BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE, CHENNAI. Original Application No. 180 of 2023 (SZ) And

Original Application No. 183 of 2023 (SZ)

SUOMOTU based on the Visual media titled Chennai Rains Makkalai Vathaikkum Oil Companies-Shocking Story - Michaung Ground Report covered by on VIKATAN TV Chennai dt.06.12.2023

Vs

The District Collector Chennai District And Ors

With

R.L. Srinivasan, Chennai.

Versus

The Tamil Nadu Coastal Zone Management Authority, Chennai and Ors.

...Respondent(s)

INDEX

S.No	Description	Page No.
1.	Report filed on behalf of the Respondnet – Tamil Nadu Pollution	1 - 20
	Control Board	
	Annexures	
1.	Photographs taken before and after cleaning activity	21 - 26
2.	Sample Collection by NIO & TNPCB on 09.12.2024	27 - 30
3.	Indian Coastal Guard letter dated:19.12.2023	31 – 33
4.	Indian Coastal Guard letter dated:04.01.2024	34 - 35
5.	Photographs regarding Mangrove, Avifauna & Daily report for	36 - 128
	21.12.2023 to 09.01.2024.	
6.	Photographs regarding Health Camp	129 – 131
7.	Photographs regarding Veterinary Camp	132 - 136
8.	Photographs regarding Fire & Rescue services stationed at site	137

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Advocate for Respondent: TNPCB Thiru.S. Sai Sathya Jith, Advocate, Chennai.

...Respondents

.. Applicant

BEFORE THE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE, CHENNAI

O.A NO. 180 of 2023 AND O. A NO.183 OF 2023

IN THE MATTER OF

Tribunal on its own motion SUOMOTU based on the Visual media titled Chennai Rains Makkalai Vathaikkum Oil Companies- Shocking Story - Michaung Ground Report covered by on VIKATAN TV Chennai dt.06.12.2023

with

The District Collector Chennai District And Ors.

...Respondents

...Applicant (s)

AND

R.L. Srinivasan, Chennai.

Versus

The Tamil Nadu Coastal Zone Management Authority, Rep. by its Member Secretary, Chennai and Ors.

...Respondent(s)

<u>REPORT FILED ON BEHALF OF THE RESPONDENT -</u> TAMIL NADU POLLUTION CONTROL BOARD

I, J. Josephine Sahayarani, D/o. Jesu Rajan, Christian, aged about 57 years, having my office at 76, Mount Salai, Guindy, Chennai – 600 032, do hereby solemnly affirm and sincerely state as follows:-

 I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board (TNPCB), Chennai -600 032, and I am authorized to file this Report duly approved by the Chairperson as on behalf of the Respondent Tamil Nadu Pollution Control Board (TNPCB). I am well acquainted with the facts of the case from the records.

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- 2. It is respectfully submitted that as per the Order dated 09.12.2023 passed by the Hon'ble Tribunal in O.A No: 180 of 2023(SZ), a detailed report was filed before this Hon'ble Tribunal on 11.12.2023.
- 3. It is respectfully submitted that as per the order dated 14.12.2023 passed by the Hon'ble Tribunal in O.A.No.180 of 2023, a detailed status cum action taken report was filed before this Hon'ble Tribunal on 18.12.2023.
- 4. It is respectfully submitted that as per the order dated 18.12.2023 passed by the Hon'ble Tribunal in O.A.No.180 of 2023 & O.A No:183 of 2023, a detailed status cum action taken report was filed before this Hon'ble Tribunal on 21.12.2023.
- 5. It is respectfully submitted that the Hon'ble Tribunal in its order dated 21.12.2023 in O.A.No.180 of 2023 & O.A No:183 of 2023 has ordered as follows among others:
 - **A.** The cleaning process of the oil sludge is to be completed as expeditiously as possible.
 - **B.** The bio-remediation which is undertaken by the Government, the report regarding the same has to be furnished before the next hearing. If the final report is not available, it is directed to file an interim report.
 - **C.** Besides watching the north of the south gate for oil leakage, the Pollution Control Board should identify any new location of oil leakage and prevent the same from going into the water body.
 - **D.** The correspondence between the CPCL and the State Government referred supra may be considered by the Government and come up with workable solution involving the Manali Industries Association which would be useful and help in avoiding any future disaster.
 - **E.** In the meanwhile, the reports be furnished as to further action taken in this regard by the Pollution Control Board, State Government and CPCL.

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- It is respectfully submitted that as per the order dated 21.12.2023 passed by the Hon'ble Tribunal in O.A.No.180 of 2023 & O.A No:183 of 2023, I am filing this further status cum action taken report as follows
 - A. The cleaning process of the oil sludge is to be completed as expeditiously as possible

In this regard action taken report is submitted as follows

a) Manpower Utilization & Materials Recovered

It is respectfully submitted that a detailed report on removal of oily water and oily sludge was already submitted in the earlier report stating that as on 20.12.2023. The total quantity of oil mixed with water removed as on 09.01.2024 is 2,20,240 litres and oil laden soil & debris removed as on 09.01.2024 is 663.5 Tonnes and the same is sent to the CPCL premises for further treatment and disposal. From 12.12.2023 to 31.12.2023, a total of 11125 Nos of manpower were engaged.

From 01.01.2024 to 09.01.2024, a total of 1739 Nos of manpower was utilized for mangrove cleaning and restoration in oil affected areas. In this period, no oil mixed water or oil laden debris were observed and not collected.

b) Machinery & Equipment deployed upto 9.1.2024

On daily basis, the clearing activities were carried out with help of the following machinery and equipment

Machinery/Equipment deployed			
1. For Oil Containment	Quantum		
Oil Boom	1380 m		
Absorbent Booms	100 m		
Absorbent pads	11,500 Nos		
2. For Oil Removal	Quantum (on Daily Basis)		
Tractors with trailers	2 Nos		
Hydracrane	3 Nos		
Boats	110 Nos		
Gully Suckers	5 – 8 Nos		
Pickup trucks	4 Nos		
Oil Skimmers	6 Nos		

JOINT CHIEF ENVIRONMENTAL ENGINEER TAMIL NADU POLLUTION CONTROL BOARD No.76, MOUNT SALAI, GUINDY, CHENNAI-600 032.

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JCBs	7 Nos
Poclain	4 – 6 Nos
Tippers	11 Nos

c) Status on Clearing of Stretches as on 9.1.2024

It is respectfully submitted that due to continuous efforts taken by Government in co-ordination with CPCL, the oil affected areas were cleared and the completion status is given as follows:

S.No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 09.01.2024
1.	Creek Mouth to Ennore Bridge. (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises; New Delhi	Cleaning work completed in this stretch
2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.35	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch
3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch
4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch
5.	Sivan Padai Veedhi to Sathyamurthy Nagar (Ernavoor Village)	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch
6.	Land area near Sathyamurthy Nagar bridge		M/s. Neo win India Ltd, Chennai	Cleaning work completed
7.	CMDA steel yard area	i anera /	M/s. Neo win India Ltd, Chennai	Cleaning work completed

Even though the cleaning works were completed in the above stretches, inspection are being carried out on daily basis and if any oil traces are found, action is being taken to remove the same.

Photos taken before and after clearing activity in the above said stretches are enclosed in ANNEXURE - 1

d) Analysis of Surface Water samples and Ambient Air

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It is respectfully submitted that the post the oil spill and cleaning activities carried out across Ennore and neighbouring coastal areas. Surface water samples were collected in the affected area by the

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TNPCB officials and analysed at a NABL accredited private laboratory (17-12-2023 to 28-12-2023), and TNPCB lab for the parameters such as Oil & Grease, Phenolic Compounds and Total Petroleum Hydrocarbon.

e) Variation of Oil & Grease level in water bodies

It is respectfully submitted that the presence of 828 mg/L of Oil & Grease and 48.4 mg/L, Total Phenolic Compounds in the sample collected at Ennore Creek Bridge on 05/12/2023 as against the standards of 10 mg/L and 1.0 mg/L clearly indicates the high oil content in the water bodies. On 07.12.2023, five samples were collected along the Buckingham Canal stretch and near CPCL campus and the Oil & Grease value was varying from 28 mg/L at the Buckingham Canal, near IOCL gate, Tondiarpet to 158 mg/L at Ennore creek. This report clearly indicates that Oil & Grease value in the Buckingham Canal in the upstream of CPCL was lower compared to its level in Ennore creek which is in the downstream of CPCL. The Oil & Grease value was 230 mg/L in the sample collected in the stagnant water in the storm water drain near south gate of CPCL. The high Oil & Grease value in B' Canal in the downstream of CPCL and in the stagnant water in the storm water drain near south gate of CPCL clearly indicate oil leak from CPCL. The Oil & Grease value in the samples collected on 09/12/2023 from storm water ponds inside the CPCL premises ranges from 46 mg/L to 96 mg/L indicates clearly that Oil & Grease got mixed with storm water in the unit of CPCL

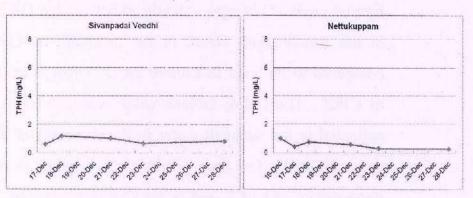
f) Variation of Total Petroleum Hydrocarbons (TPH) level in water bodies -

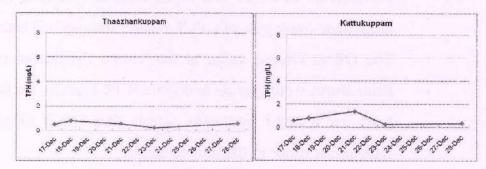
It is respectfully submitted that Surface water samples were collected post the oil spill and cleaning activities carried out across Ennore and Neighbouring coastal areas by the TNPCB officials and analysed at a NABL accredited private laboratory (17-12-2023

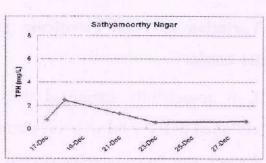
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to 28-12-2023).Samples were analysed for Total Petroleum Hydrocarbons (TPH). Results are tabulated below. The decreasing trend of TPH value from 17/12/2023 to 23/12/2023 in most of the locations and the flat graph of the same from 23/12/2023 probably indicates that no fresh contamination of Buckingham Canal is occurring from CPCL which is the major contributor of TPH. The cleaning and remediation activities is responsible for reduction of TPH initially.

Sampling Location	17.12.2023	18.12.2023	21.12.2023	23.12.2023	28.12.2023
Sathyamoorthy Nagar	0.772	2.458	1.302	0.565	0.653
Sivanpadai Veedhi	0.619	1.185	1.034	0.672	0.837
Kattukuppam	0.584	0.775	1.355	0.253	0.344
Thaazhankuppam	0.488	0.787	0.536	0.217	0.576
Nettukuppam	0.402	0.74	0.573	0.294	0.277





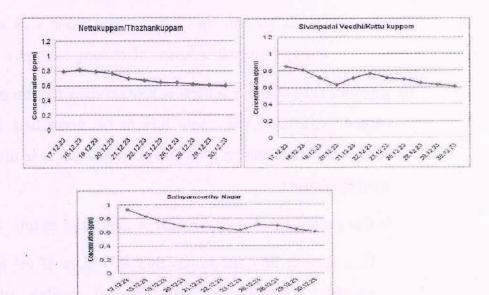


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g) It is respectfully submitted that the post the oil spill and cleaning activities carried out across Ennore and Neighbouring coastal areas. Ambient air quality survey was conducted by the TNPCB and resulted as follows

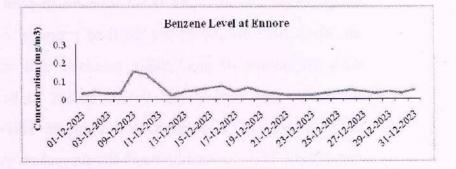
i. Variation of Total VOC (TVOC) level in the ambient air

VOC analysis was conducted in five locations covering upstream near IOCL Tondiyarpet Terminal and Near CPCL South Gate and downstream at Sivanpadai Veedhi/Kattukuppam at Nettukuppam/Thazhankuppam and at Sathyamoorthy Nagar of oil-spill affected areas from 17th December 2023 to 30th December 2023.



The trend graph of TVOC results revealed gradual decreasing trend in all the locations due to continuous cleaning work carried out by CPCL under the supervision and guidance of Government of Tamil Nadu

ii. Variation of Benzene level in the ambient air



The variation of benzene level in the ambient air monitored in Continuous Ambient Air Quality Monitoring (CAAQM) Station, Kathivakkam from 01/12/2023 to 31/12/2023 is shown in the following graph. It is inferred from the graph that the concentration of benzene increased slightly from 09.12.2023 to 12.12.2023 in the month of December due to oil spill in the surrounding area. However, the concentration of the Benzene for the month of December 2023 is found to be well within the National Ambient Air Quality prescribed standard (5 microgram/m3 annual average) The concentration of benzene decreased progressively upon the commencement of cleaning activity. Further. from 05.12.2023 to 08.12.2023 the station was not in operation, due to power shutdown (Michaung cyclone).

B. The bio-remediation which is undertaken by the government, the report regarding the same has to be furnished before the next hearing. If the final report is not available, it is directed to file an interim report

In this regard action taken report is submitted as follows

It is respectfully submitted that as a part of oil spillage cleaning activity, TNPCB requested National Institute of Oceanography (NIO), Goa on 16.12.2023 to assist in perambulating the Ennore Creek area, Buckingham Canal, Kosasthalaiyar River and other adjoining water spread areas affected due to oil spillage and to suggest the bio-remediation measures of the above sites. Presently, NIO, Goa is assisting TNPCB in the process of bioremediation by using herbal Green Clean bio-dispersant in pilot level. NIO, Goa on 30.12.2023 furnished the detailed proposal on bio-remediation with the details of mechanism involved and reaction time along with lab study reports and the procedure to be followed for the application of bio-dispersant. In this regard, TNPCB on 30.12.2023 requested CPCL to coordinate in the project proposed by NIO, Goa

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for bioremediation and furnish the daily progress report. CPCL on 03.01.2024 has accepted the proposal of NIO including funding and shall co-ordinate with NIO to carry out bio-remediation process. NIO has commenced its pilot study on 09.01.2024 (photo is enclosed in this report as Annexure – II). After the completion of the study, the final report will be submitted.

C. Besides watching the north of the south gate for oil leakage, the pollution control board should identify any new location of oil leakage and prevent the same from going into the water body –

In this regard action taken report is submitted as follows

a) Oil Assessment Study by Indian Coast Guard (ICG - East)

It is respectfully submitted that TNPCB has addressed Indian Coast Guard (ICG - East) to assess the quantum of oil spill existing in the Ennore Creek, Buckingham Canal and Kosasthalaiyar River & in the sea. Indian Coast Guard vide letter dated 19.12.2023 reported the following are enclosed as ANNEXURE - III

- As per survey undertaken on 16.12.2023, it was observed that most of the oil have been deposited in banks of Buckingham canal, Kosthalaiyar river and the floating oil is observed to be leached from sand.
- Maximum oil spilled over surface water viz., Buckingham canal, Kosthalaiyar river and Ennore Creek was calculated to be approximately 11.62 KL.
 Further traces of spilled oil were found in approximately 20 sq. km area outside Ennore Creek.
- iii. Based on the video footage, the quantity of spilled oil at sea has been calculated which is approximately 12.40 KL.

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iv. Thus around 24 KL of oil has been calculated to be spilled over water surface due to the incidence.

It is respectfully submitted that Indian Coast Guard vide letter dated 04.01.2024 has informed the following are enclosed as ANNEXURE - IV

- v. The creek area was cleaned by oil spill response specialists contracted by the CPCL and coordinated by various departments
- vi. The oil spill removal operation was undertaken professionally and suitable advice wherever needed was provided by the Coast Guard regularly
- vii. A final aerial survey was undertaken on 29th December 2023 by the Coast Guard and no trace of oil was observed in the water bodies and in the adjoining sea areas was noticed

Coast Guard finally concluded that ICG Ships and Helicopters have been continuously monitoring the situation and it is confirmed that discoloration of water due to other reasons like sewage and other effluents etc. continue to persist in the Bukingham Canal which can be acted by the concerned authorities.

b) Oil Assessment Study by IIT, Madras

It is respectfully submitted that Government entrusted the IIT, Madras to carry out physical measurements of oil depth in canals, water and sediments, flow models to assess the discharge and Occupational safety of workers in Ennore creek, Buckingham canal, Kosasthalaiyar river and other adjoining water spread areas using drones, ocean spill models and satellite imagery. IIT Madras has furnished a proposal at a cost of Rs.1.04 Crores to conduct Environmental Impact Assessment Study of oil spill affected sites at the Ennore Creek so as to

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devise a Management Action Plan for restoration and rejuvenation of the Ennore Creek area. IIT Madras has conducted physical survey by boat & road on 12.12.2023 to 26.12.2023 and identified 19 areas as oil contaminated areas. The Detailed report is awaited from IIT.

D. The correspondence between the CPCL and the state government referred supra may be considered by the government and come up with workable solution involving the manali industries association which would be useful and help in avoiding any future disaster

In this regard action taken report is submitted as follows:

 a) It is respectfully submitted that Forest Department has reported that assessment of damage in Mangrove area was done. Initially, high power Hydrojets and Water sprayers were used to clean the oil slicks spread in the Mangroves. Further, as an alternative plan the following works were carried out.

- i. All the lower branches of the mangroves were disposed off using tree cutting scissors and collected in garbage bags and sent to CPCL for further scientific disposal.
- ii. The top soil of those affected areas with oil sludge were removed and the locally available fresh soil was topped immediately so as to nullify the extent of damage to the mangroves and create a conducive climate for them.
- iii. The soil in the area acts as a major factor in rejuvenating the affected mangroves thereby topping of fresh and locally available soil from the nearby islands was started.
- iv. The process by itself is slow and laborious and the local fishermen are involved in all this cleaning works.

As a strategic and eco-friendly approach to restore coastal ecosystems, plantation of mangroves in a fish-bone creek pattern is under progress.

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It is respectfully submitted that Forest Department has b) reported that the Oil spill had affected many part of the birding areas in and around the creek. Close to 30 birds were found in slightly oiled to heavy oiled condition. A dedicated team of 40 people from Forest department and local fishermen have been deployed to rescue the affected birds. New birds without any trace of oil had started arriving to the Ennore Creek 3 days after the incident. Close to 50 Pelicans, 70 Lesser egrets and 100 Gulls, totalling of 500 Birds were spotted during monitoring which were trying to fish in the Creek area. The number of Heavily impacted birds count had come down from around 60 to 30 in 3 days. Additional Feeding spots have been setup. Observations in other water areas of Chennai City such as Pallikaranai, Adyar Creek etc has shown that the slightly oiled birds have migrated to these areas for better feeding grounds. The Wildlife teams are monitoring these areas on their feeding behaviours. Till date, around 200 Pelicans, 50 Egrets and 30 Painted storks were found oiled. Different strategies were followed to catch the birds for rescue and oil removal which includes feeding station and mist net traps. On December 26th it was observed that the Water quality had become better and more flock of birds were observed. The birds had also resumed hunting for fishes. By January 1, 200+ pelicans were spotted in a new spot for the first time. The operation will continue for the coming days to capture the oiled birds for rehabilitation. A Total of 8 Nos of Birds have been rescued till now and are being treated in Guindy National Park. The rescued birds are being cleaned, treated, fed and closely monitored by a team of veterinarians of the park and the birds have been responding well. The Bird population in the creek is also returning back to normal with reducing oil on surface water. Other water areas such as Pallikaranai, Adyar Creek etc are also being continuously monitored.

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Daily reports on cleaning activities from 12.12.2023 to 20.12.2023 was submitted in the report filed on 21.12.2023. In continuation to that daily report from 21.12.2023 to 09.01.2024 is enclosed in this report as Annexure - V.

- 7. Further, it is respectfully submitted that directions were issued by the TNPCB to M/s. CPCL on 11.12.2023 under Section 33A of Water (P&CP) Act, 1974 as amended(Annexure). Since M/s. CPCL has not furnished the reply to the directions, a show cause notice was issued to M/s. CPCL vide Proceeding dated 16.12.2023. M/s. CPCL has furnished reply for the direction vide its letter dated 16.12.2023.
 - a) The details on the directions issued and reply furnished by the unit are as follows:

S.No	Direction issued	CPCL Reply dated 16.12.2023.
i .	M/s. CPCL shall identify hotspots in Buckingham Canal, Ennore Creek and adjoining area where the oil deposits /oil slick are stagnated and take necessary remedial measures on war footing basis.	CPCL, as a major industry of the belt has taken the lead for inspection of the areas and identified hot spots requiring attention. Remedial measures have been undertaken on war footing basis.
11.	M/s. CPCL and its secondary units and terminals shall ensure that all pipelines (raw materials and products) and tanks are intact with no leakage. If CPCL is found to discharge oil containing water/polluted water against the norms set out for industries under provisions of the Water (Prevention and Control of Pollution)	 CPCL clarifies again that Tanks & Pipelines in CPCL are intact and there are no leaks. i. CPCL is designed to withstand waterlogging, with storm water systems designed to handle the highest levels of rainfall. In previous instances, including cyclones Vardah, Gaja, Nivar and the 2015 floods, CPCL has demonstrated its capability to prevent release of water contaminated with oil. ii. Cyclone Michaung brought 36 hours of incessant rain, causing severe flooding in CPCL Manali Refinery. The storm water system of CPCL was handling this flood situation, however, the discharge of 48,000 cusecs of water from Poondi and Puzhal reservoirs worsened the

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*	Act, 1974, their operations are liable to be suspended.	
iii.	M/s. CPCL shall also be liable to pay environmental compensation for any damages caused in contravention of the extant provisions under the Water (Prevention and Control of Pollution) Act, 1974.	As explained in previous paras, there was no violation from CPCL's side. The incident occurred due to uncontrolled release of water from reservoirs without prior notice or warning for suitable remedial measures. This is an apt condition of Force Majeure for CPCL.
iv.	M/s. CPCL shall also be liable to pay compensation to the families adversely impacted due to the oil spillage including the loss of livelihood.	has taken the lead in providing relief measures. Mobile medical units have been deployed in villages near Ennore creek, and medicines handed over. Rice, groceries and other essential
v.	M/s. CPCL shall carry out a Leak Detection & Repair Study (LDAR) with the help of a reputed technical institution and furnish the same to the Board immediately.	CPCL is carrying out Leak Detection & Repair Study every year & submitting reports regularly.
vi.	M/s. CPCL shall undertake a comprehensive	CPCL is in the process of lining up a reputed agency to carry out oil spill mapping. Target for completion of Job:

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	mapping study with a reputed technical institution to identify oil spread areas and furnish the report with Action Plan to the Board immediately.	Jan' 24.
vii.	M/s. CPCL is directed to ensure that no such occurrence happens in future	Will be ensured. However, infrastructure development to avoid flooding of refinery w.r.t. release of water from reservoirs shall be further taken up with Water Resource Department, Government of Tamil Nadu.

b) It is respectfully submitted that CPCL was instructed to carry out the following on 14.12.2023 and CPCL furnished reply on 18.12.2023.

