# TASK FORCE MT. PRINCESS EMPRESS OIL SPILL INCIDENT SITUATIONAL REPORT NO. 45

15 April 2023

## I. SITUATIONAL OVERVIEW

## **AFFECTED AREAS**

REGION	PROVINCES	CITIES/ MUNICIPALITIES	REMARKS
MIMAROPA	Oriental Mindoro	<ol> <li>Bansud</li> <li>Bongabong</li> <li>Bulalacao</li> <li>Gloria</li> <li>Mansalay</li> <li>Naujan</li> <li>Pola</li> <li>Pinamalayan</li> <li>Roxas</li> </ol>	Sangguniang Panlalawigan Resolution No. 6290-2023 dated 06 March 2023 declared 78 coastal barangays of nine (9) municipalities of Oriental Mindoro affected by the oil spill under the state of calamity.
	Palawan	1. Agutaya 2. Taytay	

# **WATER QUALITY MONITORING**

		TOTAL	SAMPLING STATION	IS:	DATE OF LAST
PROVINCE	CITY/ MUNICIPALITY	TOTAL SAMPLING STATIONS IN THE CITY/MUN.	WITHIN NORMAL WQG	EXCEEDED WQG	SAMPLING CONDUCTED
OCCIDENTAL MINDORO	MAGSAYSAY	3	1	2	29 March 2023
OCCIDENTAL MINDORO	SAN JOSE	2	1	1	29 March 2023
ORIENTAL MINDORO	BACO	1	0	1	31 March 2023
ORIENTAL MINDORO	BONGABONG	4	2	2	27 March 2023
ORIENTAL MINDORO	BULALACAO	3	0	3	29 March 2023
ORIENTAL MINDORO	CALAPAN CITY	8	2	6	20-25 March 2023
ORIENTAL MINDORO	GLORIA	8	3	5	27 March 2023
ORIENTAL MINDORO	MANSALAY	2	0	2	29 March 2023
ORIENTAL MINDORO	NAUJAN	9	0	9	27 March 2023
ORIENTAL MINDORO	POLA	9	1	8	27-28 March 2023
ORIENTAL MINDORO	PINAMALAYAN	6	1	5	27 March 2023
ORIENTAL MINDORO	PUERTO GALERA	Only 22 out of 35 stations have results	9	13	10 April 2023
ORIENTAL MINDORO	ROXAS	4	3	1	27 March 2023
ORIENTAL MINDORO	SAN TEODORO	2	0	2	31 March 2023
	Total	83	23	60	

E-mail Address: <a href="mailto:embmimaropa@emb.gov.ph">emb.gov.ph</a>
Website: <a href="mailto:www.mimaropa.emb.gov.ph">www.mimaropa.emb.gov.ph</a>

			TOTALS	SAMPLING STATION	S:	DATE OF LAST
PROVINCE	CITY/ MUNICIPALITY	BARANGAY	TOTAL SAMPLING STATIONS IN THE CITY/MUN.	WITHIN NORMAL WQG	EXCEEDED WQG	SAMPLING CONDUCTED
PALAWAN	TAYTAY	CASIAN	5	0	5	22-31 March 2023
PALAWAN	TAYTAY	DEBANGAN	3	0	3	31 March 2023
PALAWAN	TAYTAY	PAMANTOLON	2	0	2	23 March 2023
PALAWAN	TAYTAY	PULARAQUEN	1	0	1	27 March 2023
PALAWAN	TAYTAY	BANTULAN	3	0	3	13-29 March 2023
PALAWAN	TAYTAY	CALAWAG	4	0	4	24-28 March 2023
PALAWAN	TAYTAY	BETON	3	0	3	22-24 March 2023
PALAWAN	TAYTAY	POBLACION	3	0	3	29 March 2023
PALAWAN	TAYTAY	BARAS	3	0	3	24 March 2023
		Total	27	0	27	

