

## Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila

2 1 MAY 2018



SUBJECT: The Big One Earthquake Preparedness Program (Equipment Positioning and Mobilization Contingency Plan)

X-28-204

Pursuant to Republic Act No. 10121: "Philippine Disaster Risk Reduction and Management Act of 2010", Department Order No. 69, Series of 2010: "Creation of a Committee to Study and Formulate Action Plans to Strengthen the DPWH Disaster Preparedness and Response Mechanism", and as an Earthquake Preparedness Program to provide immediate response to nearby areas surrounding the Valley Fault System and other affected areas after the occurrence of "The Big One" earthquake, this Equipment Positioning and Mobilization Contingency Plan as herein attached to form part of this Department Order is hereby issued.

As part of the Logistics Response Cluster and aside from the primary responsibility of the DPWH on post disaster response, specifically on being the lead agency in **a**] Increasing Resiliency of Infrastructure System and **b**] Disaster and Climate Change-resilient Infrastructure Construction/Reconstruction, it is realized that immediate road clearance, and debris removal to provide logistic support on disaster response of the government, provision of alternate routes, temporary roads and bridges shall be made by this Department through the use of our equipment fleet.

This Contingency Plan contains standard operating procedure in equipment positioning and mobilization which is based on the National Disaster Risk Reduction and Management Plan (NDRRMP) 2011-2028 and in consonance with the National Disaster Risk Reduction and Management Framework (NDRRMF) of the National Disaster Risk Reduction and Management Council (NDRRMC). It is integrated to the Incident Command System (ICS) of the country, established by the Office of the Civil Defense (OCD), to improve inter-agency coordination and work for a common set of objectives during disaster response and operations in preparation to the "The Big One" earthquake.

This Order supersedes Department Order No. 101, Series of 2016, entitled "Guidelines on Equipment Positioning and Mobilization in response to 'The Big One' Earthquake" and shall take effect immediately.

For strict compliance.

MARK A. VILLAR Secretary Department of Public Works and Highways Office of the Secretary

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### THE BIG ONE EARTHQUAKE PREPAREDNESS PROGRAM (Equipment Positioning and Mobilization Contingency Plan)

#### A. INTRODUCTION

The Department of Public Works and Highways (DPWH), as a member of the National Disaster Risk Reduction and Management Council (NDRRMC), is responsible for improving infrastructure systems through infrastructure assessment, rehabilitation and reconstruction programs, as well as road clearance, every time a disaster occurs in our country.

Pursuant to Republic Act No. 10121: "Philippine Disaster Risk Reduction and Management Act of 2010", the Office of the Civil Defense (OCD) formulates and implements the National Disaster Risk Reduction and Management Plan (NDRRMP) 2011-2028 which provides legal basis for policies, plans and programs for disaster-related operations. NDRRMP, conforming to the structure of NDRRMC, has four (4) thematic areas: Disaster Prevention and Mitigation, Disaster Preparedness, Disaster Response, and Disaster Rehabilitation and Recovery. These areas are related to the overall vision of the disaster risk reduction and management which is "safer, adaptive and disaster-resilient Filipino communities toward sustainable development".

The DPWH is the lead agency in **a]** Increased Resiliency of Infrastructure Systems under the Thematic Area 1: Disaster Prevention and Mitigation, and **b]** Disaster and Climate Change-resilient Infrastructure constructed/reconstructed under the Thematic Area 4: Disaster Rehabilitation and Recovery sections of the NDRRMP.

In the Philippines, one of the known fault systems is the Valley Fault System (VFS), an active fault which consists of two segments: the East Valley Fault (EVF) and the West Valley Fault (WVF), located in the Greater Metro Manila Area (GMMA). It extends to nearby Regions III and IV-A of Luzon, through the provinces of Bulacan, Rizal, Laguna and Cavite, increasing the possible areas to be affected once an earthquake near VFS, The Big One earthquake, occurs.

According to Director Renato U. Solidum, Jr. of Philippine Institute of Volcanology and Seismology (PHIVOLCS), the fault has moved four times in the past 1,400 years. On average, it moves every 400 years (+/- 10 to 100 years). The last time an earthquake occurred along the West Valley Fault was in 1658, around 360 years ago. It means it can happen anytime within our lifetime. This fault can generate an earthquake with a magnitude of 7.2 that may result to a very destructive ground shaking which can cause destruction of infrastructures and loss of lives.<sup>1</sup>

This Department Order (DO) contains standard operating procedures in equipment positioning and mobilization which is consistent with the NDRRMP 2011-2028, the National Disaster Risk Reduction and Management Framework (NDRRMF) of the NDRRMC and the Metro Manila Earthquake Contingency Plan (Oplan Metro Yakal Plus).

