

REPUBLIC OF THE PHILIPPINES

NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL

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

MEMORANDŮM No. 78 s. 2021 JUL 2 7 2021

TO

ALL NDRRMC MEMBER AGENCIES RDRRMCs/OCD REGIONAL OFFICES

SUBJECT:

NDRRMC Emergency Alert and Warning Messages (EAWM)

Standard Operating Procedures (SOP)

The transmission of Emergency Alert and Warning Messages (EAWM) is imperative to comply with the provisions of Republic Act (RA) 10639, also known as "The Free Mobile Disaster Alerts Act," which mandates the telecommunications service providers to send free mobile alerts in the event of disasters caused by natural and human-induced hazards.

In order to systemize the process, the formalization of a **Standard Operating Procedure (SOP)** is essential in determining the functions of key government agencies and offices involved in the dissemination of the EAWM. This NDRRMC EAWM SOP will be useful in having uniformity or common drive towards success and outstanding performance that will assist the National Disaster Risk Reduction and Management Operations Center (NDRRMOC) in maintaining quality control and quality assurance processes.

In this regard, this NDRRMC Memorandum is hereby issued to provide for the utilization of the NDRRMC EAWM SOP. The NDRRMOC as the emanating office of the EAWM, the warning agencies, and other NDRRMC agencies and offices involved in the process shall adhere to this SOP as the standard process in disseminating EAWMs.

All previously identified triggers / parameters and procedures used in disseminating EAWM are hereby superseded by the provisions of the SOP.

For information and guidance.

For the Chairperson, NDRRMC:

UNDERSECRETARY RICARDO B JALADA

Executive Director, NDRRMC and

Administrator, OQD

NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL EMERGENCY ALERT AND WARNING MESSAGE STANDARD OPERATING PROCEDURES

1 REFERENCES

- 1.1 Republic Act (RA) 10121, The Philippine Disaster Risk Reduction and Management (DRRM) Act
- 1.2 RA 10639, The Free Mobile Disaster Alerts Act
- 1.3 OCD Office Order No, 90, s. 2020: Use of NDRRMC Situation Monitoring Dashboard and Updating of Processes for Hazards Monitoring and Warning
- 1.4 OCD Office Order No, 93, s. 2020: Updated Triggers for Dissemination of Emergency Alert and Warning Messages (EAWM) and Text Blast System

2 RATIONALE

The transmission of Emergency Alert and Warning Messages (EAWM) is imperative to comply with the provisions of Republic Act (RA) 10639, also known as "The Free Mobile Disaster Alerts Act," which mandates the telecommunications service providers to send free mobile alerts in the event of disasters caused by natural and human-induced hazards. Such also complements Section 6 (e) of RA 10121, otherwise known as the "The Philippine Disaster Risk Reduction and Management (DRRM) Act," which mandates the National Disaster Risk Reduction and Management Council (NDRRMC) to "Establish a national early warning and emergency alert system to provide accurate and timely advice to national or local emergency response organizations and to the general public through diverse mass media to include digital and analog broadcast, cable, satellite television, and radio, wireless communications, and landline communications." The alert is vital in disseminating near real-time warnings to the public to better prepare for an impending disaster and forewarn the local government units (LGUs) to spearhead precautionary actions in order to lessen the calamitous effects.

In order to systemize the process, the formalization of a Standard Operating Procedure (SOP) is essential in determining the functions of key government agencies and offices involved in the dissemination of the EAWM. This NDRRMC EAWM SOP will be useful in having uniformity or common drive towards success and outstanding performance that will assist the National Disaster Risk Reduction and Management Operations Center (NDRRMOC) in maintaining quality control and quality assurance processes.

3 PURPOSE

This NDRRMC EAWM SOP shall provide the procedures and processes to be implemented at the NDRRMOC in the translation of the EAWM and its dissemination to the public, which shall cover the roles and responsibilities of different agencies as stipulated in the RA 10639.

4 OBJECTIVES

The objectives of this NDRRMC EAWM SOP are as follows:

- 4.1 To determine the triggers / parameters for hazards and events that require the preparation and dissemination of EAWMs.
- 4.2 To standardize templates to be used in preparing the EAWMs.
- 4.3 To establish the procedure that covers the process of receiving, translating, and disseminating EAWM
- 4.4 To determine the means for public dissemination of EAWM.
- 4.5 To identify the proper documentation in the databasing of EAWM
- 4.6 To clarify coordinating instructions among agencies and organizations involved in the EAWM.

5 SCOPE AND LIMITATION

This NDRRMC EAWM SOP shall cover all functions performed by the personnel of the Office of Civil Defense (OCD) manning the NDRRMOC, the operational personnel of the warning agencies, and Telecommunication Companies.

The provisions of the SOP shall focus on the translation and dissemination of EAWMs that are received by the general public with mobile phones or handsets capable of receiving cell-broadcasts alerts within range of the mobile service provider's cell sites.

6 DEFINITION OF TERMS

- 6.1 **Approving Authorities:** refer to the OCD officials that are provided with authorization to approve the draft EAWM using all available means for immediate dissemination.
- 6.2 **Cell Broadcast (CB):** refers to the technology which was identified as one of the world's most efficient technology for public warning systems that works on dedicated channels reserved for this purpose. With this technology, messages can be quickly sent to many mobile phone users with cell-broadcast-enabled handsets within a designated area.

- 6.3 Emergency Alert and Warning Message (EAWM): refers to the message processed and derived from information from warning agencies. Said message contains the warning that is hazard-specific, area-focused, and time-bound to be delivered to the public for them to take early actions and preventive measures such as but not limited to conduct of evacuation and monitoring for damages and aftershocks.
- 6.4 Emergency Warning Broadcast System (EWBS): refers to a system in Digital Terrestrial Television Broadcasting (DTTB) service that shall be activated to alert and guide the public of an impending or ongoing emergency situation by delivering warning information through an audible sound the superimposition of data to various types of Integrated Services Digital Broadcasting Terrestrial (ISDB-T) receivers that are automatically activated. EWBS will be considered as a mechanism for future adoption by the NDRRMOC in sending the EAWM, where appropriate and applicable.
- 6.5 **Messaging Applications:** refer to the applications for mobile phones or computers that enable instant messaging on a centralized network using the internet.
- 6.6 **National Disaster Risk Reduction and Management Operations Center** (NDRRMOC): refers to the operating facility of the NDRRMC for multistakeholder coordination and information management. It operates on a 24-hour basis manned by the personnel of OCD during normal conditions and to be complemented by NDRRMC member agencies during emergency conditions.
- 6.7 **Short Message Service (SMS):** refers to the service for sending messages to mobile phones that use Global System for Mobile Communications in text format.
- 6.8 **Telecommunication Companies:** refer to the companies that offer telecommunication and digital services.
- 6.9 **Warning Agencies:** refer to the technical government agencies mandated to monitor the hazard situation all over the country and provide timely and accurate information on the existence of threats and/or occurrence of events.