#### RESULTS OF VOLATILE ORGANIC COMPOUNDS IN WATER AS OF 28-29 MARCH 2023

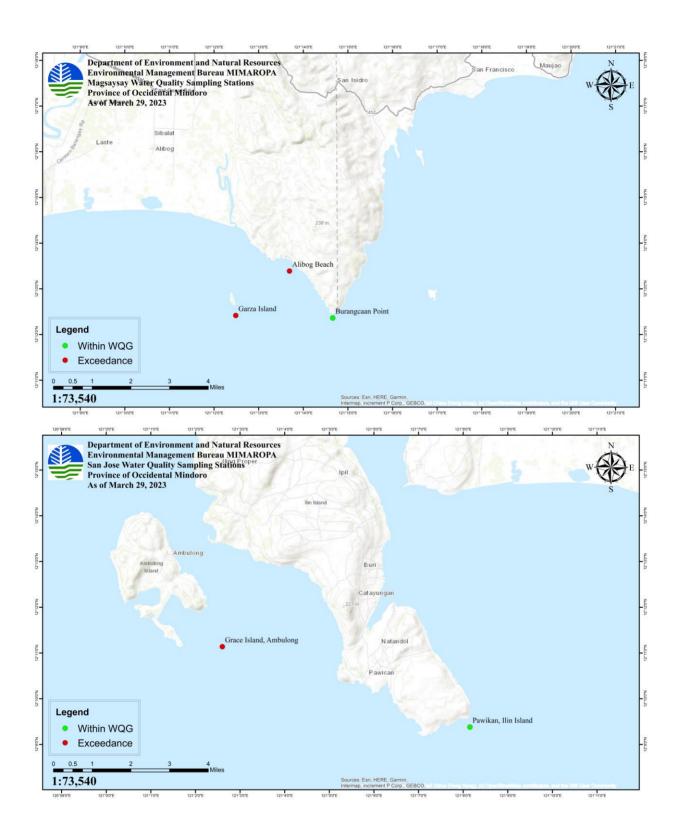
DDOMNOE	LOCATION	SOURCE OF	SAMPLE		PARAM	ETERS (mg/L)	
PROVINCE	LOCATION	WATER	IDENTIFICATION	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES
		GROUNDWATER	MELGAR A	< 0.005	< 0.005	< 0.005	< 0.005
		RIVER WATER	BULUACAN RIVER	< 0.005	< 0.005	< 0.005	< 0.005
	NAUJAN	RIVER WATER	MAG ASAWANG	< 0.005	< 0.005	< 0.005	< 0.005
	INAUJAN	RIVER WATER	TUBIG				
		SEAWATER	MASAGUING FISH	< 0.005	< 0.005	< 0.005	< 0.005
		SEAWATER	SANCTUARY				
		GROUNDWATER	CALIMA	< 0.005	< 0.005	< 0.005	< 0.005
ORIENTAL		GROUNDWATER	MISONG	< 0.005	< 0.005	< 0.005	< 0.005
MINDORO	POLA	RIVER WATER	CASILIGAN RIVER	< 0.005	< 0.005	< 0.005	< 0.005
		RIVER WATER	PULA RIVER	< 0.005	< 0.005	< 0.005	< 0.005
		SEAWATER	POLACAY	< 0.005	< 0.005	< 0.005	< 0.005
		GROUNDWATER	MARFRANCISCO	< 0.005	< 0.005	< 0.005	< 0.005
		RIVER WATER	PINAMALAYAN	< 0.005	< 0.005	< 0.005	< 0.005
	PINAMALAYAN	RIVER WATER	RIVER				
		SEAWATER	RANZO FISH	< 0.005	< 0.005	< 0.005	< 0.005
		SEAWATER	SANCTUARY				

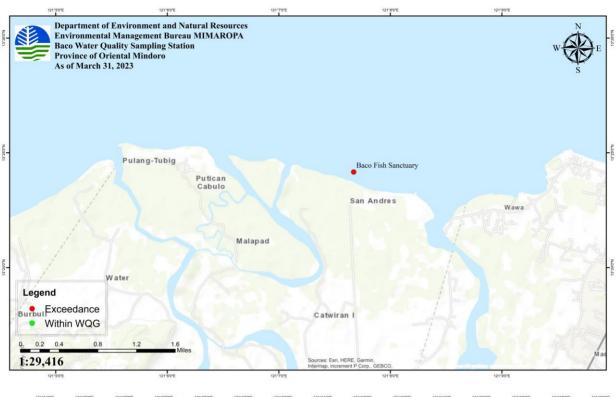
Attached are the Laboratory results of Volatile Organic Compound in water.

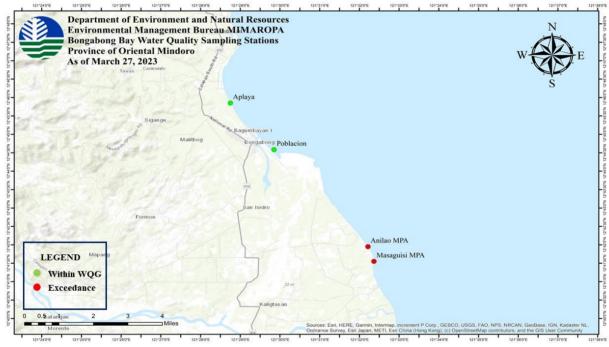
### RESULTS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER AS OF 25 MARCH 2023

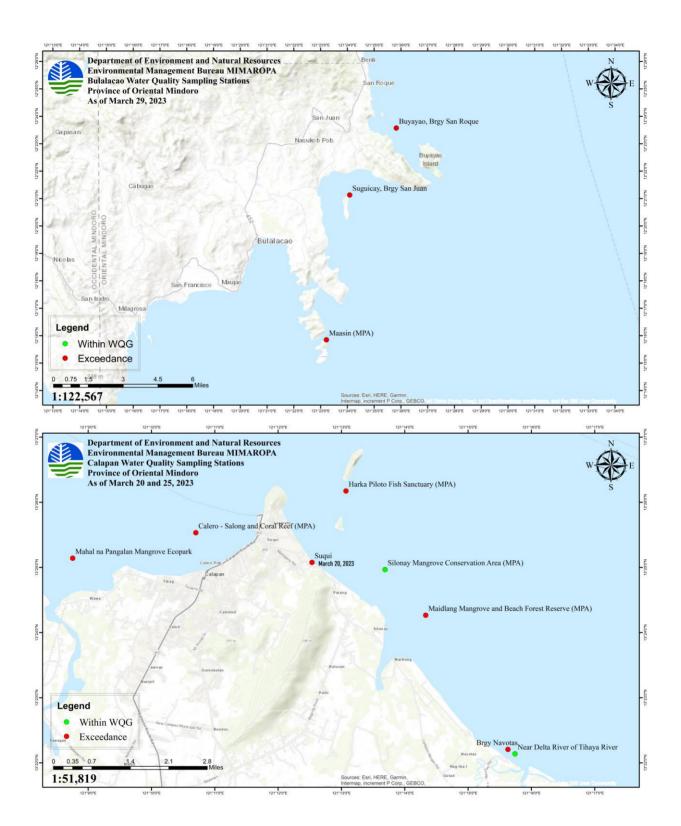
Province: Oriental Mindoro										
Source of Water: Marine Water										
Parameters (µg/L)	Calapan Bay - Navotas	Naujan – Buloc-Buloc Cove MPA	Naujan – Melgar A	Pola – Kwebang Tagumpay	Pola – Polacay Beach	Gloria - Balete	Pinamalayan Bay – Ranzo Fish Sanctuary			
Acenaphthene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Acenaphthylene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Anthracene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Benzo(a)anthracene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Benzo(a)pyrene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Benzo(b)fluoranthene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Benzo(ghi)perylene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Benzo(k)fluoranthene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Chrysene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Dibenzo(a,h)anthracene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Fluoranthene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	0.062			
Fluorene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Indeno(1,2,3-cd)pyrene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009			
Naphthalene	0.109	0.085	0.066	0.067	0.060	0.064	0.044			
Phenanthrene	0.012	0.011	< 0.009	< 0.009	< 0.009	< 0.009	0.021			
Pyrene	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	0.104			

