

COMPLETED STAFF WORK (CSW) ON THE MT PRINCESS EMPRESS OIL SPILL INCIDENT IN NAUJAN, ORIENTAL MINDORO

I. PROFILE

Vehicle	Motor Tanker (MT) Princess Empress with approximately 800,000 liters of industrial fuel oil (IFO) onboard			
Route	Bataan to Iloilo Province			
Date of Incident	February 28, 2023			
Owner	RCD Reield Marine Services, Inc.			
Location	Balangan Point, Naujan Oriental Mindoro			
Causes	submerged due to engine overheating and failure amid bad			
	weather and strong waves			

II. BACKGROUND

Reports on the incident of the half-submerged MT Princess Empress fuel tanker along the coasts of Tablas Strait across Balingwan Point, Naujan, Oriental Mindoro were released last February 28, 2023. According to the reports of the Philippine Coast Guard (PCG) Oriental Mindoro, the vessel en route from Bataan to Iloilo was carrying approximately 800,000 liters of industrial fuel oil (IFO). The vessel had reportedly encountered engine trouble on February 28, 2023 due to overheating until it drifted towards the coast of Balingawan Point which eventually led to its submersion the following day, March 1, 2023. It was soon verified that an estimate of 921,877 liters of IFO was aboard the wrecked vessel that caused the oil spill incident. The sunken vessel was eventually located three weeks after the incident on March 21, 2023 with the help of the Remote Operating Vehicle provided by the Japanese Coast Guard.

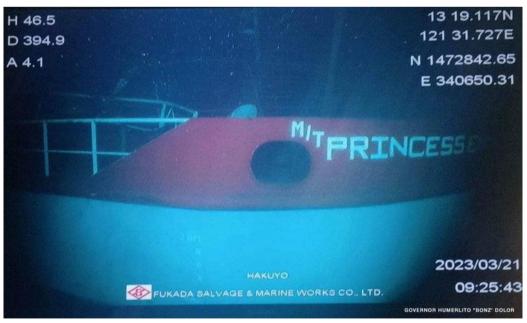


Figure 1. The sunken M/T Princess Empress cargo vessel located along Tablas Strait on March 21, 2023 using the Remote Operating Vehicle (ROV) provided by the Japanese Coast Guard



III. EFFECTS OF THE INCIDENT

A. Spread of Oil Across Oriental Mindoro

Since the incident on March 1, 2023, the oil spillage was observed to have spread quickly across the 12 coastal municipalities of Oriental Mindoro namely Puerto Galera, Baco, Calapan City, Naujan, San Teodoro, Pola, Pinamalayan, Gloria, Bansud, Bongabong, Roxas, Mansalay and Bulalacao. It is on the third (3rd) week of March when UP MSI forecast the new trajectory and possible spread of the oil to the Northern part of the province, particularly Calapan City, Baco, San Teodoro and Puerto Galera. On March 17, 2023, it was confirmed by the PCG that oil slicks have been observed in Barangay Navotas, Calapan City, the first sighting of oil wastes in the capital of the province.



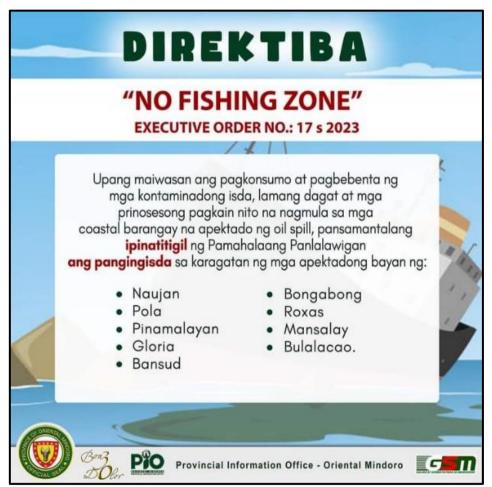
Image from Philippine Coast Guard (PCG) showing the oil spill that followed the sinking of MT Princess Empress across the waters of Naujan and its neighboring municipalities in Oriental Mindoro captured last February 28, 2023

B. Oriental Mindoro under State of Calamity

A no-fishing moratorium was declared last March 11, 2023 in all municipalities of Oriental Mindoro that fully prohibits the acquisition, consumption and fishing of marine resources in their coastal areas. With the adverse damages caused by the oil spill from the sunken M/T Princess Empress vessel, Oriental Mindoro Governor, Hon. Humerlito Dolor, has declared the whole province under state of calamity as of March 30, 2023 (*Philstar Global, 2023*). On the same day, Dolor directed the Provincial Disaster Risk Reduction and Management Office (PDRRMO) to prepare a recommendation for this declaration given the situational reports acquired from DENR and DOH. Specific municipalities initially affected by the oil spill such as Naujan, Pola and Pinamalayan had been declared under state of calamity under a much earlier time and were given utmost priority to mitigate the compromises in resident food and livelihood. Ultimately, Governor Dolor rest reassured that the affected fisherfolks will receive proper compensation.



A total of 12 Municipalities and one (1) City composed of 167 barangays were affected by the oil spill in the whole province. Further, 31,524 families primarily composed of fisherfolks were recorded to have been affected by the incident, through the Executive Order No. 17 Series of 2023 with subject "An Executive Order Urgently Enjoining Local Chief Executives to temporarily Prohibit and Suspend All Fishing Activities in their respective Coastal Barangays Affected by the Oil Spill caused by the MT Princess Empress to Prevent Consumption and Trade of Contaminated Fish, Shellfish, and other fish by-products.



Directive from the Provincial Information Office (PIO) of Oriental Mindoro declaring the province-wide fishing ban across all of its coastal municipalities under EO No. 17 series of 2023.

IV. LEGAL BASES

National Oil Spill Contingency Plan (NOSCOP)

The Philippine Coast Guard developed this National Oil Spill Contingency Plan (NOSCOP) to provide a coordinated and integrated response mechanism. This is in basis of the 1987 Constitution providing that "The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature". The NOSCOP serves as a vital plan to avert or minimize the impacts of the oil spill incidents in the marine environment of the country. Through this, it is stated that Government and Non-



Government Agencies must work hand-in-hand in mitigating and minimizing its effects. Hence, in an effort to better manage all spill response activities and the resources necessary to effectively abate the damaging effects of oil spill incident.

The NOSCOP serves as the primary reference for the crisis management of the M/T Princess Empress Oil Spill. This management plan takes its legal basis from the following national laws on environmental protection:

- 1. **R.A. 9993 and its IRR** Philippine Coast Guard Law of 2009.1
- 2. **P.D. 602** National Oil Pollution Operations Center Decree.2
- 3. **P.D. 979** Marine Pollution Decree of 1976.3
- 4. **R.A. 10654** Amended Fisheries Code of the Philippines.
- 5. **R.A. 9275** Philippine Clean Water Act of 2004.4



Tier III Response Type declaration on the M/T Princess Empress Oil Spill

Based on the NOSCOP and the observations amassed by PCG, the situation was eventually declared under Tier III Oil Spill Reponse Type. This tier scale possesses the highest threat type according to the NOSCOP and is declared when a spillage has cause major impacts which ultimately calls for further substantial resources that range from national to international responses. These are often declared in spills with the largest volume and thus have the potential to affect a significantly large area, such as large tanker accidents or offshore blowouts. Tier III arrangements usually call for the entire oil spill response resources in a nation, including that of the Oil Spill Response Organizations (OSRO), and may also call for international assistance.