7 STANDARD OPERATING PROCEDURES

7.1 Triggers / Parameters for Sending EAWM

7.1.1 The following are the scenarios, which warrant the immediate dissemination of warning through EAWMs to alert the public. The triggers for sending of EAWM per type of event shall be as follows:

Туре	Triggers / Parameters	Remarks	
		The validity of EAWM is 6 hours. (DOST-PAGASA Heavy Rainfall Warnings is released every 2-3 hours)	
Rainfall Warning	Orange or Red Rainfall Warning	 SEND EAWM if warning heightened (e.g. from Orange to Red Rainfall) even within 6hrs SEND EAWM if there are new areas to be affected (Orange and/or Red) within 6hrs. However, only include the new areas. DO NOT send EAWM if the area(s) and rainfall warning did not change within 6hrs. DO NOT send EAWM if warning scaled down (Red to Orange) within 6 hours; SEND EAWM only when it's already beyond 6hrs 	
Tropical Cyclone Wind Signal	Tropical Cyclone Wind Signal No. 3 and above	 Follow usual templates for Tropical Cyclone Bulletin. SEND EAWM only if the Signal No. is raised. DO NOT SEND EAWM if the area has already received the same EAWM with unchanged TCWS No. SEND EAWM if there are new areas affected or signal is heightened, only include the new areas. 	
Storm Surge	Storm Surge is expected with 2.1 to 3 meters or higher in terms of wave height (Orange Warning and Red Warning)	 Validity of EAWM is based on the issuance of PAGASA Storm Surge Information SEND EAWM to areas if the warning escalated. DO NOT SEND EAWM if the area has already received the same EAWM with unchanged wave height/warning. SEND EAWM to areas under Red Warning every Storm Surge Warning Release (every 6hrs). 	
Earthquake	EQ Info No. 1 with Magnitude 5.0 or higher with at least one or all of the following conditions are met: With expected damages and/or aftershocks With a depth of less than 150km	If EQ Info No. 2 has Magnitude 5.0+, and/or higher than EQ Info No. 1, confirm first with DOST-PHIVOLCS prior to sending EAWM. Send EAWM to the province of the epicenter and the province of the municipalities reported and/or recorded with Intensity IV and above. Send EAWM if there are two succeeding events with M5.0 and above in the same area.	
	 With latitude between 4°N to 22°N. 	AFTERSHOCK related EAWMS:	

		 DO NOT send EAWM if there is a statement in the EQ Information that says "This is an Aftershock" unless if it is Magnitude 6.0 and above.
	Any magnitude with	DO NOT Send EAWM if the aftershock magnitude recorded is 1.2 lower than the mainshock otherwise, confirm first with DOST-PHIVOLCS prior to sending EAWM.
Earthquake	damages and/or aftershocks	Confirm first with DOST-PHIVOLCS if there are earthquakes with any magnitude with damages and/or aftershocks.
Tsunami	Regional / Distant Tsunami with a forecasted tsunami threat in the Philippines (c/o NDRRMOC)	For Preparation Purpose: Send EAWM if DOST-PHIVOLCS issued Sea-level Monitoring or Minor Sea-level Disturbance for a regional/distant tsunami. For Evacuation: Send EAWM if DOST - PHIVOLCS issued Tsunami Warning for Regional / Distant.
	Local tsunami with forecasted tsunami height of 1 meter and above. (c/o DOST-PHIVOLCS)	For Local tsunami, DOST-PHIVOLCS shall draft the EAWM to be sent directly to the Telecommunications Companies copy furnish the NDRRMOC.
	With increased Alert Level (Alert Level 2 and above); or	SEND EAWM If DOST-PHIVOLCS released a Volcano Bulletin and the alert level is raised to at least Alert Level 2. (ANNEX C C.6.1)
	Ongoing volcanic eruption; or	Send EAWM if DOST-PHIVOLCS released an Eruption Notification. (ANNEX C C.6.2) The template to be used would depend on the type of the eruption. For volcanoes under Alert Level 0-2, the "Phreatic/ Steam-driven eruption" templates shall be used (ANNEX C C.6.2.1 and ANNEX C C.6.2.2)
Volcano	Anticipated volcanic hazard; or ongoing volcanic hazard; or	In cases of anticipated and ongoing volcanic hazards, an additional message will be sent on top of the above-mentioned templates. (ANNEX C C.6.3 to C.6.4)
	Lahar	SEND EAWM if DOST-PHIVOLCS released a Lahar Advisory due to heavy rainfall (ANNEX C C.6.5)
	Note: All Volcano related EAWMs should be confirmed first with DOST-PHIVOLCS, VMEPD	Three flow charts have been provided for which would illustrate the process which shall be followed before the templates will be released. The contents of the EAWM are volcano information based on the Eruption Notification, Advisories and Bulletins. (shown in ANNEX A)
Dam Discharge	Dam Discharge Warning No. 3	There will be a 3 hours interval for the release of the next EAWM for Dam Discharge Warning No. 3.

ANNEX A shows the flowchart in disseminating Volcano related EAWMs.

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ANNEX B contains technical details and sources about the above triggers / parameters.

7.1.2 In addition to the above events, EAWMs may also be sent for other hazards that are emergency and/or require immediate dissemination, based on requirements of the situation, as recommended by relevant NDRRMC member agencies and approved by the Executive Director of NDRRMC through the NDRRMOC.

7.2 **EAWM Templates**

- 7.2.1 The general template for EAWM shall consist of the following:
 - 1. NDRRMC (as the originator of the EAWM)
 - 2. Timestamp¹ (indicating when the EAWM contents were reviewed and approved by the approving authority)
 - 3. Brief description / Nature of hazard
 - 4. Area/s concerned (already affected, currently being affected, or projected to be affected)
 - 5. Safety actions / Reminders

The general template may be customized depending on the scenarios or event requirements.

7.2.2 The templates or format are subject to change by the OCD based on scientific updates on the nature of the hazards as well as agreements and coordination with concerned agencies.

ANNEX C EAWM Templates contain the prescribed templates for each event.

ANNEX D contains the examples using the templates stipulated in ANNEX C

7.3 Transmittal of Draft EAWM for Approval and Dissemination

7.3.1 Upon receipt and/or validation of hazard or warning information from the warning agencies, the NDRRMOC duty personnel shall proceed to draft the EAWM following the triggers and templates specified in this SOP².

¹ The timestamp shall generally reflect the time of approval by the approving authority. However, if the EAWM, for example, pertains to an earthquake, tsunami or tropical cyclone with expected landfall, the EAWM timestamp shall confirm to the actual timestamp released by the concerned warning agency.

² In cases of local or inland tsunamis where the lead time is short, DOST-PHIVOLCS shall draft the EAWM for sending to the Telecommunication Companies. However, for tsunamis generated far from the Philippine shores and if there is sufficient lead time, the NDRRMOC duty personnel shall draft the EAWM.

7.3.2 The draft EAWM shall then be sent to the approving authorities within OCD for review and eventual approval. To distinguish the EAWM from other messages, the contents for transmitting the EAWM to approving authorities for approval shall have the following message format:

Particulars	Remarks		
Greetings/	The message should begin with greetings/salutation		
salutations	followed by the request to approve the draft EAWM		
	This indicates the number of EAWMs sent within the day.		
Counter	This can be used as a dedicated serial number for every		
Counter	EAWMs. The counter is not included in the actual message		
	for public dissemination.		
Area/s of	This specifies the area/s concerned (already affected,		
dissemination	currently being affected, or projected to be affected).		
	This is the actual warning message to be received by the		
EAWM content	public. This contains information regarding the impending		
	or occurred hazard and the general safety action/s.		

7.3.3 Upon approval of the EAWM, the NDRRMOC duty personnel shall send the approved EAWM version to the Telecommunication Companies for immediate and targeted dissemination. To distinguish the EAWM from other messages, the contents for transmitting the EAWM to the Telecommunication Companies for dissemination shall have the following message format:

Particulars	Remarks	
Greetings/ salutations	The message should begin with greetings/salutations followed by the request to disseminate the approved EAWM	
Counter	This indicates the number of EAWMs sent within the day. This can be used as a dedicated serial number for every EAWMs. The counter is not included in the actual message for public dissemination.	
Area/s of dissemination	This specifies the area/s concerned (already affected, currently being affected, or projected to be affected).	
EAWM content This is the actual warning message to be received by public. This contains information regarding the impend or occurred hazard and the general safety action/s.		