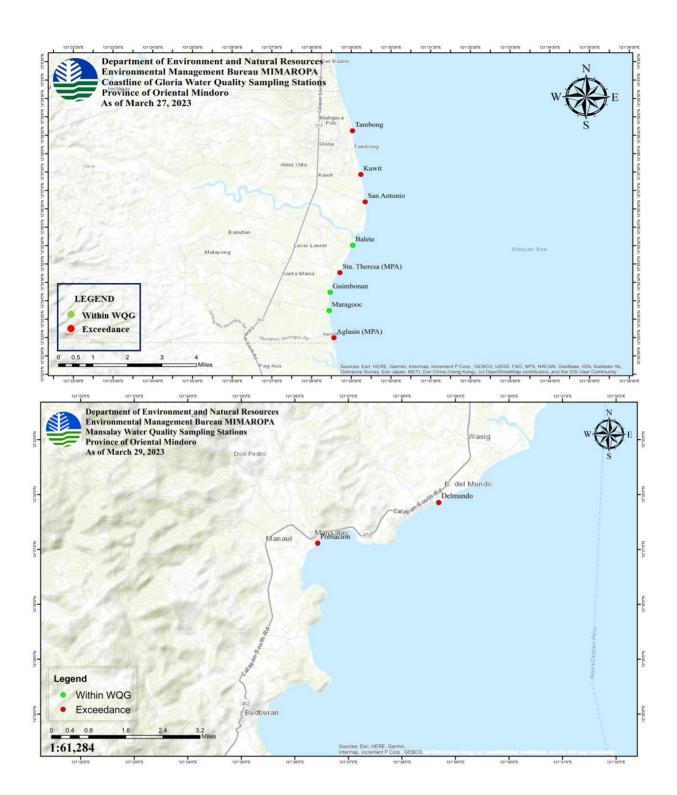
Attached are the Laboratory results of Polycyclic Aromatic Hydrocarbons in water.