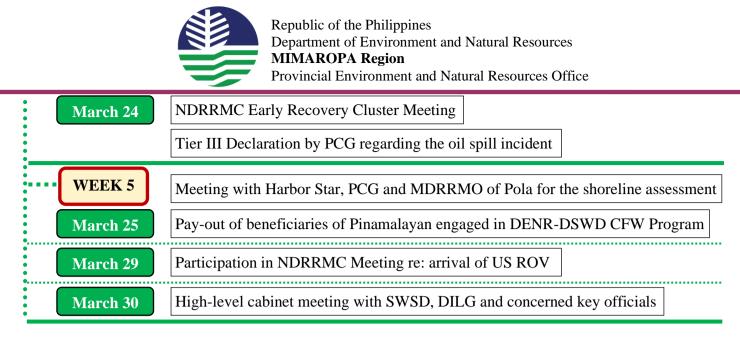


V. TIMELINE OF EVENTS (During the first 30 days after the incident)

February 28, 2023	MT Princess Empress Tanker was half- submerged near the coasts of Naujan Initial coordination with LGUs and PCG by DENR R-IVB				
WEEK 1 March 1	Meeting with PCG, Oriental Mindoro Governor Dolor, Naujan Mayor Teves and several concerned officials				
March 2	Public video statement by SENR regarding the oil spill incident				
	Creation of Incident Command Post (ICP) at Naujan for the oil spill				
March 3	Meeting with DENR Sec. Maria Antonia Yulo-Loyzaga, PDRRMO, PCG, EMB and Naujan Officials				
	Workshop for the finalization of Cash-For-Work (CFW) Program with former MIMAROPA RED Lormelyn B. Claudio with PENR, CENR and EMB Officers of Oriental Mindoro				
March 4	Meeting with DSWD Sec. Rex Gatchalian for the CFW Program				
	Coordination alongside Former MIMAROPA RED Lormelyn Claudio and Oriental Mindoro PENR and CENR Officers with Municipal Mayors of Pinamalayan and Bongabong				
WEEK 2	Ocular visit in the affected areas of Pola with USecs Marilou Erni and Jonas Leones				
March 5	Discussion of ways forward with Gov. Dolor, DILG, DOH and Pola LGUs				
	Entrance meeting of DENR-BMB for the conduct of Rapid Assessment in the coastal barangays of Oriental Mindoro affected by the oil spill				
	Transfer of the Incident Command Post from Naujan to Pola				
March 6	Press-briefing and inter-agency meeting presided by Gov. Dolor with RED Lormelyn Claudio, ARD Maximo Landrito, OIC PENRO Alan Valle, CENROs Rodel Boyles and Caesar Quebec and key municipal representatives				
March 7	Strategic Meeting with RED Claudio, ARD Landrito and concerned PENR and CENR Officers alongside Regional Civil Defense, PCG, DOH and PDRRM Office				
March 8	Zoom Meeting between DENR and DSWD regarding the implementation of the Cash- For-Work Program for the fisherfolks affected by the oil spill incident				
March 9	Meeting with EMB-PEMU and CRL Environmental Corporation				
	Arrival of President Ferdinand "Bongbong" Marcos Jr. and DENR Sec. Loyzaga for a briefing meeting regarding the oil spill affected areas of Pola, Oriental				



•		Monitoring and Orientation of simultaneous oil spill clean-up at the affected barangays of Pola with OIC PENRO Valle, ARD Landrito and DENR EMB RD Joe Amil M. Salino					
	March 10	Coordination with DSWD and Pola LGUs for the implementation of CFW					
	WEEK 3	Meeting with concerned NGAs, LGUs and Harbor Star at the ICP in Pola					
	March 11	Presentation for Senate Hearing regarding the oil spill incident					
(March 13	Zoom meeting with RED Claudio regarding the oil spill trajectory in the coastal areas of Oriental Mindoro as forecast by University of the Philippines – MSI					
	March 15	Participation in the NDRRMC Meeting alongside PCG and LGUs					
(March 16	Inter-Agency Incident Command Meeting presided by Gov. Dolor in Naujan					
(March 17	Inter-Agency Incident Command Meeting presided by Gov. Dolor in Pinamalayan					
		Emergency Task Force meeting on CFW implementation with DSWD via Zoom					
	WEEK 4	Coordination with PCG regarding the arrival of the Japanese dynamic positioning ROV at PPA to track and locate the sunken MT Princess Empress					
	March 20	ICP meeting and debriefing with PCG, ITOPF, PDRRMO, MDRRMO and MHO					
		Meeting with Regional, Provincial and Municipal DWSD Officers re: CFW					
(March 21	Participation in DOJ press briefing presided by Sec. Jesus Crispin Remulla on the filing of legal actions against the ship owners of the sunken vessel					
		Meeting with Oceanus representatives for the donation of absorbents					
(March 22	ICP meeting with PCG and Oceanus re: provision of oil spill absorbents and eco-friendly chemical dispersants					
		Collaboration with PCG, Provincial Government, US Coast Guard, NOAA and Waves Group regarding the findings from the ROV Survey and Inspection					
•		Transfer of Incident Command Post (ICP) from Pola to Calapan City					
		Press briefing presided by Gov. Dolor at PPA Calapan Port					
		Meeting with Calapan City Mayor Marilou Morillo re: response team initiatives					
March 23 Participation in NDRRMC Full Council Meeting							
		Declaration of Tier III on the MT Princess Empress oil spill response by PCG calling for further resources from national to international scale of resources					



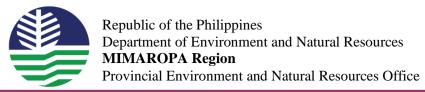
VI. RESPONSES ACTIONS TAKEN BY DENR

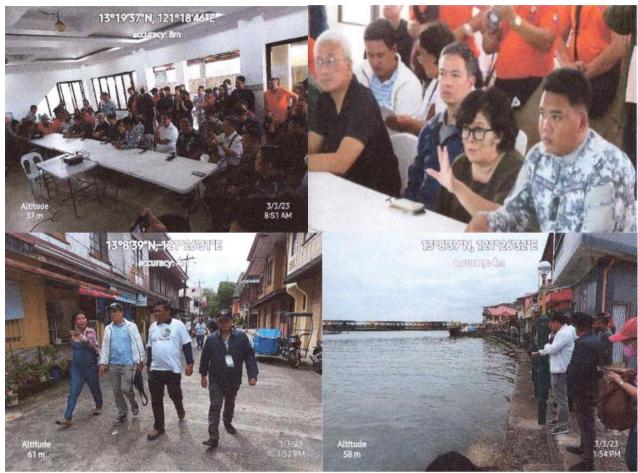
A. Coordination / Meetings with Concerned Stakeholders

From Day 1 to present, the DENR has closely coordinated with the Provincial Government through Governor Humerlito A. Dolor as well as several partner and concerned agencies such as Philippine Coast Guard (PCG), Department of Social and Welfare Development (DSWD), Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR), Department of Labor and Employment (DOLE), Office of Civil Defense (OCD), Department of Health (DOH) MIMAROPA, Department of Interior and Local Governance (DILG), Bureau of Fire Protection (BFP, under DILG), Provincial Disaster Risk Reduction and Management Office (PDRMMO), Technical Education and Skills Development Authority (TESDA) and media partners. The continuous coordination, meetings and partnerships were actively attended by the DENR Officials and members of the Task Force. From the operational planning to the on-going operations and to the early recovery period, DENR has been present and has continuously provided technical assistance and support to the operations in the incident.

The actions taken and meetings/coordination conducted by DENR in the first 30 days highlights the coordination of DENR focal persons with the Philippine Coast Guard (PCG); Provincial Government of Oriental Mindoro; National, Provincial and Muncipal Disaster Risk Reduction and Management Offices (NDRRMO / PDRRMO / MDRRMO) and other concerned NGAs and NGOs for crisis management. The collaboration of DENR with the Department of Social Welfare and Development (DSWD) was also elaborated regarding the Cash-For-Work (CFW) Program for the households / fisherfolks affected by the oil spill.

Overall, the first 30 days of actions undertaken towards the oil spill mainly revolved around sufficient inter-agency planning and coordination for the immediate response of the DENR Task Force. The following months after the first 30 days of response mainly revolved around sustained efforts for assessments, containment, clean-up and further assistance from different organizations as part of the early recovery phase of Oriental Mindoro from the oil spill.

