



REPUBLIC OF THE PHILIPPINES  
**NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT COUNCIL**

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

## **NDRRMC UPDATE**

**Incident Monitored Covering the Period of  
15 July 2020, 8:00 AM – 16 July 2020, 8:00 AM**

**Releasing Officer:**

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

**DATE: 16 July 2020**

*Source: OCD XI; OCD VI*

### **I. Final Report on the Effects of Localized Thunderstorms in Davao del Sur Province (Region XI)**

#### **A. Situation Overview**

- On 28 June 2020, Davao del Sur experienced moderate to heavy rains due localized thunderstorms which resulted to flooding in some barangays in Digos City and Municipality of Sta. Cruz with inundation reaching up to an approximate height of 2 meters.
- On 30 June 2020, the following incidents were reported:
  - a. A flooding incident occurred in the six (6) barangays within the Municipality of Hagonoy. A sudden rise of water level in Balutakay River was observed on evening of 28 June 2020. The continuous heavy rains ensued an evacuation followed by relief operations to the affected residents.
  - b. A mudslide incident occurred in Sitio Baras, Brgy. Kapatagan, Digos City. The affected area was delineated as highly susceptible to mass-wasting (landslide). The consecutive heavy rain from the local thunderstorms saturated the soil and its underlying materials. This caused the instability of the surrounding slopes which resulted to a mudslide. Furthermore, two hundred meters from the aforementioned, a translational slide was also observed. This resulted to manifestation of multiple large tension cracks and one (1) house was partially covered.

#### **B. Effects**

- A total of 2,745 families / 9,055 persons in 14 barangays of Digos City and Municipalities of Sta. Cruz and Hagonoy were affected due to the incident.
- A total of 98 damaged houses (44 totally, 54 partially) in the Municipalities of Sta. Cruz and Hagonoy, and Digos City, Davao del Sur were reported with an estimated cost of damage amounted to ₱1,546,000.00.

- A total of 4 local infrastructures (2 river dikes, 1 footbridge and 1 hanging bridge) in Municipality of Sta. Cruz and Digos City were damaged due to the incident while 2 national infrastructure (Flood Control Digos River Revetment and Bansalan-Mt. Apo National Park Road) in Digos City and Municipality of Bansalan were damaged with an estimated cost of damage amounted to ₱55,870,000.00.

### **C. Actions Taken**

#### **OCD XI**

- Monitored the AOR for any incident caused by heavy rains due to Localized Thunderstorm and coordinated with CDRRMC Digos City and PDRRMC Davao del Sur relative to the incident.
- Disseminated weather update and advisories to all LDRRMCs through email, Telefax, and Social Media.

#### **DSWD XI**

- Coordinated with Disaster Response Operation Management Information Center (DROMIC) and the City Social Welfare Development Office.
- Conducted profiling and assessment of the affected families.
- Provided 89 sleeping kits, hot meals, blankets, drinking water, facemasks, biscuits, coffee, and milk to the residents currently staying in the evacuation areas.

#### **MGB XI**

Conducted ocular inspection at Brgy. Kapatagan, Digos City, Davao del Sur re the incident occurred on 30 June 2020.

#### **DOH XI**

- Coordinated with Provincial Health Office (PHO) Davao del Sur for any additional logistics assistance.
- Prepositioned collapsible water container mobilized by the PHO Davao del Sur.
- Augmented 600 pieces of aqua tablets and 6 boxes of doxycycline.

#### **PNP Hagonoy**

- Assisted in the conduct of Search and Rescue Operations.
- Provided security and safety for the evacuees.
- Provided Municipal PNP Patrol car in rescuing the affected individuals.

#### ***PDRRMO Davao del Sur***

- Deployed Response Operation Team at Barangay Igpit, Digos City.
- Conducted close monitoring of the incident.
- Provided two (2) dump trucks for the evacuees in the flood affected barangays in the Municipality of Hagonoy.
- Deployed personnel from the PDRRMO and Provincial Engineering Office to conduct clearing operations at Brgy. Kapatagan, Digos City.
- Deployed personnel from PDRRMO with PSWDO in conducting relief operations to the affected families

#### **PDRRMO Davao Occidental**

Deployed eight (8) members of the PDRRMO Davao Occidental response team to provide assistance and immediate evacuation of the affected families in Digos City.