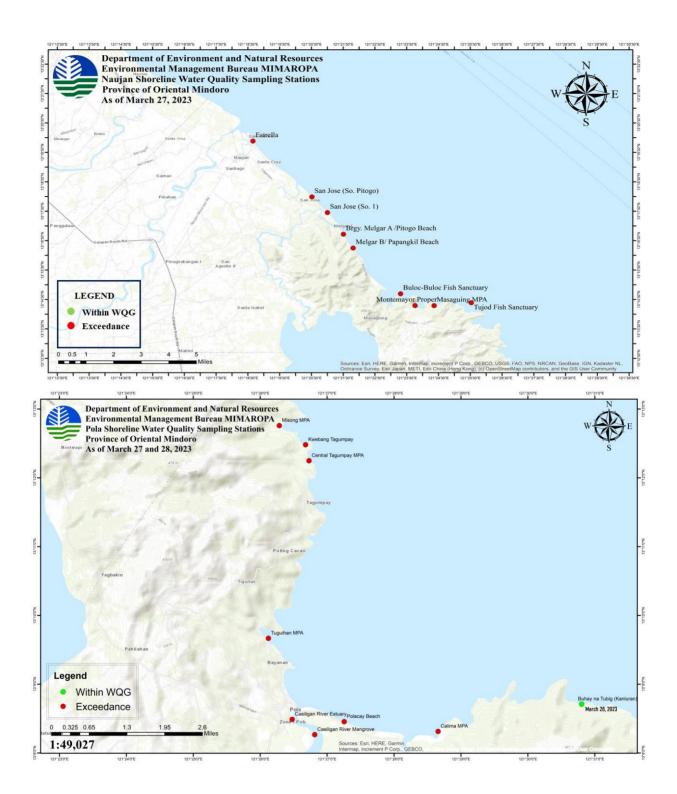


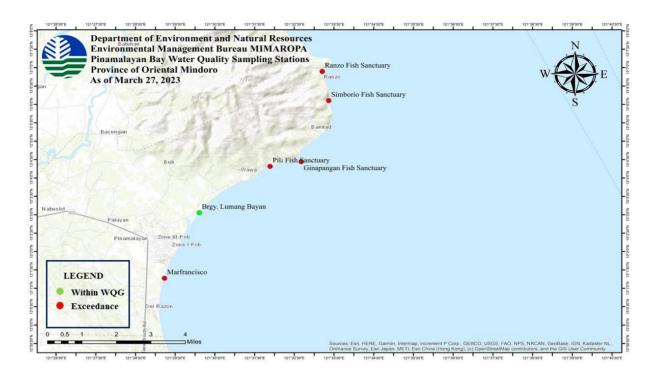


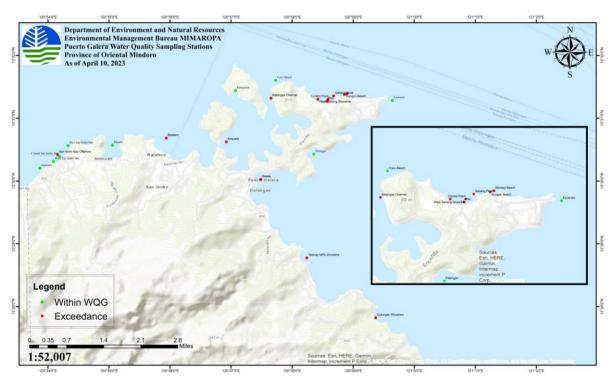


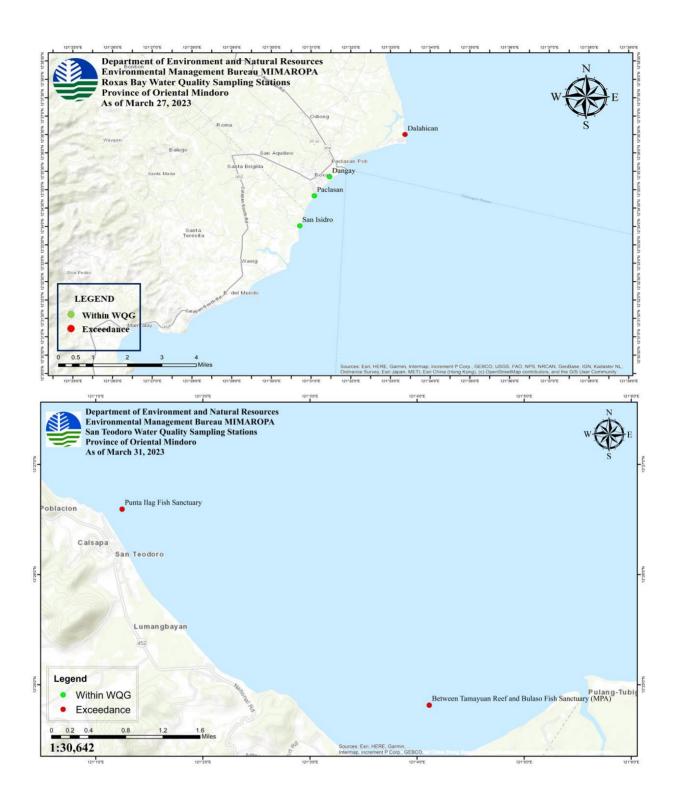


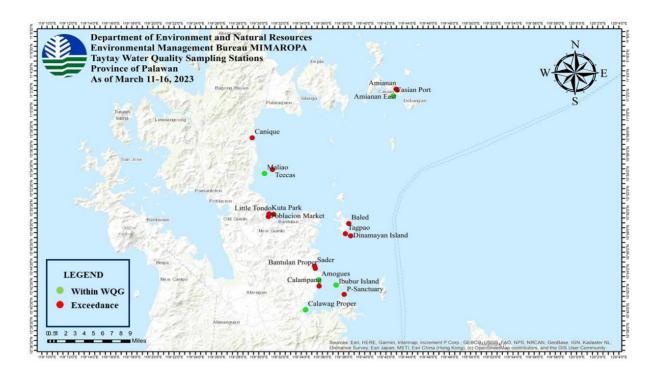




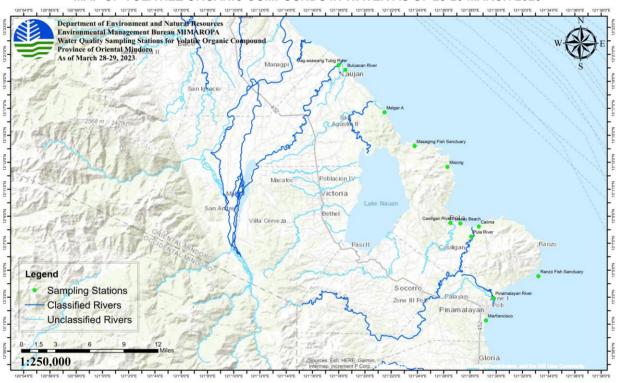




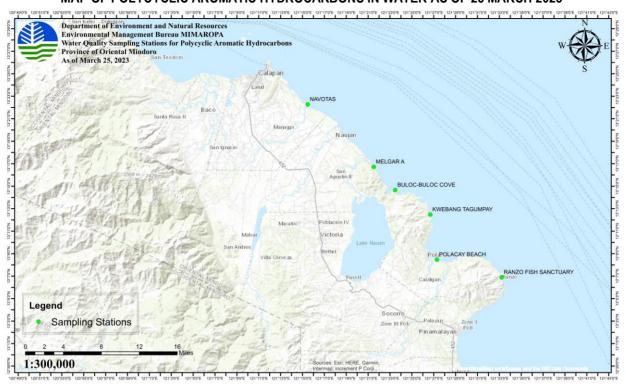




#### MAP OF VOLATILE ORGANIC COMPOUNDS IN WATER AS OF 28-29 MARCH 2023



#### MAP OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER AS OF 25 MARCH 2023



#### **AIR QUALITY MONITORING**

PROVINCE	CITY/			111-0110		TVOC (2) IN-SITU		Cs s from CRL)	DATE OF LAST SAMPLING
	MUNICIPALITY	STATIONS IN THE CITY/MUN.	NOT DETECTED	DETECTED	NOT DETECTED	DETECTED	NOT DETECTED	DETECTED	CONDUCTED
ORIENTAL MINDORO	CALAPAN CITY	1	0	1	0	1	0	0	H₂S and TVOC: 25 March 2023
ORIENTAL MINDORO	NAUJAN	1	0	1	0	1	0	0	H₂S and TVOC: 25 March 2023
ORIENTAL MINDORO	POLA	4	0	4	0	4	4	0	H <sub>2</sub> S and TVOC: 17 and 24 March 2023; VOC: 9-10 March 2023
ORIENTAL MINDORO	PINAMALAYA N	3	0	3	0	3	0	0	H₂S and TVOC: 23 March 2023
	Total	9	0	9	0	9	4	0	