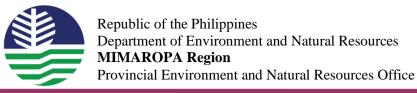




March 3, 2023 – Secretary Loyzaga's first visit after the incident

Recorded as Day 4 since the vessel's sinking last February 28, 2023, DENR Secretary Maria Antonia Yulo-Loyzaga (left) attended a briefing on the M/T Princess Empress Oil Spill incident in the municipality of Naujan, Oriental Mindoro. Subsequently after the meeting, DENR Officials conducted an ocular inspection on the areas with the most proximity to the vessel where oil traces are prominently noticeable. The location of the vessel and the immediate countermeasures that will be made as response to the spillage was discussed alongside various concerned agencies. Among the attendees include notable personnel such as:

- Naujan Mayor Henry Joel Teves
- PDDRMO CoP Naujan PD Delorino Villareal
- Dr. Fernando Siringan
- Commander Albinoja
- EMB MIMAROPA RD Joe Amil Salino
- ✤ ASEC Gilbert Gonzales
- USEC Carlos Primo David
- USEC Augusto Dela Peña





March 4, 2023 - Coordination with Municipal Mayors of Pinamalayan and Bongabong

Spear-headed by the Regional Executive Director assisted by Oriental Mindoro OIC PENR Officer and CENR Officers, Rodel Boyles and Caesar Quebec, coordination with the Municipal Mayors of Pinamalayan and Bongabong was conducted by DENR personnel on March 4, 2023. Their discussion mainly highlights possible interventions and preventive measures for the immediate oil spill response.



March 5, 2023 - Ocular Visit with Undersecretaries, Marilou Erni and Jonas Leones, in Pola

The Undersecretaries, Marilou Erni and Jonas Leones, conducted an ocular visit last March 5, 2023 in Brgy. Calima, Pola. With the spillage brought about by the current from which the vessel was sunken in the coasts of Naujan, Pola has suffered the most damages by the oil spill among the municipalities of Oriental Mindoro. A press briefing was conducted in the barangay hall presided by USec Leones regarding the interventions and support from the collaborations between DENR and LGUs. Officials also stated that statistics on the environmental damages caused by the spill are yet to be assessed and evaluated in the following weeks as the seepage of oil from the sunken vessel were still occur.





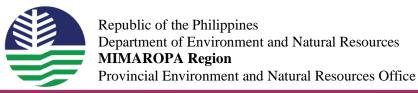
March 6, 2023 - Press Briefing with Oriental Mindoro Governor Hon. Humerlito Dolor and Vice Governor Ejay Falcon at Brgy. Motoderazo, Naujan

A press-briefing and inter-agency meeting regarding the oil spill was conducted last March 6, 2023 presided by Oriental Mindoro Governor, Hon. Humerlito Dolor. The briefing was attended by RED Lormelyn Claudio, OIC ARD for Technical Services Maximo Landrito, OIC PENRO Alan Valle, CENR Officers Caesar Quebec and Rodel Boyles and several representatives from various concerned agencies and stakeholders.



March 7, 2023 - Arrival of DENR Secretary Maria Antonia Yulo-Loyzaga in Pola

The arrival of DENR Secretary Yulo-Loyzaga in the municipality of Pola last March 7, 2023 was welcomed by Gov. Dolor and municipal Mayor Jennifer Cruz. A briefing was conducted discussing the current situation in the coastal areas of Pola which were severely affected by the oil spill. DENR Officials from PENRO and CENRO Socorro were also present in participation of the coastal inspection conducted after the meeting.





March 8, 2023 - DENR and DSWD collaboration for the Cash-For-Work Program

A meeting with RED Claudio with DSWD, PCG, DOH, and PLGUs/MLGUs alongside DENR was held at the PENR Office of Oriental Mindoro last March 8, 2023. This meeting mainly delineates the task distribution of the agencies for the implementation of the Cash-For-Work Program (CFW) for the residents affected by the oil spill.



March 10, 2023 - Meeting and updates on oil spill with the LGUs



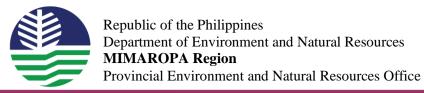
Consecutive meetings were held regarding updates on oil spill with the LGUs (Provincial, affected Municipalities) and NGAs (DENR represented by CENRO Socorro, PCG, PNP, DOH, OCD) and media. This event was held at Seacliff Suites Hotel, Barangay Zone III Pinamalayan, Oriental Mindoro. From this orientation highlights three (3) major updates: (1) the release of updates of the NGAs regarding oil spill shall be every 3:30 pm; (2) uniforms will be provided to responders; and (3) all relief goods (food and other supplies) shall be facilitated by Provincial LGUs.



March 12, 2023 - Meeting with PCG and Municipal and Barangay LGUs of Pola and Naujan



March 13, 2023 - *Meeting and update regarding the result of assessment in Pola with the PCG Japanese Team PDRRMO, PCG, PNP, Army and DENR*





March 13, 2023 - Meeting and Planning with the LGU of Calapan City (DRRMO, ENRO, Agriculture, Fisheries Management Office), DENR (PENRO and CENRO Socorro), DepEd, PNP, Red Cross and Blue Alliance regarding the preparation and management of possible spread of oil spill in the northern part of the Province of Oriental Mindoro (particularly in Calapan City)



March 13, 2023 - Meeting of Task Force MT Princess Empress Oil Spill regarding the status / updates for the upcoming senate hearing in DENR-PENRO Oriental Mindoro





March 13, 2023 - *Meeting with the LGU (PDRRMO, Municipality of Pola), DENR, DOH, OCD, PNP, PCG, Army and media (CNN) on the Municipal Hall of Pola, Oriental Mindoro. The meeting aimed to provide time table for the spiller to work on (liabilities) and to prepare for the senate hearing tomorrow.*



March 18, 2023 - Meeting with Task Force Team (Coast Guard, PDRRMO, DENR-EMB) & representative from Harbor Star re: issue on the use of hot water high pressure at Brgy. Misong, Pola & hauling of collected oil contaminated solid materials and some concerns on the implementation of activities of the concerned agencies





March 25, 2023 - *Meeting and coordination of Oceanus Conservation PH with PCG regarding their operations on the deployment of dispersants for oil spill.*



March 25, 2023 - Ocular visit of Oceanus Conservation PH in Brgy. Calima, Pola



March 25, 2023 - Meeting discussing the checklist for shoreline assessment attended by DENR, PCG, MDRRMO and Harbor Star





March 27, 2023 - Oceanus Conservation Philippines presented their initial assessment and presentation of retrieval of oil samples and the eficacy testing results and had a bench-top treatment demonstration, today, March 27, 9:00am at the Incident Command Station, PCG Calapan. Present in the meeting were IC Commodore Tuvilla, PCG personnel, DENR representatives, Next Gen representatives, Oceanus and Eco Trends PH.



April 16, 2023 - Visit and aerial inspection of PH President Bongbong Marcos in the areas affected by the M/T Princess Empress Oil Spill





April 16, 2023 - Visit and aerial inspection of PH President Bongbong Marcos in the areas affected by the M/T Princess Empress Oil Spill (continued)



B. Oil Spill Containment, Clean-up and Sampling

1. Waste Management and Hauling

Summary of Hazardous Wastes Collected from the Oil Spill within Oriental Mindoro

Area	Oil wastes (cumulative)		Oil-Contaminated Wastes (cumulative)		Agencies/ Organizations involved
	Volume (L)	Weight (kg)	Volume (L)	Weight (kg)	PCG, Harbour Insurance,
Calapan City			30,504.90	27,454.41	local communities under
Naujan			4,477.20	4,029.48	Cash for Work Program
Pola			264,372.30	237,935.07	of the DSWD
Total			299,354.40	269,418.96	

Source: DENR Situational Report

Shown in the table above is the cumulative collected oil and oil contaminated wastes from offshore (ground zero) and shorelines of the three (3) most affected municipalities from the beginning of the cleanup operations. As of to date, a total of 556 drums and 71 tonner bags have been hauled by a transporter contract by the Harbour Star thru the Insurance. Further, a total of 101 drums and 152 tonner bags are still in the Intermediate Storage Area (ISA) located in Pola port and Barangay Navotas, Calapan City, Oriental Mindoro.

The most recent hauling activity of oil spill wastes was conducted by Pola MDRRMO, PCG and DENR-EMB through its Provincial Environmental Management Unit (PEMU) - Oriental Mindoro last August 2-4, 2023 in the Port of Pola. The collected remaining hauled hazardous wastes were transported to Manila Port through the Corvus vessel owned by HSSSI. Once these wastes reach their destination, these will then be transported to Bulacan province through the Far East Fuel Corporation for treatment.