Instruction	Response by CPCL		
Undertake a complete estimation of oil spill in the area with the help of	CPCL is coordinating with expert agencies/Coast Guard to ascertain the quantity of oil spill in the area. Details will		
experts, CPCL and Coast	st be shared.		
Guard	Details not yet furnished		
Ensure that specialized sea cleaning agencies are immediately deployed with trained and well equipped manpower			
Ensure the deployment of sophisticated machinery and specialized equipment	CPCL has deployed following professional agencies to remove the oil from Ennore Creek Areas M/s. Viraj Clean Sea Enterprises Pvt Ltd M/s.Vens Hydra Lift Pvt Ltd M/s.Sea Care Services		
i to support the state of the	M/s. Neowin India Ltd		

8. Status of action taken by Other Departments

a) National Centre for Coastal Research (NCCR)

It is respectfully submitted that TNPCB entrusted National Centre for Coastal Research (NCCR), Chennai on 20.12.2023 to analyze surface water, ground water and sediment samples in 10 locations till February 2024.The scope of the work is as follows

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Location	No. of samples	Parameters analysed			
	Buckingham Canal - 3	Salinity, Temperature, Dissolv Oxygen, Biochemical Oxygen Deman			
Surface Water	Ennore Creek - 6	Chlorophyl, pH, Suspended Particulate Matter, Nutrients, Total Petroleum			
	Kosasthalayar River - 1				
Ground Water	10	Heavy Metals,Total Petroleum Hydrocarbons			
Sediments 10		Total Petroleum Hydrocarbons, Heavy Metals, Macro Benthos			
Sampling Frequency		Weekly twice in Dec 2023 - 4 times Weekly once in Jan 2024 - 4 times Fortnightly in Feb 2024 - 2 times			

It is respectfully submitted that NCCR has submitted a preliminary report on 04.01.2024 detailing the collection of surface water and ground water samples. The inference of the analysis is as follows:

- i. The TPH concentrations in surface water are in the range 0.08 mg/L 1.321 mg/L.
- Apart from station EC-06, which is the confluence point of Buckingham canal in to the Ennore creek, the TPH concentrations were found to be decreasing over the period of sampling.
- iii. TPH concentrations in ground water are in the range BDL - 0.116 mg/L.
- iv. Phytoplankton is an indicator of sensitivity to the changes of physical & chemical characteristics of water. Phytoplankton samples were collected in 5 stations and the population density exhibited higher values at EC 05 & EC 09. The detailed report of NCCR is awaited.

b) Department of Health & Family Welfare

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It is respectfully submitted that Chennai Petroleum Corporation Limited responded to the medical emergencies and provided medical support to North Chennai region in Ennore / Tiruvottiyur / Manali area. From 9th December 2023, a dedicated Ambulance with Medical Emergency Response Team was stationed continuously during the operation of the Oil recovery and clearance at the Ennore Creek, and is continuing till date. From ^{9th} December 2023, three Mobile Medical Units had visited all houses in the flood affected Ennore area and catered their medical needs. This service was utilized by 5517 beneficiaries for their medical ailments. Essential Medicine for flood relief was delivered by CPCL as requested by Zonal Medical officers, Tiruvottiyur and Manali on 12.12.2023, 14.12.2023, 15.12.2023 & 19.12.2023. On 15.12.2023, Department of Community Medicine, Madras Medical College visited Ennore Creek and inspected the operation. As on 30.12.2023, 5350 people were screened by CPCL Medical team and 15879 people were screened by the Health Department - ANNEXURE- VI

c) Department of Fisheries

On 11.12.2023, two assessment teams comprising of 13 officials from fisheries department were formed to assess the fishing boats and fishing implements with oil depositions in Ennore creek.(Photo is enclosed in this report as Annexure – VI)

Assessment team has reported that 787 boat owners and 2301 families were affected due to oil discharge at the following villages viz., Sivanpadaikuppam, Kattukuppam, Sathiyavanimuthu nagar, VOC Nagar Ulaganathapuram Ennore kuppam, Mugathuvarakuppam, Thazhankuppam and

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Nettukuppam.Fish samples have been collected and sent to Tamil Nadu J Jayalalithaa Fisheries University (TNJFU) and National Centre for Coastal Research (NCCR) Chennai for analysis of oil contamination in fish and its consumability for human. The results are awaited.

Further in the High Level Committee meeting held on 16.12.2023 (Annexure), the Government of Tamil Nadu decided to pay the following towards loss of livelihood of fishermen

- Sum of Rs. 12,500/- per family towards loss of livelihood of fishermen which will be shared by CPCL (Rs.7500/-) and State Disaster Relief Fund(Rs.5000/-).
- Rs.10,000/- per boat towards cleaning of boats and damages to fishnets
- 6700 nos of affected familes will be paid a sum of Rs.7500/- per family which will be completely contributed by CPCL.

The relief amount was disbursed as compensation to the affected boat owners and affected fisher folk families on 22.12.2023.

d) Department of Veterinary Sciences

It is respectfully submitted that the Department of Veterinary Sciences has conducted a veterinary camp in both zone 1 and zone 2 areas that were badly affected by the rain and oil spill. Veterinary health camp was conducted for seven days during which 747 animals were treated (dog, goat, cattle, duck and poultry) .Photo is enclosed in this report as Annexure – VII

e) Department of Fire & Rescue Services

It is respectfully submitted that the Fire & Rescue Services, as an emergency action, fire vehicles were turned out to the

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spot immediately to provide protection against any hazard in the vicinity. Manali Fire and Rescue station, station officer inspected the extent of spillage and a QRV and fire tender with 18 fireman commandos with life buoy, life jacket, ropes, scuba diving, foam, BA sets, first aid equipments were deployed at the Nattukuppam estuary to assist the personnel involved in oil spill removal and for taking mitigation action Photo is enclosed in this report as Annexure - VIII

9. Further action against CPCL

- A. It is respectfully submitted that based on the directions/showcasue notice issued to CPCL, the JCEE(M), Chennai vide letter dated 09.01.2024 reported the following non compliances with respect to the conditions stipulated in the consent order, direction and Show cause notice issued to the unit:
 - a. The unit of M/s. CPCL has not reported the fact on the discharge of oily effluent along with the storm water through the Storm water pond C, D and E. during the flood caused due to the Michaung Cyclone on 03.12.2023 & 04.12.2023.
 - b. The unit has not furnished the complete estimate of oil spill caused by the unit in the Buckingham Canal and Ennore Creek area.
 - c. The unit has not furnished comprehensive mapping study with a reputed technical institution to identify oil spread areas and to furnish the report with Action Plan to the Board.
 - d. Thick oil slick noticed in the storm water drains within the premises of the unit, in the canal leading from the northern side storm water outlet, CMDA steel complex yard, Buckingham Canal, Kosasthalaiyar River, Ennore Creek area, which is evident that huge quantity of oil bearing water has breached from M/s Chennai Petroleum Corporation Ltd., into the Buckingham Canal which has reached the Ennore Creek and affected the livelihood of the fisherman community,

JOINT CHIEF ENVIRONMENTAL ENGINEER TAMIL NADU POLLUTION CONTROL BOARD No.76, MOUNT SALAI, GUINDY, CHENNAI-600 032.

J. & ann 85

Environment, mangroves along the stretch of the Buckingham Canal.

- e. The unit has not provided online sensor for the pollutant parameters such as pH, TSS, TDS & Oil and Grease at the outlet of Pond C and pond located near Refinery-III, which leads to the Buckingham Canal.
- f. The unit has not provided OCEMS for the parameters pH, TSS, COD, BOD & Oil and Grease in the upstream and downstream of Buckingham canal and connects the same to WQW, TNPCB Chennai server and also to ensure the continuous online data transfer.

In view of the above, the JCEE(M), Chennai has recommended te Board dated 9.1.2024 to issue further direction under section 33 of A of the Water (P&CP) 1974 as amended to comply which is under consideration.

Under the above circumstances, it is humbly prayed that this Hon'ble National Green Tribunal may be pleased to pass such further or other orders as this Hon'ble Tribunal may deem fit and proper in the facts of this case and thus render justice.

VERIFICATION

JOINT CHIEF ENVIRONMENTAL ENGINEER TAMIL NADU POLLUTION CONTROL BOARD No.70, MOUNT SALAI, GUINDY, CHENNAI-600 032.

I, J. Josephine Sahayarani, D/o. Jesu Rajan, working as Joint Chief Environmental Engineer, having office at No. 76, Anna Salai, Guindy, Chennai-32, do hereby submit that the above contents are true to the best of my knowledge and belief through records.

J. J. Sum 82

The transformations of oil affected sites at different locations are depicted in figures below:



Thalankuppam Stretch before Cleaning



Thalankuppam Stretch after Cleaning

- 1 -



Nettukuppam Stretch before Cleaning



Nettukuppam Stretch after Cleaning



Ennorekuppam Stretch before Cleaning



Ennorekuppam Stretch after Cleaning



Ennore Bridge - Right Side before Cleaning



Ennore Bridge - Right Side after Cleaning



Ennore Bridge - Left Side before Cleaning



Ennore Bridge - Left Side after Cleaning



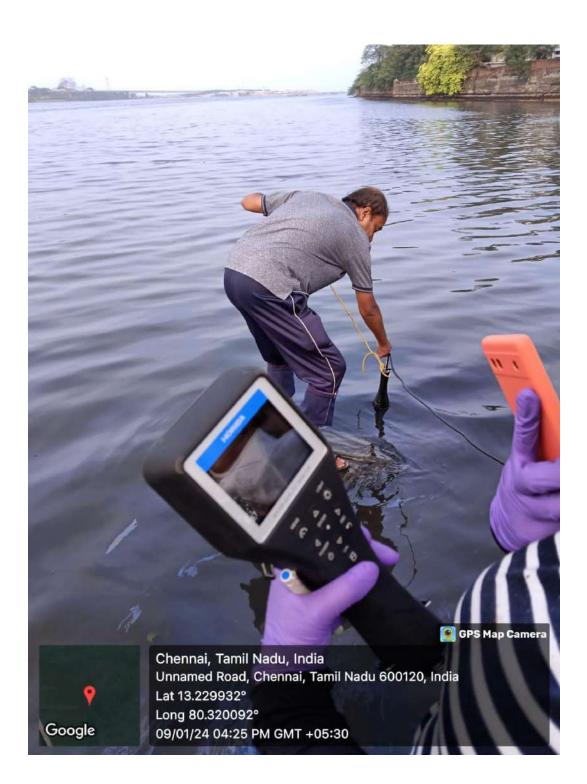
Sathyamoorthy Nagar before Cleaning



Sathyamoorthy Nagar after Cleaning



Sample Collection by NIO and TNPCB on 09.12.2024







Reply should be addressed to The Commander Tele: 044-2346 0404



31

MUKHYALAYA TATRAKSHAK KSHETRA (POORV)

2 0 DEC 2023

Headquarters Coast Guard Region (East) Near Napier Bridge Chennai - 600 009

Dec 23

Quoting: 7585

The Chairperson Tamil Nadu Pollution Control Board

ESTIMATION OF QUANTUM OF OIL SPILL IN ENNORE CREEK/ BUCKINGHAM CANAL/ KOSATHALAIYAR RIVER AREA

Dear Madam,

Kindly refer to your letter T6/TNPCB/F.12753/RL/2023 dated 13 Dec 23. 1.

TNPCB vide letter ibid requested assistance of this Headquarters for estimation of 2. quantum of Oil Spill in Ennore Creak, Buckingham Canal and Kosathalaiyar River area. Accordingly, this Headquarters deputed an expert team for quantity assessment of oil spill in the above areas.

Oil Spill Quantity assessment at Ennore Creek/ Buckingham Canal/ 3. Kosathalaiyar River Area.

Oiled Area Measurement: -(a)

Ser	Name of Canal/River	Area in Sq.Mtr	Oiled Area
(i)	Buckingham canal	6100 x 60 = 366000	90% = 329400
	Kosathalaiyar river	4900 x 260 =1274000	30% = 382200
(iii)	Ennore creek	1550 x 950 =1472500	10% = 147250

Appearance Coverage Allocation: -(b)

Ser	Name of Canal/River	Sheen	Rainbow	Metal
(i)	Buckingham canal	10%	70%	20%
(ii)	Kosathalaiyar river	10%	40%	10%
(iii)	Ennore creek	10%	30%	10%



(c) Thickness band of above appearance: -

(i)	Sheen	· · · ·	0.04 µm to 0.3 µm
(ii)	Rainbow	1 :	0.3 µm to 5.0 µm
(iii)	Metal	1	5.0 µm to 50 µm

Minimum Volume of spilled oil calculations: -(d)

Ser	Name of Canal/River	Sheen (0.04 μm)	Rainbow (0.3 µm)	Metal (5.0 μm)	
(i)	Buckingham canal	$ \begin{array}{c} (329400 \times 10\%) \\ \times \ 0.00000004 = \\ 0.0013 \end{array} \begin{array}{c} (329400 \times 7) \\ \times \ 0.000000004 = \\ 0.0692 \end{array} $		(329400 x 20%) x 0.000005 =0.3294	
(ii)	Kosathalaiyar river			(382200 x 20%) x 0.000005 =0.3822	
(iii)	Ennore creek (147250X10%) X 0.00000004= 0.0006		(147250 x 70%) x 0.0000003 = 0.0309	(147250 x 20%) x 0.000005 = 0.1473	
1	Minimu	m Volume of Spil	led Oil	1.043 KL Appx	

Maximum Volume of spilled oil calculations: -(e) 1.12

Ser (i	Name of Canal/River	Sheen (0.3 μm)	Rainbow (5.0 μm)	, Metal (50 μm)
(i)	Buckingham canal	(329400X10%) X 0.0000003 = 0.009882	(329400 x 70%) x 0.000005 = 1.1529	(329400 x 20%) x 0.000050 =3.294
(ii)) Kosathalaiyar river (382200X10%) X 0.0000003 = 0.01147		(382200 x 70%) x 0.000005 =1.3377	(382200 x 20%) x 0.000050=3.822
(iii)	Ennore creek	(147250X10%) X 0.0000003= 0.00442	(147250 x 70%) x 0.000005 =0.5154	(147250 x 20%) x 0.000050= 1.4725
	Maximu	m Volume of Spil	lled Oil	11.620 KL Appx

1.1.1

Oil Spill Quantity Assessment at Sea. The assessment of spill at sea was 4. carried out through aerial recce / ships. It was observed that traces of spilled oil were found in appx 20 Sq.Km area from Kasathalaiyar river mouth to Kasimedu Harbour.

Based on the observation, the quantity assessment is as follows: -

(a)	Oile	d Area Measurement			
	(i)	Area from Helo data	:1	20 Sq.Km	
	(ii)	Area covered with oil	:	50%	
	(iii)	Oiled Area	:	20 x 50% = 10 Sq.Km	
(b)	Appearance Coverage Allocation				
	(i)	Sheen :	80 %		
	(ii)	Rainbow :	20%		
(c)	(c) Thickness band of above appearance				
	(i)	Sheen :	0.04	μm to 0.3 μm	
	(ii)	Rainbow :	0.3 µ	im to 5.0 μm	
(d)) Minimum Volume of spilled oil: -				
	(i)	Appearance Sheen :	10 Kn	n ² x 80% x 0.04 µm = 0.32 M ³	
	(ii)	Appearance Rainbow: 1	l0 Km ² >	$x 20\% x 0.3 \ \mu m = 0.6 \ M^3$	
	(iii)	Minimum Volume: 0	.32 M ³ -	+ 0.6 M ³ = 0.92 M ³ (0.92 KL)	
(e)	e) Maximum Volume of spilled oil: -			•	
	(i)	Appearance Sheen :	10 Kn	n² x 80% x 0.3 μm =2.4 M³ ·	
	(ii)	Appearance Rainbow: 1	0 Km ² >	$x 20\% x 5 \mu m = 10 M^3$	
	(iii)	Maximum Volume: 2	.4 M ³ +	10 M ³ = 12.4 M ³ (12.4 KL)	

Regards,

Your sincerely,

(AS Ali) Commandant Regional Ops & Plans Officer for Commander Coast Guard Region (East)



E-Mail: <u>dhq5@indiancoastguard.nic.in</u> Tele : 044 -2346 0424



34

MUKHYALAYA TATRAKSHAK ZILA NO.5 (NTN) Headquarters Coast Guard District No.5 (N TN) Clive Battery Complex Rajaji Salai, Chennai – 600 001

04-Jan 24

Dr. Jayanthi. M, IFS, Chairperson Tamil Nadu Pollution Control Board 76, Mount Salai, Guindy Chennai – 600 032

OIL SPILLAGE DUE TO CYCLONE MICHAUNG IN ENNORE CREEK AREA

Dear Madam,

717

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1. Refer to TNPCB letter T6/TNPCB/F.12753/RL/2023 dated 03 Jan 24.

2. It is intimated that based on media report on 07 Dec 23, ICG first located Oil Spill employing local Coast Guard Pollution Response Team. Continuous area survey was undertaken thereafter to assess the extent of Oil Spill and quantify the volume of Oil Spilled in creek area and adjoining sea near Kosathalaiyar River mouth to facilitate crucial data of oil spill for concerned Pollution Response agency acting upon as per area of responsibilities.

3. Notwithstanding the containment / recovery action by the polluter, to avoid any damage to coastal eco-system owing to any delay in response by the polluter, ICG undertook necessary response in the affected coastal area on 10 Dec 23 through Helicopter and Ships. The efficacy of the response actions was verified during aerial surveillance on 11 & 12 Dec 23 and it was confirmed to the state authorities during SOS-CMG meeting chaired by Chief Secretary and special meeting of NGT, that oil slick in the coastal water had been contained.

4. In order to analyze the possible effects of spilled / unrecovered oil, a quantum assessment of oil spilled has been undertaken in Ennore creek, Buckingham Canal and Kosathalaiyar river respectively. As per survey undertaken on 16 Dec 23, it was observed that most of the oil have been deposited in banks of Buckingham canal/ Kosthalaiyar river and the floating oil is observed to be leached from sand. Maximum oil spilled over water surface was calculated to be approximately 11.620 KL. Further traces of spilled oil were found in appx 20 Sq. km area outside Ennore Creek. Based on the video footage, the quantity of spilled oil at sea has been calculated. Maximum oil spilled outside Ennore Creek was calculated to be approximately 12.4 KL. Thus approx. 24 KL of oil has been calculated to be spilled over water surface due to the incidence.

5. The Oil Spill in the sea area was responded by the Coast Guard whereas the creek area was cleaned by oil spill response specialists contracted by the CPCL and coordinated by the TNPCB and Tamil Nadu Ministry of Environment. The Oil Spill removal operation was undertaken professionally and suitable advice wherever needed was provided by the Coast Guard regularly. A final aerial survey was undertaken on 29 Dec 23 by the Coast Guard and no trace of oil in the water bodies or at the adjoining sea areas was noticed. However, ICG Ships and Helicopters have been continuously monitoring the situation and it is confirmed that discoloration of water due to other reasons like sewage and other effluents etc. continue to persist in the Bukingham Canal which can be acted by the concerned authorities.

6. Photographs related to oil spill elucidating the status of cleaning operations is also shared as enclosure for better appreciation.

