. Issued memorandum dated 15 January 2018 to BFP Albay re Heightened Alert (Activation of OPLAN PAGHALASA).
- b. Ensured availability of fire/rescue/emergency medical personnel, assets and equipment for possible response operations.
- c. Coordinated with C/MDRRMCs for appropriate dispositions of actions.

Department of Education (DepEd) V

- a. Inspection of schools/classrooms to be used as evacuation centers.
- b. Alerted all concerned schools and the School DRRM Coordinators to prepare the classrooms that will be used as ECs.
- c. Organized Monitoring Team of DepEd Engineers to validate the need for Temporary Learning Spaces (TLS) in the identified Evacuation Centers.
- d. Prepared Contingency Plans (Emergency classes; shifting of classes) to all schools used as ECs to ensure continuity of classes for the affected displaced learners and those who are actually enrolled in the school that is being used as ECs.
- e. Consolidated list of concerns in the ECs such as needs to construct temporary comfort rooms, repair of TLS for the learners, assignment of security officers and financial assistance for the electricity and water bills.

Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB) V

- a. Deployed ambient air quality sampling at areas affected by Mayon Volcano.

Department of Health (DOH) V

- a. Declaration of Code White Alert Status in relation to Mayon Volcano Phreatic Explosion.
- b. Raised alert status from Code White to Code Blue.
- c. Deployment of two (2) Rapid Health Assessment Teams in Camalig, Guinobatan and Ligao City.
- d. Logistics provided – LGU Guinobatan and LGU Camalig: ₱19,800 worth of mask (1,500 pcs.) each and ₱10,076.40 worth of assorted medicines each.
- e. Additional logistics provided – LGU Guinobatan and Camalig: ₱58,000.00 each worth of medicines and supplies.
- f. Conducted Orientation on Psychological First Aid for DOH-CHD V Monitoring Teams to be deployed and the use of monitoring tools and inventory of logistics.
- g. Conducted Rapid Health Assessment on affected municipalities by Joint PDO-PHO Teams.
- h. Deployed six (6) DOH-CHD V monitoring team on 16 January 2018 to the affected municipalities.

Department of Public Works and Highways (DPWH) V

- a. Instructed Albay 1st, 2nd, and 3rd District Engineers to monitor the ongoing eruption of Mayon Volcano and activated DRRMTs to clear ashfall/rocks that may block National Roads and Bridges.
- b. Continuously monitoring river channels near the foot of Mayon Volcano within their AOR for possible Lahar Flows that will affect the National Roads and Bridges.

Philippine National Police- Police Regional Office (PNP-PRO) 5

- a. Standby for deployment of SAR Personnel with equipment, Security Personnel and mobility from Regional Mobile Force Battalion, Regional Headquarters Support Group and Regional Logistics Division.
- b. In close coordination with MDRRMCS and with standby personnel for deployment.
- c. Conduct monitoring and inspection of the affected barangays under the 6km PDZ
- d. Provides security at the Evacuation center.
- e. Assisted in the evacuation of affected population in the municipality of Camalig, and Guinobatan.
- f. Issued memorandum to Albay PNP Provincial Director directing all units under their jurisdiction to stand by alert SAR personnel and equipment for possible deployment as need arises and monitor situation. Likewise direct police station within the 6-km PDZ to closely coordinate with their respective MDRRMC.
- g. Issued Memorandum to Regional Logistics, Headquarters Support Group and Regional Mobile Force Battalion to put on standby alert SAR personnel equipment and vehicle for possible deployment as need arises.

9th Infantry Battalion, Philippine Army

- a. Placed four (4) military trucks on standby for possible evacuation.
- b. Conducted information campaign in the neighboring barangays in the 6-km PDZ.
- c. Prepositioned one (1) KM250 and one (1) KM450 with DRO personnel of 83th IB for possible deployment and for the conduct of pre-emptive evacuation to residents in the 6-8 km.
- d. Dispatched one (1) KM250 and one (1) KM450 with DRO personnel to APSEMO for possible deployment and for the conduct of pre-emptive evacuation to residents in the 6-8 km.