March 10, 2023 - Loading of drums in Brgy. Tagumpay and Misong, Pola





March 7, 2023 - loading of collected oil wastes in Brgy. Calima, Pola





March 7, 2023 - loading of collected oil wastes in Brgy. Misong, Pola

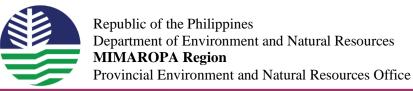




March 7, 2023 - Collection of Wastes in Pola



March 11, 2023 - Collection/Hauling of steel drums with oil in Casiligan River, Pola





March 11, 2023 - Collection / Hauling of steel drums with oil in Barangay Calima, Pola

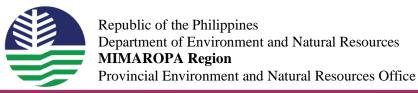


March 20, 2023 - Waste Hauling at Pola



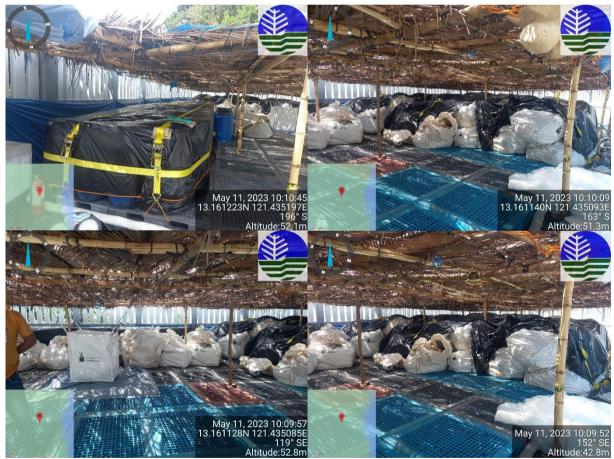


March 23, 2023 - Loading of collected oil from ground zero to tanker for transport to the treatment facility





May 4, 2023 - Stored hazardous waste in Brgy. Tiguihan, Pola Port with a total of 94 drums and 152 tonner bags.



May 11, 2023 - Stored hazardous waste in Brgy. Tiguihan, Pola Port with a total of 96 drums and 179 tonner bags.





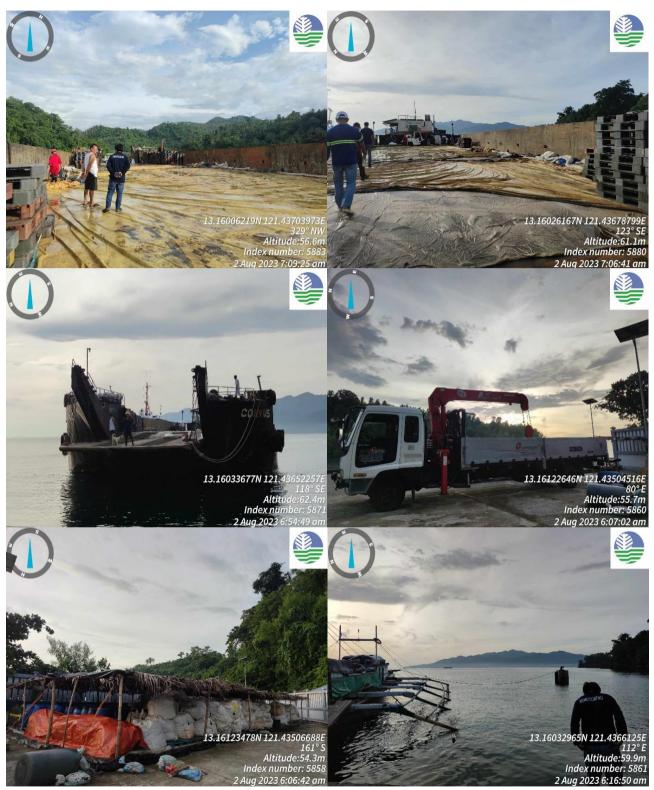
August 2, 2023 - Personnel of Harbor Star Shipping Services Inc. (HSSSI) weigh and label the hazardous wastes stored at Pola Port in Pola, Oriental Mindoro prior to hauling.





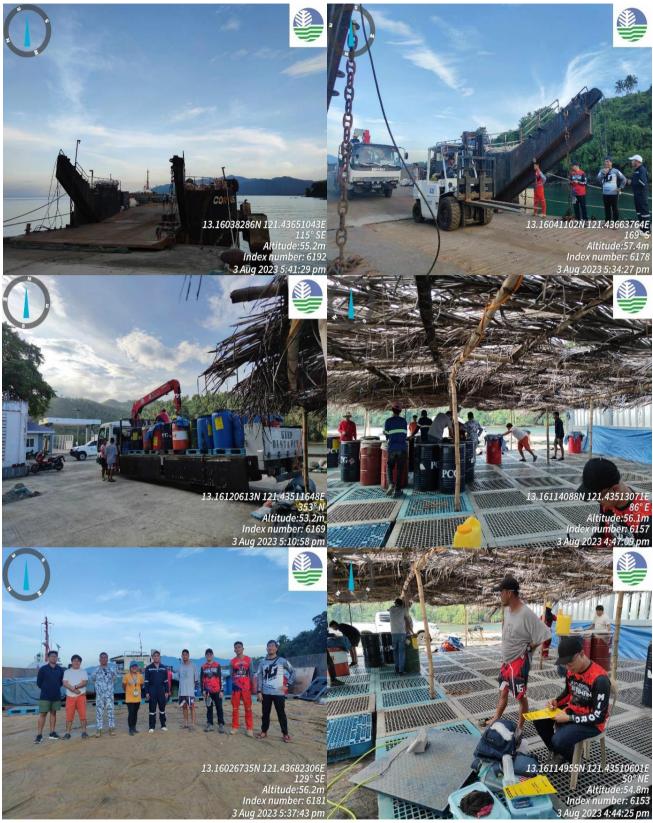
August 2, 2023 - Tonner bags were placed atop rows of palette with another layer of tarpaulin and sorbent pads below to prevent leakage. Sorbent booms were also placed around the rows of palette for added protection.



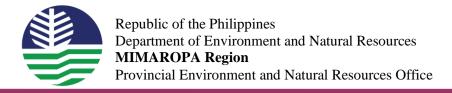


August 2, 2023 - Arrival of Corvus barge at Pola Port to collect the remaining hazardous wastes generated during the Naujan Oil Spill Incident assisted by EMB MIMAROPA personnel on standby for the monitoring of hauling of said wastes.





August 3, 2023 - continuation of hauling of hazardous wastes by Harbor Star Shipping Services Incorporated (HSSSI) with a total of 315 tonner bags and 153 drums hauled to Corvus barge





August 3, 2023 - HSSSI to dispose of the unused recycled spill booms at Pola Port based on the recommendation of International Tanker Owners Pollution Federation (ITOPF)

2. Clean-Up Activities



March 3, 2023 - Clean-up activity conducted by DENR PENRO and CENRO personnel in Brgy. Misong, Pola alongside PCG, PNP and LGUs



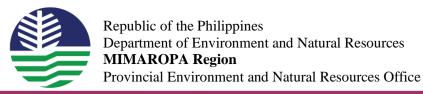


March 7, 2023 - Coastal clean-up at Brgy. Calima, Pola





March 10, 2023 - Coastal clean-up at Barangay Tagumpay, Pola, Oriental Mindoro.





March 10, 2023 - Coastal clean-up at Barangay Misong, Pola, Oriental Mindoro



March 13, 2023 - Monitoring and Documentation of Oil Spill Assessment and Management Activities of PDRRMO, PCG and Japanese Coast Guard in Barangay Buhay na Tubig, Pola





March 13, 2023 - Monitoring and Documentation of Oil Spill Assessment and Management Activities of PDRRMO, PCG and Japanese Coast Guard in Barangay Buhay na Tubig, Pola

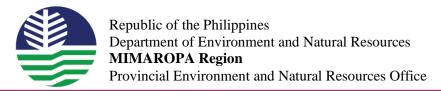


May 26, 2023 - Clean-up activity conducted by DENR PENRO and CENRO personnel in Brgy. Calapan City in celebration of the Coral Triangle Day (CTD)





June 9, 2023 - Clean-up activity conducted by DENR PENRO and CENRO personnel in Brgy. Lazareto, Calapan City in celebration of the Month of the Ocean Day (MOO)



3. Water Quality Sampling

AREAS		Date of Last		
COVERED	Total	Within Normal	Exceeded WQG	Sampling
	Stations	WQG		
Baco	1	0	1	March 29, 2023
Bongabong	4	0	4	April 17, 2023
Bulalacao	3	0	3	April 17, 2023
Calapan City	8	2	6	March 20-25, 2023
Gloria	8	0	8	April 16, 2023
Mansalay	2	0	2	April 17, 2023
Naujan	9	0	9	March 27, 2023
Pola	9	1	8	March 27-28, 2023
Pinamalayan	5	0	5	April 16, 2023
Puerto Galera	35	25	10	April 25, 2023
Roxas	4	0	4	April 17, 2023
San Teodoro	2	0	2	March 31, 2023
TOTAL	90	28	62	

Summary of Water Quality Monitoring Results in the province of Oriental Mindoro

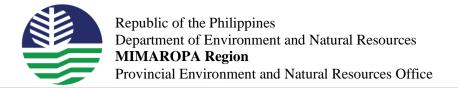
Source: DENR Situational Report, 05 May 2023

Based on the result, a total of 62 among the 90 stations have exceeded the normal water quality guidelines as of their latest sampling. The results were used for the pronouncement of the restriction on water activities as recreational as well as fishing activities within the province. As of to date, water sampling is done once a month.