#### **MDRRMC Sta. Cruz and Hagonoy**

- Conducted Response Operation and pre-emptive evacuation of the affected families.
- Gathered additional data from the BDRRMC for validation and dissemination.
- Conducted strict implementation on crowd control management and order at headquarters.
- Dispatched all MDRRMO Personnel at the different areas within the AOR and conducted routine monitoring at identified flooded areas.
- MDRRMC Sta. Cruz provided tents to the evacuated residents.

#### **CDRRMC Digos City**

- Dispatched CDRRMC responders within AOR to conduct monitoring and post situation updates regarding water level on bridges.
- Deployed the Digos Emergency Response Team together with PNP and BFP to conduct force evacuation of the affected families in the flash flood area.
- CSWDO and CDRRMO visited and assessed the affected families at the evacuation center.
- Conducted of Rapid Disaster Needs Assessment (RDANA)

#### **MDRRMRC Kiblawan, Malalag, and Sulop**

Deployed Response Operation Team to the affected areas in Digos City.

#### **Davao Firefighters Rescue Services**

Augmented Response team to conduct response operations to flood affected areas in Digos City.

## **II. Progress Report on Oil Spill Incident due to Barge Explosion in Bo. Obrero, Iloilo City (Region VI)**

### **A. Situation Overview**

- On 3 July 2020, at 2:45 PM, an explosion incident at Zone 3 of Bo. Obrero, Lapuz, Ilo-Ilo, City. This involved the power barge 102 Starboars Side owned by AC Energy Corp. The tank has the capacity of 320,000 liters of bunker oil which contains 200,000 liters bunker oil during the incident. The cause of the explosion is due to the welding works on the hull.
- Immediately, BFP deployed fire trucks, personnel ambulance to the scene to address the fire. However, the explosion caused the barge to leak and the spillage was contained by the personnel of the power barge but a small amount of oil leaked from the cordon. The same is now being attended by the BFP in coordination with the PCG.
- Recorded the following information:
  - a. Approximate Volume of Oil Spilt: 268,948.61 liters (as of 08 July 2020)
  - b. **Total Volume of Bunker Collected: 261,207.464 liters (bunker oil mix with water)**
  - c. **Contaminated Debris Collected: 1,940 kgs + 40 drums + 157 sacks**

- d. Total Mangrove Area Affected: 88.8 ha (Barangays Tacay, Taminla, Umilig, Tanag, and Getulio of Buenavista, Guimaras and Zone III, Brgy. Bo. Obrero, Lapaz, Iloilo City)

## B. Effects

### AFFECTED POPULATION

- A total of **238 families / 868 individuals** were evacuated in District 21 Hotel, Diversion 21 Hotel, and Marriot Hotel due to the strong odor from the oil spill.

### AFFECTED AREAS

Province/ Municipality/City	No. of Brgys.	Name of Barangays	Length of Coastline (kms)	Remarks
Iloilo City	7	Bo. Obrero, Brgy. Mansaya	1.5	Closely monitored and initial interventions were implemented
		Zone 5, Bo. Obrero		Approximately 2,000 sq. meters of mangrove areas
Guimaras				
Buenavista	17	Sawang, Zaldivar, Magsaysay, Sto. Rosario, Rizal, Montipiller Navalas, Taminla, Tacay, San Miguel, Bacjao, Umilig, Dagsaan, Getulio, Tanag, Avila and East Valencia	15	Closely monitored and initial interventions were implemented  Additional data from PDRRMC
Jordan	8	Rizal, Hoskyn, Morobuan, Balcon Melliza, Balcon Maravilla, Espinosa, Sinapsapan and Lawi	6	
San Lorenzo	3	Suclaran, San Enrique and M. Chavez		
Nueva Valencia	9	Poblacion, Pandaraonan, Dolores, Tando, Igang, Lucmayan, Sto. Domingo, Magamay & San Roque		
Iloilo Province				
Leganes	5	<i>Camangay, Bigk MV Hechanova, Gua-an and Nabitanan</i>	6	<i>As of 10 July 2020 MDRRMC, Sit Rep</i>