Tactical Operations Group (TOG) 5, Philippine Air Force

- a. Facilitated availability of aircraft to be used for aerial survey of Mayon Volcano
- b. Placed DRU Team on standby with equipment and mobility to provide assistance for evacuation.
- c. Transported a total of 174 persons from Brgy. Buyuan, Mabinit, and Matanag to various evacuation sites.
- d. Facilitated the conduct of aerial survey of Mayon Volcano together with OCD V, PHIVOLCS, DSWD, 9ID PA, and APSEMO.

Bicol Regional Training and Teaching Hospital (BRTTH)

- a. On Code White Alert effective 14 January 2018.
- b. Activated and placed Emergency Department on standby.
- c. Prepositioned appropriate logistical needs.
- d. Conducted safety rounds to hospital areas.

National Food Authority (NFA)

- a. Has sufficient stock of rice and arrangements with nearby regions for augmentation of stocks.

PDRRMC Albay

- a. Close coordination with PDRRMC Chairman and members for the updates regarding the event and possible response actions.
- b. Coordination with PHIVOLCS from time to time as to the status of Mayon Volcano.
- c. Sent an updates for public information via SMS and through social media to all stakeholders.
- d. Suspension of classes for Kinder to Senior High school in 15 January 2018 in schools used as evacuation centers:
 - Evacuation of residents inside and within the periphery of the 6-km PDZ:
 - Camalig – Brgys. Anoling, Quirangay, Tumpa, Sua, Tinubran
 - Guinobatan – Brgys. Tandarora and Maninila
 - Daraga – Brgys. Miisi, Banadero, Matnog and Budiao
 - Ligao City – Brgys. Baligang and Amti
 - Tabaco City – Brgys. Magapo Buang and Buhian
 - Malilipot – Brgys. Canaway and Calbayog
- e. Strictly no farming and orchid picking inside the 6-km PDZ in Barangays Anoling, Quirangay, Tumpa, Sua, Tinubran in Camalig; Tandarora, Maninila in Guinobatan; Miisi, Banadero, Matnog and Budiao in Daraga: Baligang and Amti in Ligao City: Magapo Buang and Buhian in Tabaco City: and Canaway and Calbayog in Malilipot.
- f. Residents within the slope of the volcano experiencing heavy ash fall should take precautionary measure against possible roof collapsed due to accumulated heavy ash and rain.
- g. C/MDRRMCs are advised to implement this advisory in their areas of jurisdiction.
- h. Coordinated with the affected MDRRMOs of ash fall to conduct immediate assessment in their AOR.
- i. Close coordination with PDRRMC Chairman and members for the updates regarding the event and possible response actions.
- j. In coordination with PHIVOLCS re the status of Mayon Volcano.
- k. Sent and updates for public information via SMS through social media to all stakeholders.

MDRRMCs Camalig, Guinobatan, and Daraga

- a. Field assessment of affected areas of the Mayon Volcano Activity.
- b. Distributed face masks to the affected population of the activity.
- c. Implement evacuation operations of population in the 6-8km PDZ.
- d. MDRRMO Malilipot implemented evacuation operations of population at risk in Barangays Calbayog and Canaway.
- e. Ordered the cancellation of classes in the municipality.
- f. Conducted meeting with Punong Barangays (PBs) and validation of evacuated population.
- g. Continuously inspecting affected barangays to ensure that all families are evacuated.

MDRRMC Sto. Domingo

- a. Placed the Mayon Unit Barangays (Lidong, Fidel, Surtida, Sta. Mesiricordia, and San Fernando) on alert and on standby.

- b. Strictly prohibited farming, orchid picking, and other activities inside the 6-km PDZ traversing the Mayon Unit Barangays.
- c. Advised affected BDRRMCs to implement the advisory in their AORs.
- d. Conducted meeting with LDRRMC and DepEd Principal.
- e. The Local Chief Executive (LCE) announces suspension of classes, preparation and evacuation on marginalized sector within 6-km PDZ.