- 7.3.4 Aside from the Telecommunication Companies, the approved EAWM shall also be sent by the NDRRMOC duty personnel to the concerned OCD Regional Offices for redundancy of the EAWM using the message format same as above.
- 7.3.5 The NDRRMOC shall require a confirmation message from the Telecommunication Companies and OCD Regional Offices, indicating the name of the focal person. The Duty Personnel shall ensure that the Telecommunication Companies and OCD Regional Offices have received the message by contacting each focal, one (1)

- minute after sending the approved message. Should there still be no confirmation, the approved EAWM shall be sent to the next focal persons until confirmation will be received.
- 7.3.6 Sending of messages via SMS or the use of mobile messaging applications shall be the means for transmitting the EAWMs from the NDRRMOC duty personnel to the approving authorities and the Telecommunication Companies.
- 7.3.7 Given the urgency of sending the warning, all EAWMs shall be prepared, approved, and sent to Telecommunication Companies with the prescribed turnaround time upon receipt of the warning information.

ANNEX E contains the EAWM Transmittal Format.

7.4 Means for Public Dissemination of EAWM

- 7.4.1 The Telecommunication Companies shall utilize cell broadcast and SMS as main platforms for public dissemination of EAWMs in targeted areas.
- 7.4.2 Aside from the Telecommunication Companies' dissemination, the NDRRMOC, OCD Public affairs Office (OCD PAO), and the OCD Regional Offices shall undertake redundant dissemination of EAWM using SMS blast, social media posting, and other means of communication.
- 7.4.3 The NDRRMC, in collaboration with relevant partners and organizations, may employ other mediums such as Emergency Warning Broadcast System (EWBS) and other technological innovations.

7.5 Databasing of EAWMs

7.5.1 The NDRRMOC assigned duty personnel for EAWM shall maintain and update the database and ensure that all disseminated EAWMs shall be recorded using the EAWM Monitoring Log Sheet with the following information:

Particular	Description	
Counter	This indicates the number of EAWMs sent within the	
Counter	day. The counter of EAWMs sent is maintained daily.	
Date	This is the date of release of the EAWM	
Event	This pertains to the particular event that covers	

Туре	This refers to the type of event or hazard from which the EAWM was derived at.	
EAWM Message	This refers to the EAWM body or content, which follows the agreed templates.	
Areas	This specifies the area/s concerned (already affected, currently being affected, or projected to be affected), which have received the EAWM	
Approving authority and time	This indicates the name of the approving authority and the time of approval	
Time sent to Telecommunication Companies	This records the time the EAWM was sent to the Telecommunication Companies.	
Time Acknowledged (Telecommunication Companies and Regional Offices)	This refers to the time that the receipt of EAWM was acknowledged by the Telecommunication Companies and OCD Regional Offices. This includes the name of the personnel who acknowledged the receipt of the EAWM.	
Prepared by	This specifies the name of the NDRRMOC staff who drafted the EAWM.	
Source	This is the source of information where the warning was received/monitored. Included here are the details such as the name of the warning agency, advisory number, warning number, and other information.	
Link	The website or link where the advisory was monitored.	

7.5.2 The EAWM Monitoring Log Sheet shall be accomplished by the Alert and Warning Unit (AWU) of the 24/7 OpCen Risk Monitoring and Evaluation Section (RMES).

ANNEX F contains the detailed format of the EAWM Monitoring Logsheet.

7.6 Coordinating Instructions

- 7.6.1 The designated duty personnel shall adhere to the following succession of command within the NDRRMOC for the approval of the EAWM:
 - Chief, 24/7 Operations Center / Assistant Chief / Alert Team Leader
 - Director, Operations Service
 - Civil Defense Deputy Administrator for Operations
 - Civil Defense Deputy Administrator for Administration
 - Civil Defense Administrator
- 7.6.2 There shall also be focal persons within the warning agencies and the Telecommunication Companies, with the corresponding succession of command.

- 7.6.3 The concerned OCD Regional Offices shall be copy furnished by the NDRRMOC in sending the approved EAWM to Telecommunication Companies for purposes of redundant dissemination.
- 7.6.4 The OCD Regional Offices shall promptly report to the NDRRMOC that the information was received and disseminated to their respective Area of Responsibility (AOR).

8 INSTITUTIONAL ARRANGEMENTS

8.1 The OCD shall:

- 8.1.1 Ensure continuous and uninterrupted dissemination of EAWMs, as needed, through the 24/7 functionality of the NDRRMOC.
- 8.1.2 Designate at least three (3) focal persons for all EAWM-related concerns.
- 8.1.3 Receive, validate and authenticate EAWMs based on the advisories of the warning agencies.
- 8.1.4 Work with warning agencies, other NDRRMC member-agencies, Telecommunication Companies, and relevant partners for the continuous enhancement of the EAWM process.
- 8.1.5 Ensure that the Regional Offices shall disseminate the EAWM to the Local DRRM Offices utilizing all available primary and alternate means of communication for redundancy.
- 8.1.6 Update the Telecommunication Companies on the change of the approving authorities within the OCD.
- 8.1.7 Ensure that the released EAWMs shall be posted on the NDRRMC social media accounts thru the OCD PAO and the social media accounts of the OCD Regional Offices.
- 8.1.8 OCD PAO shall craft Information, Education, and Communication (IEC) materials that shall explain the process and details of the EAWM.

8.2 DOST-PHIVOLCS and DOST-PAGASA shall:

- 8.2.1 Designate at least two (2) focal persons for all EAWM related concerns for information of the OCD.
- 8.2.2 Assess the situation and recommend to the OCD through the NDRRMOC the need for sending EAWM to the public.

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- 8.2.3 Work with the OCD, Telecommunication Companies, and relevant partners for the continuous enhancement of the EAWM process.
- 8.3 Other warning agencies and NDRRMC member agencies shall adhere, but not limited to the following:
 - 8.3.1 Assess the situation and recommend to the OCD through the NDRRMOC the need for sending EAWM to the public.
 - 8.3.2 Work with the OCD, Telecommunication Companies, and relevant partners for the continuous enhancement of the EAWM process.
- 8.4 The Department of Information and Communications Technology (DICT) thru the National Telecommunications Commission (NTC) shall:
 - 8.4.1 Designate at least two (2) focal persons for all EAWM related concerns for information of the OCD.
 - 8.4.2 Ensure that the requested public dissemination of EAWMs is facilitated by the Telecommunication Companies.
 - 8.4.3 Supervise and monitor the compliance of the Telecommunication Companies on all relevant EAWM requirements.
 - 8.4.4 Develop and implement standards, guidelines, and regulations on the use of relevant tools and technologies to enhance the EAWM process.
- 8.5 The Telecommunication Companies shall:
 - 8.5.1 Designate at least three (3) focal persons for all EAWM related concerns for information of the OCD.
 - 8.5.2 Adhere to the EAWM requirements as provided for in the SOP and other mandated tasks pursuant to RA 10639, the regulations set by the OCD, NTC, DICT, and other relevant authorities.
 - 8.5.3 Submit an EAWM Compliance Report to the NTC which includes the date and time of the first and last transmission of each EAWM and the targeted areas, copy furnish the OCD on a monthly basis.
- 8.6 Presidential Communications Operations Office (PCOO) shall:
 - 8.6.1 Designate at least two (2) focal persons for all EAWM related concerns for information of the OCD.
 - 8.6.2 Disseminate the EAWM to the public using all available media through its attached agencies.