Regards,

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Amilela

(AK Shukla) Commandant(JG) Dist Ops and Plans Officer for Commander, CGDHQ-5(NTN)

Annexure - V

Mangrove cleaning & restoration

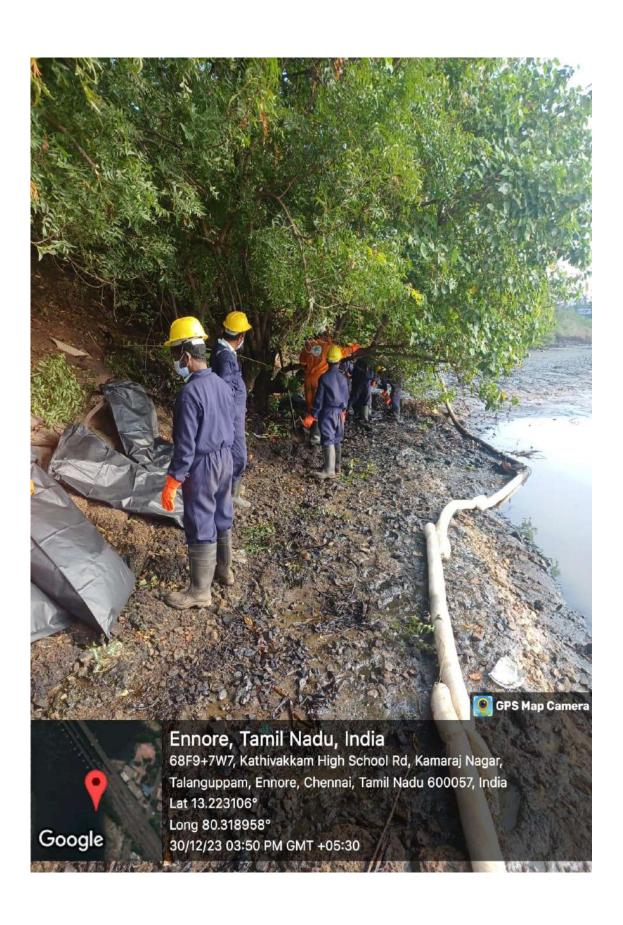


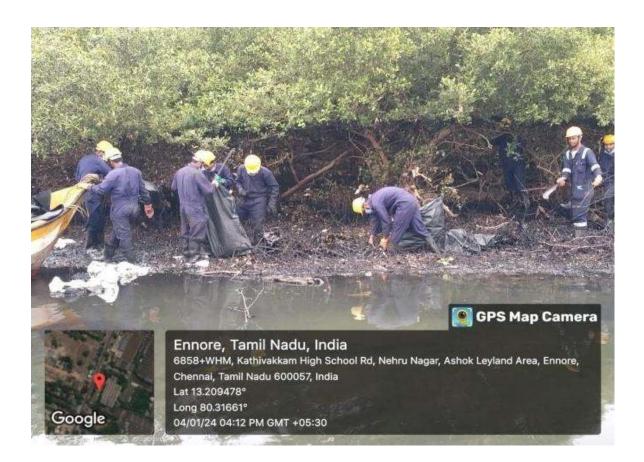


Latitude 13.2142516666666666°

Local 04:37:05 PM GMT 11:07:05 AM Longitude 80.314063333333332°

Altitude 0 meters Saturday, 06.01.2024







Capturing and Treatment of Birds











Rehabilitated Birds











TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date:21-12-2023

Activities Carried Out	 Oil present on the surface on the bank of Buckingham Canal in Kattukuppakam village were removed by using machinery such as Poclain, JCB. Cleaning of bunds from Sathyayamurthy Nagar toEnnore Bridge by using power jet wash. Oil present on the surface in Ennore Bridge to Railway Bridge (Kattukuppakam) is removed using oil absorption pads.
Machineri es Deployed :	 Boats – 80 Nos. So far installed Booms Oil Boom 300 m long installed– Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed– between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed - SivanpadaiVeethi 250 m Boom at the mouth of the Buckingham Canal JCB – 2 Nos. Truck/ Tipper –11Nos. Tata ace – 1Nos Hydras– 2 Nos. Poclain – 2 Nos.
Manpowe r	CPCL630 (in Boat = 80 x 4 =320,Machinery labours =22, M/s.Viraj Clean Sea Enterprises - 130, M/s. Sea Care services - 65, M/s. Vens Hydra lift Pvt ltd - 8, M/s. Neowinindia limited-85)
Material Removed :	Oily Water 15,840 litres (72 Nos. of barrels)
	Soil with oil Sludge 12 tons
Detail of Sample Collection :	Surface water samples - 10 numberscollected.

Number	VOC measured at 10 location.
of VOC	
sample	
collected:	
Photogra	Truck with oil waste barrels sent to CPCL permises from Mugathuvara
phs if	Kuppam:
any:	
	Waste material collected in polythene bags and stored in the Mugathuvaram bridge:
	Unloading of Waste material collected in polythene bags at Mugathuvaram bridge:



	<image/>		
Remarks:	• 15,840 litres ofoily water has beencollected in barrels and sent to CPCL		
	premises for safe storage.		
	• A total of 12 T of oil slick soil wasremoved and sent to CPCL for safe		
	storage.		
	• Four agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services,		
	M/s. Vens Hydra Lifts Pvt Ltd & M/s. Neowin India Ltd were engaged by M/s.		
	CPCL for the clean-up operations.		
CPCL Official	Mr.M.N.Suresh, Senior Manager		
present:	Mr. Kamala Kannan, DGM		
	Mr.Purushothaman, Manager Mr. T. Ravi, Assistant Manager		
Governm	Tamil Nadu Pollution Control Board		
ent			
Official Present:	 Director of Environment & Climatic Change Revenue Department, 		
	 Revenue Department, Greater Chennai Corporation 		
	 Fisheries Department 		
	Tamil Nadu Forest Department		
	 Police Department 		







TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 22-12-2023

Activities Carried Out	 Cleaning of banks of Buckingham Canal through Poiclain at Sathyamurthy Nagar stretch Removal of debris, plants with oil on the bunds of B'Canal through JCBs & Poclains and also manually at Sivanpadai veedhi bridge to Kattukuppam Oil present on the surface on the bank of Buckingham Canal in Kattukuppakam village were removed by using machinery such as Poclain, JCB. Cleaning of bunds from Sathyayamurthy Nagar to Ennore Bridge by using power jet wash. Oil present on the surface in Ennore Bridge to Railway Bridge (Kattukuppakam) is removed using oil absorption pads. 	
Machineries Deployed:	 Two Boom Oil Boom 1 Oil Boom 8 50 m long 1 	600 m long installed – Ennore Creek Mouth ns of 325 m long and 275 m at Ennore Bridge 00 m long installed – between Road Bridge and Railway Bridge 60 m long installed – Railway Bridge light boom and 50 m hard boom installed - Sivanpadai Veethi m at the mouth of the Buckingham Canal
Manpower	CPCL	631 (in Boat = 80 x 4 =320, Machinery labours =28, M/s. Viraj Clean Sea Enterprises - 130, M/s. Sea Care services - 65, M/s. Vens Hydra lift Pvt Itd - 8, M/s. Neowin india limited-80)
Material Removed:	Oily Water	3,960 litres (18 Nos. of barrels)
	Soil with oil Sludge	10 tons
Detail of Sample Collection:		water samples - 09 numbers.
Number of VOC sample collected:	VOC measured at 6 location.	
Photographs if any:	Cleaning the	bunds of Buckingham Canal through JCB at Kattukuppam



Shifting of collected oil waste materials in bags at Mugathuvara Kuppam



Machineries are deployed in cleaning activity at Sathyamurthy Nagar stretch



	<image/>
Remarks:	 3,960 litres of oily water has been collected in barrels and sent to CPCL premises for safe storage. A total of 10 T of oil slick soil was removed and sent to CPCL for safe storage. The Member Secretary, TNPCB along with the technical committee members constituted by government and Dr.Indumathi M Nambi, IIT Professor have inspected the Sathyamurthy Nagar-B'Canal, CMDA steel complex and CPCL premises The Chairperson, TNPCB has inspected the oil spill area and discussed with the NIO scientist for implementation of Bio dispersion work at oil affected stretch on pilot scale basis. Additional Chief Secretary, Environment, Climate Change and Forest Department has inspected the oily affected mangroves stretch in presence of the Forest department and TNPCB officials. Four agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services, M/s. Vens Hydra Lifts Pvt Ltd & M/s. Neowin India Ltd were engaged by M/s. CPCL for the clean-up operations.
CPCL Official present:	Mr. M.N.Suresh, Senior Manager Mr. Kamala Kannan, DGM Mr. Purushothaman, Manager Mr. T. Ravi, Assistant Manager
Government Official Present:	 Tamil Nadu Pollution Control Board Director of Environment & Climatic Change Revenue Department, Greater Chennai Corporation Fisheries Department Tamil Nadu Forest Department Police Department







TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 23-12-2023

Activities	C C	ngham Canal by using machineries such as JCB, Poclain, Hydras at	
Carried Out	Sathyamurthy Nagar stretch and CMDA Steel yard		
	Removal of oil by using skim	mer in Buckingham Canal at Sivanpadai veedhi bridge	
	 Removal of plants and debris 	s affected by the oil near Sathyamurthy Nagar	
Machineries Deployed:	 Two Booms of 3. Oil Boom 100 m lo Oil Boom 80 m lou 50 m long light bo 250 m Boom at th JCB – 5 Nos. Truck/ Tipper – 13 Nos. Tata ace – 1 Nos Tractor-Trailer – 3 No. Hydras– 2 Nos. Poclain – 2 Nos. 	ong installed – Ennore Creek Mouth 25 m long and 275 m at Ennore Bridge ong installed – between Road Bridge and Railway Bridge ng installed – Railway Bridge oom and 50 m hard boom installed - Sivanpadai Veethi ie mouth of the Buckingham Canal	
	Gully sucker – 1 No.		
Manpower	E	42 (in Boat – Nil , Machinery labours =40, M/s. Viraj Clean Sea Interprises - 120, M/s. Sea Care services - 20, M/s. Vens Hydra lift Pvt d - 2, M/s. Neowin india limited- 60)	
Material		,920 litres (36 Nos. of barrels)	
Removed:			
	Soil with oil Sludge 24	4 tons	
Detail of	Surface water samples - 10 num	bers.	
Sample Collection:			
Number of VOC sample collected:	VOC measured at 10 location.		
Health	By CPCL : Total screened as on	n 23.12.2023– 4,500 Nos	
Camp		s – 390 Nos, Respiratory related issues – 590 Nos.)	
details		creened as on 23.12.2023– 12,690 Nos	
Dhatagrapha		s – 1,879 Nos, Eye irritation issues – 15 Nos.)	
Photographs if any:		eaning of oil affected areas at CMDA Steel yard	
		Ges Map Cannor Chennai, TN, India Matal 3, 174610, Long 80.288500 12/23/2023 03:19 PM GMT+05:30	



Loading oil laden soil in the truck near Sathyamurthy nagar land area



Loading of barrels containing oily water at Mugathuvara kuppam



	Removal of plants and debris affected by the oil near Sathyamurthy Nagar		
	Chennai, TN, India		
	Supramani 5th Cross Street, Manali New Town, Chennai, 600103, TN, India Lat 13.176203, Long 80.291131 12/23/2023 03:36 PM GMT+05:30 Note: Captured by GPS Map Camera		
Remarks:	• 7,920 litres of oily water has been collected in barrels and sent to CPCL premises for safe storage.		
	A total of 24 T of oil slick soil was removed and sent to CPCL for safe storage.		
	• Four agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services, M/s. Vens Hydra Lifts Pvt		
	Ltd & M/s. Neowin India Ltd were engaged by M/s. CPCL for the clean-up operations.		
	No boats were involved in the cleaning activities due to protest by the local fishermen's.		
CPCL Official	Mr. M.N.Suresh, Senior Manager		
present:	Mr. Kamala Kannan, DGM		
	Mr. Purushothaman, Manager		
0	Mr. T. Ravi, Assistant Manager		
Government Official	Tamil Nadu Pollution Control Board		
Present:	Director of Environment & Climatic Change		
	Revenue Department,		
	Greater Chennai Corporation		
	Fisheries Department Tomil Nedu Forest Department		
	Tamil Nadu Forest Department		
	Police Department		





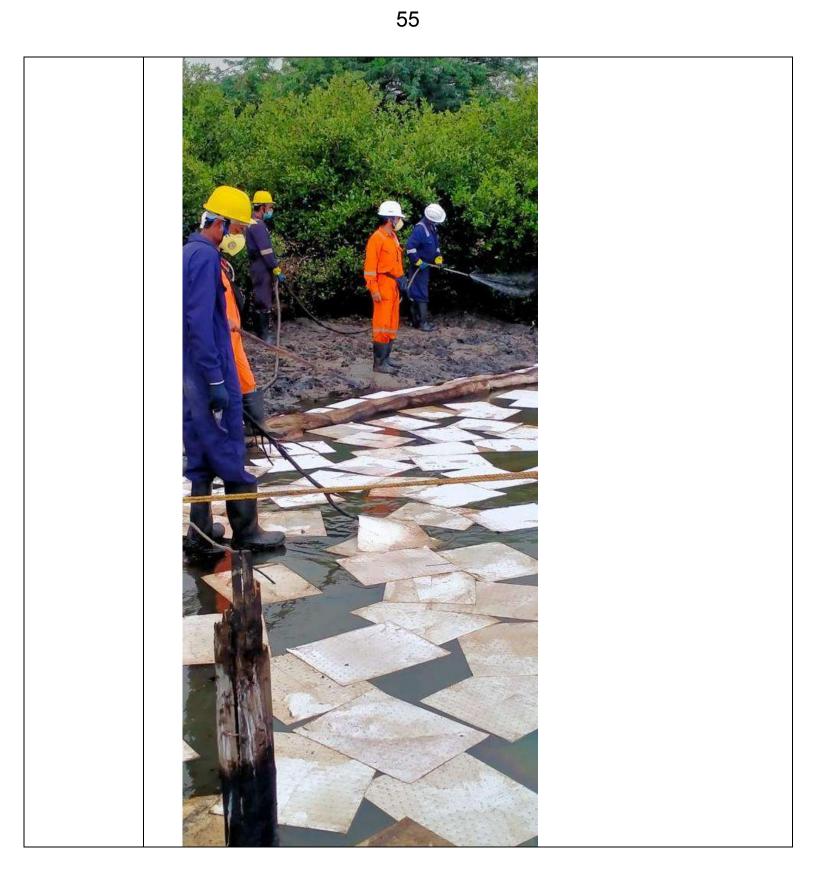


TAMIL NADU POLLUTION CONTROL BOARD

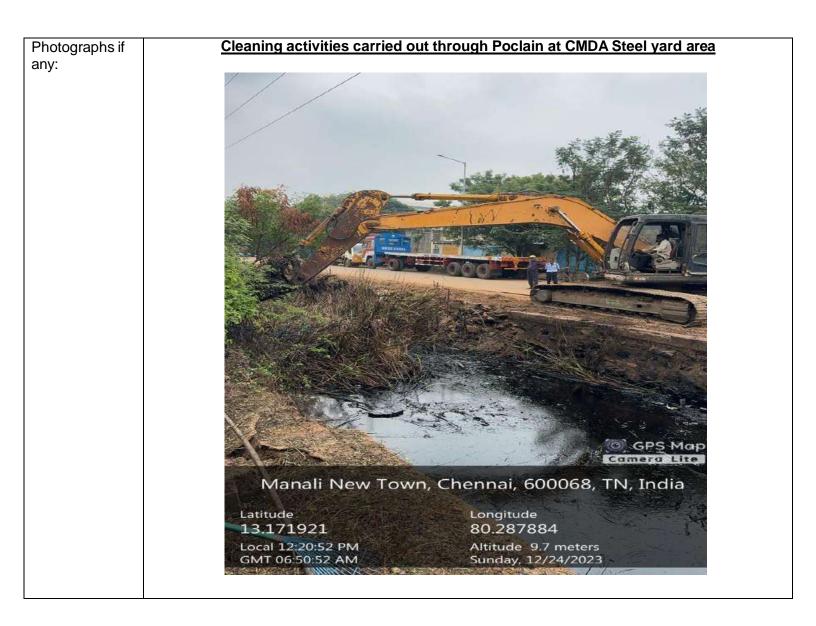
ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

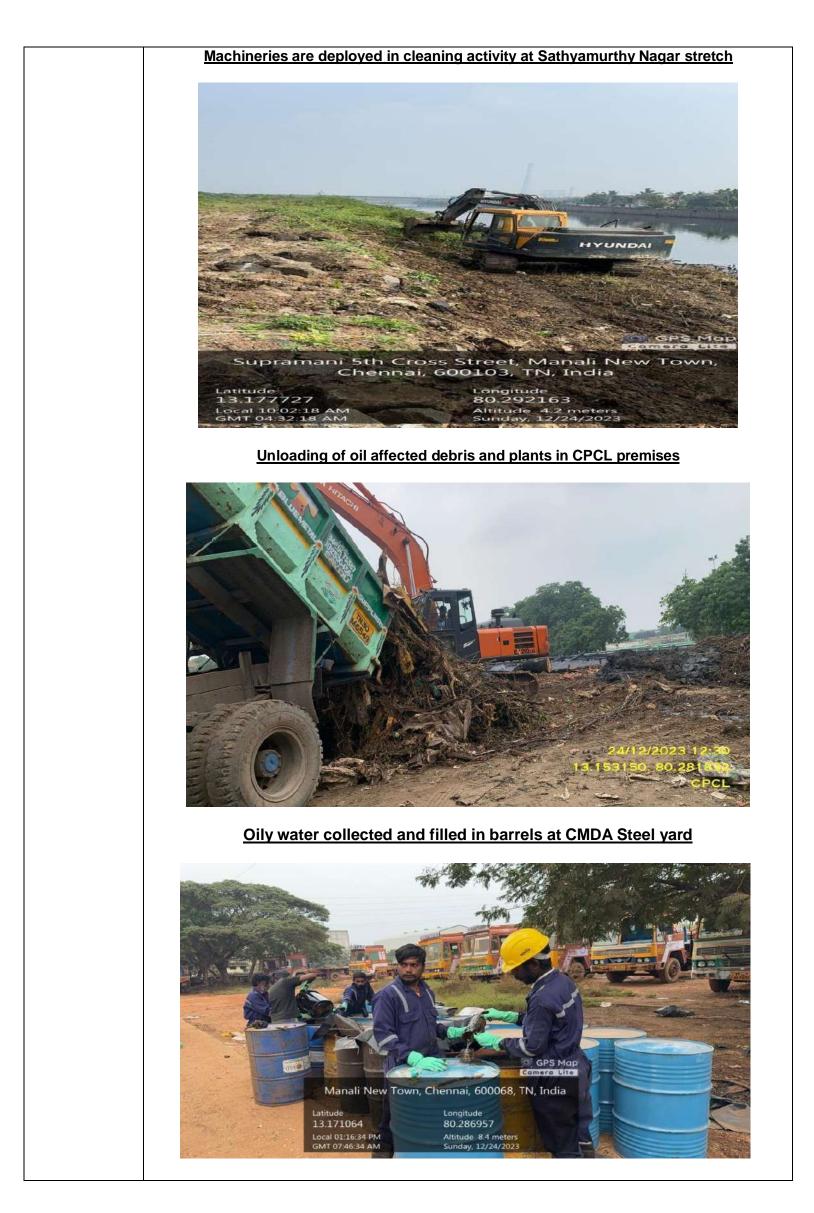
Date: 24-12-2023

	Work carried out in Stretch No.1 : Railway Bridge to Kattupuppam (Near Temple area) Stretch cleaned : 150 metres Machinery used: 1 No. oil skimmer, 1 No. hydro jet washer	
Mangrove Stretches	Cleaning activities carried out in Mangrove stretches reported by the Forest Department	
details	(Skin releated issues – 390 Nos, Respiratory related issues – 590 Nos.) By Health department : Total screened as on 23.12.2023– 12,690 Nos (Skin releated issues – 1,879 Nos, Eye irritation issues – 15 Nos.)	
Health Camp	Soil & debris with oil 78 tons Sludge 78 tons By CPCL : Total screened as on 24.12.2023–4,540 Nos	
Material Removed:	Oily Water 12,760 litres (58 Nos. of barrels)	
Manpower	CPCL618 (in Boat = 80 x 4 = 320 , Machinery labours =44, M/s. Viraj Clean Sea Enterprises - 125, M/s. Sea Care services - 56, M/s. Vens Hydra lift Pvt ltd - 3, M/s. Neowin india limited- 70)	
	 Truck/ Tipper – 12 Nos. Tata ace – 1 Nos. Tractor-Trailer – 2 Nos. Hydras– 2 Nos. Poclain – 2 Nos. Gully sucker – 1 No. 	
Deployed:	 So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed - Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal JCB – 7 Nos. 	
Activities Carried Out Machineries	 Cleaning of banks of Buckingham Canal by using machineries such as JCB, Poclain, Hydras at Sathyamurthy Nagar stretch, near Sathangadu and CMDA Steel yard Removal of oily water through gully sucker and manually at CMDA Steel yard premises Removal of plants, soil and debris affected by the oil near Sathyamurthy Nagar Oily water sample collected for testing at Sathangadu Cleaning and removing of oily water and debris by using absorption pads and manually under Ennore Railway bridge area Cleaning of Mangroves stretches of about 10 m near Kattukuppam temple by using Hydrojet machine Boats – 80 Nos. 	