<sup>&</sup>lt;sup>1</sup>Retrieved from http://www.gmanetwork.com/news/story/316877/scitech/science/the-next-big-quake-inmetro-manila-may-hit-within-our-lifetime

- **B. DEFINITION OF TERMS** For the purposes of this DO, the following terms or words and phrases shall mean or be understood as follows:
  - **1. Check-in**<sup>2</sup> the process whereby resources report to an incident or planned event to receive tactical assignment.
  - 2. Contingency Plan (CP) a scenario-based plan for a specific and projected natural and/or human-induced hazard. It aims to address the impacts of the hazard and/or to prevent the occurrence of the emerging threats by arranging well-coordinated responses and enabling efficient management of resources.
  - **3. Demobilization**<sup>2</sup> the release and return of resources that are no longer required for the support of an incident/event.
  - 4. Emergency Operations Center (EOC)<sup>2</sup> the facility that serves as repository of information and main hub for coordination of resources to support the management of an incident or planned event. This shall be located at the Quadrant Base of each Affected Area<sup>3</sup>, and shall be under the responsibility of various Regional Disaster Risk Reduction and Management Council (RDRRMC) offices.
  - 5. Incident Commander (IC)<sup>2</sup> the individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.
  - 6. Incident Command System (ICS)<sup>2</sup> a standard, on-scene, all-hazard incident management concept that can be used by all DRRMCs, member agencies and response groups. It allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by agency or jurisdictional boundaries.
  - Incident Management Team (IMT) a team composed of the IC and appropriate Command and General Staff personnel assigned to an incident or planned event. The IMT members may be expanded as needed.
  - **8. Mobilization** the activation of asset, physical and manpower resources, to bring together to a target site and prepare for action.
  - Rapid Damage Assessment and Needs Analysis (RDANA) a disaster response mechanism that is used immediately in the early emergency phase to determine the extent of impacts and assess the priority needs of the communities.

## C. ACRONYMS

AEE	Area Equipment Engineer
AFP	Armed Forces of the Philippines
BOE	Bureau of Equipment
BOM	Bureau of Maintenance
СО	Central Office
СР	Contingency Plan
DE	District Engineer
DEO	District Engineering Office
EMD	<b>Equipment Management Division</b>
EOC	Emergency Operations Center

<sup>&</sup>lt;sup>2</sup> NDRRMC Memo. No. 44, S. 2016: "Guidelines on the Mobilization of Incident Management Teams (IMTs)"

<sup>&</sup>lt;sup>3</sup> D.2. Strategic Deployment Area (see page 6)

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EVF	East Valley Fault
GMMA	Greater Metro Manila Area
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
LGU	Local Government Unit
MMDA	Metropolitan Manila Development Authority
MMDRRMC	Metro Manila Disaster Risk Reduction and Management Council
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMF	National Disaster Risk Reduction and Management Framework
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PM	Preventive Maintenance
PPE	Personal Protective Equipment
QRA	Quick Response Asset
QRE	Quick Response Equipment
QRMT	Quick Response Medical Team
QRST	Quick Response Support Team
QRT	Quick Response Tools
RD	Regional Director
RDANA	Rapid Damage Assessment and Needs Analysis
RDRRMC	Regional Disaster Risk Reduction and Management Council
RO	Regional Office
VFS	Valley Fault System
WVF	West Valley Fault

## D. PRE-EMERGENCY PHASE (Disaster Preparedness)

#### 1. QUICK RESPONSE ASSET (QRA)

Quick Response Assets (QRAs) are composed of all available Department's Quick Response Equipment (QRE), Quick Response Tools (QRT), and personnel, composed of Quick Response Support Team (QRST) and Quick Response Medical Team (QRMT), who can provide support and assistance in the clearing and rescue operations after the occurrence of The Big One earthquake. *The DPWH Quick Response Team shall also be known as the DPWH Incident Management Team*.

Similar to the QRA lists submitted by each Region pursuant to DO No. 101, Series of 2016: "Guidelines on Equipment Positioning and Mobilization in response to 'The Big One' earthquake", **an updated list of QRAs shall be summarized, consolidated and sent by EMD quarterly (every end of the third month)**, to the Bureau of Equipment (BOE) which keeps and updates the QRA Database. Likewise, soft copy shall be sent to **dpwhboeqra@gmail.com** for BOE's immediate updating. This updated list shall be published on the DPWH Intranet.

For easy identification, **a]** minor changes in data of the newly updated checklist shall be printed in bold font to be easily identified, and **b]** major changes shall be mentioned in the covering memorandum, if there is any.

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**Disaster response shall be on wave system.** The First wave of QRA, or the first responders, shall be composed of highly important QRE, QRT, QRST, and QRMT which shall immediately clear the road for easy passing and for other rescuers to reach affected areas. After the deployment of the first wave, an assessment will be done to evaluate the severity of the incident and to estimate and set the quantity of QRA to be deployed. Depending on the said assessment, second wave and/or additional waves may be deployed subject to the needs and availability of QRA.