The last sampling was conducted on the last week of August 2023. Fortunately, recent water sampling results of the said month from the DENR EMB reveal that no oil traces have been observed across the 12 coastal municipalities, indicating signs of recovery. Still, continuous monthly monitoring of the coastal



March 11, 2023 - Water sampling in the areas of Naujan Barangays Montemayor, Melgar B,



Masaguing, and Herrera conducted by PCG, Bantay-Dagat and BFAR



March 11, 2023 - Water Sampling in San Teodoro Stations 1 (Punta Ilag Fish Sanctuary) and 2 (Between Tamauyan Reef and Bulaso Fish Sanctuary



May 3, 2023 - Water sampling in the areas stationed in the selected coastal barangays of *Pinamalayan [continued]*: (1) Marfrancisco (left); (2) Lumangbayan (right)





March 14, 2023 - Water sampling conducted by DENR-EMB in the areas stationed in the selected coastal barangays of *Pinamalayan*: (1) Banilad-Simborio FS; (2) Banilad-Guinapangan FS; (3) Pili; (4) Ranzo FS; (5) Marfrancisco; (6) Lumangbayan; [arrangement from top to bottom, left to right] 37





May 2, 2023 - Water sampling conducted by DENR-EMB in the areas stationed in the selected coastal barangays of *Roxas*: (1) Dalahican (left); (2) Dangay (center); (3) Paclasan (right)



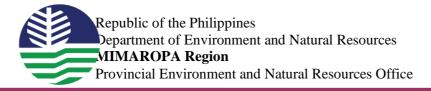
May 3, 2023 - Water sampling conducted by DENR-EMB in the areas stationed in the selected coastal barangays of *Pinamalayan*: (1) Banilad-Simborio FS (top-left); (2) Banilad-Guinapangan FS (top-right); (3) Pili (bottom-left); (4) Ranzo FS (bottom-right)









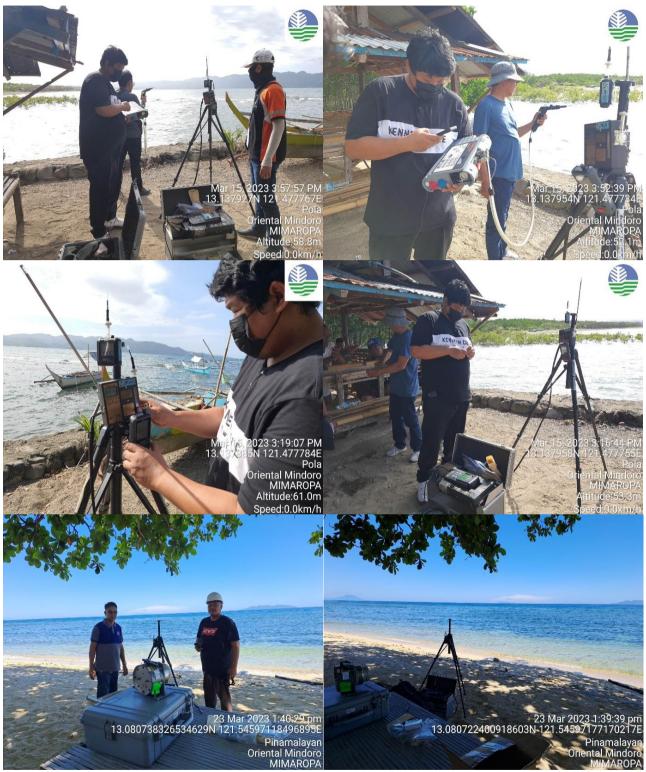


3. Air Quality Sampling

Areas Covered	NO. OF SAMPLING SITES						DATE OF LAST SAMPLING CONDUCTED			
	TOTAL STATIONS (H2S)	NOT DETECTED (H2S)	DETECTED (H2S)	TOTAL STATION (VOC)	NOT DETECTED (VOC)	DETECTED (VOC)	TOTAL STATION (TVOC)	NOT DETECTED (TVOC)	DETECTED (TVOC)	
Calapan City	1	0	1	0	0	0	1	0	1	H2S and TVOC: March 25, 2023
Naujan	1	0	1	0	0	0	1	0	1	H2S and TVOC: March 25, 2023
Pola	4	0	4	4	4	0	7	0	7	H2S: March 17 and 24, 2023 TVOC: April 20, 2023 VOC: March 9-10, 2023
Pinamalayan Source: DEI	3 NR Situation	0 al Report, 05	3 May 2023	0	0	0	3	0	3	H2S and TVOC: March 23, 2023

For the air quality results, a one-time test of samples was conducted on March 23 and 25, 2023 in the municipalities of Naujan, Pola, Calapan City and Pinamalayan. These four (4) areas have been reported to have suffered the greatest damages from the oil spill among the municipalities of Oriental Mindoro. As shown above, the hydrogen sulfide (H₂S) can indicate bacterial contamination. Results show that H₂S was detected in all sampling stations. Moreover, Volatile Organic Compounds (VOC) further indicate poor air condition and the Total Volatile Organic Compound (TVOC) have been scaled to be hazardous to human health. During the sampling period, results for the TVOC have been detected along the four (4) areas.





March 23, 2023 - Conduct of Ambient Air Sampling by DENR-EMB at Brgy. Calima, Pola, Oriental Mindoro



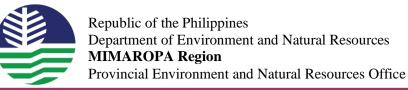
C. Installation of Spill Booms



March 6, 2023 - Installation of improvised absorbent boom in Casiligan River, Pola Oriental



March 8, 2023 - Installation of improvised spill booms in Brgy. Aplaya, Bongabong





March 9, 2023 - Installation of improvised spill booms in Brgy. Balatasan, Bulalacao,



March 10, 2023 - Monitoring of construction of improvised absorbent boom in the Market Center, Barangay Batuhan, Pola, Oriental Mindoro





March 11, 2023 - Installation of coconut husks spill booms in Bgy Ranzo, Pinamalayan



March 12, 2023 - Arrival of Blue Alliance (NGO) from Batangas City carrying 79 pieces of 3meter spill booms



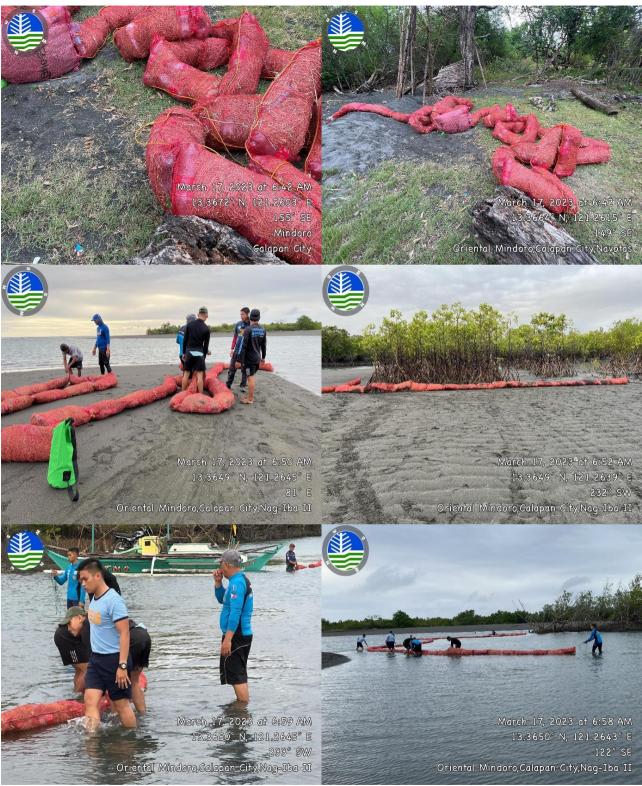


March 13, 2023 - Installation of improvised spill booms in Bgy Pili, Pinamalayan,