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8.6.3 Support in the development of a protocol and agreement in the dissemination of EAWM utilizing the support of the relevant broadcasting companies.

9 PUBLIC FEEDBACK / ISSUES / CONCERNS / INQUIRIES

In cases of queries or complaints on the EAWM, OCD PAO shall directly communicate with the stakeholder who raised the concern and provide appropriate clarification or information.

10 REVIEW AND ENHANCEMENT OF THE EAWM PROCESS

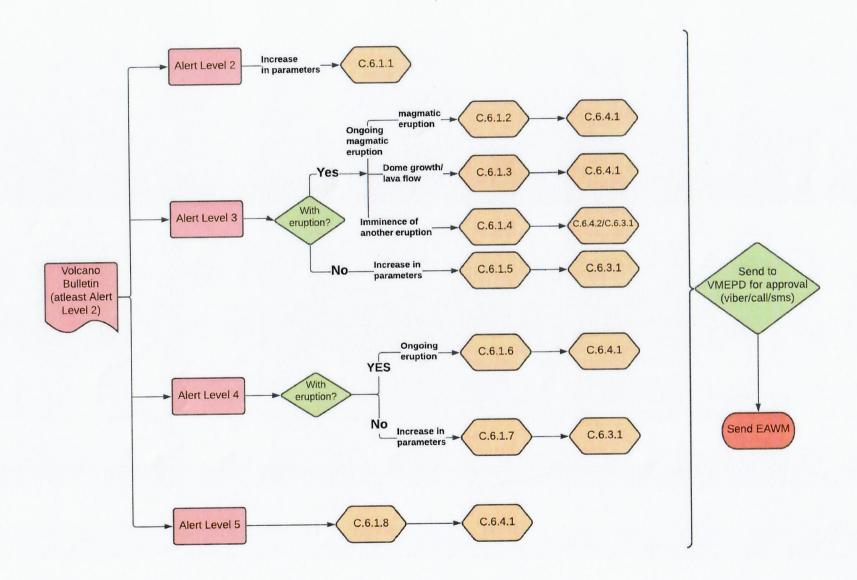
The OCD Operations Service through the OCD 24/7 Operations Center will initiate a focus group discussion, meeting with concerned NDRRMC member agencies, Telecommunication Companies, and other stakeholders to explore how to improve the EAWM process.

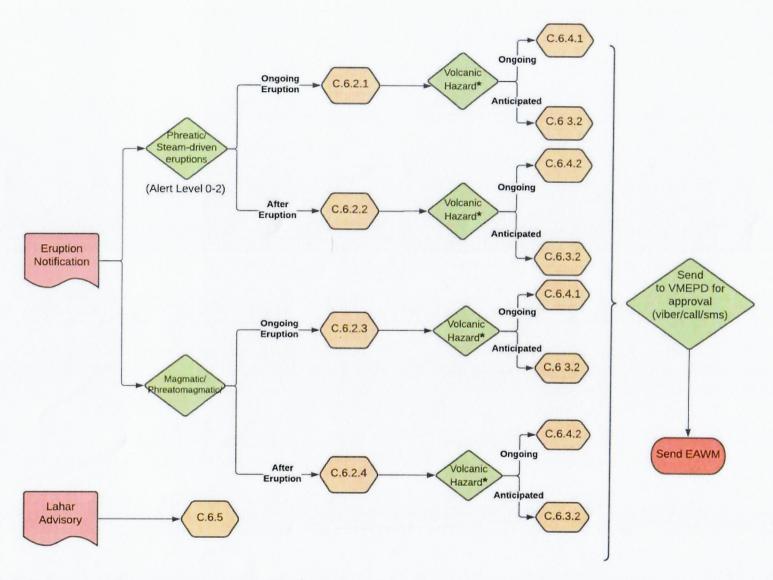
Approved by:

UNDERSECRETARY RICARDO B JALAE

Executive Director, NDRRMC and Administrator, OCD

ANNEX A. The flowchart in the dissemination of Volcano-related EAWMs.





Note: * If there were no volcanic hazards stated in the Eruption Notification, proceed with the sending of the EAWM to VMEPD for approval

ANNEX B. Technical details of EAWM Triggers / Parameters

Hazard	Description	Sources
Earthquake	It is a weak to violent shaking of the ground produced by the sudden movement of rock materials below the earth's surface. The earthquakes originate in tectonic plate boundary. The focus is point inside the earth where the earthquake started, sometimes called the hypocenter, and the point on the surface of the earth directly above the focus is called the epicenter.	 DOST-PHIVOLCS' Earthquake information Portal. (https://earthquake.phivolcs.dost.gov.ph/) HazardHunterPH Portal (https://hazardhunter.georisk.gov.ph/) Email Facsimile Coordination through phone for confirmation.
Heavy Rainfall Warnings	 Issued when heavy rainfall (i.e. hydrometeorological hazard) may lead to flooding and rain-induced landslides. Orange Rainfall Warning level - FLOODING IS THREATENING in low-lying areas and LANDSLIDES in mountainous areas. Red Rainfall Warning level - SERIOUS FLOODING is expected in low lying areas and LANSDSLIDES in mountainous areas. 	 Social media accounts of DOST-PAGASA and DOST-PAGASA Regional Service Divisions. Northern Luzon PRSD NCR PRSD Southern Luzon PRSD Visayas PRSD Mindanao PRSD Official Website of DOST-PAGASA
Tropical Cyclone Wind Signal	 TCWS are warnings released by DOST-PAGASA to inform the public that an area is about to be hit by a tropical cyclone. TCWS #3 - May cause moderate to heavy damage. Expect the impact of 121-170 kph winds in 18 hours. Wave height of up to 14.0 meters. Storm surge is possible at coastal areas. TCWS #4 - May cause heavy to very heavy damage. Expect the impact of 171-220 kph winds in 12 hours. Wave height of more than 14.0 meters. Storm surge 2-3 meters is possible at coastal areas. TCWS #5 - May cause very heavy to widespread damage. A super typhoon will affect the locality. Expect the impact of very strong winds of more than 220kph in at least 12 hours. Wave height of more than 14.0 meters. 	 DOST-PAGASA's Tropical Cyclone Bulletin DOST-PAGASA's Tropical Cyclone Bulletin Portal (http://bagong.pagasa.dost.gov.ph/tropical-cyclone/severe-weather-bulletin/2) Facsimile Email Social media accounts of DOST-PAGASA(e.g. Facebook, Twitter) Official You Tube Channel of DOST-PAGASA(i.e. DOST-PAGASA Weather Report)