For easy identification, prior to deployment, equipment and tools shall have proper decals/markings/identification indicating their DPWH Property Code Number and the Region they come from. Also, personnel shall have identification cards or markings on their clothing indicating the team and Region to which they belong.

**Prioritization from Department of Transportation (DoTr) through Philippine Ports Authority (PPA):** All QRE and QRTs have authorization and prioritization in passing through all port areas in the country, through the letter signed by DoTr PPA General Manager JAY DANIEL R. SANTIAGO dated September 28, 2017 which stated that "PPA shall issue an advisory directing all PPA Field Offices nationwide to give full support to the QRAs Project of the DPWH."

#### **1.1 Quick Response Equipment (QRE)**

- a. Composed of Hydraulic Excavators (F17), Truck Mounted Cranes (F5), Hydraulic Cranes (F6), Truck Mounted Flood Mitigation Equipment (H17), Stake Trucks (H2), Dump Trucks (H3), Truck Tractors/Prime Movers (H4), Maintenance Shop Trucks (H7), Forklifts (H8), Crawler Tractors/Bulldozers (L1), Front End Loaders/Payloaders (L2), Road Graders (N1) and Service Vehicles (H1/H1M).
- b. Shall strictly follow the Preventive Maintenance (PM) program to ensure their operational condition and shall undergo overall check-up prior to deployment.
- c. Equipment currently being utilized on road maintenance projects and other related works should be made ready for immediate deployment.
- d. Equipment assigned to remote areas, e.g., island Regions or areas where mobilization will be laborious/uneconomical shall be on stand-by/reserved list in case demand for more equipment arises.
- e. The **first wave of QRE** shall be composed of Front End Loader/Payloaders (L2), Hydraulic Excavators (F17), Dump Trucks (H3), and Crawler Tractors/Bulldozers (L1). These can be used to immediately clear the road for easy passing and for other rescuers to reach affected areas.
- f. Quantity of first wave of QRE to be immediately deployed shall be:
  - 1. Two (2) units Dump Truck
  - 2. Two (2) units Front End Loader/Payloader
  - 3. One (1) unit Hydraulic Excavator
  - 4. One (1) unit Crawler Tractor/Bulldozer, if available
- g. All remaining units of first wave equipment shall be deployed together with the second wave based on assessment done by the IC.
- h. The **second wave of QRE** shall be composed of QRE like Truck Mounted Cranes (F5), Hydraulic Cranes (F6), Truck Mounted Flood Mitigation Equipment (H17), Stake Trucks (H2), Truck Tractors/Prime Movers (H4), Maintenance Shop Trucks (H7), Forklifts (H8), Road Graders (N1) and Service Vehicles (H1).

- i. Service Vehicles shall be initially limited to five (5) units only, or just enough to transport the Quick Response Support and Medical Teams of each Region, whichever is higher.
- j. Additional waves may be deployed subject to the needs and availability of QRA, based on assessment done by the IC.

## 1.1 Quick Response Tool (QRT)

- a. Composed of Generator Sets (G1), Chain Saws (T1), Air Compressors (A1), Trailer Mounted Tower Floodlighting Equipment (J6) and other **portable hand tools that can be used in road clearing operation and other construction and maintenance works** such as Sledge Hammer, Portable Jackhammer, Axe, Crow bar, Shovel, Chain block, Halogen Flashlight, Bolt cutter, Hacksaw, Power saw, Megaphone, Ladder, and Nylon Rope.
- b. The **first wave of QRT** shall be composed of tools that can be used to immediately clear the road. These can be any tool listed above and shall be determined by the Responding Region, subject to availability.
- c. Additional waves may be deployed subject to the needs and availability of QRA, based on assessment done by the Incident Commander.
- d. Shall strictly follow the PM program to ensure their operational condition and shall undergo overall check-up prior to deployment.

## **1.2 Quick Response Support Team (QRST)**

- a. Composed of engineers, operators, mechanics, inspectors, welders, carpenters, drivers and any equipment personnel available who can provide technical support and manpower assistance.
- b. Each shall be equipped with proper Personal Protective Equipment (PPE), provided by his respective office, before proceeding to any rescue operations.
- c. The **first wave of QRST** shall be composed of team leaders, engineers, inspectors, operators, mechanics and other equipment personnel who have knowledge and skills in operating equipment, especially the first wave of QRE.
- d. Each unit of equipment shall have a back-up operator/driver in case the designated operator/driver gets injured or affected by the earthquake.
- e. Additional waves may be deployed subject to the needs and availability of QRA, based on assessment done by the IC.