#### Note:

- 1. While H2S were detected in the abovementioned sampling locations, the results did not exceed the W.H.O. Standards.
- 2. Based on the in-situ sampling, Total Volatile Organic Compounds (TVOC) was detected in the absence of EMB Standards.

#### Results of Volatile Organic Compounds (VOCs) on March 9-10, 2023 Sampling

Sources	Benzene	Ethyl Benzene	m,p-Xylene	o-Xylene	Toluene
Brgy. Misong (P00136674-02)	ND	ND	ND	ND	ND
Brgy. Buhay na Tubig (P00136674-04)	ND	ND	ND	ND	ND
Brgy. Calima (P00136674-06)	ND	ND	ND	ND	ND
Brgy. Buhay na Tubig (P00136674-08)	ND	ND	ND	ND	ND

Note: **ND** means **NOT DETECTED** by the method used. No traces of analytes detected from the sample analyzed and the sample collected only represents the source during the time of collection. Samples were collected by CRL and analyzed by ASSET Inc. Laboratories.

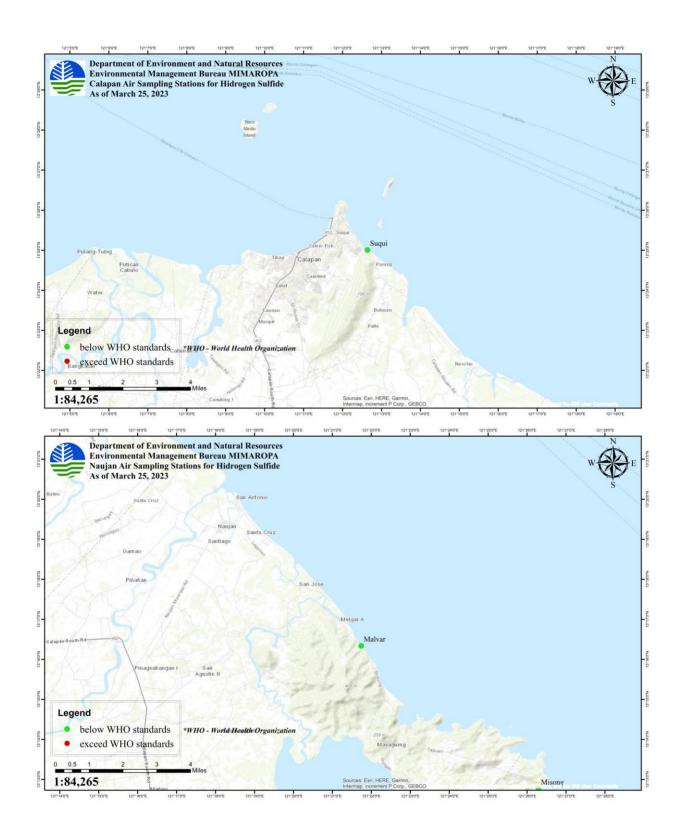
E-mail Address: <a href="mailto:embmimaropa@emb.gov.ph">embmimaropa@emb.gov.ph</a>
Website: <a href="mailto:embmimaropa.emb.gov.ph">emb.gov.ph</a>

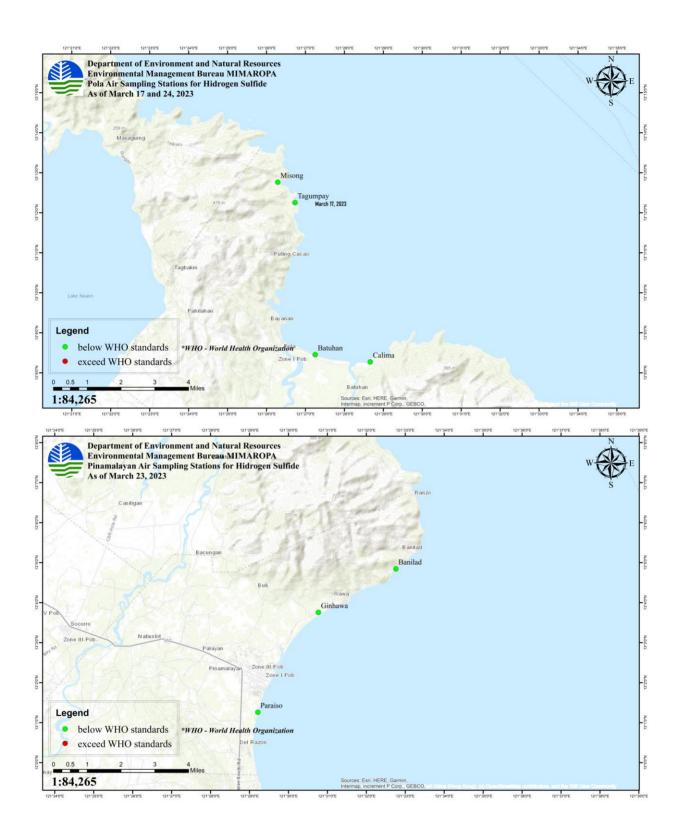
## Results of Total Volatile Organic Compounds (TVOCs) on March 15-25, 2023 Sampling