	Storm surge of more than 3 meters is possible at coastal	
Tsunami	 ls a series of sea waves commonly generated by under-thesea earthquakes and whose heights could be greater than 5 meters. It is erroneously called tidal waves and sometimes mistakenly associated with storm surges. Tsunamis can occur when the earthquake is shallow-seated and strong enough to displace parts of the seabed and disturb the mass of water over it. Sea level change – A change in the sea level in the coastal areas. Tsunami Warning – A warning where in a destructive tsunami is generated with life threatening wave heights is expected to arrive the coastline with wave heights of greater than one (1) meter above the expected ocean tides. 	DOST-PHIVOLCS' Tsunami Information web Portal. (https://www.phivolcs.dost.gov.ph/index.php/tsunami/tsunami-advisory-and-warning3) Facsimile Email
Storm Surge (Daluyong ng Bagyo)	This is the abnormal rise in sea level that occurs during tropical cyclones or "bagyo". It is caused by strong winds and low atmospheric pressures produced by tropical cyclones. As the tropical cyclone approaches the coast, strong winds push the ocean water over the low-lying coastal areas, which can lead to flooding. This makes storm surges very dangerous. This is included upon the issuance of Tropical Cyclone Wind Signal.	 DOST-PAGASA's Storm Surge Warnings DOST-PAGASA's Forecast Storm Surge Portal (http://bagong.pagasa.dost.gov.ph/tropical-cyclone/forecast-storm-surge) Email Facsimile Social media accounts of DOST-PAGASA(e.g.Facebook,Twitter) Official You Tube Channel/Press Briefings
Volcanic Hazard	Eruptible magma is discharged from a vent or fissure as a mixture of fragmented lava, ash and gases, as fluidal lava. Volcanic eruptions are directly associated with hazards such as lava flow and rockfall, tephra fall/ ashfall/ ballistic projectiles, pyroclastic density currents or PDC (pyroclastic flow, pyroclastic surge, base surge), lateral blast, volcanic gas, volcanic tsunami, fissuring and lahars. A volcano preparing to erupt will pass through increasing levels of unrest, which are categorized based on monitored parameters:	 DOST-PHIVOLCS' Volcano Bulletin Advisory DOST-PHIVOLCS' Volcano Bulletin Portal (https://www.phivolcs.dost.gov.ph/index.php/volcano-hazard/volcano-bulletins3) Facsimile Email DOST-PHIVOLCS' Volcano Observatory Notification for Aviation and Volcano Eruption Notification. DOST-PHIVOLCS' Volcano Bulletin Portal

	 Alert Level 1 (Low-level Unrest) – slight and recurring increase in even one parameter (earthquake, volcanic gas, ground deformation, plume emission, etc.) Alert Level 2 (Increased Unrest) – sustained increases in more than one parameter. Alert Level 3 (Intensified Unrest/ Magmatic Unrest) – elevated increases in parameters with clear indication of ascending magma; minor eruptive activity may be taking place. Alert Level 4 (Hazardous Eruption Imminent) – accelerating unrest and eruptive activity, or abrupt decline thereof. 	(https://www.phivolcs.dost.gov.ph/index.php/volcano-hazard/volcano-bulletins3) Facsimile Email
	Alert Level 5 (Hazardous Eruption Ongoing) – Worst-case scenario eruption taking place, generating hazardous volcanic hazards.	
Dam Discharge	 The Dam Discharge Warning Operation aims to disseminate the information and warning to the public occupying/living within the vicinity along the river channels on the rising water level due to the release from the dam's spillway. Dam Discharge Warning No. 3 - When the water release through the dam spillway is rapidly increased, this Dam Discharge Warning shall be issued and disseminated to forewarn that the water level is going to rise steadily soon and advise not to go near the river. 	Dam Discharge Warning No. 3 released by NIA – MARIIS Facsimile Email Viber Group Social Media Platforms SMS

ANNEX C. EAWM Templates

C.1 Rainfall Warning

C.1.1 Orange Rainfall Warning

NDRRMC(Time, Date)Orange Rainfall Warning sa *(Areas Affected)*. Nagbabanta ang matinding pag-ulan, pagbaha at pagguho ng lupa.

C.1.2 Red Rainfall Warning

NDRRMC(Time, Date)Red Rainfall Warning sa (Areas Affected). Asahan ang matinding pagulan, pagbaha at pagguho ng lupa.

C.2 Tropical Cyclone Wind Signal

C.2.1 With Tropical Cyclone Wind Signal No. 3 and above

NDRRMC(Time, Date) Signal # (*TCWS No.*) sa (*Areas/Provinces Affected*). Malakas na hangin ang inaasahan sa loob ng (*Expected hours*) oras. Lahat ay pinag-iingat.

C.3 Storm Surge Warning

C.3.1 With storm surge warning with 2.1 - 3.0 meters (Orange Storm Surge Warning)

NDRRMC(Time, Date)Asahan 2-3metro taas ng alon at storm surge dulot ni Bagyong (Name of TC). Humanda sa paglikas ang nasa mababang lugar na nasa tabing dagat.

C.3.2 With storm surge warning with 3.0 meters and above (Red Storm Surge Warning)

NDRRMC(Time,Date)Asahan higit 3 metro taas ng alon at storm surge dulot ni Bagyong (Name of TC). Lumikas ang mga nasa mababang lugar na nasa tabing dagat.

C.4 Earthquake

C.4.1 Magnitude 5.0 or higher with expected damages and aftershocks

NDRRMC(Time, Date)Isang Magnitude (<u>EQ Magnitude</u>) na lindol ang naganap sa (<u>Epicenter of EQ</u>) kaninang (<u>Time of Occurrence</u>). Aftershocks at damages ay inaasahan.

C.4.2 Magnitude 5.0 or higher with aftershocks without expected damages.

NDRRMC(Time, Date)Isang Magnitude (EQ Magnitude) na lindol ang naganap sa (Epicenter of EQ) kaninang (Time of Occurrence). Aftershocks ay inaasahan.

C.4.3 Aftershocks with magnitude 6.0 and above

NDRRMC(Time, Date)Isang Magnitude (EQ Magnitude) na aftershock ang naganap sa (Epicenter of EQ) kaninang (Time of Occurrence). Aftershocks ay patuloy na inaasahan.

C.5 Tsunami

C.5.1 Tsunami Warnings

NDRRMC(Time, Date) May banta ng tsunami mula sa dagat na nakaharap sa (Name of Nearest Country/Province). Lumayo sa (Body of water where the tsunami will first arrive). Lumikas patungo sa mataas na lugar.

C.5.2 For sea-level change

NDRRMC(Time, Date) May banta ng tsunami mula sa dagat na nakaharap sa (Name of Nearest Country/Province). Maging handa sa posibleng paglikas at maghintay sa karagdagang abiso.

C.6 Volcano

C.6.1 With increased alert levels (Alert Level 2 and above)

C.6.1.1 Alert Level 2

NDRRMC(Time,Date) Ang Bulkang (Name of Volcano) ay itinaas na sa ALERT LEVEL 2 dahil sa pagtaas ng lebel ng aktibidad nito. Sumunod sa abiso ng awtoridad.

C.6.1.2 Alert level 3 due to an ongoing magmatic eruption

NDRRMC (Time, Date) ALERT LEVEL 3: Kasalukuyang may nagaganap na mahinang pagputok ang Bulkang (Name of Volcano). Mag-ingat at sumunod sa abiso ng kinauukulan.

C.6.1.3 Alert level 3 due to an ongoing magmatic eruption (dome growth/slow extrusion of degassed magma)

NDRRMC (Time, Date) ALERT LEVEL 3: Kasalukuyang may tahimik na paglabas ng lava sa Bulkang *(Name of Volcano)*. Mag-ingat at sumunod sa abiso ng kinauukulan.

C.6.1.4 Alert level 3 due to the imminence of another eruption after the previous one

NDRRMC (Time, Date) ALERT LEVEL 3: Pumutok ang Bulkang (Name of Volcano). dakong (Time of Occurrence). Mag-ingat at maghanda. Sumunod sa abiso ng awtoridad.