Cleaning activitie in progress under Ennore Railway Bridge



Removal of plants, debris and soil affected by the oil near Sathyamurthy Nagar



Remarks:	12,760 litres of oily water has been collected in barrels and sent to CPCL premises for safe
	storage.
	A total of 78 T of oil slick soil and debris was removed and sent to CPCL for safe storage.
	Oil affected mangrove stretches of about 10 m was cleaned near Kattukuppam temple
	• Four agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services, M/s. Vens Hydra
	Lifts Pvt Ltd & M/s. Neowin India Ltd were engaged by M/s. CPCL for the clean-up operations.
CPCL Official	Mr. M.N.Suresh, Senior Manager
present:	Mr. Kamala Kannan, DGM
	Mr. Purushothaman, Manager
	Mr. T. Ravi, Assistant Manager
Government	Tamil Nadu Pollution Control Board
Official Present:	Director of Environment & Climatic Change
	Revenue Department,
	Greater Chennai Corporation
	Fisheries Department
	Tamil Nadu Forest Department
	Police Department







TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 25-12-2023

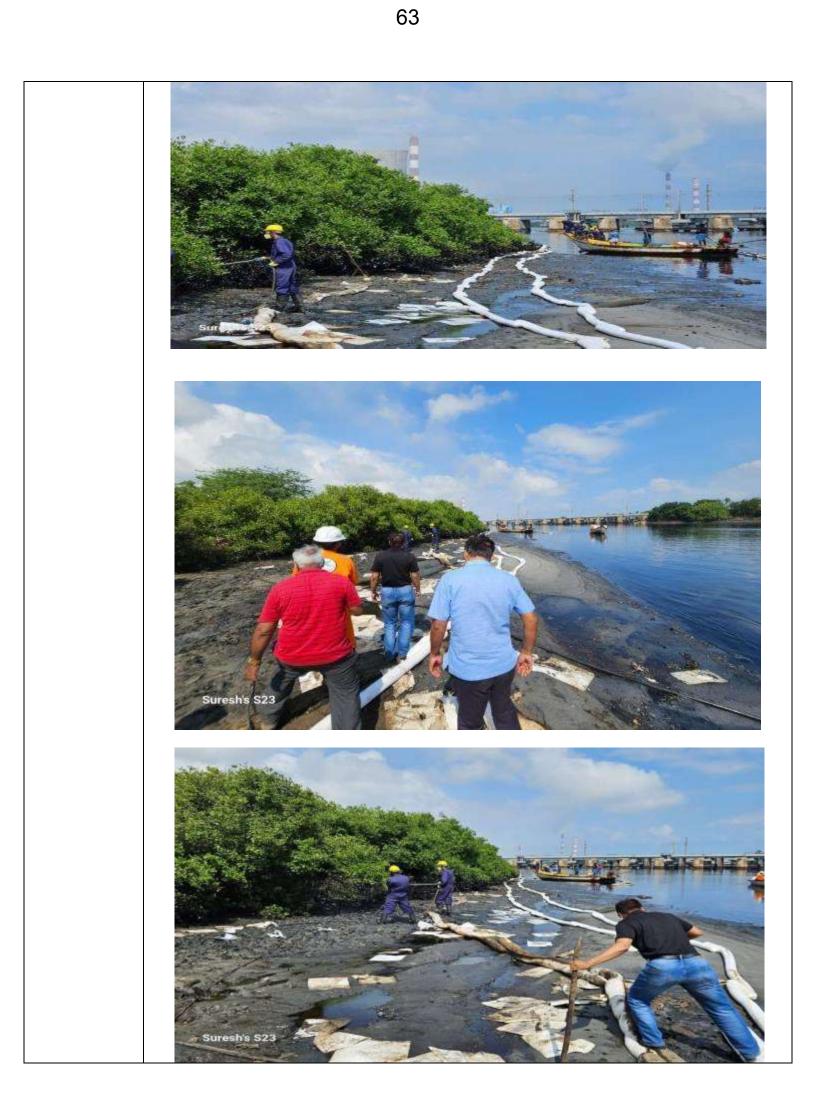
Activities Carried Out	Cleaning of banks of Buckingham Canal by using machineries such as JCB, Poclain, Hydras at Sathuamuthu Nagar strateb	
Carried Out	 Sathyamurthy Nagar stretch Removal of oily water through gully sucker and manually at CMDA Steel yard premises 	
	•	
	Cleaning and rem Sathyamurthy Nag	noval of plants, soil and debris affected by the oil through Poclain near gar.
	Cleaning of shores	s by manually at Nettu Kuppam and Ennore Kuppam area
	Cleaning and remo	oving of oily water and debris by using absorption pads and manually under
	Ennore Railway br	idge area
	Cleaning of Mangi	roves stretches of about 50 m near Kattukuppam temple by using Hydrojet
	machine	
Machineries	Boats – 80 Nos	S.
Deployed:	So far installed	Booms
		m 300 m long installed – Ennore Creek Mouth
		ooms of 325 m long and 275 m at Ennore Bridge
		m 100 m long installed – between Road Bridge and Railway Bridge
		m 80 m long installed – Railway Bridge
		ng light boom and 50 m hard boom installed - Sivanpadai Veethi Boom at the mouth of the Buckingham Canal
	 ○ 250 m I ● JCB – 7 Nos. 	Boom at the mouth of the Buckingham Canal
	 Truck/ Tipper - 	- 21 Nos
	 Tata ace – 2 N 	
	Tractor-Trailer	
	 Hydras– 2 Nos 	
	Poclain – 2 No	
	Gully sucker –	4 No.
Manpower	CPCL	690 (in Boat = 80 x 4 = 320 , Machinery labours =99, M/s. Viraj Clean
		Sea Enterprises - 135, M/s. Sea Care services - 63, M/s. Vens Hydra lift
Matarial	Olle Mater	Pvt ltd - 3, M/s. Neowin india limited- 70)
Material Removed:	Oily Water	11,880 litres (54 Nos. of barrels)
Removed.	Soil with oil Sludge	28 tons
Health Camp	Ų	ened as on 25.12.2023– 4,620 Nos
details		ated issues – 390 Nos, Respiratory related issues – 590 Nos.)
		t: Total screened as on 23.12.2023– 12,690 Nos
	-	ated issues – 1,879 Nos, Eye irritation issues – 15 Nos.)
Mangrove Stretches	-	arried out in Mangrove stretches reported by the Forest Department attupuppam (Near Temple area)
Stretches	Stretch cleaned : 50	
		o. oil skimmer, 2 No. hydro jet washer
	Cleaning of oil affect	cted mangroves was carried out by using hydro jets. The PCCF &
	Member Secretary, T	amil Nadu Wetland Authority & Chief Mission Director, Green Tamil
	Nadu Mission (FAC	c) and DFO Tiruvallur have visited the site and assessed the
	effectiveness of the	hydro jet cleaning. Even though hydro jet washing was done on the
	leaves, it has not yie	Ided good results. Water mixed with oil is getting flushed back to the

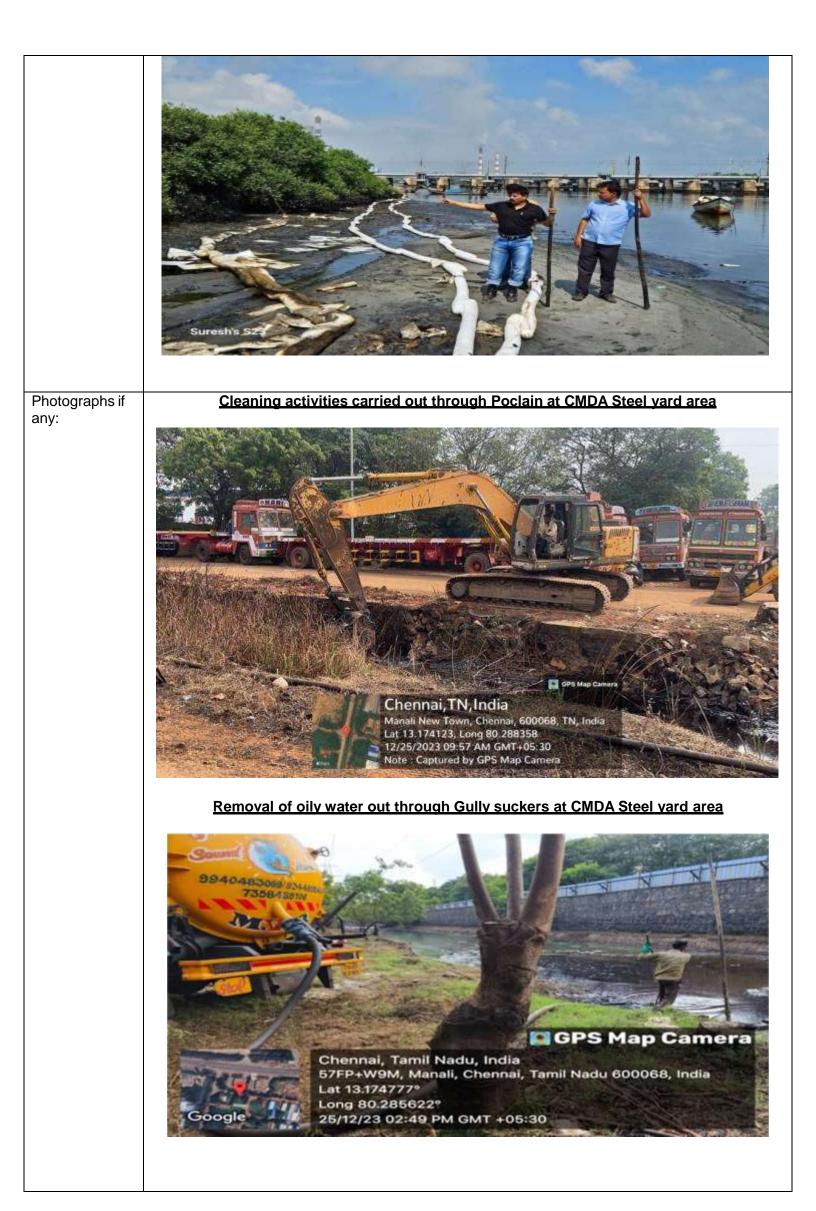
B'Canal. This process shall take more months with recurrent problem of oil mixed water. Hence it is decided to take out the oiled leaves through harvester like the tea gardens ... and pick those twigs and taking it to the CPCL premises for safe disposal. As a trial basis selective branch cutting for a stretch of 100 metres will be carried out tomorrow (26-12-2023). After seeing the results, it will be decided to proceed for further

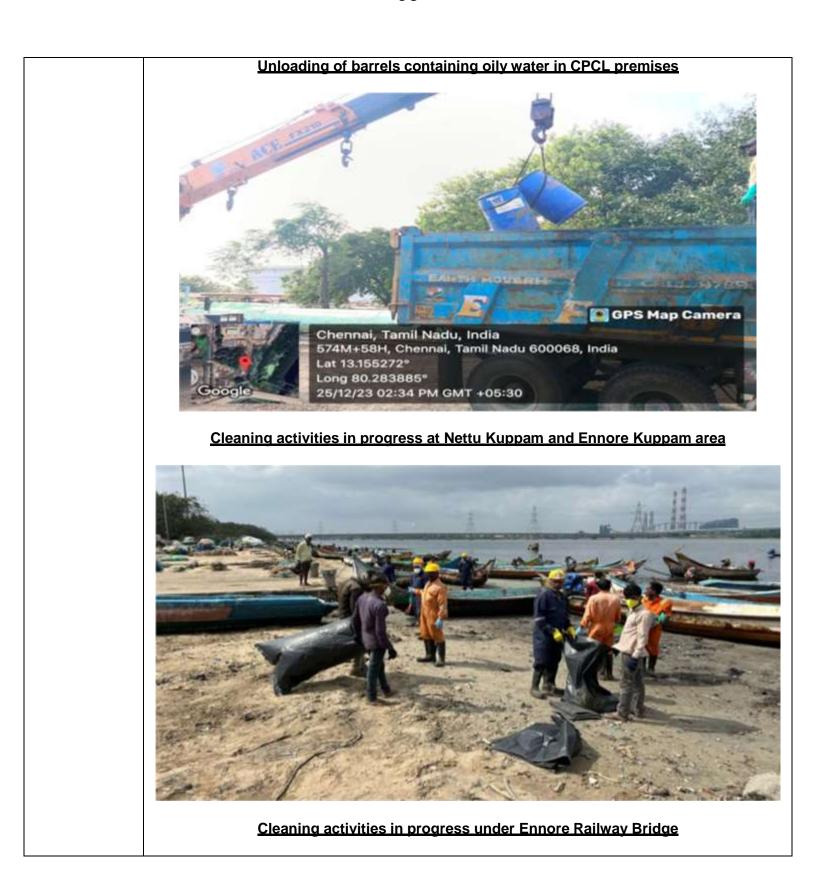




Stretch -1 : 1000 metres, Stretch-2: 3500 m, Stretch-3: 1000 m, Stretch-4: 9000 m









CPCL Official	Mr. M.N.Suresh, Senior Manager
present:	Mr. Kamala Kannan, DGM
	Mr. Purushothaman, Manager
	Mr. T. Ravi, Assistant Manager
Government	Tamil Nadu Pollution Control Board
Official Present:	Director of Environment & Climatic Change
	Revenue Department,
	Greater Chennai Corporation
	Fisheries Department
	Tamil Nadu Forest Department
	Police Department







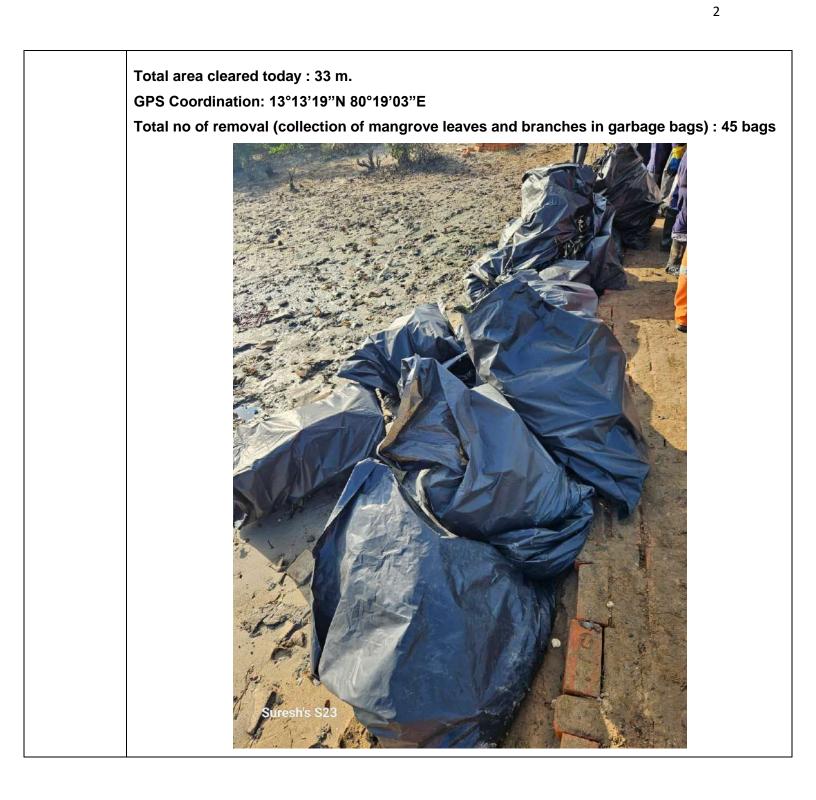
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TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

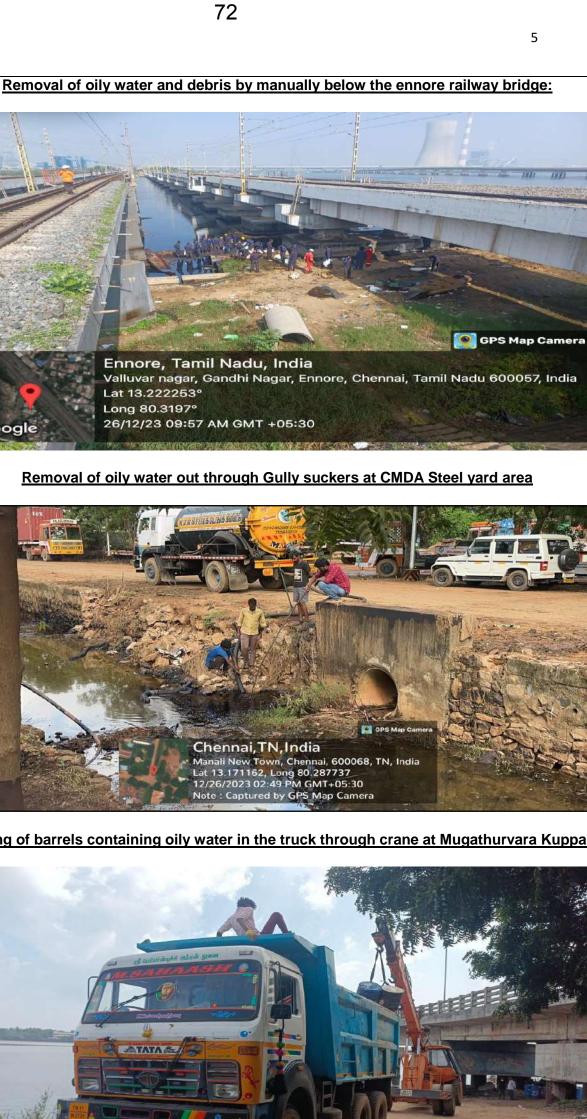
Date: 26-12-2023

	Total manpower used : 10 members for cutting work and 15 members for clearing branches (collection and disposal).			
	Total equipment used : 6 boats and 10 branch pruner (6 branch pruner scissors and 4 billhooks)			
Mangrove Stretches	Cleaning activities carried out in Mangrove stretches reported by the Forest Department OIL REMOVAL WORK IN MANGROVES - PROGRESS REPORT (26.12.2023)			
	Health department	26.12.2023		
	Health department Static camp by	20.12.2023 10.12.2023 to	1,638	294
	Mobile camp by	06.12.2023 to	14,241	2,078
	By CPCL	as on 26.12.2023	4,760	410
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)
VOC sample collected:				
Number of	VOC measured at 10 location			
Collection:	Mobile CAAQM is being in operation at Sathyamoorthy Nagar.			
Detail of Sample	NCCR collected Surface water samples – 09 numbers Ground water samples – 08 numbers			
Detailet	Soil with oil Sludge 48 tons			
Removed:				
Material	Oily Water7,920 litres (36 Nos. of barrels)			
	Enterprises - 125, M/s. Sea Care services - 56, M/s. Vens Hydra lift Pvt ltd - 03, M/s. Neowinindia limited- 75)			
Manpower	CPCL			=64, M/s. Viraj Clean Sea
	Gully sucker – 4 No.			
	 Poclain – 2 Nos. 			
	 I factor- I faller – 2 Nos. Hydras– 1 Nos. 			
	 Tata ace – 1 Nos. Tractor-Trailer – 2 Nos. 			
	Truck/ Tipper –23 Nos. Tata and 1 Nos.			
	• JCB – 10 Nos.			
	 250 m Boom at the mouth of the Buckingham Canal 			
	 50 m long light boom and 50 m hard boom installed - SivanpadaiVeethi 			
	 Oil Boom 80 m long installed – Railway Bridge 			
	 I wo Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge 			
	 Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge 			
Deployed:	So far installed Booms			
Machineries	Boats –80 Nos.			
	 Cleaning of oil affected Mangrove stretches of about 33 m near Kattukuppam temples 			
Carried Out	Ennore Railway bridge area			
	 Cleaning and removing of oily water and debris by using absorption pads and manually under 			
	 Removal of soil and debris affected by the oil through Poclain near Sathyamurthy Nagar. 			
	 Cleaning of banks of Buckingham Canal by using machineries such as JCB, Poclain at Sathyamurthy Nagar stretch 			
	Cleaning and removal of soil and debris at CMDA Steel yard by using JCB & Poclain			
	Cloaning and roman	al of coil and dobria of CM	DA Stool word by woine	ICR & Dooloin









Removal of oily water out through Gully suckers at CMDA Steel yard area

Photographs

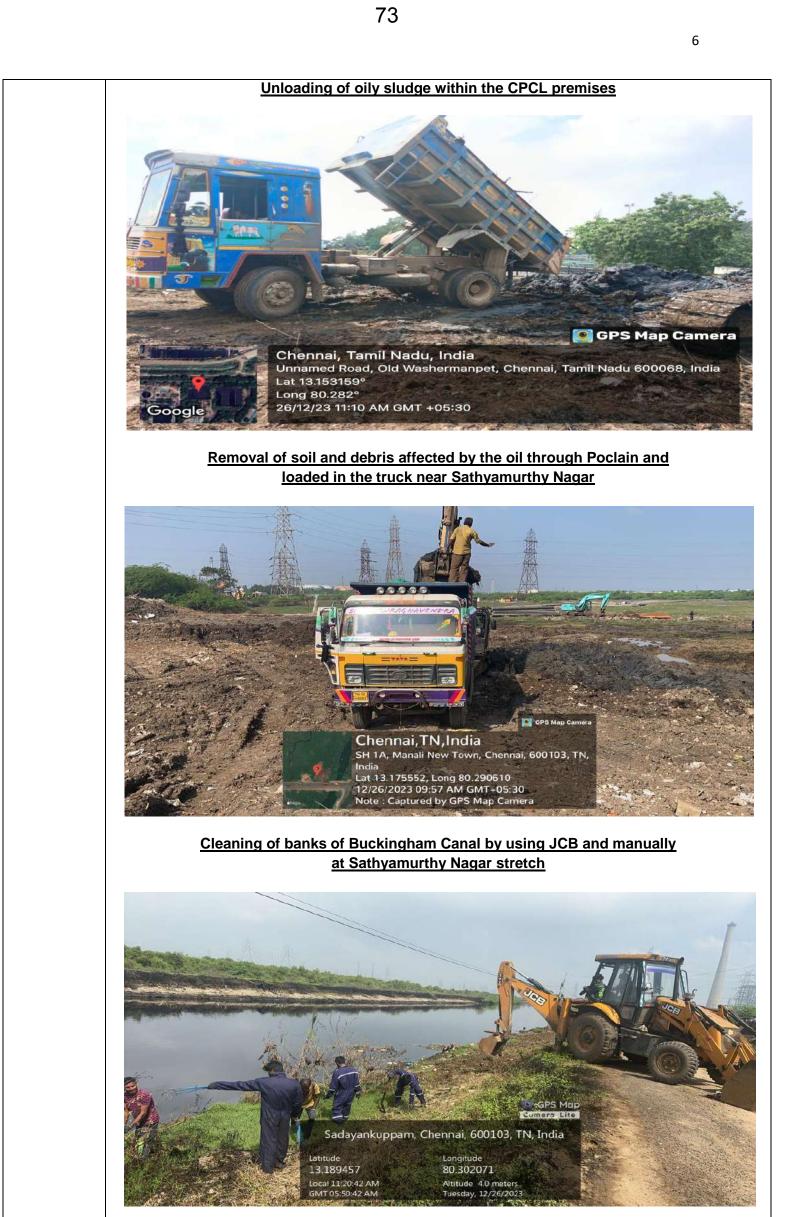
Google

if any:



Loading of barrels containing oily water in the truck through crane at Mugathurvara Kuppam





	The Chairperson, TNPCB has inspected the Oil spill cleanup activites				
Remarks:	 7,920 litres of oily water has been collected in barrels and sent to CPCL premises for safe storage. 				
	 A total of 48 T of oil slick soil was removed and sent to CPCL for safe storage. 				
	 Oil affected mangrove stretches of about 33 m was cleaned near Kattukuppam temple 				
	 The Chairperson, Tamil Nadu Pollution Control Board has inspected the oil cleanup activities at 				
	Sathyamurthy Nagar, Mugathuvara Kuppam, Ennore Railway Bridge and oil affected mangrove				
	stretches near Kattukuppam temple area				
	 Four agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services, M/s. Vens Hydra Lifts 				
	Pvt Ltd & M/s. Neowin India Ltd were engaged by M/s. CPCL for the clean-up operations.				
CPCL Official	Mr.M.N.Suresh, Senior Manager				
present:	Mr. Kamala Kannan, DGM				
	Mr.Purushothaman, Manager				
	Mr. T. Ravi, Assistant Manager				
Government Official	Tamil Nadu Pollution Control Board				
Present:	Director of Environment & Climatic Change				
	Revenue Department				
	Greater Chennai Corporation				
	Fisheries Department				
	Tamil Nadu Forest Department				
	Police Department				







TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 27-12-2023

Activities Carried Out	Removal of oily wa premises.	ter through gully sucker a	nd by using adsorption	boom at CMDA Steel yard
	Cleaning of banks Sathyamurthy Nag	-	by using machineries	such as JCB, Poclain at
	Removal of soil and	d debris affected by the oil	through Poclains near	Sathyamurthy Nagar.
Machineries Deployed:	∘ Two Bo	ed Booms m 300 m long installed– E boms of 325 m long and 2 m 100 m long installed– be	275 m at Ennore Bridge	
	o Oil Boo	m 80 m long installed – Ra	ilway Bridge	
	∘ 50 m lo	ng light boom and 50 m ha	ard boom installed - Siva	anpadaiVeethi
	⊙ 250 m E	Boom at the mouth of the E	Buckingham Canal	
	 JCB – 7 Nos. JCB concrete k Truck/ Tipper – Tata ace – 1 N Tractor-Trailer Hydras– 1 Nos Poclain – 2 No Gully sucker – 	os. – 2 Nos. s.		
Manpower	CPCL	283 (in Boat- Nil, Machir Enterprises - 55, M/s. Se - Nil, M/s. Neo win India	a Care services - 55, N	/iraj Clean Sea I/s. Vens Hydra lift Pvt Itd
Material Removed:	Oily Water	4,400 litres (20 Nos. of b	,	
	Soil with oil Sludge	70 tons		
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)
	By CPCL	as on 27.12.2023	4,950	410
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294
Mangrove Stretches		arried out in Mangrove st		he Forest Department al public protest in Ennore
	area			



	Unloading of barrels containing collected oily water within the CPCL premises
	<u>Cleaning of banks of Buckingham Canal by using machineries</u> <u>at Sathyamurthy Nagar stretch</u>
	Littlude: 13.17.0457 Longitude: 80.292614 Everation: 26.53394 nn Accuracy: 7.1 mn The: 12.227.2023 10:55
Remarks:	 4,400 litres of oily water has been collected in barrels and sent to CPCL premises for safe storage. A total of 70 T of oil slick soil was removed and sent to CPCL for safe storage. Local public protest in ennore area affected the clean-up operations. Three agencies Viz M/s. Viraj Clean Sea Services, M/s. Sea care services, & M/s. Neowin India Ltd were engaged by M/s. CPCL for the clean-up operations.
CPCL Official present:	Mr.M.N.Suresh, Senior Manager Mr. Kamala Kannan, DGM Mr.Purushothaman, Manager Mr. T. Ravi, Assistant Manager

Government	Tamil Nadu Pollution Control Board
Official Present:	Director of Environment & Climatic Change
	Revenue Department
	Greater Chennai Corporation
	Fisheries Department
	Tamil Nadu Forest Department
	Police Department





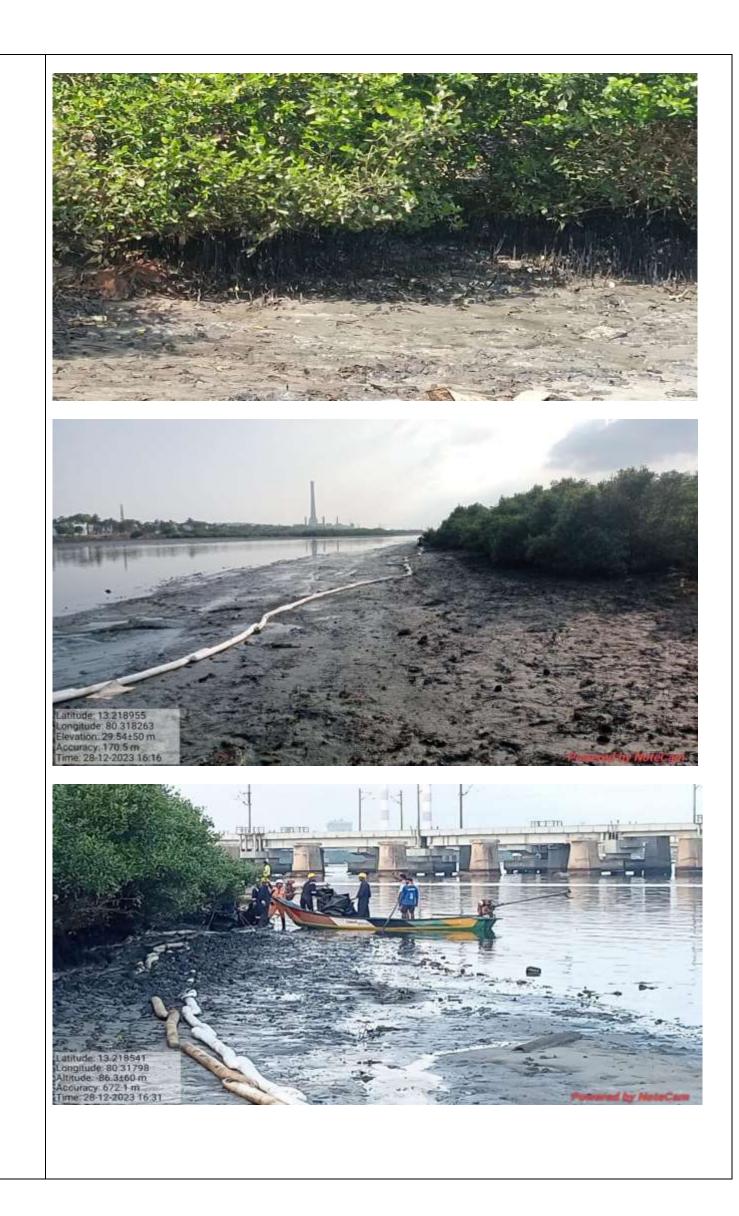


TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 28-12-2023

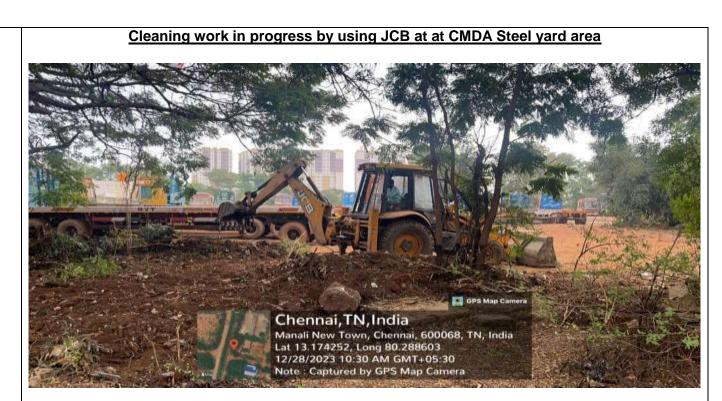
Activities Carried Out	-	through gully sucker at C	• •			
	 Cleaning and removing of oily water and debris by using absorption pads and manually under Ennore Railway bridge area 					
	, ,	d Mangrove stretches of a	hout 80 m near Kattu ki	unnam		
Machineries Deployed:	 Boats –80 Nos. So far installed Boom 3 Oil Boom 3 Two Boom 4 Oil Boom 1 Oil Boom 8 50 m long 	•	ore Creek Mouth 5 m at Ennore Bridge een Road Bridge and R ray Bridge boom installed - Sivanp	ailway Bridge		
			•			
	 JCB – 10 Nos. JCB concrete bread 	vora 2 Noa				
	 JCB concrete break Truck/ Tipper –20 N 					
	 Tata ace – 1 Nos. 	105.				
	 Tractor – 2 Nos. 					
	• Hydras– 1 Nos.					
	Poclain – 2 Nos.					
	Gully sucker – 3 No			07 M/)/: : 01 0		
Manpower	CPCL 657 (in Boat =80 x 4 = 320,Machinery labours =67, M/s. Viraj Clean Sea Enterprises - 105, M/s. Sea Care services - 65, M/s. Vens Hydra lift Pvt ltd - 0, M/s. Neowin India limited- 100)					
		10, 100/5, 1000000000000000000000000000000000000				
Material Removed:	Oily Water	7,920 litres (36 Nos. of b	/			
Removed:	Soil with oil Sludge	7,920 litres (36 Nos. of b Nil	/			
Removed: Detail of Sample		7,920 litres (36 Nos. of b Nil	/			
Removed: Detail of Sample Collection: Number of VOC sample collected:	Soil with oil Sludge	7,920 litres (36 Nos. of t Nil 10 numbers	/			
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp	Soil with oil Sludge Surface water samples –	7,920 litres (36 Nos. of t Nil 10 numbers	Total Screened	Skin related issues (in Nos)		
Removed: Detail of Sample Collection: Number of VOC sample collected:	Soil with oil Sludge Surface water samples – VOC measured at 10 loca	7,920 litres (36 Nos. of t Nil 10 numbers tion Period	Total Screened (in Nos)	Skin related issues (in Nos) 410		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp	Soil with oil Sludge Surface water samples – VOC measured at 10 loca	7,920 litres (36 Nos. of t Nil 10 numbers	Total Screened	(in Nos)		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by Health department	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to 20.12.2023	Total Screened (in Nos) 5,115 14,241	(in Nos) 410 2,078		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to	Total Screened (in Nos) 5,115	(in Nos) 410		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp details Mangrove	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities carried	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ed out in Mangrove stret	Total Screened (in Nos) 5,115 14,241 1,638 ches as reported by the	(in Nos) 410 2,078 294 e Forest Department		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp details Mangrove	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities carrie The PCCF & Member S	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ed out in Mangrove stret ecretary, Tamil Nadu W	Total Screened (in Nos) 5,115 14,241 1,638 ches as reported by the etland Authority & Ch	(in Nos) 410 2,078 294 e Forest Department		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities carrie The PCCF & Member S Green Tamil Nadu Miss	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ed out in Mangrove stret ecretary, Tamil Nadu W ion (FAC) has inspected	Total Screened (in Nos) 5,115 14,241 1,638 ches as reported by the etland Authority & Ch the site.	(in Nos) 410 2,078 294 e Forest Department nief Mission Director,		
Removed: Detail of Sample Collection: Number of VOC sample collected: Health Camp details Mangrove	Soil with oil Sludge Surface water samples – VOC measured at 10 loca Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities carrie The PCCF & Member S Green Tamil Nadu Miss	7,920 litres (36 Nos. of b Nil 10 numbers tion Period as on 28.12.2023 06.12.2023 to 20.12.2023 10.12.2023 10.12.2023 cd out in Mangrove stret ecretary, Tamil Nadu W ion (FAC) has inspected : 80 m stretch at Kattu F	Total Screened (in Nos) 5,115 14,241 1,638 ches as reported by the etland Authority & Ch the site.	(in Nos) 410 2,078 294 e Forest Department		



81 Photographs Receiving of used contaminated absorption pads in polythene bags at mugathuvaram bridge: New 2 Latitude: 13.232147 Longitude: 80.317658 Elevation: 42.43±100 m Accuracy: 16.8 m Time: 12-28-2023 15:47 Removal of oily water out through Gully suckers at CMDA Steel yard area MAN HAJ hennai, TN, India nali New Town, Chennai, 600068, TN, India 13.173996, Long 80.288327 28/2023 09:59 AM GMT+05:30 te : Captured by GPS Map Camera Removal and loading of boulders in the shore line by using machineries such as poclain and breaker at Nettu kuppam and Mukathuvarakuppam area

if any:

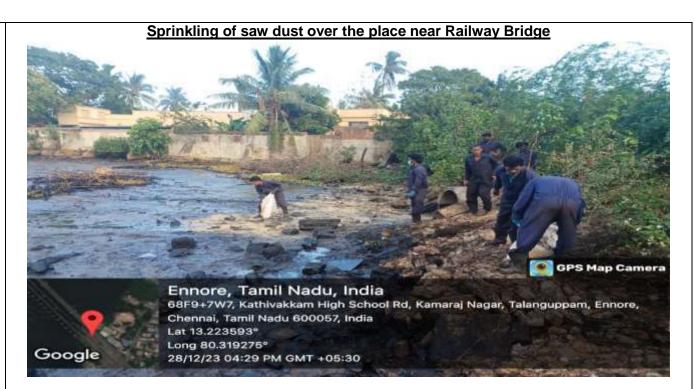




Loading of barrels containing oily water in the truck at Mugathuvara Kuppam







Unloading of barrels containing oily water within the CPCL premises





		Details of Stretch for oil cleaning oper			-		
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 28.12.2023		
	1.	Creek Mouth to Ennore Bridge (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*		
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*		
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Work in progress		
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Work in progress		
	* Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action						
CPCL Official	Mr.M.N.Suresh, Senior Manager						
present:	Mr. Kamala Kannan, DGM						
	Mr.Purushothaman, Manager Mr. T. Ravi, Assistant Manager						
Government		mil Nadu Pollution Control Board					
Official		ector of Environment & Climatic Change	;				
Present:	 Revenue Department 						
		eater Chennai Corporation					
		heries Department					
	• Tar	nil Nadu Forest Department					
		ice Department					







TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 29-12-2023

Activities Carried Out		through gully sucker and	d also by using oil abso	rption boom at CMDA St	teel	
Camed Out	yard premises	af dah ija at OMDA Otaal		e ele in		
	•	of debris at CMDA Steel			مامه	
	Ũ					
	, ,	Ennore Railway bridge area				
Machineries	 Cleaning of oil affecte Boats –80 Nos. 					
Deployed:	 Boats – 80 Nos. So far installed Bo 	oms				
		800 m long installed– Enn	ore Creek Mouth			
		ns of 325 m long and 27	0			
		00 m long installed – bety	•	Railway Bridge		
	 Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed – Sivanpadai Veethi 					
	-	ing at the mouth of the Bu		ipadal veetin		
	 JCB – 10 Nos. 		ckingham Canar			
	 Truck/ Tipper – 18 	Nos.				
	• Tata ace – 1 Nos.					
	• Tractor trolley – 2	Nos.				
	Hydras- 1 Nos. Declairs 2 Nos.					
	 Poclain – 2 Nos. Gully sucker – 4 Nos. 					
Manpower	CPCL		= 320, Machinery labour	rs = 72, M/s. Viraj Clean		
		Sea Enterprises - 105	5, M/s. Sea Care service	es - 65, M/s. Vens Hydra	lift	
		Pvt ltd - 0, M/s. Neo w				
Material Removed:	Oily Water		of barrels- 220 ltr capac barrels- 25 ltr capacity)	ity)		
Removed.		Total - 8,820 litres				
	Soil with oil Sludge	Nil				
Detail of	NCCR collected Surface		ers.			
Sample Collection:	Ground water samples –	08 numbers				
Number of	VOC measured at 10 loca	ation				
VOC sample						
collected:						
Health Camp	Description	Period	Total Screened	Skin related issues		
details			(in Nos)	(in Nos)	_	
	By CPCL Mobile camp by	as on 29.12.2023 06.12.2023 to	5,255 14,241	410 2,078	_	
	Health department	20.12.2023	14,241	2,070		
	Static camp by	10.12.2023 to	1,638	294		
	Health department	26.12.2023				
Mangrove	Cleaning activities carrie	ed out in Mangrove stre	tches reported by the l	Forest Department		
Stretches	OIL REMOVAL WORI	K IN MANGROVES - P	ROGRESS REPORT	(29.12.2023)		
	Equipments used: 6 boat	s, 10 cutting tools, 1 hydr	ro get, 1 sprayer.			
	Manpower used: 10 for a	cutting, 2 for hydroget and	d sprayer and 33 for coll	lection and disposal,		
1						

Clearing sites: Total three sites, the first 2 sites are on the right and left side of the temple and the third side is located at kattukuppam near B. Canal.

GPS Coordinates:- Site 1: 13.2222889 N, 80.3177901 E, Site 2: 13.2217650 N, 80.3175302 E, Site 3 : 13.2175102 N, 80.2175103 E.

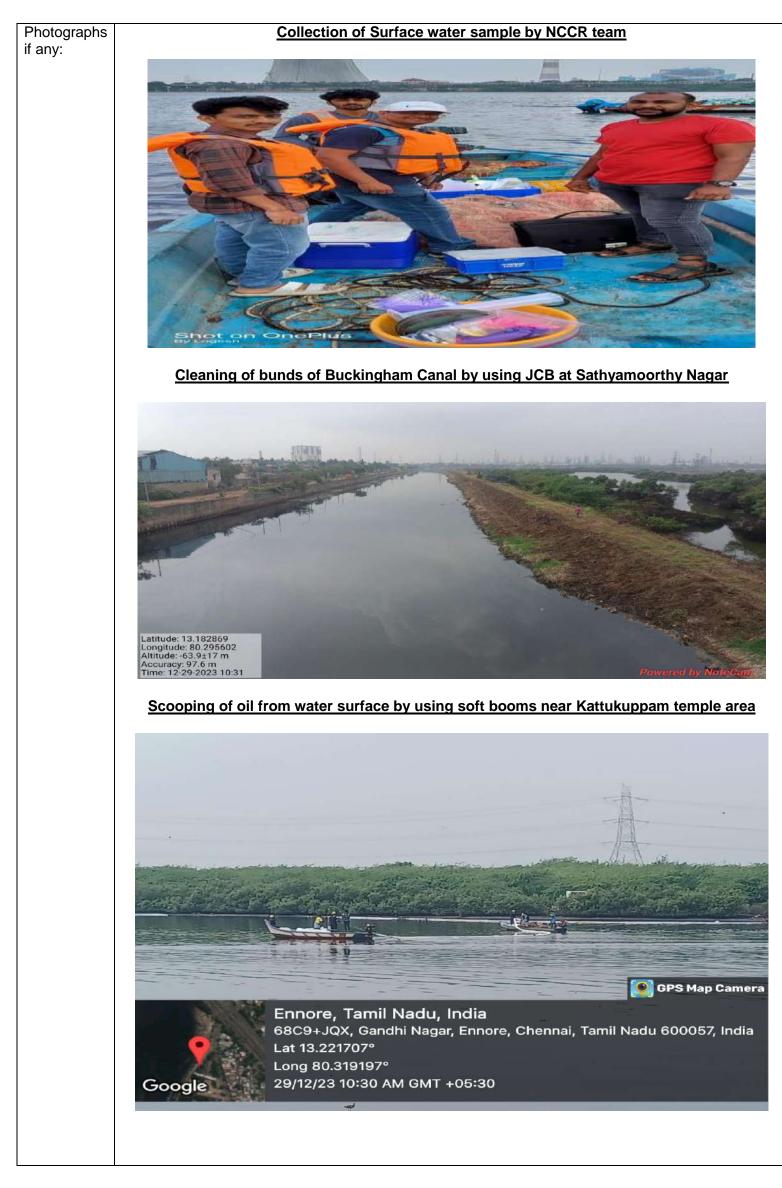
Today cleared area: 130 m (site 1-50 m, site 2-40 m, site 3-40 m)

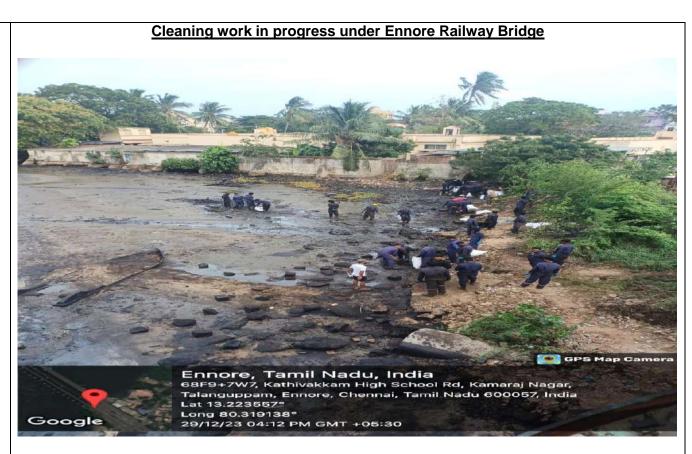
Collection of wastes in bags: 30 bags.