## **1.3 Quick Response Medical Team (QRMT)**

- a. Composed of nurses, doctors or any personnel who had first aid application training and certification given by Philippine Red Cross or other competent agencies.
- b. Shall be equipped with first aid kit which includes medicines, medical tapes, bandages, wound dressing, antiseptic, tweezers, scissors, safety pins, plastic bags, medical gloves, etc.
- c. All QRMT members shall be part of the second wave of responders.

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Affected Areas		Location of Sub- Emergency Operations Centers	RDRRMC Responsible Region	DPWH Responding Regions
Region III – Central Luzon		Veterans Memorial Medical		III, IX*, XII*
North Quadrant	Cities of Caloocan, Valenzuela, Quezon, San Juan, and Mandaluyong	Center Golf Course, North Ave., Quezon City / University of the Philippines Diliman	Region I	NCR, I, VII*
East Quadrant	Cities of Pasig and Marikina	LRT 2 Santolan Station Depot, Santolan, Pasig City	Region II	NCR, II, XI*
West Quadrant	Cities of Manila, Malabon, and Navotas	Intramuros Golf Course, Manila City	CAR	NCR, CAR, X*
South Quadrant	Cities of Las Piñas, Makati, Muntinlupa, Parañaque, Pateros, Taguig, and Pasay	Villamor Air Base Golf Course, Pasay City	Region V	NCR, V, VI*, VIII**
Region IV-A - CALABARZON				IV-A, IV-B, XIII*

### 2. STRATEGIC DEPLOYMENT AREA



The Department's QRAs all over the country are clustered to a particular strategic deployment area to equally allocate support and assistance. The Metropolitan Manila Development Authority (MMDA) has divided Metro Manila into four (4) quadrants for better evacuation and rescue operations among residents in preparation for the possible movement of the Valley Fault System that may damage the Metro Manila Area. Moreover, Regions III and IV-A are also identified as affected Regions and part of the areas for deployment. The grouping of Affected Areas, Location of EOCs, Regional Disaster Risk Reduction and Management Council (RDRRMC) Responsible Region and DPWH Responding Regions are shown in the table above. The RDRRMC Responsible Region shall set up EOCs on the said quadrants.

\*Regions that may prioritize sending manpower (QRST and/or QRMT) first before equipment (QRE and/or QRT) due to transportation constraints.

\*\*Region VIII is now included in the Responding Region, and is now required to submit their consolidated QRA list to the BOE. D.O. No. <u>87.</u>, s. 2018 THE BIG ONE EARTHQUAKE PREPAREDNESS PROGRAM (Equipment Positioning and Mobilization Contingency Plan) Page 7 of 15

Equipment assigned to Regions that are expected to be greatly affected by the earthquake namely NCR, Region III and Region IV-A, will be used to assist in their respective Regions but can be operated by personnel from other Regions in case the designated personnel from these Regions will be affected by the earthquake.

Relative to the resource assumption on Oplan Metro Yakal Plus, only 30% of QRA of NCR can be mobilized for response.

The map (shown on right) represents the Valley Fault System in Luzon. Fault lines are indicated by the red lines.

#### 3. MOBILIZATION ROUTES AND ENTRY POINTS

In order to have a safe and fast response to affected areas, each Regional Office (RO)/District Engineering Office (DEO) shall have a plan on how to mobilize the equipment towards the assigned deployment area. The following guidelines are hereby recommended:

- Identify the primary route and all possible alternate routes in case the primary route is rendered impassable due to the effects of earthquake.
- b. Provide a map and properly label the streets, roads and landmarks.
- c. Mark areas prone to floods, landslides and other calamities.
- d. Locate areas prone to accidents like cliffs, steep slopes, bridges, tunnels, etc.
- e. Ensure that the drivers/operators are familiar with the routes.
- f. Prepare an itinerary of travel and list of possible expenses like fuel, toll fees, and shipping fees, among others.



Figure 2. The Fault Valley System in Greater Metro Manila Atlas, DOST-PHIVOLCS-NDRRMC

Based on the Oplan Metro Yakal Plus, the Entry Points of Equipment, Manpower and Relief Assistance on the North and South of Metro Manila shall be at the following:

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MEANS OF TRANSPORTATION	ENTRY POINTS				
LAND TRANSPORTATION					
	Balintawak Cloverleaf towards A. Bonifacio				
	Mindanao Avenue				
North	Malinta				
	Bocaue, Marilao, Meycauayan towards Commonwealth				
	McArthur - Valenzuela				
	Osmeña				
	Alabang-Muntinlupa				
	Sucat				
South	Circumferential Road 5 (C5) – Libingan ng mga Bayani				
	Villamor – Sales				
	Epifanio Delos Santos Avenue (EDSA)				
	Circumferential Road 6 (C6)				
SEA TRANSPORTATION (if not heavily damaged)					
	Subic Bay Freeport				
North	Manila Port				
	San Fernando, La Union Port				
South	Batangas Port				
30001	Sangley Point				
AIR TRANSPORTATION (if runway is not damaged)					
	Clark International Airport				
	Subic Bay International Airport				
North	San Fernando, La Union Airport				
	Cagayan Province Airport				
	Laoag International Airport				
	Cebu International Airport				
	Sangley Point				
South	Lipa Airbase, Batangas				
	Davao International Airport				
	Laguindingan (CDO) International Airport				