Dumangas	11	Bacay, Sapao, Dacutan, Punta Pulao, Bantud Fabrica, Lacaran, Ermita Bool, Naluyan, Sool, Bolilao, Nanding Lopez		data from MDRRMC Dumangas
<i>Tigbuan</i>				<i>Municipal waters</i>
<i>San Joaquin</i>				<i>Municipal waters</i>

### **THREATENED AREAS**

<b>Province/ Municipality/City</b>	<b>Areas</b>	<b>Remarks</b>
Iloilo City	<ul style="list-style-type: none"> <li>• Iloilo Commercial Port Complex, Lapuz</li> <li>• Iloilo Arrastre Pier, Brgy. Concepcion</li> <li>• Coastline of Molo and Arevalo Districts</li> </ul>	Preventive measures were implemented
Iloilo	<ul style="list-style-type: none"> <li>• Coastline of Municipalities of Dumangas, Leganes, and Zarraga</li> </ul>	Preventive measures were implemented
Guimaras	<ul style="list-style-type: none"> <li>• Coastline Municipalities of Jordan and Buenavista</li> </ul>	Preventive measures were implemented

### **C. Actions Taken**

#### **RDRRMC VI**

***Conducted coastal cleanup on the affected coastal areas in the island of Guimaras***

#### **OCD VI**

- Conducted Emergency meeting on 14 July 2020 re Coastal Clean Up in Guimaras relative to Oil Spill.
- Conducted RTF meeting re Updates on Oil Spill on 13 July 2020.
- Conducted an Oil Spill Assessment on the affected coastal areas in Iloilo City, Province of Iloilo and Province of Guimaras.
- Conducted daily 3:00 PM on the Updates of Oil Spill Response Operations with concerned agencies via VTC starting 4 July 2020.
- Scheduled conduct of assessment in oil spill affected areas in the region particularly Iloilo City and Guimaras on 11 July 2020.
- Conducted Meeting on the Updates of Oil Spill Response Operations with the concerned agencies via VTC on 4, 5, 7, 8, and 9 July 2020, all at 3:00 PM.
- Facilitated the turn-over of the donated 420 pcs. KATSA from Angelina Bakeshop through Philippine Red Cross (PRC) Iloilo Chapter at the Oil Spill ICP in CGWW District Office, Bo. Obrero, Iloilo City. It will be used as improvised spill boom.
- Distributed 150 pcs of gloves to CDWW District on 4 July 2020.
- Convened concerned RDRRMC members to provide updates on Oil Spill Incident Response Operations via zoom on 05 July 2020, 3:00 PM.

- Convened response agencies on the updates of Oil Spill incident response operations via zoom on 04 July 2020, 8:00 PM.
- Activated the Regional IMT and established ICP at Coast Guard Station Iloilo in Bo. Obrero, Iloilo City on 4 July 2020.
- Conducted series of coordination and small group meetings with CDRRMC Iloilo on 4 July 2020.
- Distributed 250 pcs of face masks to the affected families and 150 pcs to PCG.
- In close coordination with Iloilo City DRRM Office, CGDWV and concerned member agencies.
- Conducted emergency meeting via zoom on 3 July 2020, 10:00 PM
- Continuous monitoring of the AOR.

#### DILG VI

- Coordinated with and alerted coastal LGUs in Iloilo and Guimaras for a possible spread of oil spill.

#### PCG VI

- ***Supervised the skimming/recovery operation of Harbor Star personnel at the Barge.***
- MEPU-WV personnel continue supervising the Harborstar personnel in skimming/recovery operation at the said Barge.
- Continue Monitoring/Inspection of Threatened Areas.
- CGS Guimaras and Sub Station personnel together with MEPU-WV personnel continue conducted survey/recovery within the affected areas.
- DF-347/ AB-065/ AB-063/ RB-3006 & RB-074 conducted the laying of sorbent boom and absorbent pads at the vicinity waters of Iloilo-Guimaras Strait.
- CGS Guimaras conducted Coastal Clean-up in the municipalities of Buenavista and Jordan, Guimaras.
- CGS Iloilo deployed PCG Floating Assets to conduct laying of improvised spill boom and rented/donated spill boom and Sorbent boom/Absorbent pads.
- Continuous skimming by MEPU-WV personnel at the said Barge.
- MEPU-WV supervised the laying of additional spill boom 200 meters vicinity waters of Power Barge 102 conducted by Harbor Star.
- Continuous monitoring/inspection of threatened areas.
- ~~CGS Iloilo and CGS Guimaras personnel conducted continuous oil spill recovery within the affected coastal areas.~~
- Continuous laying of improvised spill boom and rented/donated spill boom and sorbent pads/absorbent pads.
- On-going collection and recovery of spilt oil.
- Continuous monitoring/inspection of threatened areas.
- CGS Iloilo and Guimaras conducted coastal survey on the extent of oil spill.
- Continued conduct of skimming and scooping of oil spill.
- Recorded the following MARPOL Assets:
  - Additional 1 segment oil spill boom from Global Energy Power Corp and 10 segment oil spills from Petron Corporation were being laid out at vicinity waters of Loboc.
  - Additional 4 skimmers, 1 came from Petron Corporation.
- CGS Iloilo and CGS Guimaras conducted seaborne patrol to assess the extent of oil spill.