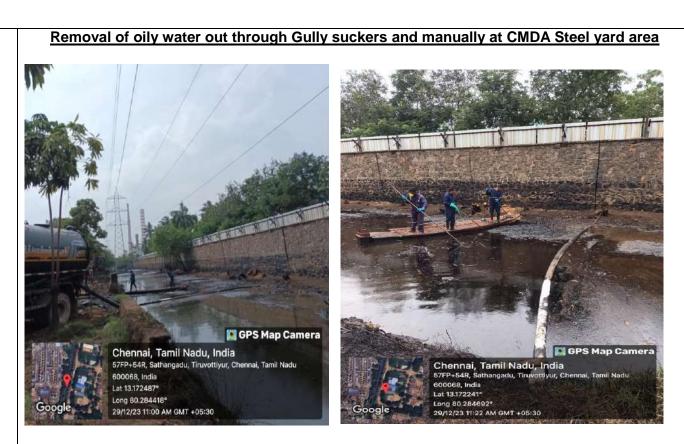


Unloading of barrels containing oily water from boats at Mugathuvara Kuppam

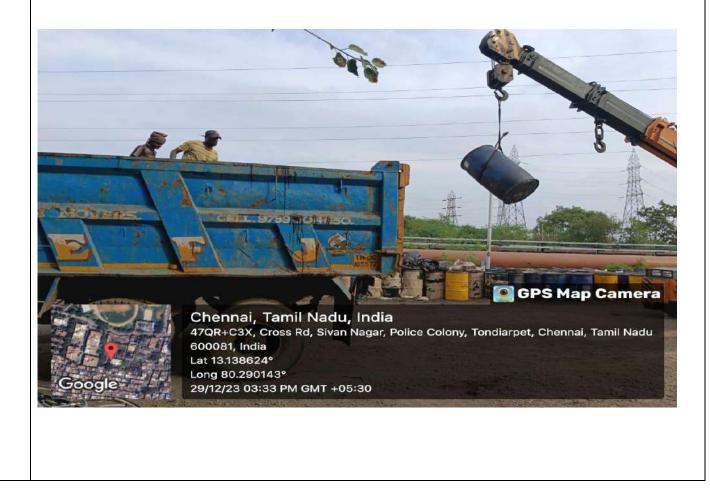


Removal of oil from water surface by using soft boom near Ennore Railway bridge





Unloading of barrels containing oily water within the CPCL premises



Remarks:	 8,820 litres of oily water has been collected in barrels and sent to CPCL premises for safe storage. Oil affected mangrove stretches of about 130 m was cleaned near Kattukuppam. Details of Stretch for oil cleaning operation from Ennore Creek to Buckingham Canal: 							
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 29.12.2023	Details of oily water and oily sludge removed from 12.12.2023 onwards		
	1.	Creek Mouth to Ennore Bridge (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	oily water removed as on 29.12.2023 is		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	2,14,820 litres and oily sludge removed as on		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	29.12.2023 is 663.5 Tonnes and the same is sent		
	5. Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	to the CPCL premises for			
	6. 7.	Land area near Sathyamurthy Nagar bridge CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai M/s. Neo win India Ltd, Chennai	Work in progress Work in progress	further treatment and disposal.		
	* Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action							
CPCL	Mr.M.N.Suresh, Senior Manager							
Official present:	Mr. Kamala Kannan, DGM							
present.	Mr.Purushothaman, Manager							
	Mr. T	. Ravi, Assistant Manager						
Government	• T	amil Nadu Pollution Control B	oard					
Official Present:	• D	irector of Environment & Clim	atic Change	9				
	• R	evenue Department						
	• G	reater Chennai Corporation						
	• F	isheries Department						
	• T	amil Nadu Forest Department						
		olice Department						







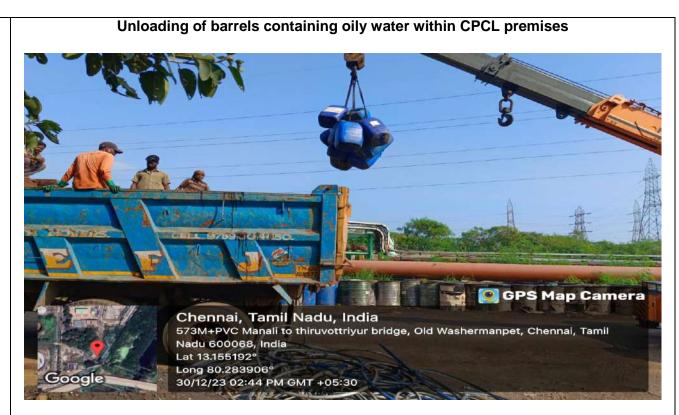
TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 30-12-2023

Activities Carried Out	•	• • • •	soft booms and sludge	e & debris manually under	
Carried Out	•		also by using oil absor	ption boom at CMDA Steel	
	yard premises				
	•	I of debris at CMDA Stee	, , ,		
	•	d Mangrove stretches of	about 100 m near Kattu	u kuppam	
Machineries Deployed:	 Boats -80 Nos. So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed – Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal JCB – 10 Nos. Truck/ Tipper – 19 Nos. Tata ace – 2 Nos. Hydras – 1 No. Poclain – 2 Nos. 				
Manpower	Gully sucker – 7 Nos. GPCL Gully sucker – 7 Nos. G41 (in Boat =80 x 4 = 320,Machinery labours = 71, M/s. Viraj Clean Sea Enterprises - 85, M/s. Sea Care services - 60, M/s. Vens Hydra lift Pvt ltd - 0, M/s. Neo win india limited- 105)				
Material Removed:	Oily Water	500 litres (20 Nos. of	barrels- 25 ltr capacity) of barrels- 60 ltr capacity	/)	
	Soil with oil Sludge	Nil			
Detail of Sample Collection:	Surface water samples -	10 numbers			
Number of VOC sample collected:	VOC measured at 10 loca	ation			
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)	
	By CPCL	as on 30.12.2023	5,350	410	
	Mobile camp by	06.12.2023 to	14,241	2,078	
	Health department Static camp by	20.12.2023 10.12.2023 to	1,638	294	
	Health department	26.12.2023	1,000	234	
Mangrove					
Stretches	Cleaning activities carried out in Mangrove stretches reported by the Forest Department OIL REMOVAL WORK IN MANGROVES - PROGRESS REPORT (30.12.2023)				
	GPS Coordinates:- 13°13'01"N 80°18'56"E				
	Today cleared area: 100	m stretch at Kattu Kupp	am was cleaned by selec	ctive pruning of the oil	
	affected branches of Man	groves.			
	Collection of wastes in bags: 300 bags.				





The Additional Chief Secretary, Environment, Climate Change & Forest department and The Chairperson, Tamil Nadu Pollution Control Board have inspected the oil clean-up operation at Ennore area





Remarks:	• 2	,420 litres of oily water has bee	en collected	in barrels and sent to	CPCL premise	s for safe storage			
		il affected mangrove stretches			•	· ·			
	• т	he Additional Chief Secretary	, Environm	ent, Climate Change	, The Chairpe	rson, Tamil Nadı			
	P	Pollution Control Board and Forest Department officials have inspected the oil clean-up operation							
	a	t Ennore area							
	Details of Stretch for oil cleaning operation from Ennore Creek to Buckingham Canal:								
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 29.12.2023	Details of oily water and oily sludge removed from 12.12.2023 onwards			
	1.	Creek Mouth to Ennore Bridge (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of			
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	oily water removed as on 30.12.2023 is			
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	2,17,240 litres and oily sludge removed as on			
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	30.12.2023 is 663.5 Tonnes and the same is			
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	sent to the CPCL premises			
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Work in progress	for further			
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Work in progress	treatment and disposal.			
CPCL Official	shore	en though the cleaning work e cleaning is carried out on d .N.Suresh, Senior Manager							
present:		amala Kannan, DGM							
	Mr.P	urushothaman, Manager							
	Mr. T	. Ravi, Assistant Manager							
Government	• T	amil Nadu Pollution Control Bo	oard						
Official Present:	• D	irector of Environment & Clima	atic Change)					
	• R	evenue Department							
	• G	reater Chennai Corporation							
	• F	isheries Department							
	• т	amil Nadu Forest Department							
	1 _	olice Department							







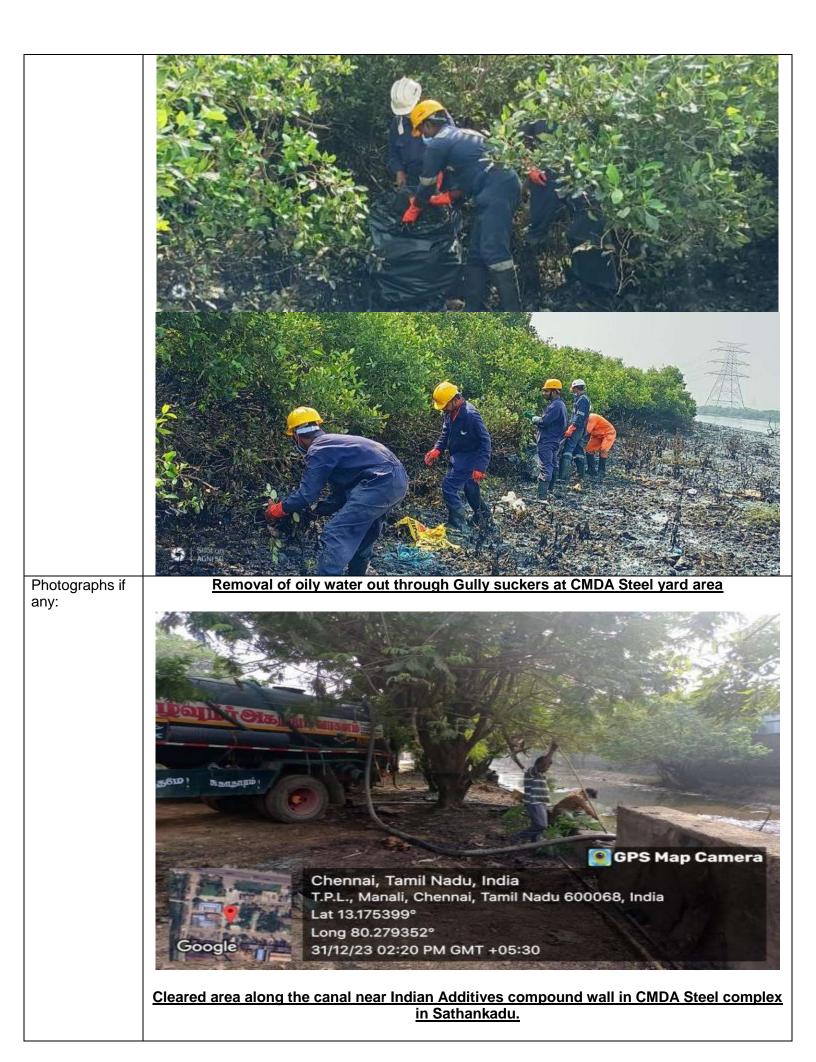
TAMIL NADU POLLUTION CONTROL BOARD

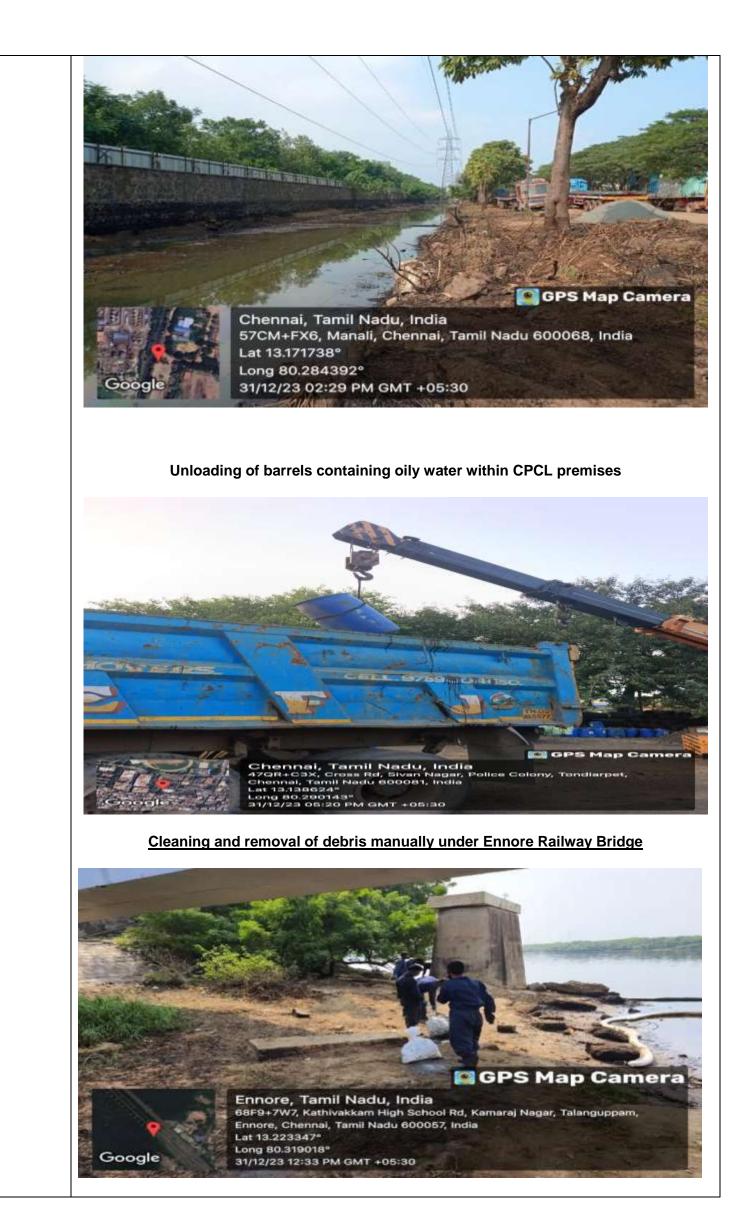
ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 31-12-2023

Activities Carried Out	•	ater through gully sucker and also by using oil absorption boom at CMDA				
	 Steel yard premises Cleaning and removing of oily water by using soft booms and sludge & debris manually under Ennore Railway bridge area 					
	•	by manually at Nettu Kuppam and Ennore Kuppam area				
	Cleaning of oil affer	ected Mangrove stretches at Ennore area (Ennore railway bridge, Temple				
	area, Nettukupparr	n area, Near Lock Bridge)				
		in Nettukuppam area as requested by the local fishermen in the presence				
	of WRD officials					
Machineries	Boats –80 N					
Deployed:	 So far instal ○ Oil Boo 	ied Booms m 300 m long installed– Ennore Creek Mouth				
		poms of 325 m long and 275 m at Ennore Bridge				
		m 100 m long installed– between Road Bridge and Railway Bridge				
	o Oil Boo	m 80 m long installed – Railway Bridge				
	∘ 50 m lo	ng light boom and 50 m hard boom installed – Sivanpadai Veethi				
	∘ 250 m E	Boom at the mouth of the Buckingham Canal				
	 JCB – 5 Nos. 					
	 Truck/ Tipper – 	- 17 Nos.				
	 Tata ace – 2 N 					
	Tractor trolley -	– 2 Nos.				
	Hydras- 1 No.					
	 Poclain – 2 No 	S.				
	Gully sucker –					
Manpower	CPCL	608 (in Boat =80 x 4 = 320,Machinery labours = 58, M/s. Viraj Clean Sea Enterprises - 85, M/s. Sea Care services - 60, M/s. Vens Hydra lift Pvt Itd				
		- 0, M/s. Neo win india limited- 85)				
Material	Oily Water	220 litres (1 No. of barrel- 220 ltr capacity)				
Removed:		2,580 litres (43 Nos. of barrels- 60 ltr capacity) Total – 2,800 litres				
		10tal – 2,000 litres				
		Consolidated				
		(Total quantity of oily water removed as on 31.12.2023 is 2,20,040 litres and				
		oily sludge removed as on 31.12.2023 is 663.5 Tonnes and the same is sent				
	Soil with oil Sludge	to the CPCL premises for further treatment and disposal.)				
Detail of	Surface water samples					
Sample						
Collection:						
Number of VOC	VOC measured at 10 I	ocation				
sample						
collected:						

Health Camp	Description	Period	Total Screened	Skin related issues
details	Description	renou	(in Nos)	(in Nos)
	By CPCL	as on 31.12.2023	5,410	410
	Mobile camp by	06.12.2023 to	14,241	2,078
	Health department Static camp by	20.12.2023 10.12.2023 to	1,638	294
	Health department	26.12.2023	1,000	201
Mangrove Stretches	Cleaning activities car	rried out in Mangrove st	retches reported by the	e Forest Department
ottetenes	OIL REMOVAL WO	RK IN MANGROVES -	PROGRESS REPORT	Г (31.12.2023)
	Total Manpower: 83	3 nos.		
	Total number of boa	ts deployed : 6 nos.		
	1. Ennore railway b	ridge - 1 Nos. Manpov	wer deployed - 11 No	DS.
	2. Temple area clear	ning works- 1 Nos . M	anpower deployed -	8 Nos.
	3. Nettukuppam are	ea cleaning - 2 Nos. M	lanpower deployed –	6 Nos
	4. Mangroove area o	cleaning near lock brid	ge - By road. Manpo	ower deployed - 54
	Nos			
	5. Sorbent boom sw	eeping near temple are	ea- 4 Nos. Manpower	deployed - 4 Nos.
			r	





		Shore clear	ning work i	n progress at Nettuk	uppam_		
	G	Ennore, Ta	amil Nadu, each Rd, Talan	India Inguppam, Ennore, Chennai	GPS Map		
Remarks:	 Prks: 2,800 litres of oily water has been collected in barrels and sent to CPCL premises for sa storage. Oil affected mangrove stretches were cleaned at Ennore area (Ennore Railway Bridg Temple area, Nettukuppam area, Near Lock Bridge). Details of Stretch for oil cleaning operation from Ennore Creek to Buckingham Cana 						
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 29.12.2023	Details of oily water and oily sludge removed from 12.12.2023 onwards	
	1.	Creek Mouth to Ennore Bridge (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water	
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	removed as on 31.12.2023 is	
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	2,20,040 litres and oily	
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	sludge removed as on	
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	31.12.2023 is 663.5 Tonnes and the same	
	6. 7.	Land area near Sathyamurthy Nagar bridge CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai M/s. Neo win India Ltd, Chennai	Work in progress Work in progress	is sent to the CPCL premises for	
						further treatment and disposal.	

	* Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action			
CPCL Official	Mr.M.N.Suresh, Senior Manager			
present:	Mr. Kamala Kannan, DGM			
	Mr.Purushothaman, Manager			
	Mr. T. Ravi, Assistant Manager			
Government	Tamil Nadu Pollution Control Board			
Official Present:	Director of Environment & Climatic Change			
	Revenue Department			
	Greater Chennai Corporation			
	Fisheries Department			
	Tamil Nadu Forest Department			
	Police Department			









TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 01-01-2024

Activities Carried Out	Cleaning of oil affected Mangrove stretches at Ennore area (Temple area and Near Lock Bridge)						
	In view of New Year – No activity for Oily sludge & Oily water						
Machineries Deployed:	 In view of New Year – No activity for Oily sludge & Oily water Boats –20 Nos. So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed – Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal JCB – 1 No. Truck/ Tipper – 8 Nos. Tata ace – 1 Nos. Hydras– 1 No. 						
	Gully sucker – 2 Nos.						
Manpower	CPCL	CPCL 248 (in Boat =20 x 4 = 80,Machinery labours = 12, M/s. Viraj Clean Sea Enterprises - 85, M/s. Sea Care services - 46, M/s. Vens Hydra lift Pvt ltd - 0, M/s. Neo win india limited- 25)					
Material Removed:	Oily Water Nil						
	Soil with oil Sludge	Sludge Nil					
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)			
	By CPCL	as on 01.01.2024	5,425	410			
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078			
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294			
Mangrove Stretches	grove Cleaning activities carried out in Mangrove stretches reported by the Forest Department						



Remarks:	• C	il affected manarove stratche	s woro clo	anad at Ennora area	(Tomplo area	and Near Lock			
Remains.	 Oil affected mangrove stretches were cleaned at Ennore area (Temple area and Near Lock Bridge). 								
			s carried ou	t in other stratches					
		 Today, no oil cleaning work was carried out in other stretches. Details of Stretch for oil cleaning operation from Ennore Creek to Buckingham Canal: 							
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 29.12.2023	Details of oily water and oily sludge removed from 12.12.2023 onwards			
	1.	Creek Mouth to Ennore Bridge (Nettu Kuppam, Ennore Kuppam, Thazhan Kuppam, Mugathuvara Kuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as			
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	on 01.01.2024 is			
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	2,20,040 litres and oily sludge			
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	removed as on 01.01.2024 is			
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	663.5 Tonnes and the same is sent to the			
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Work in progress	CPCL			
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Work in progress	premises for further			
						treatment and disposal.			
	* Ev	en though the cleaning work	s were com	pleted in the above 5	stretches (Sl.				
	* Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action								
CPCL Official present:		.N.Suresh, Senior Manager							
		amala Kannan, DGM							
		urushothaman, Manager							
Covernment	Mr. T. Ravi, Assistant Manager								
Government Official Present:		amil Nadu Pollution Control Bo							
		irector of Environment & Clima		;					
		evenue Department							
		reater Chennai Corporation							
		isheries Department amil Nadu Forest Department							
		•							
	Police Department								







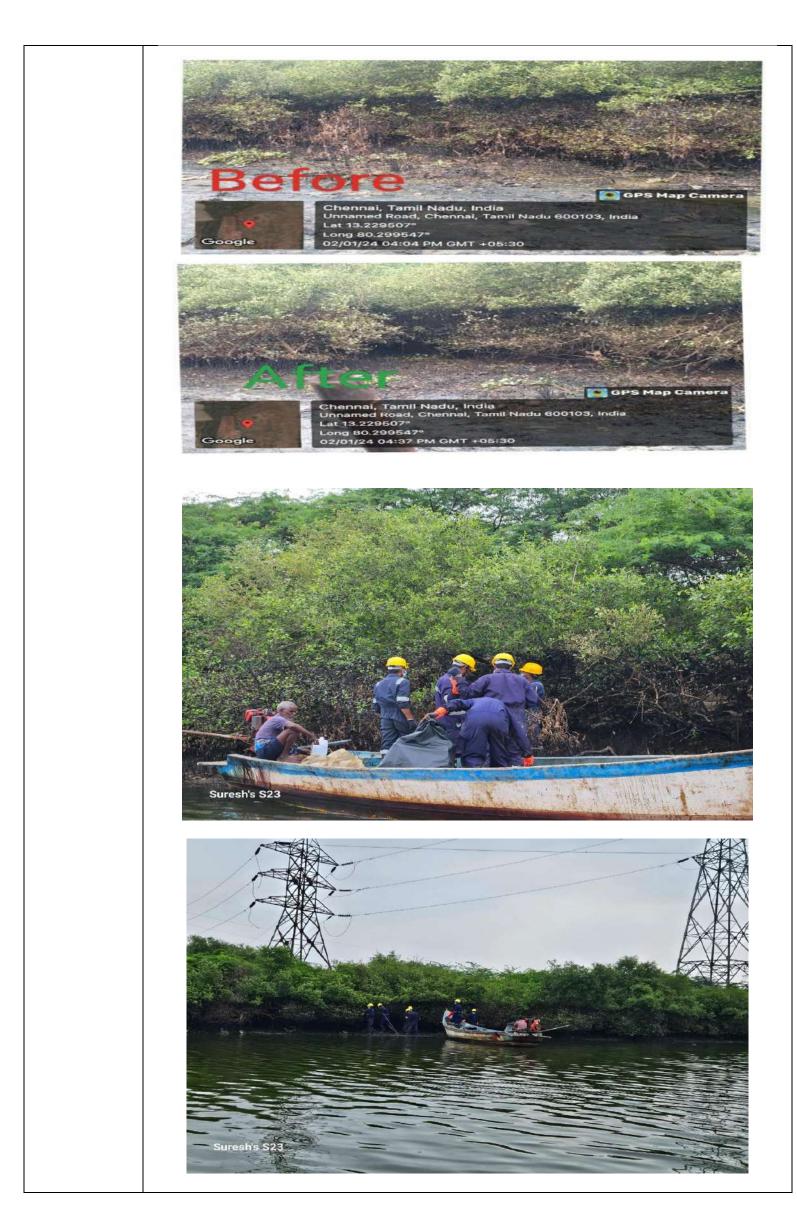


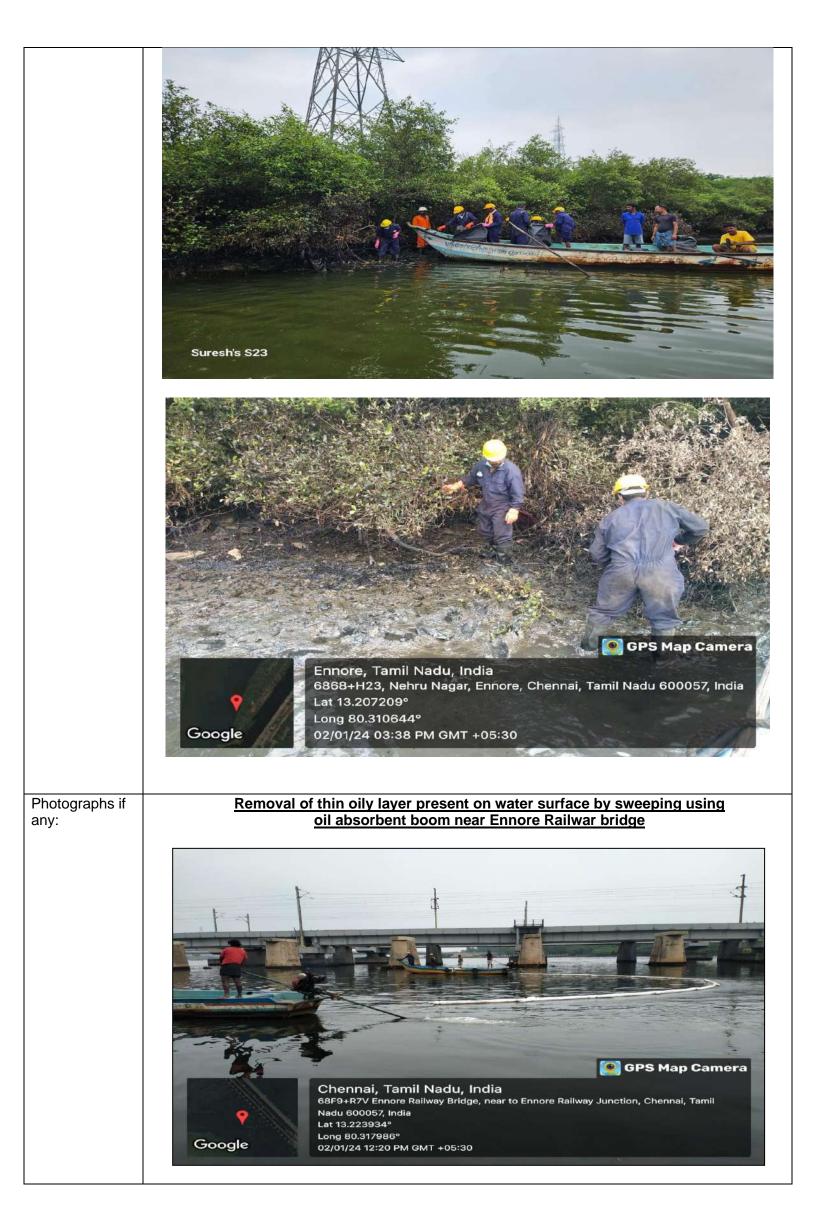
TAMIL NADU POLLUTION CONTROL BOARD

ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 02-01-2024

	 Cleaning of shores by manually and removing of oily water by using soft booms under Ennore Railway bridge area 							
	• Cleaning of thin oily layer patches present on water surface between Temple area at							
		Kattukuppam and Ennore Railway Bridge by sweeping using oil absorbent boom						
	Cleaning of oil affected Mangrove stretches at Temple area, Lock bridge and Pathukannu bridge							
Machineries	Boats –20 Nos.							
Deployed:	 Boats -20 Nos. So far installed Booms 							
	 Oil Boom 300 m long installed							
	 Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge 							
	 Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 							
	\circ 50 m long light boom and 50 m hard boom installed –SivanpadaiVeethi							
	o 250 m B ● Truck/ Tipper –	oom at the mouth of the E	Buckingham Canal					
	 Tata ace – 1 No 							
	Hydras- 1 No.							
Manpower	Gully sucker – 7 CPCL	<u>′ Nos.</u> 239 (in Boat =20 x 4 = 8	0 Machinery Jahours -1	3 M/s Virai Clean Sea				
manpower				/s. Vens Hydra lift Pvt Itd				
Material	Oily Water	- 0, M/s. Neowin india lim Nil	nited-25)					
		INII						
Removed:	Soil with oil Sludge Nil							
	5							
Detail of	NCCR collected Surfac	e water samples – 09 nur	nbers					
Detail of Sample Collection:	5	e water samples – 09 nur	mbers					
Detail of Sample Collection: Health Camp	NCCR collected Surfac	e water samples – 09 nur	mbers Total Screened	Skin related issues				
Detail of Sample Collection:	NCCR collected Surfactor Ground water samples Description	e water samples – 09 nur – 08 numbers Period	Total Screened (in Nos)	(in Nos)				
Detail of Sample Collection: Health Camp	NCCR collected Surfac Ground water samples Description By CPCL	e water samples – 09 nur – 08 numbers Period as on 01.01.2024	Total Screened (in Nos) 5,425	(in Nos) 410				
Detail of Sample Collection: Health Camp	NCCR collected Surface Ground water samples Description By CPCL Mobile camp by Health department	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023	Total Screened (in Nos) 5,425 14,241	(in Nos) 410 2,078				
Detail of Sample Collection: Health Camp	NCCR collected Surfac Ground water samples Description By CPCL Mobile camp by Health department Static camp by	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to	Total Screened (in Nos) 5,425	(in Nos) 410				
Detail of Sample Collection: Health Camp details	NCCR collected Surfac Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department	e water samples – 09 nur – 08 numbers Period <u>as on 01.01.2024</u> 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023	Total Screened (in Nos) 5,425 14,241 1,638	(in Nos) 410 2,078 294				
Detail of Sample Collection: Health Camp	NCCR collected Surfac Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove st	Total Screened (in Nos)5,42514,2411,638retches reported by the	(in Nos) 410 2,078 294 e Forest Department				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surfac Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WO	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES -	Total Screened (in Nos)5,42514,2411,638retches reported by the	(in Nos) 410 2,078 294 e Forest Department				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surfac Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES -	Total Screened (in Nos)5,42514,2411,638retches reported by the	(in Nos) 410 2,078 294 e Forest Department				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surface Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WO Total Manpower: 85 no	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES -	Total Screened (in Nos)5,42514,2411,638retches reported by the PROGRESS REPOR'	(in Nos) 410 2,078 294 Forest Department T (02.01.2024)				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surface Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WO Total Manpower: 85 no	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES - s.	Total Screened (in Nos)5,42514,2411,638retches reported by the PROGRESS REPOR'	(in Nos) 410 2,078 294 Forest Department T (02.01.2024)				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surfactor Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WOIL Total Manpower: 85 no Total number of boats decleaning work	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES - s. leployed : 20 nos. and 20	Total Screened (in Nos) 5,425 14,241 1,638 retches reported by the PROGRESS REPOR' cutting equipment's we	(in Nos) 410 2,078 294 Forest Department T (02.01.2024)				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surface Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WOI Total Manpower: 85 no Total number of boats d cleaning work Today cleared area: 320	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES - s.	Total Screened (in Nos) 5,425 14,241 1,638 retches reported by the PROGRESS REPOR' cutting equipment's we ock bridge and 3. Pathuk	(in Nos) 410 2,078 294 Forest Department T (02.01.2024)				
Detail of Sample Collection: Health Camp details Mangrove	NCCR collected Surface Ground water samples Description By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car OIL REMOVAL WOI Total Manpower: 85 no Total number of boats d cleaning work Today cleared area: 320	e water samples – 09 nur – 08 numbers Period as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove str RK IN MANGROVES - s. leployed : 20 nos. and 20 0 m, 1. Temple area, 2. Lo uning of the oil affected br	Total Screened (in Nos) 5,425 14,241 1,638 retches reported by the PROGRESS REPOR' cutting equipment's we ock bridge and 3. Pathuk	(in Nos) 410 2,078 294 Forest Department T (02.01.2024)				





Remarks:	<complex-block></complex-block>					
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 02.01.2024	Details of oily water and oily sludge removed from 12.12.2023 onwards
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam,	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water
	2.	MugathuvaraKuppam) Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	on 02.01.2024 is
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	2,20,040 litres and oily sludge
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in	removed as on 02.01.2024 is
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	this stretch* Cleaning work completed in	663.5 Tonnes and the same
	6.	Land area near Sathyamurthy Nagar bridge CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai M/s. Neo win India Ltd, Chennai	this stretch* Work in progress Work in progress	is sent to the CPCL premises for further treatment
		en though the cleaning works e cleaning is carried out on d	-	-		and disposal.

CPCL Official present:	Mr.M.N.Suresh, Senior Manager				
	Mr. Kamala Kannan, DGM				
	Mr.Purushothaman, Manager				
	Mr. T. Ravi, Assistant Manager				
Government Official Present:	Tamil Nadu Pollution Control Board				
	Director of Environment & Climatic Change				
	Tamil Nadu Forest Department				
	 Tamil Nadu Pollution Control Board Director of Environment & Climatic Change 				









ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 03-01-2024

Activities Carried Out	 Cleaning of thin oily layer patches present on water surface between Temple area at Kattukuppam and Ennore Railway Bridge by sweeping using oil absorbent boom Cleaning of oil affected Mangrove stretches at Log bridge and Pathukannu bridge area 						
Machineries Deployed:	 Boats –20 Nos So far installed Oil Bool Two Bool Oil Bool Oil Bool Oil Bool Oil Bool 50 m loi 250 m Bool 250 m Bool Tractor trolley - Trata ace – 1 No. Hydra– 1 No. Mini truck – 1 No. 	 Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed- between Road Bridge and Railway Bridge Oil Boom 80 m long installed - Railway Bridge 50 m long light boom and 50 m hard boom installed -SivanpadaiVeethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley - 1 No. Tata ace - 1 No. 					
Manpower	Grass cutting n CPCL	222 (in Boat =20 x 4 = 8	a Care services - 26, N	6, M/s. Viraj Clean Sea I/s. Vens Hydra lift Pvt Itd			
Material Removed:	Oily Water	Nil					
Detail of Sample Collection:	Soil with oil Sludge Surface water samples	Nil s – 06 numbers					
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)			
	By CPCL	as on 01.01.2024	5,425	410			
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078			
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294			
Mangrove Stretches	OIL REMOVAL WC Total Manpower: 90 nc Total Equipment's : 20 work Today cleared area: 21	boats, 45 cutting equipme	PROGRESS REPOR	T (03.01.2024)			

		<u>Removal of thin oily</u> oil absor		ent on water surface near Ennore Railwa		using
Remarks:	bi	vil affected mangrove stretche ridge area				
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 03.01.2024	Details of oily water and oily sludge removed from 12.12.2023
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam, MugathuvaraKuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	onwards Total quantity of oily water removed as
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	on 03.01.2024 is
		Doilway Dridge to entrance of	1.0	M/s. Viraj Clean Sea	Cleaning	2,20,040
	3.	Railway Bridge to entrance of Buckingham canal		Enterprises, New Delhi	work completed in this stretch*	litres and oily sludge
	3. 4.		0.1		completed in this stretch* Cleaning work completed in	sludge removed as on
		Buckingham canal Entrance of Buckingham canal to		Delhi M/s.Vens Hydra Lift	completed in this stretch* Cleaning work completed in this stretch* Cleaning work completed in	sludge removed as on 03.01.2024 is 663.5 Tonnes and the same
	4.	Buckingham canal Entrance of Buckingham canal to Sivan padai Veedu Sivan Padai Veedhi to	0.1	Delhi M/s.Vens Hydra Lift Pvt Ltd, Chennai M/s. Neo win India	completed in this stretch* Cleaning work completed in this stretch* Cleaning work	sludge removed as

CPCL Official present:	Mr.M.N.Suresh, Senior Manager		
	Mr. Kamala Kannan, DGM Mr.Purushothaman, Manager		
	Mr. T. Ravi, Assistant Manager		
Government Official Present:	Tamil Nadu Pollution Control Board		
	Director of Environment & Climatic Change		
	Tamil Nadu Forest Department		









ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 04-01-2024

Activities Carried Out	Cleaning of oil affected Mangrove stretches at Log bridge and Pathukannu bridge area						
Machineries Deployed:	 Boats -20 Nos. So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed –Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley – 3 No. Tata ace – 1 No. Grass cutting machine – 2 Nos. 						
Manpower	CPCL	222 (in Boat =20 x 4 = 80 Enterprises - 85, M/s. Sea - 0, M/s. Neowin india lim	a Care services - 26, M				
Material Removed:	Oily Water	Nil					
	Soil with oil Sludge	Nil					
Detail of Sample Collection:	Surface water samples	s – 06 numbers					
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)			
	By CPCL	as on 01.01.2024	5,425	410			
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078			
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294			
Mangrove Stretches	OIL REMOVAL WO Total equipment's- 2 mangrove work. No of manpower- 90 m Total sites- 2 sites, 1. Total area cleared- 33 Total garbage collect 1 floating excavator ma m and 35 bags of soil h	Health department26.12.2023Cleaning activities carried out in Mangrove stretches reported by the Forest DepartmentOIL REMOVAL WORK IN MANGROVES - PROGRESS REPORT (04.01.2024)Total equipment's- 20 boats, 45 cutting Equipments and 10 shovels were used today for					
Remarks:	bridge area	ove stretches were cleane n for oil cleaning operatio					

	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 04.01.2024	Details of oily water and oily sludge removed from 12.12.2023 onwards		
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam, MugathuvaraKuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as on		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	04.01.2024 is 2,20,040 litres and oily		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	sludge removed as on		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	04.01.2024 is 663.5 Tonnes		
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	and the same is sent to the CPCL		
	6. 7.	Land area near Sathyamurthy Nagar bridge CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai M/s. Neo win India	Work in progress Cleaning	premises for further		
				Ltd, Chennai	work completed in this stretch	treatment and disposal.		
	*Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action							
CPCL Official		.N.Suresh, Senior Manager						
present:		amala Kannan, DGM						
	Mr.P	urushothaman, Manager						
	Mr. T	. Ravi, Assistant Manager						
Government Official Present:	• D	amil Nadu Pollution Control B irector of Environment & Clim amil Nadu Forest Department	atic Change)				







ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 05-01-2024

Activities Carried Out	Cleaning of oil affected Mangrove stretches at Log bridge and Pathukannu bridge area						
Machineries Deployed:	 Boats -20 Nos. So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed –Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley – 2 Nos. Tata ace – 1 No. Grass cutting machine – 2 Nos. 						
Manpower	CPCL	212 (in Boat =20 x 4 = 8 Enterprises - 85, M/s. Se - 0, M/s. Neowin india lim	a Care services - 16, M				
Material Removed:	Oily Water	Nil					
	Soil with oil Sludge	Nil					
Detail of Sample Collection:	Surface water samples	s – 08 numbers					
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)			
	By CPCL	as on 01.01.2024	5,425	410			
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078			
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294			
Mangrove Stretches	Static camp by 10.12.2023 to 1,638 294						
Remarks:	Oil affected mangree bridge area	a mucronata (9) and Ex	d of about 450 m at Lo	g bridge and Pathukannu			
	Details of Stretch	h for oil cleaning operation	on from Ennore Creek	to Buckingnam Canal:			

	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 05.01.2024	Details of oily water and oily sludge removed from 12.12.2023 onwards		
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam, MugathuvaraKuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as on		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	05.01.2024 is 2,20,040		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	litres and oily sludge removed as		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift P∨t Ltd, Chennai	Cleaning work completed in this stretch*	on 05.01.2024 is 663.5 Tonnes		
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	and the same is sent to the		
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Work in progress	CPCL premises for		
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Cleaning work	further		
					completed in this stretch	treatment and		
	*E	n though the cleaning work		alatad in the above 5	stratahas (SL)	disposal.		
		en though the cleaning works						
CPCL Official		e cleaning is carried out on d	ally Dasis Io	or any carryover of o				
present:		.N.Suresh, Senior Manager amala Kannan, DGM						
		urushothaman, Manager						
	Mr. T	. Ravi, Assistant Manager						
Government Official Present:		amil Nadu Pollution Control B						
		irector of Environment & Clim amil Nadu Forest Department	C C					