Table 2. North and South Entry Points

The Land Transportation Entry Points may be used as a temporary meeting stations where QRA from different Regions may cross and have a chance to better coordinate and communicate to our co-rescuers.

Upon approval of this Department Order, each RO and DEO shall submit the identified primary and alternate routes within 7 days which shall form as an integral part of this Order. The new route shall pass through the designated Entry Point.

#### 4. STRATEGIC PLANNING

- a. Conduct quarterly meeting among RO/DEO/EMD personnel, including QRE operators, QRST and QRMT members, to discuss the strategies, plans and updates on the positioning and mobilization of equipment.
- b. Issues and concerns raised during these meetings should be consolidated and sent to concerned offices for actions to be immediately taken.

## 5. RELATION TO OTHER DISASTER-RESPONSE POLICIES

It is highly advised that OPLAN METRO YAKAL PLUS be read and understood well to be aware of the inter-operability, Standard Operating Procedures, and other Responsibilities of DPWH and DPWH-NCR, especially on Chapter 4. Sectoral Plans and Arrangements, to wit:

- a. In Section 4.1 Command and Control, it is DPWH's Task/Responsibility to ensure that roads and thoroughfares are cleared of debris and to assist in the restoration of other lifelines; it shall also assist in the establishment and maintenance of evacuation camps; and shall assist in building/establishment of temporary shelters.
- b. It is also stated in Section 4.1 that "Upon identifying the areas and major roads which suffered heavy damage by MMDA personnel, the MMDRRMC Main EOC will initiate contact with DPWH-NCR to inform them about the areas that need road clearing. Clearing operations will only commence after MMDA authorized official has declared the areas free of casualties."
- c. In Section 4.4 Search and Rescue, it is mentioned that "Search and Rescue Team (AFPlead) deployed shall assist the DPWH-NCR by checking first the area to be cleared for any trapped victim. They will give the go signal to the DPWH-NCR if clearing of the debris can commence."
- d. In Section 4.5 Relief and Camp Management, it is determined that DPWH-NCR's Task/Responsibility is to "Coordinate provision of electricity and water source inside the evacuation camps".
- e. In Section 4.6 Engineering, Reconstruction and Rehabilitation, DPWH is the Lead Agency while DPWH-NCR shall be the Deputy, and DPWH Regions shall be the cooperating group members.
- f. Section 4.6 contains standard operating procedures for clearing operations which will be done by DPWH-NCR. It will not hinder this DO's operating procedures since it's assumed in this DO that DPWH-NCR is affected by the earthquake, therefore they can focus on their responsibilities in Oplan Metro Yakal Plus.
- g. As a Disclaimer, this Big One Earthquake Preparedness Program shall only contain Equipment Positioning and Mobilization Contingency Plan since the Bureau of Equipment can only control the equipment fleet of the Department.

## E. EMERGENCY PHASE (Disaster Response)

Occurence of the Big One Earthquake at the Valley Fault System
Activate Disaster Response: The Big One Earthquake Preparedness Program (Equipment Positioning and Mobilization Contingency Plan)
DPWH-NCR Team shall conduct initial reconnaissance and RDANA. A report shall be submitted to DPWH-NCR, BOM and BOE.
First wave of QRA shall be mobilized to immediately clear roads and thoroughfare based on the report on step C.
Additional wave/s may be deployed subject to the actual need and availability of QRA, based on assessment done by the IC.
After the successful clearing operations, demobilize all QRAs back to their respective offices. Account for any damaged QRE, QRT, injuries and casualties.

## **1. COORDINATION WITH OTHER AGENCIES**

Immediately after the occurrence of The Big One earthquake, this program shall be activated. The DPWH Regional and District DRRM Teams shall coordinate with the Regional/Provincial Disaster Risk Reduction Management Council-Office of Civil Defense (R/PDRRMC-OCD) to provide support to the Logistics Response Cluster.

Based on the Oplan Metro Yakal Plus, DPWH shall ensure that roads and thoroughfares are cleared of debris. DPWH-NCR shall be the Lead Agency in the MMDRRMC Engineering, Reconstruction and Rehabilitation Response Sector in which they are responsible for the conduct of clearing operations of debris and obstructions; immediately restore vital access roads, bridges and vital lifelines; and reconstruct/rehabilitate damaged structures and facilities as seen in Table 6. List of MMDRRMC Response Sectors, Its Lead Agency and the Responsibility of the Lead Agency.