CDRRMC Legazpi City

- a. Notified five (5) critical northern Barangays of the City (Mabinit, Bonga, Matanag, Buyuan, and Padang) of the situation thru call and SMS.
- b. Instructed BDRRMCs and Punong Barangays to strictly enforce the PDRRMC Albay Advisory No. 1 and monitor any updates.
- c. Placed City Health Office and CSWDO on standby.
- d. Alerted Disaster Response partners.
- e. Continuously disseminating advisories on social media official account.
- f. Conducted emergency meeting with Brgys. Mabinit, Bonga, Matandag, Buyuan, and Padang.
- g. Instructed BDRRMCs and Punong Barangays to strictly enforce the No Entry, No Farming and No. Picking of Orchids within the 6-km PDZ and within the 7-km Extended Danger Zone.
- h. Placed Legazpi City Fire Station on standby.
- i. Coordinated with Legazpi School Division Office to prepare the evacuation site and centers.

CDRRMC Tabaco City

- a. Strictly implemented closure of the road going to Mayon Planetarium until further notice.
- b. Advised affected BDRRMCs to implement advisory in their AOR.
- c. Convened CDRRMC to discuss proactive measures related to Mayon Volcano Activity.

C. Cost of Assistance

1. A total of **₱5,536,605.00** worth of assistance was provided by DSWD and LGUs to the affected families in the Province of Albay.

PROVINCE / MUNICIPALITY / CITY	COST OF ASSISTANCE		
	DSWD	LGUs	TOTAL
ALBAY	₱5,412,000.00	₱124,605.00	₱5,536,605.00
PLGU Albay	₱4,961,000.00		₱4,961,000.00
Legazpi City (Capital)	₱451,000.00		₱451,000.00
Malilipot		₱124,605.00	₱124,605.00

Source: DSWD Dromic Report No. 9 on the Mayon Phreatic Eruption as of 19 January 2018, 6PM

Preparedness Measures and Effects of Mt. Mayon Phreatic Eruption
PRE-EMPTIVE EVACUATION
As of 20 January 2018, 8:00 AM

Region/Province/ Municipality/Barangay	No. of Families Evacuated	Evacuation Center	Date and Time of Evacuation
GRAND TOTAL	3,904		
Albay	3,904		
Camalig	1059		
Anoling	204	Anoling ES/Relocation Site	As of 15 January 2018
Cabangan	126	Cabangan ES	As of 15 January 2018
Salugan	32	Camalig North Central School	As of 15 January 2018
Quirangay	108	AECID CNS	As of 15 January 2018
Tumpa	302	CNCS	As of 15 January 2018
Sua	287	CNCS	As of 15 January 2018
Guinobatan	926		
Maninila	506	Guinobatan East Central School	As of 15, January 2018
Tandarora	143	Lower Binugsacan Elem. School	As of 15, January 2018
Tandarora (Mabalod)	198	Lower Binugsacan High School	As of 15, January 2018
Malad Bucad Grande	79	Maladbucad Elem. School	As of 15, January 2018
Ligao City	346		
Baligang	346	National Technical Vocational High School, Nasisi, Nasisi Ligao City	As of 15 January 2018
Daraga	796		
MI-ISI	323	Upper Malabog/Malabog Parish	As of 15 January 2018
Budiao	111	Budiao Elem. School, Anislag	As of 15 January 2018
Banadero	84	Anislag relocation Site	As of 15 January 2018
Matnog	278	Anislag Elem. School, Daraga relocation site	As of 15 January 2018
Tabaco City	140		
Malilipot	637		
Canaway	30	Malilipot Central School	As of 15, January 2018
Calbayog	562	San Jose Elem. School	As of 15, January 2018
San Roque	45		As of 15, January 2018

Source: DILG SitRep No. 02 as of 15 January 2018, 5:00 PM