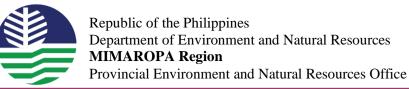


March 15, 2023 - Preparation of improvised spill booms in Brgy. Herrera, Naujan





March 17, 2023 - Installation of improvised spill booms at Sitio Duluhan, Brgy. Melgar B, Naujan

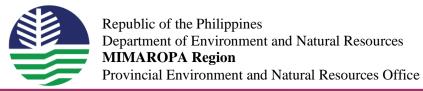




March 17, 2023 - Installation of improvised spill booms at Sitio Makapili, Brgy. Melgar B, Naujan



March 19, 2023 - Installation of improvised spill booms at Sitio Villa Antonio, Brgy. Navotas, Calapan City

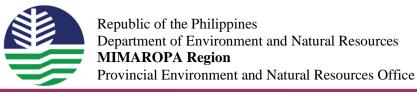




March 20, 2023 - Production of improvised spill booms at Brgy. Maidlang, Calapan City



March 24, 2023 - Production of improvised spill booms to be installed at Punta-Ilag Fish Sanctuary (Brgy. Ilag, San Teodoro)

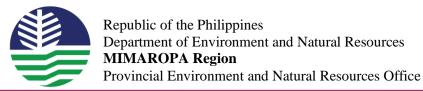




March 24, 2023 - *Production of improvised spill booms to be installed at Brgy. Tacligan, San Teodoro*



March 23, 2023 - *Production of improvised spill booms to be installed at Brgy. Maidlang, Calapan City*





March 26, 2023 - Fabrication of spill booms in Brgy Dulangan, Puerto Galera, producing a total of 180 meters for 8 days



March 26, 2023 - Fabrication of spill booms in Brgy. Poblacion, San Teodoro





March 26, 2023 - Bgy. Maidlang, Calapan City residents producing approximately 1700 meters spill booms ready for installation by the PCG



March 29, 2023 - Deployment of decorticator equipment in Bgy Poblacion, San Teodoro, assisted by PENRO personnel together with the operators from Bavolod, Negros Occidental.



D. Rapid Assessment

An inter-agency meeting for the conduct of Rapid Assessment was held last March 5, 2023 at DENR-PENRO Conference Room, Brgy. Suqui, Calapan City. A Rapid Assessment pertains to an intensive, team-based qualitative inquiry for data collection implemented to quickly develop a preliminary understanding of a situation. This activity has been deemed essential for the assessment of the damages caused by the recent oil spill incident caused by the sinking of the MT Princess Empress last February 28, 2023. This is pursuant to the DENR-BMB Special Order (SO) No. 2023-66 creating the Oriental Mindoro Oil Spill Rapid Assessment Team which authorizes the conduct of said assessment from March 5-10, 2023. Moreover, this team was also assisted by the DENR-ERDB in accordance to the ERDB SO No. 2023-70.

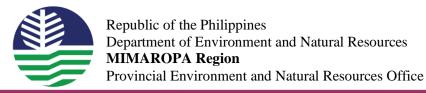
The activities that will be included for the Rapid Assessment were identified. A total of three (3) major surveys were proposed by the BMB. The objectives of these activities aim to efficiently obtain essential data from the barangays. These include:

- 1. <u>Aerial Mapping</u> photo-documentation of the coastal waters via drones and production of ortho-mosaic maps for each barangay
- 2. <u>Bio-physical Survey</u> observation on the state of natural resources in each barangay. Flora, fauna and the type and number of habitats present in the area will be noted.
- 3. <u>Social Survey</u> observation on the communities affected by the oil spill. This includes interviewing of households regarding the livelihood resources of each barangay and how are they affected by the oil spill



Rapid Assessment Team 2 composed of DENR PENRO and BMB personnel in the Incident Command Post (ICP) of Pola

After the five-day (5) assessment, an exit meeting for the Rapid Assessment conducted in the coastal barangays of Oriental Mindoro was held back in the PENRO Conference Room last March 10, 2023. This primarily consolidates the data obtained by the Rapid Assessment composite teams formed last March 5, 2023.





March 5, 2023 - Entrance meeting with RED Lormelyn Claudio, BFAR, PAgO and other concerned stakeholders for the scheduling and task distribution of the Rapid Assessment; March10, 2023 - Exit meeting with DENR PENRO and BMB personnel regarding the conducted Rapid Assessment of Coastal Barangays of Oriental Mindoro affected by the M/T Princess Empress Oil Spill Incident

Tasking and Scheduling of Specific Activities

With the proposed activities identified, tasking and scheduling of these activities are then discussed. The Rapid Assessment will be a five-day (5) survey (March 6-10, 2023) to be conducted in the coastal areas in the municipalities of Pola, Pinamalayan, Bansud, Roxas, Bongabong, Mansalay, Bulalacao, Gloria and Naujan. A total of 60 coastal barangays were identified for the Rapid Assessment (*Table 1*). Municipalities such as Pola with coastal areas reported to be greatly affected by the oil spill were given priority for assessment.

E. Initial Valuation of Damages caused by the Oil Spill

Aside from the Rapid Assessment, another meeting was initiated by the DENR Biodiversity Management Bureau (BMB) last March 27, 2023 (Monday) at the DENR-PENRO Conference Room at Brgy. Suqui, Calapan City, Oriental Mindoro. The proposed Initial Valuation of Damages mainly involves appraisal of incurred losses and lost profit. This includes statistical analysis and inference of obtained financial calculations that are lost due to the recent MT Princess Empress Oil Spill incident last February 28, 2023. The valuation of damages spearheaded by the DENR-BMB primarily targets the tourism sectors affected by the oil spill. The effects on community water resources were also targeted.



With the proposed activities identified, tasking and scheduling of these activities are then discussed. The activity shall be a three-day (3) survey to be conducted from March 29-31, 2023 in selected oil spill-affected barangays of Pola, Naujan and Calapan City. Coordination with key officials will be conducted first to notify and identify barangays with the target resort respondents. Afterwards, an exit meeting for data consolidation and cleansing was also conducted on March 31, 2023.

Identification of Activities

The activities that will be included for the Initial Valuation of Damages were identified. A total of three (3) major surveys were proposed by the BMB. These activities will be conducted in the municipalities of Pola, Naujan and Calapan City. The objectives of these activities aim to efficiently obtain essential data from the barangays. These include:

- 1. <u>Groundwater Survey</u> interview of residents regarding their water resources and their observed effects caused by the oil spill
- 2. <u>Tourism Impact</u> survey of owners, staff, caretakers and/or operators of selected resorts regarding the impact of the oil spill towards their business as of March 2023.
- 3. <u>Rapid Assessment</u> observation on the communities affected by the oil spill. This includes aerial drone mapping, bio-physical and social surveys. <u>This activity will only be conducted in Calapan City.</u>



March 30, 2023 - Entrance meeting for the scheduling and task distribution of the Initial Valuation of Damages along selected coastal barangays affected by the M/T Princess Empress Oil Spill Incident





March 28, 2023 - Coordination with Pola and Naujan LGUs and stakeholders such as resort owners as part of the Initial Valuation of Damages caused by the M/T Princess Empress Oil Spill



F. Cash-For-Work Program

As part of the immediate response to the affected individuals and families due to the oil spill and fishing restrictions in the affected areas, the DENR have partnered with the DSWD for the Cash for Work (CFW) Program. The benefits of the said program are families who are dependent to coastal and marine resources for their daily living. In the program, the LGUs identifies the beneficiaries while the DENR's role is to provide technical assistance and monitor the various work program identified to be paid by the DSWD.