SECTOR	LEAD AGENCY	RESPONSIBILITY
Engineering, Reconstruction and Rehabilitation	DPWH-NCR Conduct clearing operations of debris and obstructions; immediately restore vital access roads, bridges and vital lifelines; reconstruct/ rehabilitate damaged structures and facilities.	

Table 6. List of MMDRRMC Response Sectors, Its Lead Agency and the Responsibility of the Lead Agency

Figure 4. Cropped image from Oplan Metro Yakal Plus

### 2. COORDINATION WITH OTHER DPWH OFFICES<sup>4</sup>

- a. After the Valley Fault System collapse, this program shall be activated. The activation shall be reported immediately to the DPWH Secretary.
- b. Pursuant to Department Order No. 15, Series of 2015, the RD/District Engineer (DE) concerned [DPWH-NCR, Region III and Region IV-A] shall transmit to the Secretary, through the Bureau of Maintenance (BOM), copy furnished BOE and DPWH-NCR, the initial assessment of the damages, through e-mail, or fax-telephone, those damages covering at least the Priority I, in the group of Damages Category within six (6) hours after the calamity. (Indicate same under Column 6 of BOM-SDMCD Form 2015-03 as attached in D.O. 15, Series of 2015).
- c. If it is deemed impossible to conduct assessment within 6 hours after the Big One earthquake, DPWH Team will wait for the consolidated Rapid Damage Assessment and Needs Analysis (RDANA)/Situational Reports from the NDRRMC EOC. After the assessment of damages is done, the Office of the Secretary, through the BOM, BOE and DPWH-NCR, shall communicate with the RO/DEOs for clearing and rescue operations in affected areas.
- d. Official Assessment of the damages shall be coordinated with the IC of NDRRMP or through the NDRRMC EOC. Temporary assessment may be done by DPWH Employees to estimate the severity of the damages and to estimate the number of QRA needed.
  - 1. Based from the Standard Operating Procedures of Section 4.6, Oplan Metro Yakal Plus, "Immediately right after an earthquake, the DPWH-NCR District Offices will deploy teams to conduct reconnaissance and RDANA. Each Team

<sup>&</sup>lt;sup>4</sup> Department Order No. 15, Series of 2015

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is composed of two (2) personnel. Initial action of each team is to visually inspect which roads are passable and which need clearing...". An immediate report relative to this RDANA shall be submitted to DPWH-NCR, BOM and BOE.

- e. Based from the assessment done, the ROs and DEOs of the affected areas [DPWH-NCR, Region III and Region IV-A] shall estimate the required number and type of QRA needed for the clearing and rescue operations. If the QRAs within their RO/DEO are inadequate, a request shall be sent to the BOM, BOE and DPWH-NCR for additional QRA through any form of available communication within six (6) hours from the time of occurrence of the earthquake.
- f. Upon receipt of request, BOM, BOE and DPWH-NCR shall check the availability of QRA through the updated QRA Database. A shortlist of available QRAs shall be prepared by considering the following factors that will affect the time and cost of mobilization to the affected area:
  - 1. Distance from the current location of equipment to the affected area.
  - 2. Mode of mobilization either by land, water or air.

In remote areas (i.e. Visayas and Mindanao Regions especially island Regions), mobilization of QRE might not be feasible or economical, however, QRST and QRMT of these areas shall still proceed to augment other responding Regions in the clearing and rescue operations in case demand arises.

- g. The BOE Director shall coordinate with the RDs and EMD Chiefs on the whereabouts of the equipment to be used for the clearing and rescue operations through any form of available communication within nine (9) hours from the time of occurrence of the earthquake.
- h. The RD shall send a list of all the QRAs to be deployed for clearing and rescue operations using the BOM-SDMCD Form 2015-04 as attached in D.O. 15, Series of 2015, to BOM and BOE.
- i. In case communication lines are down and there is no other way to contact the Central Office (CO), the RD has the authority to deploy all QRAs to respond to the Regions in need of assistance.
- j. Upon the instructions of the RD, the EMD Chief together with the DE/Area Equipment Engineer (AEE) and team leaders shall proceed to their respective deployment areas.
- k. The **mobilization of DPWH QRA shall be on responder-basis (wave system)** to prioritize the road clearing operations.
  - The first responders (first wave of QRA) shall be composed of the highly important QRE, QRT, QRST, and QRMT such as Front End Loaders/Payloaders (L2), Hydraulic Excavators (F17), Dump Trucks (H3), and Crawler Tractors/Bulldozers (L1). These heavy equipment can be used to immediately clear the road for easy passing and for other rescue operations to reach affected areas.
  - 2. An assessment will be done to evaluate the severity of the incident and to estimate and set the quantity of QRA to be deployed. This shall be based on the report submitted by DPWH-NCR (E.2.d.1) or can be coordinated with the IC.
  - 3. The second responders (second wave of QRA) shall be based on the assessment of the IC, or any assessor from the EOC. This wave shall be composed of QRE like Truck Mounted Cranes (F5), Hydraulic Cranes (F6), Truck Mounted Flood Mitigation Equipment (H17), Stake Trucks (H2), Truck Tractors/Prime Movers (H4), Maintenance Shop Trucks (H7), Forklifts (H8), Road Graders (N1) and Service Vehicles (H1/H1M);