- AC Power Phil. Inc. was reminded to provide PPE's for personnel who are helping in the operations.
- Deployed District Deployable Response Team (DRT), DF-347, Rubber Boats of MCS-3004 & 3006, Aluminum Boats 065 & 063 assisted MEPU WW in laying 25 segments spill boom, spreading of absorbent pads and started collecting oil by means of scooping.
- Deployed personnel and assets in responding to the incident.

#### DOH VI

- Attended meeting at CGDWW Headquarters, Bo. Obrero, Lapuz and with City MSWDO and school principal for some issues and concern in the evacuation center.
- Coordinated with Iloilo DMO IV, CHO HEMS Coordinator, WASH Coordinator and Logistics Officer of DOH WW CHD.
- Attended VTC Meeting on 4, 5, 6, 8 July 2020 via ZOOM for the updates on Oil Spill Incident Response Operations.
- Conducted ocular visit at Barrio Obrero Gym and TIIC evacuation centers to ensure the observance of health protocols with DSWD VI as Head Cluster for Camp Management.
- Provided hygiene kits, masks, and medicines to the affected families.
- Conducted a meeting at CGDWW Headquarters, Bo. Obrero, Lapuz.
- Conducted a meeting with City MSWDO and school principal for some issues and concern in the evacuation center.
- Ensured augmentation of 2 Nurses in the Evacuation Center.
- Conducted assessment in the evacuation center re minimum health standard
- Visited site in the affected area.
- Coordinated with Iloilo DMO IV, CHO HEMS Coordinator, WASH Coordinator, and Logistics Officer of DOH WW CHD.
- Provided IEC materials like proper hand washing, respiratory etiquette, and proper way of putting on mask in the evacuation center.
- Provided a total of ₱ 72,153.80 worth of assorted medicines and supplies in the evacuation center.

#### DSWD VI

- Conducted an ocular inspection of the newly opened evacuation centers and provided technical assistance in Camp Coordination and Camp Management.
- Distributed the following assistance to the affected families:

Item	Qty	Cost per Pack	Total Cost of Assistance (₱)
Family Food Packs	248	360.00	89,280.00
Hygiene Kits	248	1,787.75	443,362.00
Comforters	248	1,300.00	322,400.00
Toys	440	donated	donated
Total Cost Assistance			855,042.00

- Provided technical assistance on Camp Coordination and Camp Management in Bo. Obrero Elem. School which served as evacuation center for the affected individuals.
- Provided sleeping kits and hot meals to affected individuals in the evacuation center.

#### BFP VI

- Deployed personnel and fire trucks and other equipment to suppress the fire and to contain the spill.
- Conducted mapping of the affected area and maintained infection control protocols.

#### **DENR-EMB VI**

- Conducted sampling activity in the oil spill site and site assessment in the affected areas, including the areas of Dumangas and Leganes, Iloilo.
- CENRO of Miagao, Iloilo conducted ocular inspection to affected mangrove area, around 1 hectare, and discussed rehabilitation plan.

#### **BFAR VI**

- Conducted evaluation of fish, seaweeds, shellfish and crabs from different areas affected by oil incident on 9 July 2020 wherein it found out negative from bunker oil.
- Issued the advisory informing the public that the fish caught from open waters and fishponds are safe for human consumption. however, shellfish, due to their nature as filter feeders, as well as seaweeds and crabs, from the affected areas, need further laboratory analysis to determine the level of contamination of bunker oil.
- On-going validation of oil spill incidents in reported areas that includes assessment of the critical habitat present (mangrooves, coral reefs and seagrass) and re-validation of the number of fisherfolk affected as well as the cost of damages.