As of to date, a total of 20,932 individuals per families from eight (8) municipality and one (1) city were the target beneficiaries of the program. Out of that total number, 15,185 of it have already been engaged in the said program. Meanwhile, 13,958 of it have been paid out for the first (1st) and second (2nd) batch of pay out schemes. A total of Php 58,901,600.00 was already involved and out for the CFW.

The participants of the CFW program were deployed to conduct various activities such as collecting locally available materials for making improvised oil spill boom and absorbent; establishing barangay or backyard gardens; mangrove rehabilitation; and conduct of community cleanup drives.

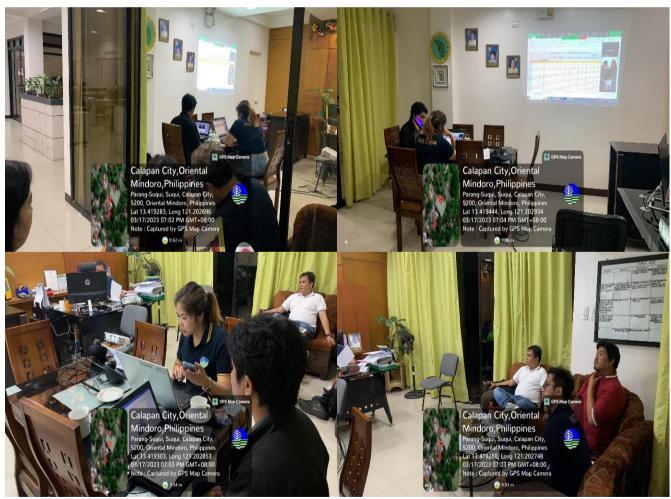


March 9, 2023 - Briefing of DSWD to the beneficiaries of the Cash-For-Work (CFW) program in Pola, Oriental Mindoro





March 10, 2023 - Orientation on Cash-for-Work Program to the affected fisherfolks / residents in the Municipal Hall of Pola, Oriental Mindoro



March 17, 2023 - Emergency Meeting for Cash-for-Work Program with DSWD and RED





March 20, 2023 - Coordination and orientation with barangay LGUs of Pola for the CFW Program: Brgy Misong (top); Brgy. Batuhan (middle); and Brgy. Tagumpay (bottom)



G. Offshore and Shoreline Assessment



June 17, 2023 - Orientation of the Shoreline and Dive Assessment Job Aid for the coastal areas of Naujan affected by the oil spill held by the Philippine Coast Guard



June 17, 2023 - *Setup and task distribution of the Shoreline and Dive Assessment Teams for the coastal areas of Naujan affected by the oil spill*



June 17, 2023 - Briefing at the residence of Brgy. Melgar B, Naujan regarding the conducted Shoreline Assessment





June 17, 2023 - Shoreline Assessment (left) and water sampling (right) in the coastal areas of Brgy. Melgar A, Naujan



June 17, 2023 - Shoreline Assessment (left) and water sampling (right) in the coastal areas of Brgy. Melgar B, Naujan



June 17, 2023 - Briefing at the Barangay Hall of Melgar B, Naujan regarding the conducted Shoreline Assessment





June 17, 2023 - Dive Team Assessment of PCG in the coastal areas of Brgys. Melgar A and Melgar B, Naujan

H. Donations / Provisions Received by DENR for the Oil Spill Management

1. Far East Fuel Corporation

Provision of free hauling services from Far East Hauling Inc. to the first batch of collected oil and oil-contaminated wastes in the municipality of Pola, Oriental Mindoro on March 4, 2023. The first hauling activity was done on March 14, 2023 and wastes were transported to the Treatment Facility in Bulacan.







2. First Gen

Donations of various materials and equipment for the oil spill response and clean-up was received by the EMB PEMU Chief on March 8, 2023. These includes PPEs, gloves, drums, absorbent pads and the like.

Item	Quantity	Unit
Deployment Materials		
Mini Spill Boom (1000 x 60mm, 3-L absorbing capacity)	424	pcs
Mini Spill Boom (2000 x 30 mm, 6-L absorbing capacity)	132	pcs
Oil Sorbent Pads	3	pcks
Oil Sorbent Rolls	3	rolls
Open Top Drums	4	pcs
Closed Top Drums	12	pcs
Heavy-Duty Plastic Bag	5	boxes
Personal Protective Environment (PPEs)		
N95 Masks, 8210	45	boxes
N95 Masks, 9502+N95	10	boxes
Nitrile Gloves	40	pairs
Latex Gloves	5	boxes
Hand Soaps	4	boxes





3. Mindoro Harvest Power Plant

A total of 25 pcs of empty drums was donated by the Mindoro Harvest Power Plant on March 3, 2023. This was then turned-over to the LGU of Pola thru the MDRRMO, for the use in the cleanup activities.



4. Coco Peat Asia Co. Ltd. and Coco Peat Philippines

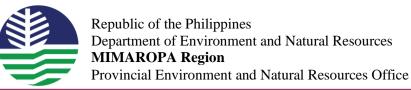
A total of 1100 peat (550 sacks of coco peat powder and 550 spill boom) was received by the DENR on March 12, 2023 and turned over to the LGU of Pola thru the MDRRMO.



5. Blue Alliance

A total of 79 pieces Spill Boom with 3-meter length was donated by the Blue Alliance on March 12, 2023 received by the DENR and turned over to the LGU of Pola thru the MDRRMO.





6. Malampaya Foundation Inc.

A total of 54 empty drums and 12 tote tanks was donated by the Malampaya Foudnation, Inc. on March 9, 2023. It was received by the DENR Oriental Mindoro thru the EMB PEMU. Aside from these containers, the MFI also donated several oil spill clean-up materials and kits such as masks, gloves, tote tanks and vehicular support alongside the pledge of support from its JV partners DOE, PNOC EC, Prime Energy and UC38 LLC:



7. Petron and San Miguel Corporation

The Petron and San Miguel Corporation thru the DENR Central Office have turnedover of 37 boxes of PPEs composed of protective suits, respirator masks, boots and gloves to the Provincial Government of Oriental Mindoro. The turn-over was attended by Undersecretary Marilou Erni, Task Force Commander on March 21, 2023.





8. Oceanus Conservation and Eco Trends

The Oceanus Conservation PH thru the Eco Trends have extended their assistance and donation to the DENR Central Office of the Eco-safe solution, an oil and fuel dispersant and the Magic Fiber Absorbent Pads. A total of 11 drums of oil dispersant solution was transported to Calapan City and was deposited to the Incident Command Post (ICP) in the Provincial Capitol Complex for the use in the cleanup operations for the oil spill incident.

Furthermore, the Oceanus Conservation PH along with the Eco Trends also donated a total of 2,528 boxes (75,840 sheets) of Magic Fiber Absorbent Pads received by the DENR Oriental Mindoro thru the EMB – PEMU. Although a total of 1,944 boxes were still unutilized and stored at the 3rd floor of PENR Office Oriental Mindoro Building, these remaining resources shall be use for future activities for the recovery and rehabilitation of the affected areas should possible oil sightings reoccur.



Drums of oil dispersant solution donated by the Oceanus Conservation PH and Eco Trends deposited in the Incident Command Post (ICP) of Calapan City to be used for the recovery of oil spill-affected areas





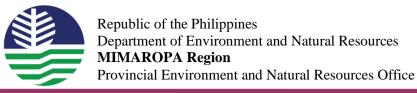
Boxes of Magic Fiber Absorbent Pads also donated by Oceanus Conservation PH and Eco Trends deposited at the DENR PENR Office of Oriental Mindoro

9. Ramon Uy Foundry and Machine Shop Corp.

The fabrication of spill booms generated via shredders and decorticators was conducted as alternative countermeasures for the oil spill incident. These were made possible by the provision of three (3) equipment consisting of one (1) decorticator and two (2) shredders from Mr. Ramon Uy, the owner of RU Foundry and Machine Shop Corp. The 11-day production activity was held within the municipalities of Puerto Galera, San Teodoro and Calapan City in the province of Oriental Mindoro last March 23 to April 2, 2023. The production of these spill booms shall serve as primary protection of the municipalities' coastal waters and Marine Protected Areas (MPAs) against the spreading oil slicks.