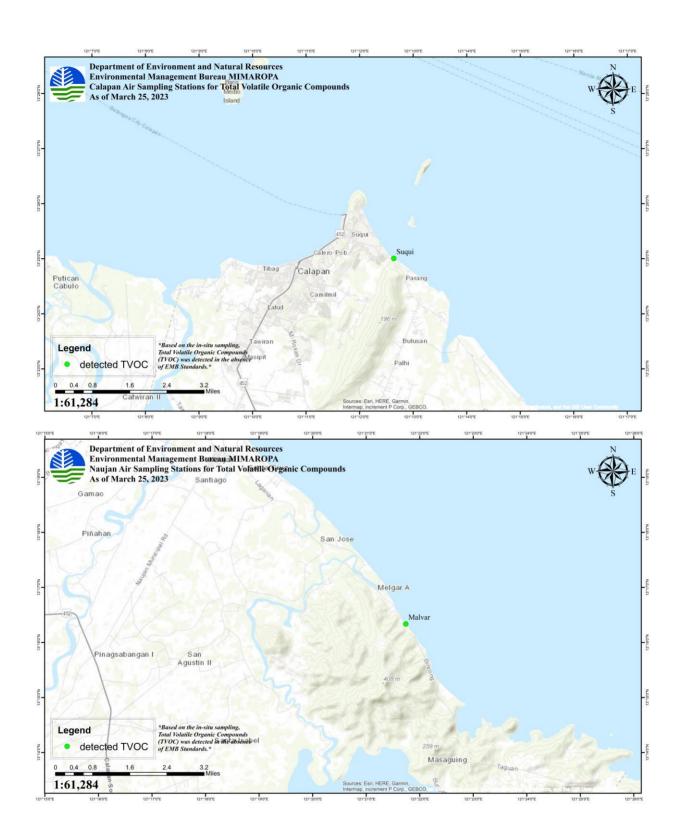
PROVINCE	SOURCE (Municipality/City)	LOCATION (Barangay)	TVOC (mg/m³)	DATE OF SAMPLING
			0.015	15 March 2023
		BRGY, CALIMA	0.046	16 March 2023
		BRGT. CALIIVIA	0.017	17 March 2023
			0.024	24 March 2023
	POLA		0.011	16 March 2023
	POLA	BRGY. MISONG	0.018	17 March 2023
			0.023	24 March 2023
ORIENTAL MINDORO		BRGY. BATUHAN	0.024	24 March 2023
		DDCV TACHMDAV	0.018	16 March 2023
		BRGY. TAGUMPAY	0.013	17 March 2023
	NAUJAN	BRGY. MALVAR	0.014	25 March 2023
	PINAMALAYAN	BRGY. PARAISO	0.011	23 March 2023
	PINAMALAYAN	BRGY. GINHAWA	0.023	23 March 2023
	PINAMALAYAN	BRGY. BANILAD	0.024	23 March 2023
	CALAPAN	BRGY. SUQUI	0.022	25 March 2023

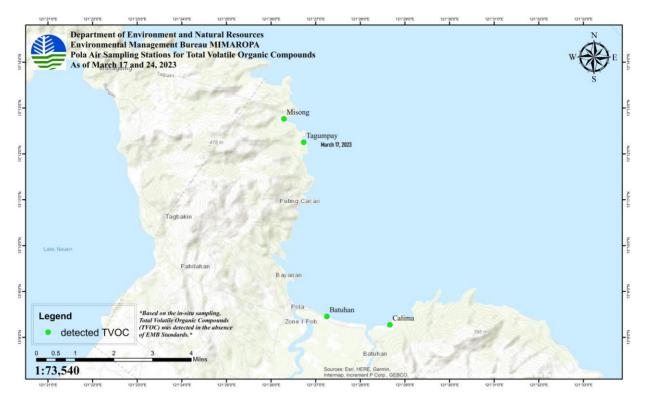
## Results of Hydrogen Sulfide (H<sub>2</sub>S) on March 15-25, 2023 Sampling