C.6.1.5 Alert level 3 due to an increase in parameters

NDRRMC (Time, Date) Ang Bulkang *(Name of Volcano)* ay itinaas na sa ALERT LEVEL 3. Posible ang pagputok sa loob ng ilang araw hanggang ilang linggo.

C.6.1.6 Alert level 4 due to an ongoing eruption

NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 4 ang Bulkang (Name of Volcano). Patuloy ang mapanganib na pagsabog. Sumunod sa abiso ng kinauukulan.

C.6.1.7 Alert level 4 due to an increase in parameters

NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 4 ang Bulkang (Name of Volcano), posible ang lubhang mapanganib na pagputok sa loob ng ilang oras hanggang ilang araw.

C.6.1.8 Alert level 5

NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 5 ang Bulkang *(Name of Volcano)*. Nagaganap ang lubhang mapanganib na pagputok. Sumunod sa abiso ng kinauukulan.

C.6.2 With volcanic eruption

C.6.2.1 Ongoing phreatic/steam-driven eruption (For Alert level 0-2)

NDRRMC (Time, Date) Nagaganap ang steam-driven o phreatic na pagputok sa Bulkang *(Name of Volcano)* na nagsimula kaninang *(Time of Occurrence/start time)*. Sumunod sa abiso ng awtoridad.

C.6.2.2 After eruption (phreatic/steam-driven eruption)

NDRRMC (Time, Date) Naganap ang steam-driven o phreatic na pagputok sa Bulkang (*Name of Volcano*) mula (*start time*) hanggang (*end time*). Sumunod sa abiso ng awtoridad.

C.6.2.3 Ongoing eruption (other types such as phreatomagmatic/magmatic)

NDRRMC (Time, Date) Nagaganap ang *(phreatomagmatic/magmatic)* na pagputok sa Bulkang *(Name of Volcano)* na nagsimula kaninang *(start time)*. Sumunod sa abiso ng awtoridad.

C.6.2.4 After eruption (other types such as phreatomagmatic/magmatic)

NDRRMC (Time, Date) Naganap ang (*phreatomagmatic/magmatic*) na pagputok sa Bulkang (*Name of Volcano*) mula (*start time*) hanggang (*end time*). Sumunod sa abiso ng awtoridad.

C.6.3 With anticipated volcanic hazard

C.6.3.1 Anticipated volcanic hazard simultaneously with Alert Level Raising message (Alert Level 3 and above) due to increase in parameters

NDRRMC (Time, Date) Lahat ay pinag-iingat sa posibleng (*Type of Hazard*) dulot ng posibleng pagputok ng Bulkang (*Name of Volcano*).

C.6.3.2 Anticipated volcanic hazard after an eruption event

NDRRMC (Time, Date) Lahat ay pinag-iingat sa posibleng (<u>Type of Hazard</u>) dulot ng pagputok ng Bulkang (<u>Name of Volcano</u>) dakong (<u>Time of Occurence</u>).

Note: The following are the *type of volcanic hazards*

- Pagdaloy ng lava
- Pag-agos ng pyroclastics
- Paglahar
- Pagguho ng lupa
- Paglindol

- Pagbitak ng lupa
- Pag-ashfall
- Base surge
- Volcanic Tsunami
- Nakakalasong Volcanic Gases

C.6.4 With ongoing volcanic hazard

C.6.4.1 Ongoing volcanic hazard and eruption

NDRRMC (Time, Date) Mag-ingat sa <u>(Type of Hazard)</u> dulot ng patuloy na pagputok ng Bulkang <u>(Name of Volcano).</u>

C.6.4.2 Ongoing volcanic hazard after an eruption event

NDRRMC (Time, Date) Mag-ingat sa <u>(Type of Hazard)</u> dulot ng pagputok ng Bulkang <u>(Name of Volcano)</u> dakong <u>(Time of Occurence)</u>.

Note: The following are the type of volcanic hazards

- · Pagdaloy ng lava
- Pag-agos ng pyroclastics
- Paglahar
- · Pagguho ng lupa
- Paglindol

- Pagbitak ng lupa
- Pag-ashfall
- Base surge
- · Volcanic Tsunami
- Nakakalasong Volcanic Gases

C.6.5 With lahar due to heavy rainfall

NDRRMC (Time, Date) Mag-ingat at maghanda ang mga residenteng nakatira sa tabing-ilog palibot ng Bulkang (Name of Volcano) sa posibleng paglahar.

C.7 Dam Discharge

C.7.1 Dam Discharge Warning No. 3

NDRRMC(Time, Date) Dadagdagan ang pagpapakawala ng tubig sa Magat Dam dahil sa patuloy na paglakas ng ulan. Ang mga nasa tabing-ilog ay pinalilikas.

ANNEX D. EAWM examples using the templates

Туре	Parameters / Triggers	EAWM Template	EAWM Example
Rainfall Warning	C.1.1 Orange Rainfall Warning	NDRRMC(Time, Date)Orange Rainfall Warning sa (Areas Affected). Nagbabanta ang matinding pag-ulan, pagbaha at pagguho ng lupa.	NDRRMC(12:00AM, 01Jan21)Orange Rainfall Warning sa <i>Metro Manila</i> . Nagbabanta ang matinding pag-ulan, pagbaha at pagguho ng lupa.
vvairiiiig	C.1.2 Red Rainfall Warning	NDRRMC(Time, Date)Red Rainfall Warning sa (Areas Affected). Asahan ang matinding pag-ulan, pagbaha at pagguho ng lupa.	NDRRMC(12:00AM, 01Jan21)Red Rainfall Warning sa <i>Metro Manila</i> . Asahan ang matinding pag-ulan, pagbaha at pagguho ng lupa.
Tropical Cyclone Wind Signal	C.2.1 Tropical Cyclone Wind Signal No. 3 and above	NDRRMC(Time, Date) Signal # (TCWS No.) sa (Areas/Provinces Affected). Malakas na hangin ang inaasahan sa loob ng (Expected hours) oras. Lahat ay pinag-iingat.	NDRRMC(12:00AM, 01Jan21) Signal #3 sa Metro Manila. Bulacan at Pampanga. Malakas na hangin ang inaasahan sa loob ng 18 oras. Lahat ay pinag-iingat.
Storm Surge	C.3.1 With storm surge warning with 2.1 - 3.0 meters (Orange Storm Surge Warning) C.3.2 With storm surge warning with 3.0 meters and above (Red Storm Surge Warning)	NDRRMC(Time, Date)Asahan 2-3metro taas ng alon at storm surge dulot ni Bagyong (Name of TC). Humanda sa paglikas ang nasa mababang lugar na nasa tabing dagat. NDRRMC(Time,Date)Asahan higit 3 metro taas ng alon at storm surge dulot ni Bagyong (Name of TC). Lumikas ang mga nasa mababang lugar na nasa tabing dagat.	NDRRMC(12:00AM, 01Jan21) Asahan 2-3 metro taas ng alon at storm surge dulot ni Bagyong AURING Humanda sa paglikas ang nasa mababang lugar na nasa tabing dagat. NDRRMC(12:00AM, 01Jan21) Asahan 2-3 metro taas ng alon at storm surge dulot ni Bagyong AURING. Humanda sa paglikas ang nasa mababang lugar na nasa tabing dagat.
	C.4.1 Magnitude 5.0 or higher with expected damages and aftershocks C.4.2 Magnitude 5.0 or higher	NDRRMC(Time, Date)Isang Magnitude (EQ Magnitude) na lindol ang naganap sa (Epicenter of EQ) kaninang (Time of Occurrence). Aftershocks at damages ay inaasahan.	NDRRMC (12:00AM, 01Jan21) Isang Magnitude <u>5.3</u> na lindol ang naganap sa Jose Abad Santos. Davao Occidental kaninang <u>11:30PM</u> . Aftershocks at damages ay inaasahan. NDRRMC (12:00AM, 01Jan21) Isang
Earthquake	with aftershocks without expected damages.	NDRRMC(Time, Date)Isang Magnitude (EQ Magnitude) na lindol ang naganap sa (Epicenter of EQ) kaninang (Time of Occurrence). Aftershocks ay inaasahan.	Magnitude <u>5.3</u> na lindol ang naganap sa <u>Jose Abad Santos. Davao Occidental</u> kaninang <u>11:30PM</u> . Aftershocks ay inaasahan.
	C.4.3 Aftershocks with magnitude 6.0 and above	NDRRMC(Time, Date)Isang Magnitude (EQ Magnitude) na aftershock ang naganap sa (Epicenter of EQ) kaninang (Time of	NDRRMC(12:00AM, 01Jan21) Isang Magnitude <u>6.0</u> na aftershock ang naganap sa Jose Abad Santos, Davao Occidental