#### **PRC-Iloilo Chapter**

- Installed a 5-ton water bladder at the TIIC to provide additional water supply to the evacuees.
- Provided 420 pcs katsa to the ICP donated by Angelina Bakeshop through PRC.
- Provided hot meals to the evacuees in Bo. Obrero Elem. School.

#### **National Resilience Council**

- Coordinated with LGU Ilo-Ilo to possibly engage UP Marine Science and UP NIGS in managing the oil spill if needed.

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#### **CDRRMC ILOILO**

- ***Continuous monitoring of health and other medical concerns of evacuees.***
- ***Conducted mass testing to 67 families staying at Diversion 21 Hotel.***
- ***Facilitated transport of 70 families back to their respective residences in Brgy. Mansaya, Lapuz***
- ***Conducted psychosocial activities conducted for the children staying at District 21 Hotel***
- Conducted Operations briefing re Oil Spill tackling the update on current situation, deployed resources, and daily operations per cluster.
- Conducted storytelling, art activities for children ages 3-7, and prayer sessions at Marriott Hotel and District 21.
- Turnover of donations of AC Energy to Iloilo City Government.
- Ongoing transfer of evacuees from Jalandoni Memorial Elementary School to hotels such as District 21 Hotel, Diversion 21, and Marriot Hotel.



- CSWDO initiated meetings with AC Corp, CHO, CDRRMO and Punong Barangays re the management of the evacuees at the 3 hotels.
- As of 10 July 2020, 9:30 PM, Bo. Obrero ES was cleared of evacuees.
- Transfer of 18 families from Technical Institute of Iloilo City to Diversion 21 Hotel and 25 families from Technical Institute of Iloilo City to Marriot Hotel.
- Deployment of Medical Teams to hotels catering to evacuees.
- Deployment of police assistance desks in the hotels catering to evacuees.
- Visited 5 evacuation centers which were activated due to the incident together with AC Energy and concerned government offices.
- Conducted a meeting with Mansaya Incident Management Team, AC Energy, CHO, CSWO and CENRO to discuss possible support to the affected families due to the loss of livelihood and health impacts
- Brgy. Calumpang distributed food packs to the 56 fisher folks headed by the President of Fisher Association.
- Shared drone shots taken.
- Facilitated the delivery of 5 truckloads of rice hulls from the Municipality of Oton and a truckload of coco husks from the composting plant of the City Government.
- The Local Government Unit of Iloilo City provided a total of ₱719,792.20 worth of Food and Non- Food assistance.
- Convened the Barangay Councils of Bo. Obrero, Mansaya and Loboc with AC Power Barge, the CDRRMO, UPV via zoom meeting re the local initiatives related to the conduct of coastal clean-up following the oil spill and the fabrication of the improvised spill booms to be installed in coastal communities among others.
- CDRRMO conducted a quick orientation on the latest situation on the oil spill with the Barangay Councils of Bo. Obrero, Mansaya and Loboc with AC Power Barge including the Harbor Star (third party) and its effect in the coastal areas using the drone shots.
- Conducted crowdsourcing for the environment friendly materials needed for the fabrication of the improvised spill booms.
- Harbor Star deployed 45 people (cash for work basis) to lead the coastal clean-up in the Zone 3 area of Bo. Obrero and Mansaya.
- CSWDO, Cluster Lead for the Food and Non-food items and Camp Management and Camp Coordination Cluster met with the Punong Barangays of Loboc, Mansaya and Bo. Obrero re the needs for additional evacuation centers given the increasing number of families that expressed interest to evacuate.
- CENRO conducted a meeting and status update with the Barangay Incident Management Team.
- GSO and CEO facilitated the installation of water tank at the evacuation center.
- BFP Iloilo City provided potable water at the evacuation center.
- CDRRMO, ICPO CHO, and BFP conducted an ocular inspection to assess the extent of oil spill.
- CSWDO provided 139 sets of NFIs, consisting of 2 blankets, 2 mats, 1 mosquito net, and 1 water jug.
- CDRRMO coordinated with the neighboring LGUs such as Leganes, Oton and the Province of Guimaras re the presence of oil spill along respective coastal areas.