Additional QRT, QRST, and QRMT can also be deployed subject to the needs and availability of such QRA.

- 4. Additional wave/s can be implemented based on the actual need and other circumstances.
- I. In case there will be demands for more heavy equipment in clearing and rescue operations, units will be sent from areas initially identified by each Region where transportation/mobilization of equipment is difficult. Mobilization shall be handled by the responding Region.
- m. In case of landslides, the RD of affected Region shall direct DEOs to immediately open all closed roads within the Region going to NCR, Region III, Region IV-A and other affected areas.
- n. En route to the deployment area, QRAs coming from responding Regions can augment the heavy equipment in the affected area to open closed roads. Once roads are passable to one-way traffic, local DEOs shall be responsible for the full opening of roads (i.e. for two-way traffic).
- o. QRAs coming from responding Regions can proceed to reach their assigned deployment area at the earliest possible time.
- p. All QRA shall go first at the EOC which is located at each of the deployment area. Upon arrival at the EOC, the RD, DE, EMD Chief or AEE shall "check-in" and closely coordinate with the IC thereat to receive directions from the IC, and execute immediate and cautious clearing and rescue operations.
- q. Once checked-in, the DPWH Team shall cease operational control over the DPWH QRA and other resources but still perform according to their mandates, SOPs and technical expertise. The IC shall lead all the operations of all government agencies including the DPWH Team, and shall manage them tactically for proper placement and efficiency.

In case the earthquake occurred on a night time, weekend, or holiday, this response operation may or may not be activated depending on the actual circumstance. But in the exigency of the service, may we request that we take it as a great service and sacrifice to our country and countrymen.

## F. POST-EMERGENCY PHASE (Disaster Rehabilitation and Recovery)

- a. After the successful clearing and rescue operations, demobilize all QRAs back to their respective offices. Account for any damaged QRE, QRT, injuries and casualties.
- b. A report relative to this demobilization shall be sent to BOM, BOE and DPWH-NCR.

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### G. ORGANIZATIONAL DUTIES AND RESPONSIBILITIES



## DPWH Quick Response Team [Incident Management Team]

NOTE: This organizational structure is subject to change until further revision is issued.

### 1. UNDERSECRETARY, TECHNICAL SERVICES

Head, DPWH Quick Response Team [Incident Commander]

- a. Contacts and alerts all RDs to prepare and mobilize all their available resources upon the instructions given by the Secretary.
- b. Oversees the operation of the Quick Response and Support Team, and facilitates resolution of issues raised by team members.

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### 2. ASSISTANT SECRETARY, TECHNICAL SERVICES

Head, Disaster Response Operations [Deputy Incident Commander]

a. Coordinates with the National Disaster Risk Reduction Management Council-Office of Civil Defense (NDRRMC-OCD) and other agencies in providing support and assistance.

## 3. DIRECTOR and ASSISTANT DIRECTOR, BUREAU OF EQUIPMENT

Head, Equipment Positioning and Mobilization

- a. Update the nationwide QRA Database monthly.
- b. Coordinate with the RDs and EMD Chiefs on the whereabouts of the equipment to be used for the clearing and rescue operations.
- c. Ensure the proper positioning and mobilization of QRE.

### 4. REGIONAL DIRECTOR and ASSISTANT REGIONAL DIRECTOR

Heads, Regional Quick Response Support and Medical Team

- a. In the event of the earthquake, conduct close monitoring of roads and other infrastructure facilities for any damages caused by these natural events.
- b. Closely coordinate with LGUs and local disaster teams regarding calamity and emergency response works.
- c. Provide an updated list of QRA within their region monthly.
- d. Provide support to other Regions in need.

### 5. CHIEF, EQUIPMENT MANAGEMENT DIVISION

Head, Equipment and Personnel Dispatch

- a. Coordinates with the DE/AEE on the availability and status of QRAs.
- b. Ensures all QRE and QRT to be deployed are in good operating condition.
- c. Tracks and monitors the operations of deployed QRE.
- d. Keeps an updated list of all available QRAs within the Region.
- e. Summarize and consolidate the updated QRA list and submit it to BOE.