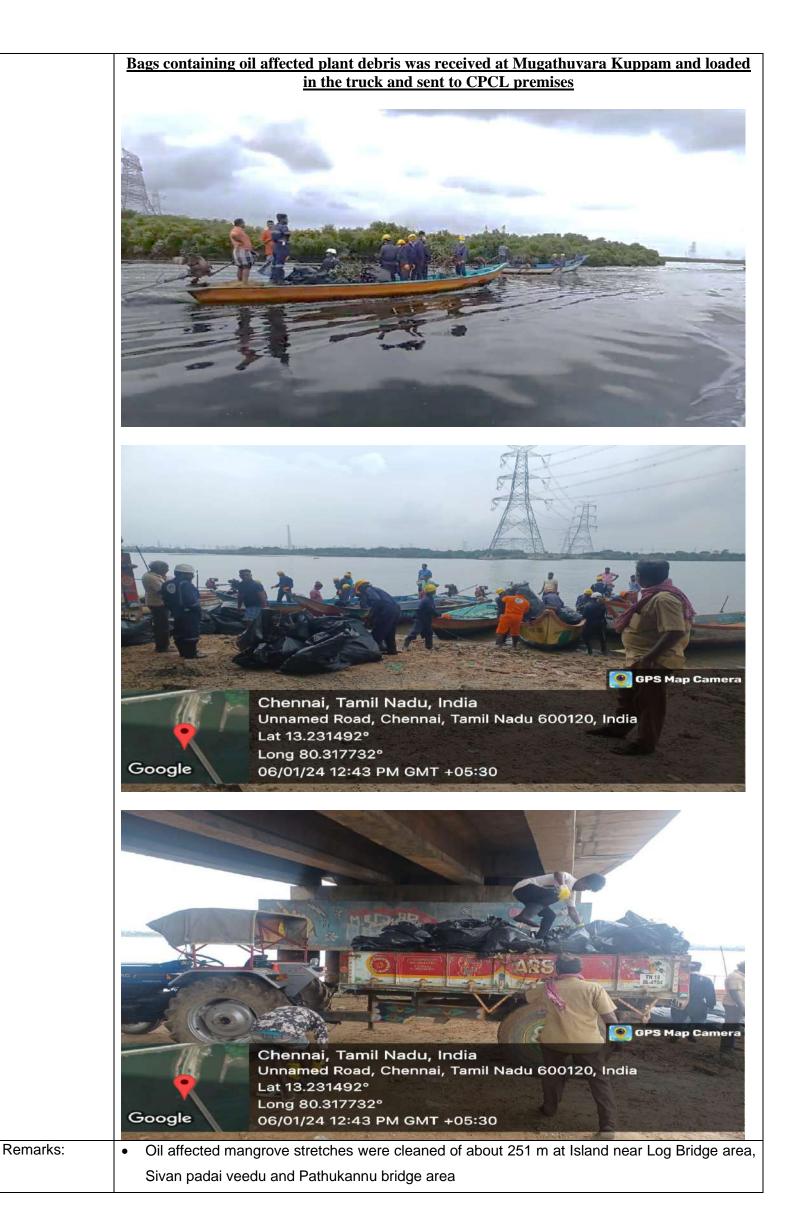




ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 06-01-2024

Activities Carried Out	Cleaning of oil affected Mangrove stretches at Island near Log Bridge area, Sivan padai veedu and Pathukannu bridge area					
Machineries Deployed:	 Boats –20 Nos. So far installed Booms Oil Boom 300 m long installed– Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed– between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed –Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley – 2 Nos. Tata ace – 1 No. Grass cutting machine – 2 Nos. 					
Manpower	CPCL	212 (in Boat =20 x 4 = 80	a Care services - 16, N	6, M/s. Viraj Clean Sea I/s. Vens Hydra lift Pvt Itd		
Material Removed:	Oily Water	Nil				
	Soil with oil Sludge	Nil				
Detail of Sample Collection: Health Camp	Surface water samples	s – 08 numbers				
details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)		
	By CPCL	as on 01.01.2024	5,425	410		
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078		
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294		
Mangrove Stretches Photographs if	Static camp by 10.12.2023 to 1,638 294					
any:						



		Details of Stretch for oil clea	aning opera	ation from Ennore Cr	eek to Buckin	igham Canal:		
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 06.01.2024	Details of oily water and oily sludge removed from 12.12.2023 onwards		
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam, MugathuvaraKuppam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as on		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	06.01.2024 is 2,20,040 litres and oily		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	sludge removed as on		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	06.01.2024 is 663.5 Tonnes		
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	and the same is sent to the CPCL		
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed	premises for further		
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed	treatment and disposal.		
	*Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore cleaning is carried out on daily basis for any carryover of oil due to tidal action							
CPCL Official		N.Suresh, Senior Manager	any busis -		II uut to taun	action		
present:	Mr. K	amala Kannan, DGM						
		urushothaman, Manager						
		. Ravi, Assistant Manager						
Government Official Present:		amil Nadu Pollution Control Bo		.				
		amil Nadu Forest Department	· ·	5				









ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 07-01-2024

Activities Carried Out	The workers were unable to carry out cleaning work today due to the rain.						
Machineries Deployed:	 Boats – Nil. So far installed Booms Oil Boom 300 m long installed– Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed– between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed –Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley – Nil. Tata ace – Nil. Grass cutting machine – Nil. 						
Manpower Material	CPCI Oily V		Nil Nil				
Removed:							
Health Camp	Soil v	vith oil Sludge	Nil				
details		Description		eriod	Total Screened (in Nos)		ated issues n Nos)
				1.01.2024	5,425		410
		bile camp by alth department		2.2023 to 2.2023	14,241	4	2,078
	Stat	tic camp by	10.12	2.2023 to	1,638		294
	Hea	alth department	26.1	2.2023			
Mangrove Stretches	Nil						
Photographs if	Nil						
any:							
Remarks:	D		for oil clea	ning operat	ion from Ennore Cre		
	SI. No	Stretch N	ame	Distance (Km)	Agency Engaged	Status of work as on 06.01.2024	Details of oily water and oily sludge
							removed from 12.12.2023 onwards
	1.	Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam, MugathuvaraKupp	bam)	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as on 06.01.2024 is 2,20,040
	2.	Ennore Bridge Bridge (Kattukuppakam)	to Railway	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	litres and oily sludge removed as on

	3. 4. 5.	Railway Bridge to entrance of Buckingham canal Entrance of Buckingham canal to Sivan padai Veedu Sivan Padai Veedhi to Sathyamurthy Nagar	1.0 0.1 6	M/s. Viraj Clean Sea Enterprises, New Delhi M/s.Vens Hydra Lift Pvt Ltd, Chennai M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch* Cleaning work completed in this stretch* Cleaning work completed in	06.01.2024 is 663.5 Tonnes and the same is sent to the CPCL premises for further treatment and disposal.
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	this stretch* Cleaning work completed	
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed	
		en though the cleaning works e cleaning is carried out on d	-	-		
CPCL Official present:		.N.Suresh, Senior Manager ´amala Kannan, DGM				
		urushothaman, Manager . Ravi, Assistant Manager				
Government Official Present:	• T	amil Nadu Pollution Control Bo				
		irector of Environment & Clima amil Nadu Forest Department	0	•		





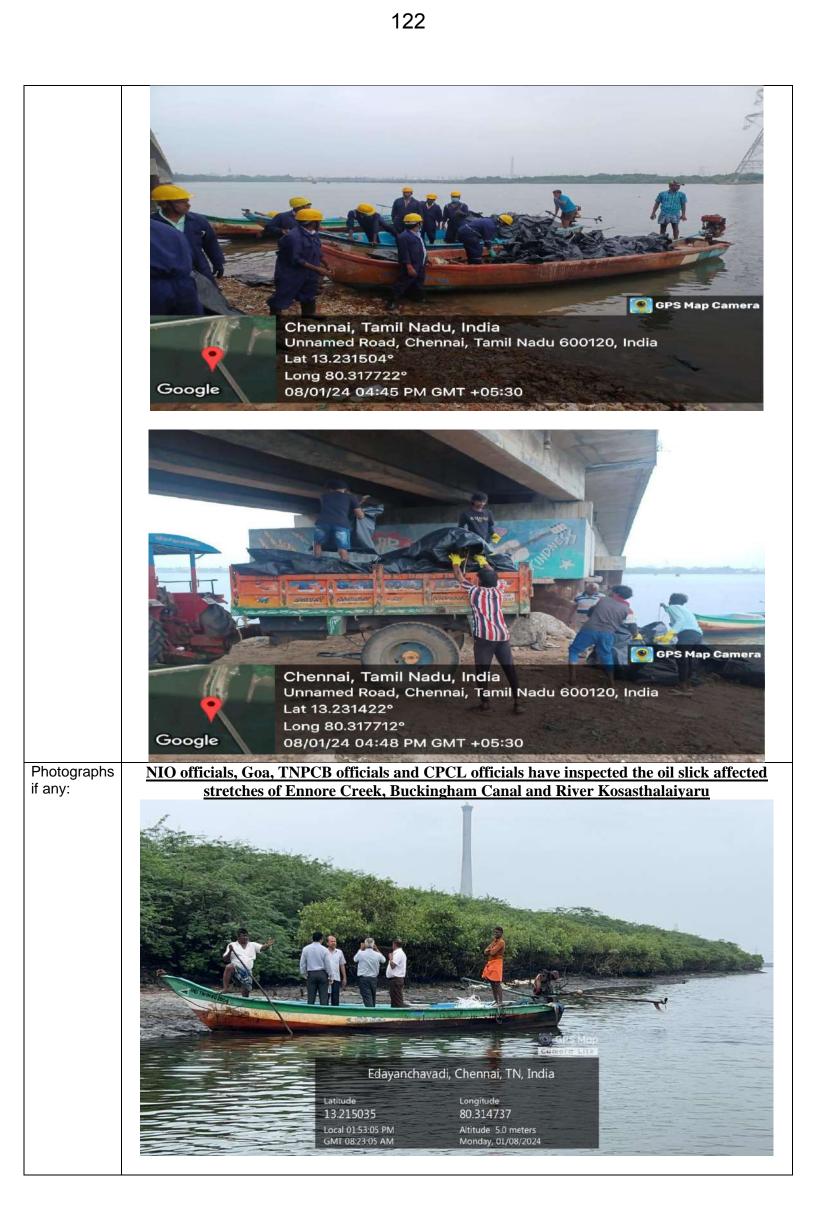


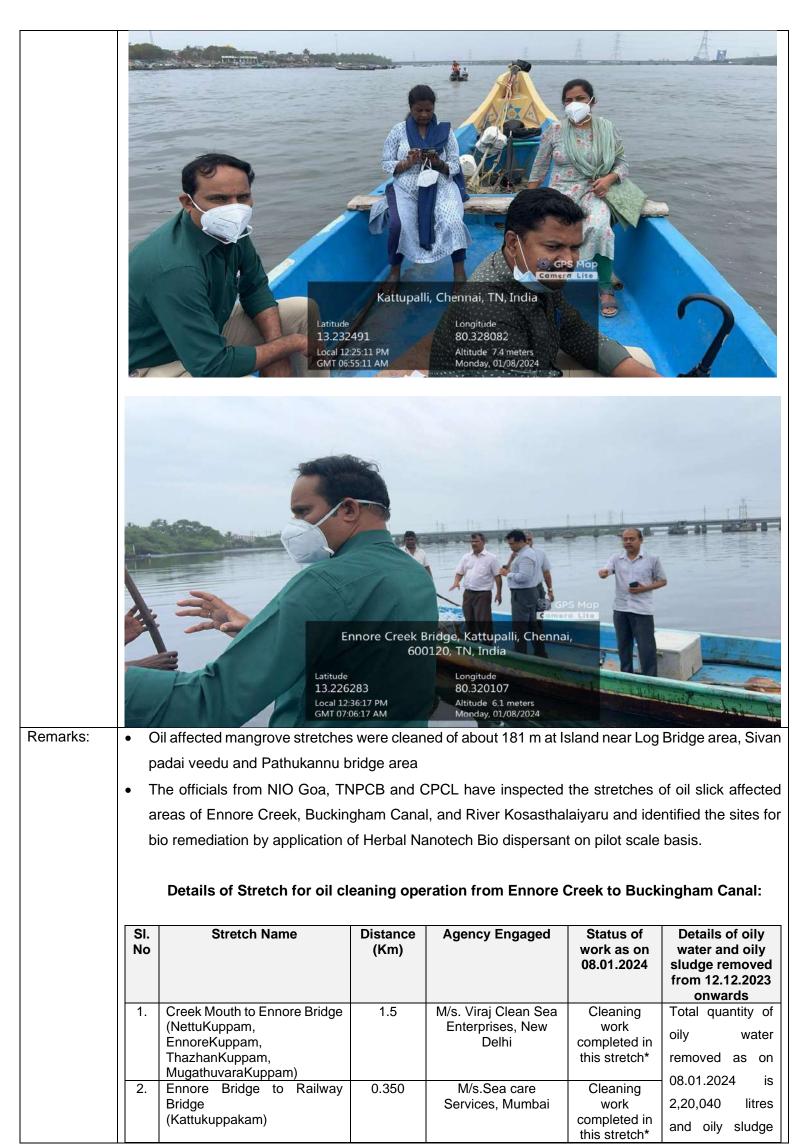


ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 08-01-2024

Activities Carried Out	Cleaning of oil affected Mangrove stretches at Island near Log Bridge area, Sivan padai veedu and Pathukannu bridge area					
Machineries Deployed:	 Pathukannu bridge area Boats -20 Nos. So far installed Booms Oil Boom 300 m long installed- Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed- between Road Bridge and Railway Bridge Oil Boom 80 m long installed - Railway Bridge 50 m long light boom and 50 m hard boom installed - Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley - 2 Nos. Tata ace - 1 No. Hydra - 1 No. Gully sucker - 1 No. 					
Manpower	CPCL	196 (in Boat =20 x 4 = 80,Machinery labours =6, M/s. Viraj Clean Sea Enterprises - 85, M/s. Sea Care services - 0, M/s. Vens Hydra lift Pvt ltd - 0, M/s. Neowin india limited-25)				
Material Removed:	Oily Water	Nil				
	Soil with oil Sludge	Nil				
Health Camp details	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)		
uetalis	By CPCL	as on 01.01.2024	5,425	410		
	Mobile camp by Health department	06.12.2023 to 20.12.2023	14,241	2,078		
	Static camp by Health department	10.12.2023 to 26.12.2023	1,638	294		
Mangrove Stretches	Cleaning activities carried out in Mangrove stretches reported by the Forest Department Mangrove restoration work in Ennore - Daily progress report (08.01.2024) Total equipment's- 20 boats, 45 cutting Equipments, 10 shovels were used today for mangrove v No of manpower- 75 nos Total sites- 3 sites, 1. Island near Log Bridge area, 2. Sivan padai veedu 3. Pathukannu bridge Total area cleared- 181 m. Total garbage collected today - 254 bags.					





	3. 4. 5.	Railway Bridge to entrance of Buckingham canal Entrance of Buckingham canal to Sivan padai Veedu Sivan Padai Veedhi to Sathyamurthy Nagar	1.0 0.1 6	M/s. Viraj Clean Sea Enterprises, New Delhi M/s.Vens Hydra Lift Pvt Ltd, Chennai M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch* Cleaning work completed in this stretch* Cleaning work	removed as on 08.01.2024 is 663.5 Tonnes and the same is sent to the CPCL premises for further treatment
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	completed in this stretch* Cleaning work completed	and disposal.
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed	
	*Even though the cleaning works were completed in the above 5 stretch cleaning is carried out on daily basis for any carryover of oil due to tidal					
CPCL Official present:	Mr.M.N.Suresh, Senior Manager Mr. Kamala Kannan, DGM Mr.Purushothaman, Manager					
Government	 Mr. T. Ravi, Assistant Manager Tamil Nadu Pollution Control Board 					
Official Present:	 Director of Environment & Climatic Change Tamil Nadu Forest Department 					









ENNORE CREEK OIL SPILL MANAGEMENT DAILY REPORT

Date: 09-01-2024

Activities Carried Out	Cleaning of oil affected	Mangrove stretches at Siv	an Padai Veedu area			
Machineries Deployed:	 Boats -20 Nos. So far installed Booms Oil Boom 300 m long installed – Ennore Creek Mouth Two Booms of 325 m long and 275 m at Ennore Bridge Oil Boom 100 m long installed – between Road Bridge and Railway Bridge Oil Boom 80 m long installed – Railway Bridge 50 m long light boom and 50 m hard boom installed –Sivanpadai Veethi 250 m Boom at the mouth of the Buckingham Canal Tractor trolley – 3 Nos. JCB – 1 No. Tata ace – 1 No. Gully sucker – 2 Nos. Grass cutting machine – 2 Nos. 					
Manpower	CPCL	188 (in Boat =20 x 4 = 80	a Care services - 0, M/s	M/s. Viraj Clean Sea . Vens Hydra lift Pvt ltd - 0,		
Material Removed:	Oily Water	Nil				
	Soil with oil Sludge	Nil				
Detail of Sample Collection:	NCCR collected surface water samples – 10 numbers and Ground water samples – 8 numbers collected through TNPCB Lab					
Health Camp	Description	Period	Total Screened (in Nos)	Skin related issues (in Nos)		
Health	Description By CPCL	Period as on 01.01.2024				
Health Camp			(in Nos)	(in Nos)		
Health Camp	By CPCL Mobile camp by	as on 01.01.2024 06.12.2023 to	(in Nos) 5,425	(in Nos) 410		
Health Camp	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to	(in Nos) 5,425 14,241 1,638 etches reported by the	(in Nos) 410 2,078 294 Forest Department		
Health Camp details Mangrove	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car Mangrove restoration	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove stree work in Ennore - Daily pr	(in Nos) 5,425 14,241 1,638 etches reported by the ogress report (09.01.2	(in Nos) 410 2,078 294 Forest Department		
Health Camp details Mangrove	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car Mangrove restoration Total equipment's- 20	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove stree work in Ennore - Daily pr boats, 45 cutting Equipm	(in Nos) 5,425 14,241 1,638 etches reported by the ogress report (09.01.2	(in Nos) 410 2,078 294 Forest Department 024)		
Health Camp details Mangrove	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car Mangrove restoration Total equipment's- 20 work. No of manpower- 74 no	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove stree work in Ennore - Daily pr boats, 45 cutting Equipm	(in Nos) 5,425 14,241 1,638 etches reported by the ogress report (09.01.2 ments, 10 shovels were	(in Nos) 410 2,078 294 Forest Department 024) e used today for mangrove		
Health Camp details Mangrove	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car Mangrove restoration Total equipment's- 20 work. No of manpower- 74 no	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove stree work in Ennore - Daily pr boats, 45 cutting Equipm	(in Nos) 5,425 14,241 1,638 etches reported by the ogress report (09.01.2 ments, 10 shovels were	(in Nos) 410 2,078 294 Forest Department 024) e used today for mangrove		
Health Camp details Mangrove	By CPCL Mobile camp by Health department Static camp by Health department Cleaning activities car Mangrove restoration Total equipment's- 20 work. No of manpower- 74 m Total sites- 3 sites, 1. Is	as on 01.01.2024 06.12.2023 to 20.12.2023 10.12.2023 to 26.12.2023 ried out in Mangrove stree work in Ennore - Daily pr boats, 45 cutting Equipm boats, 45 cutting Equipm bos sland near Log Bridge area	(in Nos) 5,425 14,241 1,638 etches reported by the ogress report (09.01.2 ments, 10 shovels were	(in Nos) 410 2,078 294 Forest Department 024) e used today for mangrove		



Photographs if any:



Remarks:	Oil affected mangrove stretches were cleaned of about 400 m at Sivan Padai Veedu area							
	 Bio-remediation process: - The water samples were collected from the Control site and T1, T2 locations before treatment of bio-dispersion. Also, the sediments were collected from the above 							
	said locations in various depths 2 cm, 5cm and 10 cm by the NIO team. The T3 location could not be reached by boat due to low tide at that time. The dilutions of bio dispersant were decided by visiting the sites with Dr. Sreepada. Details of Stretch for oil cleaning operation from Ennore Creek to Buckingham Canal:							
	SI. No	Stretch Name	Distance (Km)	Agency Engaged	Status of work as on 09.01.2024	Details of oily water and oily sludge removed from 12.12.2023 onwards		
	1.	Creek Mouth to Ennore Bridge (NettuKuppam, EnnoreKuppam, ThazhanKuppam,	1.5	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	Total quantity of oily water removed as on		
		MugathuvaraKuppam)				09.01.2024 is		
	2.	Ennore Bridge to Railway Bridge (Kattukuppakam)	0.350	M/s.Sea care Services, Mumbai	Cleaning work completed in this stretch*	2,20,040 litres and oily sludge removed as on		
	3.	Railway Bridge to entrance of Buckingham canal	1.0	M/s. Viraj Clean Sea Enterprises, New Delhi	Cleaning work completed in this stretch*	09.01.2024 is 663.5 Tonnes and the same is		
	4.	Entrance of Buckingham canal to Sivan padai Veedu	0.1	M/s.Vens Hydra Lift Pvt Ltd, Chennai	Cleaning work completed in this stretch*	sent to the CPCL premises for		
	5.	Sivan Padai Veedhi to Sathyamurthy Nagar	6	M/s. Neo win India Ltd, Chennai	Cleaning work completed in this stretch*	further treatment and disposal.		
	6.	Land area near Sathyamurthy Nagar bridge	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed			
	7.	CMDA steel yard area	-	M/s. Neo win India Ltd, Chennai	Cleaning work completed			
	*Even though the cleaning works were completed in the above 5 stretches (Sl. No 1 to 5), shore							
	cleaning is carried out on daily basis for any carryover of oil due to tidal action							
CPCL	Mr.M.N.Suresh, Senior Manager							
Official present:	Mr. Kamala Kannan, DGM							
	Mr.Purushothaman, Manager							
	Mr. T. Ravi, Assistant Manager							
Government Official	Tamil Nadu Pollution Control Board							
Present:	Director of Environment & Climatic Change							
	• T	amil Nadu Forest Department						

Health Screening



AdiDravidar (AD) Colony Eranvur Mr JayaramanCouncillor Ward 4



Sathyamurthy Nagar Mr Samuel Diraviyam Councillor Ward 6



ThallanKuppam Mr Sivakumar Councillor Ward 1



Ennore CreekMr Sivakumar Councillor Ward 1



Medicine for Zone 1 & 2



Veterinary Camp conducted in affected areas













Fire & Rescue services stationed at site



BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE, CHENNAI.

Original Application No. 180 of 2023 (SZ) And Original Application No. 183 of 2023 (SZ)

SUOMOTU based on the Visual media titled Chennai Rains Makkalai Vathaikkum Oil Companies- Shocking Story - Michaung Ground Report covered by on VIKATAN TV Chennai dt.06.12.2023

Vs

The District Collector Chennai District And Ors

...Respondents

With

R.L. Srinivasan, Chennai.

.. Applicant

Versus

The Tamil Nadu Coastal Zone Management Authority,Rep. by its Member Secretary, Chennai and Ors.

...Respondent(s)

REPORT FILED ON BEHALF OF THE RESPONDNET -TAMIL NADU POLLUTION CONTROL BOARD

Advocate for Respondent:TNPCB Thiru.S. Sai Sathya Jith , Advocate, Chennai.

Date:10.01.2024.

Date of hearing on:11.01.2024