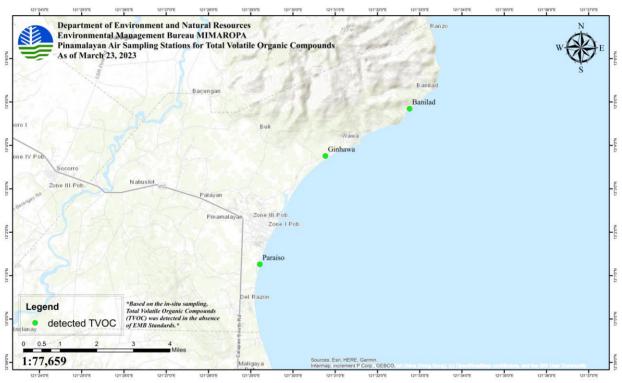
PROVINCE	SOURCE (Municipality/City)	LOCATION (Barangay)	H₂S (ppm)	DATE OF SAMPLING
			0.03	15 March 2023
		DDCV CALIMA	0.03	16 March 2023
		BRGY. CALIMA	0.03	17 March 2023
			0.01	24 March 2023
	POLA		0.04	16 March 2023
	FOLA	BRGY. MISONG	0.04	17 March 2023
			0.01	24 March 2023
ORIENTAL MINDORO		BRGY. BATUHAN	0.02	24 March 2023
		DDCV TACUMDAY	0.02	16 March 2023
		BRGY. TAGUMPAY	0.02	17 March 2023
	NAUJAN	BRGY. MALVAR	0.04	25 March 2023
	PINAMALAYAN	BRGY. PARAISO	0.02	23 March 2023
	PINAMALAYAN	BRGY. GINHAWA	0.03	23 March 2023
	PINAMALAYAN	BRGY. BANILAD	0.05	23 March 2023
	CALAPAN	BRGY. SUQUI	0.02	25 March 2023

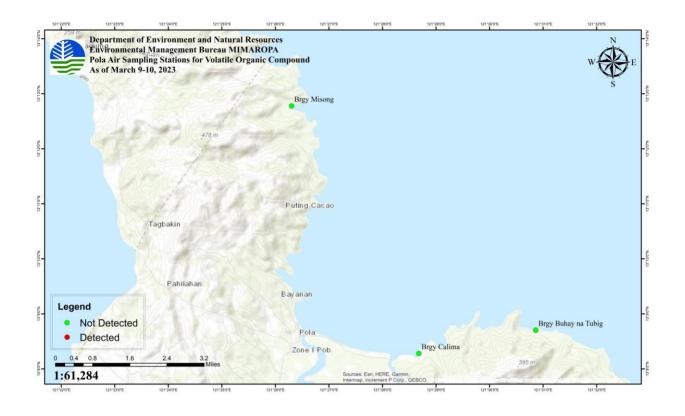












## WASTE COLLECTION: as of 15 April 2023

CITY/		OIL WASTE		OIL CONTAMINATED MATERIALS		AGENCIES/ ORGANIZATIONS	% OF
PROVINCE	MUNICIPALITY	CUM. VOLUME (IN LITERS)	CUM. WEIGHT (IN KG)	CUM. VOLUME (IN LITERS)	CUM. WEIGHT (IN KG)	INVOLVED IN THE COLLECTION	WASTE TREATED
ORIENTAL MINDORO	CALAPAN CITY			2,706.60	2,435.94	PCG, Harbour	0
ORIENTAL MINDORO	NAUJAN			3,852.00	3,466.80	Insurance, local communities under	43.24%
ORIENTAL MINDORO	POLA			192,012.30	175,511.07	Cash for Work Program (DSWD)	76.56
PALAWAN	TAYTAY			1,249.20	1,124.28		0
Т	OTAL			202,820.10	182,538.09		

#### Conversion:

1 Drum of Oil Contaminated Materials= 208.2 Liters

1 Liter of Oil Contaminated Materials= 0.9 kg

Tonner Bag = 729 Liters

Note: 1. The volume and weight were computed based on the conversion factors above.

- 2. The conversion of tonner bags was adjusted based on its volume hence a reduced amount in volume and weight compared to the reported waste on April 14, 2023.
- 3. The actual weight will be provided after hauling and treatment has been completed by the accredited service provider.

#### **DONATIONS MONITORING**

DONOR	ITEMS DONATED / SERVICES	RECIPIENT CITY/ MUNICIPALITY	FOCAL PERSON
DMCI Power Corp.	50 pcs Drums	LGU - Pola	
Power One Corporation	30pcs Drums	LGU - Pola	

Occidental Mindoro Consolidated Power Corp.	15 pcs Drums	LGU - Pola	
Temasek Foundation through Filinvest Land Inc.	70 Boxes (1000pcs/box) of KN95 mask 5 Boxes (1000pcs/box) of KN95 mask 2 Boxes (1000pcs/box) of KN95 mask		Jennifer M. Cruz 8 March 23 Meynardo Axalan 9 March 2023
	5 boxes of Absorbent Pads		
Coral Bay Nickel Mining	11 pieces 3M 6200 Half Facepiece Respirator (Medium) 14 pairs 3M 6003 Organic Vapor/Acid Gas Cartridge 28 pieces 3M 5N11 Particulate Filter, N95 28 pieces 3M 501 Filter Retainer 14 pieces 3M 4750 Chemical Protective Coverall (Large) 15 boxes Nitrile Gloves 14 pairs Boots Chemical Resistant 3 pieces 3M 6800 Full Facepiece Respirator (Medium)	EMB – MIMAROPA Region	Atty. Alessa May V. Ismael (23 March 2023)
First Gen Corporation	424 pcs Mini Boom Spill 132 pcs Mini Boom Spill 3 packs (100pcs/pack) Oil Sorbent Pads 3 rolls (49m x 0.96m x 0.35cm per roll) Oil Sorbent Rolls 4 pcs Open Top Drums 12 pcs Closed Top Drums 5 boxes (75pcs/box) Heavy-Duty Plastic Bag 45 boxes (20 pcs/box) N95 masks 10 boxes (50 pcs/box) N95 masks 40 pairs Nitrile Gloves 5 boxes (100 pcs/box) Latex Gloves, small 4 boxes (162 bars/box) Hand Soaps		Meynardo Axalan 9 March 2023
Prime Energy Resources	54 pcs UN Drums (210 Liters)		
Development	10 tote tanks (1cum).		
First Gen Corporation	Oil Spill Boom Reels (Tank Capacity: 300L) Oil Spill Boom (Inflatable booms in 2 reels) Dispersants 600 Liter	PCG Oriental Mindoro	