### 6. ASSISTANT CHIEF, EQUIPMENT MANAGEMENT DIVISION

Head, Supplies and Logistics

- a. Ensures all supplies needed by the team in the operation are provided (i.e. PPE, tools, fuel, food, water, etc.).
- b. Plans and strategizes the safest and fastest route to the site.
- c. Prepares an itinerary of travel and list of possible expenses like fuel, toll fees, and shipping fees, among others.

### 7. AREA EQUIPMENT ENGINEER and DISTRICT ENGINEER

Heads, Area Monitoring

- a. Gather and lead all team members within the area.
- b. Respond quickly to emergency works during times of calamities within the area of jurisdiction.
- c. Mobilize all equipment and personnel to the designated deployment area safely and at the earliest time possible.
- d. Keep an updated list of all available QRAs within the respective office.
- e. Update respective QRA list and submit it to the EMD for their consolidation.

## G. FUNDS

Funds allocated to fuel, logistical supports, PPE, food, water and other necessities of personnel will initially come from the DEO where the equipment is assigned. Once the operators and equipment reached the RO and are scheduled for dispatch, supplies will be provided by the RO. Funds will be charged to the Maintenance and Other Operating Expenses (MOOE) of the RO/DEO.

# ANNEX A. PPA letter signed by General Manager JAY DANIEL R. SANTIAGO

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	BONIFACIO DRIVE, SOUTH HARBOR, PORT AREA, MANILA 1018, PHILIPPINE P.O. BOX 436, MANILA, PHILIPPINES TTI NO. BOX 436, MANILA, PHILIPPINES	$\begin{array}{c} \mathbf{R} \in \mathbf{C} \in \mathbf{I} \vee \mathbf{E} \mathbf{D}^{3} \\ \hline \mathcal{O}_{\mathcal{F}^{\mathcal{C}^{-}} \cup \mathcal{O}^{\mathcal{A}^{-}, \mathcal{D}^{2}, \mathcal{O}^{\mathcal{B}^{-}} \\ \mathcal{O}_{\mathcal{C}^{T^{-}} \cup \mathcal{O}^{T^{-}, \mathcal{O}^{T^{-}} \\ \mathcal{O}_{\mathcal{C}^{T^{-}} \cup \mathcal{O}^{T^{-}, \mathcal{O}^{T^{-}} \\ \mathcal{O}_{\mathcal{C}^{T^{-}} \cup \\ \mathcal{O}_{\mathcal{C}^{T^{-}} \cup \mathcal{O}^{T^{-}} \\ \mathcal{O}_{\mathcal{C}^{T^{-}} \\ \mathcal{O}_{\mathcal{O}^{T^{-}} \cup \\ \mathcal{O}_{\mathcal{C}^{-}} \\ \mathcal{O}_{\mathcal{O}^{T^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{-}} \\ \mathcal{O}_{\mathcal{O}^{T^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{-}} \\ \mathcal{O}_{\mathcal{O}^{-}} \\ \mathcal{O}_{\mathcal{O}^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{-}} \\ \mathcal{O}_{\mathcal{O}^{-}} \cup \\ \mathcal{O}_{\mathcal{O}^{$
SEP 28 2017	HTTP://WWW.PPA.COM.PH	District Beller Branchary
Secretary MARK A. VILLAR Department of Public Works and Highways Manila		RECEIVED
Dear Secretary Vil	lar:	30 79 515

This refers to your letter dated June 30, 2017, reiterating the previous letter of Undersecretary Raul Asis inquiring on PPA's stand relative to the Department of Public Works and Highways' Quick Response Assets (QRAs) in passing through all the ports in the Philippines to support the disaster response programs of the government.

We apologize that PPA was not able to respond to the March 1, 2017 letter of Undersecretary Raul C. Asis, because we only came to know the existence of said letter when it was attached to your June 30; 2017 letter.

Nevertheless, please be informed that PPA interposes no objection to the Quick Response Assets Project of the DPWH as this program will improve your capabilities to respond to disaster, calamities and other emergency situations in the country. In addition, the QRAs will intensify immediate clearing of roads and further improve the quality of road repair works.

PPA shall issue an advisory directing all PPA Field Offices nationwide to give full support to the QRAs Project of the DPWH.

Thank you and best regards.

Sincerely,

JAY DANKEL R. SANTIAGO General Manager

VISION

MISSION

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\*By 2020, PPA shall have provided port services of global standards."

Provide reliable and responsive services in ports, sustain development or communities and an experimental service providers. Establish a mutually beneficial, equitable and fair relationship with partners and service providers. Provide meaningful and gentul employment while creating a nutruing environment that promotes continuous learning and improven 2000 and the country's image and reputation.