- CDRRMO coordinated with partners re activities addressing oil sludge and improvised spill booms among others.
- CENRO engaged the representatives of AC Energy Corporation Power Barge 102 relative to the facilitation of the operations on oil spill and in tapping the services of the affected individuals in making improvised spill booms.
- Convened together with CENRO, BFP, PCG, BDRRMC Barrio Obrero, Petron and Shell to assess the current situation.
- CENRO Iloilo assisted in assessing the necessary protocols to reduce hazard in the environment and community.
- Iloilo City Health Office provided medical needs of 43 patients who complained of difficulty of breathing, sore throat and nasal congestion.
- PSTMO facilitated the hauling and installation of tents at the evacuation center.

### **PDRRMO Guimaras**

- Conducted ocular site inspection in the Municipality of Joran and Buenavista
- Conducted training for workers for the affected barangays of Jordan and Buenavista on how to proper Clean-up Operation.
- Created EO No. 57 s. 2020 re an order Organizing the Guimaras Incident Command System (GICS) Team for July 3, 2020 Ayala Corporation Oil Spill Tragedy.
- Conducted 1<sup>st</sup> Task Force Meeting for the Response Management of Oil Spill Tragedy.
- Conducted training for workers for the affected barangays of Jordan and Buenavista on how to do the Proper Clean-up Operation.
- Conducted Emergency Meeting for Plan of Action.
- On 05 July 2020, the team of PDRRMO and Coast Guard Station Guimaras went to the identified coastal barangayas (Sawang, Zaldivar, Magsaysay, Sto. Rosario, Rizal and Montpillier in Buenavista) and Rizal (Hoskyn and Morobuan in Jordan) to assess the extent of the oil spill.
- PCG Guimaras personnel conducted lecture to the affected on how to use the spill boom to ensure that the oil spill will not spread further.
- Assessed the extent of damage along the coastal areas of Buenavista using a drone, of which, other barangays affected are – Dagsaan, Getulio, San Miguel, Navalas, Umilig and Morobuan in Jordan.
- Assisted the people in the affected barangays to make fabricated spill boom by using used clothing.
- Collected pertinent data in preparation for RDANA.
- Constantly monitored the affected areas and directed the BDRRMOs to coordinate and update PDRRMO and Coast Guard Sub-Stations.

### **MDRRMC Leganes**

- Installed improvised spill boom, bamboos to serve as floater with used clothes to 6 coastal barangays.
- Deployed 50 volunteers for immediate installation of improvised oil spill boom to 6-kilometer shoreline from 10 July 2020 SitRep.

### **MDRRMC Dumangas**

Conducted ocular inspection at the Municipal waters and coastal areas to check the extent of oil spill.

### **BDRRMC Barrio Obrero**

Deployed local assets to assist in containing the oil spill.

**AC POWER CORP. (Owner of the power barge)**

- Provided accommodation (District 21, Diversion 21 and Marriott Hotel) as evacuation centers and other needs of the affected families and individuals.
- Conducted pre-planing workshop regarding the reintegration plan for the evacuees.
- Deployed staff at evacuation centers to address concern of the evacuees.
- Hired 35 civilians to augment PCG for the clean-up and 8 motorbancas for manual scooping.
- Provided psychological needs of the affected families inside evacuation centers.
- Locally hired workers by AC Energy Power Corp started the fabrication of the improvised spill booms using rice husks
- Hired a third-party contractor to facilitate the skimming and scooping operations to contain the oil spill.

**POWER BARGE 102**

- Recorded the following Assets:
    - 1 skimmer from Cebu arrived on 7 July 2020, totaling to 5 skimmers being deployed in the affected area;
    - 1 additional skimmer from Phoenix to arrive soon;
    - 4 bales of absorbent pads, consisting of 100 pieces per bale, measuring to 6x20 per piece, and absorbent booms (1 pc. 20 meters; 1 pc. 10 meters; and 15 pcs. 2 meters) which were provided to PCG; and
    - 100 pieces of drums donated by Petron Corporation
  - Deployed motorboats for the ongoing conduct of cleanup operations and manual scooping.
-