		Occurrence). Aftershocks ay patuloy na inaasahan.	kaninang <u>11:30PM</u> . Aftershocks ay patuloy na inaasahan.
Tsunami	C.5.1 Tsunami Warnings	NDRRMC(Time, Date) May banta ng tsunami mula sa dagat na nakaharap sa (Name of Nearest Country/Province). Lumayo sa (Body of water where the tsunami will first arrive). Lumikas patungo sa mataas na lugar.	NDRRMC(12:00AM, 01Jan21) May banta ng tsunami mula sa dagat na nakaharap sa Japan . Lumayo sa karagatan ng Pasipiko o lumikas patungo sa mataas na lugar.
rsunami	C.5.2 For sea-level change	NDRRMC(Time, Date) May banta ng tsunami mula sa dagat na nakaharap sa (Name of Nearest Country/Province). Maging handa sa posibleng ng paglikas at maghintay sa karagdagang abiso.	NDRRMC(12:00AM, 01Jan21) May banta ng tsunami mula sa dagat na nakaharap sa Japan . Maging handa sa posibilidad ng paglikas at mag-antay sa karagdagang abiso.
Volcano	C.6.1 With increased alert levels (Alert Level 2 and above) C.6.1.1 Alert Level 2	NDRRMC(Time,Date) Ang Bulkang (Name of Volcano) ay itinaas na sa ALERT LEVEL 2 dahil sa pagtaas ng lebel ng aktibidad nito. Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) Ang Bulkang <i>Hibok-hibok</i> ay itinaas na sa ALERT LEVEL 2 dahil sa pagtaas ng lebel ng aktibidad nito. Sumunod sa abiso ng awtoridad.
	C.6.1.2 Alert level 3 due to an ongoing magmatic eruption	NDRRMC (Time, Date) ALERT LEVEL 3: Kasalukuyang may nagaganap na mahinang pagputok ang Bulkang (Name of Volcano). Mag-ingat at sumunod sa abiso ng kinauukulan.	NDRRMC(12:00AM, 01Jan21) ALERT LEVEL 3: Kasalukuyang may nagaganap na mahinang pagputok ng Bulkang <i>Hibok</i> - <i>hibok</i> . Mag-ingat at sumunod sa abiso ng kinauukulan.
	C.6.1.3 Alert level 3 due to an ongoing magmatic eruption (dome growth/slow extrusion of degassed magma)	NDRRMC (Time, Date) ALERT LEVEL 3: Kasalukuyang may tahimik na paglabas ng lava sa Bulkang <i>(Name of Volcano)</i> . Mag- ingat at sumunod sa abiso ng kinauukulan.	NDRRMC(12:00AM, 01Jan21) ALERT LEVEL 3: Kasalukuyang may tahimik na paglabas ng lava sa Bulkang <i>Hibok-Hibok</i> . Mag-ingat at sumunod sa abiso ng kinauukulan.
	C.6.1.4 Alert level 3 due to the imminence of another eruption after the previous one	NDRRMC (Time, Date) ALERT LEVEL 3: Pumutok ang Bulkang (Name of Volcano) dakong (Time of Occurrence). Mag-ingat at maghanda. Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) ALERT LEVEL 3: Pumutok ang Bulkang <i>Hibok-</i> <i>hibok</i> dakong <i>12:00AM</i> . Mag-ingat at maghanda. Sumunod sa abiso ng awtoridad.
	C.6.1.5 Alert level 3 due to an increase in parameters	NDRRMC (Time, Date) Ang Bulkang (Name of Volcano) ay itinaas na sa ALERT LEVEL 3. Posible ang pagputok sa loob ng ilang araw hanggang ilang linggo.	NDRRMC(12:00AM, 01Jan21) Ang Bulkang <u>Hibok-Hibok</u> ay itinaas na sa ALERT LEVEL 3. Posible ang pagputok sa loob ng ilang araw hanggang ilang linggo
	C.6.1.6 Alert level 4 due to an ongoing eruption	NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 4 ang Bulkang <i>(Name of Volcano)</i> .	NDRRMC(12:00AM, 01Jan21) Itinataas na sa ALERT LEVEL 4 ang Bulkang <i>Hibok-hibok</i> .

	Patuloy ang mapanganib na pagsabog. Sumunod sa abiso ng kinauukulan.	Patuloy ang mapanganib na pagsabog. Sumunod sa abiso ng kinauukulan.
C.6.1.7 Alert level 4 due to an ongoing eruption	NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 4 ang Bulkang (<i>Name of Volcano</i>), posible ang lubhang mapanganib na pagputok sa loob ng ilang oras hanggang ilang araw.	NDRRMC(12:00AM, 01Jan21) Itinataas na sa ALERT LEVEL 4 ang Bulkang <i>Mayon</i> , posible ang lubhang mapanganib na pagputok sa loob ng ilang oras hanggang ilang araw.
C.6.1.8 Alert level 5	NDRRMC (Time, Date) Itinataas na sa ALERT LEVEL 5 ang Bulkang (<i>Name of Volcano</i> . Nagaganap ang lubhang mapanganib na pagputok. Sumunod sa abiso ng kinauukulan.	NDRRMC(12:00AM, 01Jan21) Itinataas na sa ALERT LEVEL 5 ang Bulkang <i>Hibok-Hibok</i> . Nagaganap ang lubhang mapanganib na pagputok. Sumunod sa abiso ng kinauukulan
C.6.2 With volcanic eruption C.6.2.1 Ongoing phreatic/steam-driven eruption (For Alert level 0-2)	NDRRMC (Time, Date) Nagaganap ang steam-driven o phreatic na pagputok sa Bulkang (Name of Volcano) na nagsimula kaninang (Time of Occurence). Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) Nagaganap ang steam-driven o phreatic na pagputok sa Bulkang <i>Hibok-hibok</i> na nagsimula kaninang 12:00PM . Sumunod sa abiso ng awtoridad.
C.6.2.2 After phreatic/steam-driven eruption (For Alert level 0-2)	NDRRMC (Time, Date) Naganap ang steam- driven o phreatic na pagputok sa Bulkang (Name of Volcano) mula (start time) hanggang (end time). Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) Nagaganap ang steam-driven o phreatic na pagputok sa Bulkang <i>Hibok-hibok</i> mula 12:00PM hanggang 12:05PM. Sumunod sa abiso ng awtoridad.
C.6.2.3 Ongoing eruption (other types such as phreatomagmatic/magmatic)	NDRRMC (Time, Date) Nagaganap ang (phreatomagmatic/magmatic) na pagputok sa Bulkang (Name of Volcano) na nagsimula kaninang (start time). Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) Nagaganap ang <i>phreatomagmatic</i> na pagputok sa Bulkang <i>Hibok-Hibok</i> na nagsimula kaninang <i>3:16PM</i> . Sumunod sa abiso ng awtoridad
C.6.2.4 After eruption (other types such as phreatomagmatic/magmatic)	NDRRMC (Time, Date) Naganap ang (phreatomagmatic/magmatic) na pagputok sa Bulkang (Name of Volcano) mula (start time) hanggang (end time). Sumunod sa abiso ng awtoridad.	NDRRMC(12:00AM, 01Jan21) Naganap ang phreatomagmatic na pagputok sa Bulkang Hibok-Hibok mula kaninang 3:16PM hanggang 3:20PM. Sumunod sa abiso ng awtoridad
C.6.3 With anticipated volcanic hazard C.6.3.1 Anticipated volcanic hazard simultaneously with Alert Level Raising	NDRRMC (Time, Date) Lahat ay pinag-iingat sa posibleng (<i>Type of Hazard</i>) dulot ng posibleng pagputok ng Bulkang (<i>Name of Volcano</i>).	NDRRMC (12:00AM, 01Jan21) Lahat ay pinag-iingat sa <i>posibleng pag-agos ng pyroclastics at pagguho ng lupa</i> dulot ng posibleng pagputok ng Bulkang <i>Hibok-hibok</i> .