Provision and transport of the decorticator and shredder by Ramon Uy Foundry and Machine Shop Corp. at DENR PENRO Oriental Mindoro to be utilized for the fabrication of spill booms





Production of improvised spill booms using coconut husks at Brgy. Maidlang, Calapan City last March 23, 2023



Production of improvised spill booms using coconut husks at Brgy. Dulangan, San Teodoro last March 26, 2023



Meeting with PCG, DENR Coast Guards, Oceanus and PDRRMO re: actions to be taken for the containment of oil acquired from the spill booms held last March 27, 2023





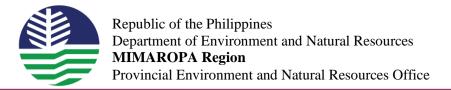
March 29, 2023 - Production of improvised spill booms using coconut husks processed by the shredders and decorticators from Ramon Uy Foundry and Machine Shop Corp. at Brgy. Poblacion, San Teodoro



March 30, 2023 - *Production of improvised spill booms using coconut husks processed by the shredders and decorticators from Ramon Uy Foundry and Machine Shop Corp. at Brgy. Lumangbayan, San Teodoro*



March 31, 2023 - Exit meeting with RED Lormelyn Claudio, PENR Officer Alan Valle, Mr. Ramon Uy, DENR personnel and RU Foundry and Machine Shop Corp. staff



Total number of coconuts utilized for the fabrication of improvised spill booms in the two (2) selected barangays of San Teodoro, Oriental Mindoro

Barangay	Total No. of Coconut Husks Utilized	No. of Sacks of Coconut Fibers Produced	Duration of Fabrication Process	
Poblacion	4,250	38	2 hrs & 45 min	
Lumangbayan	4,500	40	3 hrs	

The production of the improvised spill booms in the municipality of San Teodoro was conducted in Brgys. Poblacion and Lumangbayan. Statistics of coconut husk utilization and number of coco fibers produced for each barangay are tabulated above. This activity is a collaborative effort of teams from PENRO Oriental Mindoro personnel, San Teodoro LGUs and Sangguniang Bayan, and the RU Foundry and Machine Shop Corp. The processing of more than 4,000 coconut husks within only three (3) hours prove that the provided shredders and decorticators were great and efficient equipment for the fabrication of spill booms.

10. Korean Coast Guard

Lastly, the Korean Coast Guard also provided information materials to the resident fisherfolks in the coastal barangays of Calapan City last March 30, 2023. These were distributed along Barangays, Maidlang and Navotas. These materials, along with their conducted coastal site inspection, should guarantee awareness regarding the oil spill situation and the proper measures to combat these calamities.



Distribution of information materials from Korean Coast Guard at Brgy. Maidlang, Calapan City



Summary of Donations received and/or Turned-Over to DENR Oriental Mindoro as of May 12, 2023

Organization/Donors	Type Of Donations	Quantity / Unit	Date Received	Remarks
Far East Fuel Corporation	Free Hauling Services		03/04/23	Hauling activity was done on March 14, 2023 and wastes was transported to the Treatment Facility in Bulacan.
First Gen	PPEs		03/08/23	Received by the DENR Oriental Mindoro thru the PEMU
Mindoro Harvest Power Plant	Empty Drums	25 pcs	3/3/23	Received by the DENR PENRO Oriental Mindoro and turned-over to LGU of Pola thru the MDRRMO
Coco Peat Asia Co. Ltd. and Coco Peat Philippines	Coco Peat Powder Spill Boom	500 sacks 550 pcs	3/12/23	Received by the DENR CENRO Socorro and turned- over to LGU of Pola thru the MDRRMO
Blue Alliance	Spill Boom (3m)	79 pcs	3/12/23	Received by the DENR CENRO Socorro and turned- over to LGU of Pola thru the MDRRMO
Malampaya Foundation, Inc.	Empty Drums Tote Tanks	54 pcs 12 pcs	3/9/23	Received by the DENR Oriental Mindoro thru the PEMU
Petron and San Miguel Corporation	protective suits, respirator masks, boots and gloves	37 boxes	3/21/23	Received by the DENR Oriental Mindoro and turned- over to the Provincial Government of Oriental Mindoro
RU Foundry and Machine Shop Corporation and Ecological and Agriculture Development Foundation	Shredder and Decorticator (for spill boom fabrication)	3pcs	3/22/23	Received and assisted by the DENR PENRO Oriental Mindoro
Ecotrans International (Oceanus)	Magic Fiber Absorbent Pads	2,528 boxes	5/5/23	Deposited at PENRO Oriental Mindoro
Ecotrans International (Oceanus)	Oil Dispersant	11 drums	4/2/23	Deposited at ICP Calapan thru the PDRRMO



I. Clearance of Termination of Physical Clean-up in Pola, Oriental Mindoro.

Incident reports testify that Pola has experienced the greatest impact on their coastal environments due to the oil spill. Since the incident, concerned LGUs in collaboration with the DENR, PCG, NDRRMC, DOH and several other agencies have consistently monitored the affected areas to alleviate their situation through various coastal clean-ups and spill boom fabrication as part of the acquired benefits from the Cash-For-Work Program.

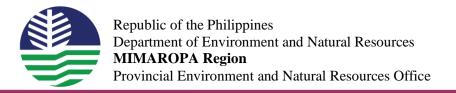
However, according to the status report from the Municipality of Pola regarding their clean-up operations, the conduct of their fourth (4th) and final assessment last June 8, 2023 have completed all of the areas covered by 100% of the shoreline operation. The Incident Management Team assessed that these areas have fully met the set clean-up endpoints established by multi-agency survey teams and were declared acceptably clean. Unfortunately, it is reported that the areas returning to its natural and pristine condition is no longer possible due to the damages caused by oil staining on the coastal environment.

To wit, a certification and agreement for the termination of physical shoreline clean-up operation in Pola was written last June 9, 2023. This writ is in agreement of all concerned agencies and stakeholders consisting of PCG, DENR, MDRRMO, Local and International Contractor representatives, Harbor Star, ITOFP and the 11 affected coastal barangays of Pola.

As recommendation, the PCG-MST, DENR and concerned LGUs of Pola shall conduct continuous recovery monitoring of mangrove condition and water and air quality. Moreover, the team shall also conduct oiling sediment analysis on the sandy shorelines of selected coastal areas of Pola such as Brgy. Batuhan. These remaining activities shall further determine the oiling trapped in the subsurface remaining in the coasts of Pola.

J. Information, Education and Communication (IEC) Campaigns conducted by DENR

Continuous conduct of IEC activities is initiated by the DENR Oriental Mindoro Offices through the CENR Offices. As of this time, two (2) municipalities, Gloria and Bansud, have been visited for the conduct of IEC last August 23 and 25, respectively. All municipalities affected by the oil spill incident are targeted for the conduct of IEC activities as part of the recovery plans for the incident.





August 23, 2023 - Conduct of Information, Education and Communication Campaign with the barangay officials and affected fisherfolks of Gloria in Brgy. Sta. Theresa, Gloria



August 25, 2023 - Conduct of Information, Education and Communication Campaign with the barangay officials and affected fisherfolks of Bansud in Brgy. Sta. Tiguisan, Bansud



VII. WAYS FORWARD

It is necessary that conduct of habitat assessment on all areas affected by the incident shall be done to evaluate the extent of the damages caused by the incident. A request to the DENR Biodiversity Management Bureau (BMB) for the conduct of habitat assessment and initial valuation activities has been sent by this Office through the Regional Office.

By then, rehabilitation and recovery plans/activities can be implemented throughout the province. Further, identification of other interventions such as provision of alternative livelihood programs can be proposed as part of the recovery of the people affected through collaboration with other concerned agencies. Overall, continuous monitoring of the affected areas is still deemed necessary for the constant recovery and rehabilitation from the oil spill incident.

Prepared By:

NEIL EDGAR DEX P. MARZA Coastal Extension Officer **BEA NATASHA R. FORTU** Forester II / IEC Officer **Focal Person on the Oil Spill Incident** Noted By:

AMOR D. ASI SVEMS / Chief, CDS



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NEH EDGAR DEX P. MARZA Coastal Extension Officer

FORTU **BEA NA** Forester II / IEC Officer Focal Person on the **Oil Spill Incident**

Noted By:

AMOR D. ASI SVEMS / Chief, CDS