#### II. ACTIONS TAKEN

- Continuous air and water monitoring and sampling of stations in Occidental Mindoro, Oriental Mindoro and Palawan.
- Continuous supervision and technical assistance in the Hazardous waste management.
- Provide technical assistance in the fabrication and installation of spill booms made from alternative materials
- Coordination with local government units and other concerned government agencies pertaining to clean-up operations, assistance in livelihood projects of affected residents and fisherfolks.
- On 30 March 2023, PEMU Palawan personnel lead by Engr. Grizzel Bea Sabado, Chief, EMS Roxas, Palawan lead the retrieval of oil slicks and oil-contaminated debris, and clean-up activities at Amianan Beach, Casian Island, Taytay, Palawan.
- During the operations, the team was able to retrieve more or less three (3) drums of oil-contaminated materials and a handful of oil slicks from the shore. Representatives from the BLGU Casian stated

that they were unable to identify the persons responsible for burning the oil slicks and oil-contaminated materials.

- On the same day, the team also travelled to Debangan Island wherein they were able to collect more
  or less two (2) drums of oil-contaminated materials within the shore. However, because of size of the
  vessel, the team was only able to transport three (3) drums of oil contaminated materials to the LGU
  -Taytay Materials Recovery Facility located at Sitio Langayan, Brgy. Poblacion, Taytay, Palawan.
- On 04 April 2023, BLGU and LGU Taytay MENRO Office facilitated the transport of the remaining oil
  contaminated materials from the island to the MRF.
- Genetron International Marketing, hazardous waste transporter, started to haul all the drums and tonner bags in the temporary storage area at Philippine Ports Authority (PPA)-Pola, Oriental Mindoro.
   The drums containing hazardous waste will be treated by Separ Environmental Corporation located at 600 3<sup>rd</sup> St., Banaban, Angat, Bulacan.

On 07 April 2023, EMB MIMAROPA Region facilitated and monitored the hauling of oil contaminated materials at the collection point located at Brgy. Tagumpay and in various barangays of Pola, Oriental Mindoro. Representatives from Philippine Coast Guard, LGU Pola, ITOPF, and Harbor Star were present during the activity.

#### Details of the Hauling Activity

Transporter	Truck No.	Plate No.	No. of Drums/ tonner bags collected	Total Weight (kg)	Location of the Hauling activity	Treater
Genetron International Marketing	1	AVA 4201	60 drums	7012.3	Temporary Storage Area at PPA Pola Port	Separ Environmental Corporation
	2	AFA 7499	55 drums	6357.7		
	3	NBP 4066	60 drums	6189.4		
	4	NCK 6809	64 drums	5361.2		
	5	TIU 586	62 drums	5800.7		
	6	NAP 6054	30 tonner bags	Not yet weighed*		
	7	NBU 7119	23 drums 41 tonner bags	6368.2	Collection point of Brgy. Tagumpay, Brgy. Misong, Brgy. Bayanan, Brgy. Puting Cacao, Brgy. Calima and Brgy. Batuhan in Pola, Oriental Mindoro	

<sup>\*</sup> Total weight to be determined upon arrival at the TSD Facility.

A total of 324 drums (275 plastic drums, 49 steel drums) and 71 tonner bags were hauled by Genetron International Marketing.

Involved parties and witnesses from various agencies participated in the signing of manifest forms for the transport of hazardous wastes from Pola using the 7 wing vans of Genetron International Marketing.

#### III. WAYS AHEAD

- Continuous monitoring and strategize sampling frequency of water quality sampling in areas affected by oil spill.
- Continuous coordination with provincial/local government units as regards clean-up operations, water quality sampling, technical assistance in the collection and transporting of hazardous wastes, and cash for work programs for individuals affected by the oil spill.
- Source apportionment analysis for PM10 filter paper samples collected from Baco Station, Calapan Station, and Naujan Station of the BCN Airshed.
- To monitor the implementation of Clean-up Plan submitted by Harbor Star specifically on the hauling, storage, and disposal of hazardous waste.

JOE AMIL M. SALINO
Regional Director
EMB – MIMAROPA Region





E-mail Address: embmimaropa@emb.gov.ph

# **ANNEX 1**

# Hauling in Brgy. Tagumpay, Pola, Oriental Mindoro











Hauling in Brgy. Puting Cacao, Brgy. Bayanan, Brgy. Calima and Brgy. Batuhan, Pola, Oriental Mindoro











Hauling in Brgy. Misong, Pola, Oriental Mindoro











PENRO Compound, Brgy. Suqui, Calapan City, Oriental Mindoro
Regional Satellite Office: 6<sup>th</sup> Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita, Manila
Office of the Regional Director: **(02) 8536 9786**; Administrative and Finance Division: **(02) 8536 9786**Environmental Management and Enforcement Division: **(02) 8633 2587**; Clearance and Permitting Division: **(02) 8633 2587**Records Management Unit: **(02) 8633 8900** 

# Truck 1







Truck 2







Truck 3







Truck 4







Truck 5







# Truck 6







Truck 7







**Signing of Manifest Form** 