	message (Alert Level 3 and above) due to increase in parameters	K.,	
	C.6.3.2 Anticipated volcanic hazard after an eruption event	NDRRMC (Time, Date) Lahat ay pinag-iingat sa posibleng (Type of Hazard) dulot ng pagputok ng Bulkang (Name of Volcano) dakong (Time of Occurence).	NDRRMC (12:00AM, 01Jan21)) Lahat ay pinag-iingat sa posibleng <i>padaloy ng pyroclastics at pag-ashfall</i> dulot ng pagputok ng Bulkang <i>Hibok-Hibok</i> dakong <i>12:00PM</i> .
	C.6.4 With ongoing volcanic hazard C.6.4.1 Ongoing volcanic hazard and eruption	NDRRMC (Time, Date) Mag-ingat sa <u>(Type of Hazard)</u> dulot ng patuloy na pagputok ng Bulkang <u>(Name of Volcano).</u>	NDRRMC (12:00AM, 01Jan21) Mag-ingat sa pag-agos ng pyroclastics at pagguho ng lupa dulot ng patuloy na pagputok ng Bulkang Hibok-Hibok.
	C.6.4.2 Ongoing volcanic hazard after an eruption event	NDRRMC (Time, Date) Mag-ingat sa (Type of Hazard) dulot ng pagputok ng Bulkang (Name of Volcano) dakong (Time of Occurence).	NDRRMC (12:00AM, 01Jan21) Mag-ingat sa pag-agos ng pyroclastics at pagguho ng lupa dulot ng pagputok ng Bulkang Hibok- Hibok dakong 12:00 PM.
	C.6.5 With lahar due to heavy rainfall	NDRRMC (Time, Date) Mag-ingat at maghanda ang mga residenteng nakatira sa tabing-ilog palibot ng Bulkang (Name of Volcano) sa posibleng paglahar.	NDRRMC (12:00AM, 01Jan21) Mag-ingat at maghanda ang mga residenteng nakatira sa tabing-ilog palibot ng Bulkang <i>Hibok-Hibok</i> sa posibleng paglahar.
Dam Discharge	C.7.1 Dam Discharge Warning No. 3	NDRRMC(Time, Date) Dadagdagan ang pagpapalabas ng tubig sa Magat Dam dahil sa patuloy na paglakas ng ulan. Ang mga nasa tabing-ilog ay pinalilikas.	NDRRMC(12:00AM, 01Jan21) Dadagdagan ang pagpapalabas ng tubig sa Magat Dam dahil sa patuloy na paglakas ng ulan. Ang mga nasa tabing-ilog ay pinalilikas.

ANNEX E. EAWM Transmittal Format

Figure 2. EAWM format for Approving Figure 1. EAWM Format for dissemination by TelCos **Authorities** Good AM Sir, EAWM for Greetings and for actions Good AM Sir. EAWM for Approval dissemination. Approved by Ast. Chief OpCen Approving key official 24Feb2020-01 24Feb2020-01 **EAWM Counter (Format:** To be disseminated in the province ddmmmvvvv-counter) of Davao Occidental To be disseminated in the province Areas disseminated with of Davao Occidental the EAWM. These are NDRRMC(6:57AM,24Feb21) areas affected by the Magnitude 5.1 lindol naganap NDRRMC(6:57AM,24Feb21) EAWM which includes the sa Sarangani (Davao Occidental) Magnitude 5.1 lindol naganap areas with Intensities for kaninang 6:26AM. Aftershocks av sa Sarangani (Davao Occidental) earthquakes. inaasahan. kaninang 6:26AM. Aftershocks ay The EAWM. inaasahan.

Sender

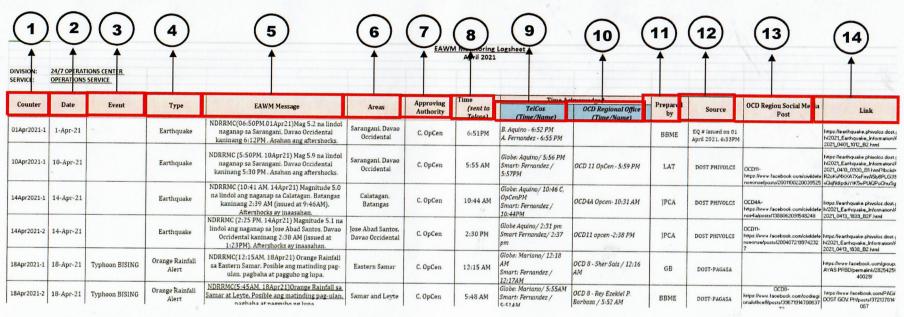
Time approved by approving official

NDRRMC 6:57AM 24Feb21)

Magnitude 5.1 lindol naganap
sa Sarangani (Davao Occidental)
kaninang 6:26AM. Aftershocks ay inaasahan.

The EAWM Body

ANNEX F. EAWM Monitoring Logsheet



- 1. This is the counter of the EAWMs released. Format (ddmmmyyyy-n where in d=date, m=month(letter), y=year, n=counter)
- Date sent.
- 3. The event that covers the release of the EAWM such as the name of the Tropical Cyclone or LPA.
- 4. The type of event or hazard in which the EAWM was derived at.
- 5. The exact body of the EAWM transmitted / disseminated.
- Affected areas disseminated with the EAWM
- 7. Recording of the time and Key official who approved the EAWM.

- The time sent to the TelCos.
- 9. Time acknowledged by the TelCos
- 10. Time acknowledged by the OCD Regional Office
- 11. OpCen personnel who prepared the EAWM with signature.
- 12. Source of information. Should include the number of Warning/Advisory, Source (Advisory#, SWB#, PRSD), and if earthquake kindly add the PHIVOLCS personnel who confirmed the EAWM
- 13. The link of the OCD Regional Office's social media post.
- 14. The website or the exact address where the incident was monitored. (can be a link from facebook or from the official website