

Copy No. :



INDIAN COAST GUARD

(MINISTRY OF DEFENCE)

PROCEEDINGS

OF THE

22ND NOS-DCP AND PREPAREDNESS MEETING

10 AUG 2017

CONTENTS

Sl.	Topic	Page
1.	Proceedings of the 22 nd NOS-DCP and Preparedness Meeting 2017	1-2
2.	Inaugural Address by DG Rajendra Singh, PTM, TM, DGICG	3-6
3.	Presentation on “NOS-DCP Overview” by Commandant Bhim Singh Kothari, Director (Environment), Indian Coast Guard	7-10
4.	Presentation on “Combating Oil Spill in Port Limits” by Capt. AK Gupta, General Manager (MS), Kamarajar Port Ltd, Chennai	11-13
5.	Presentation on “Shoreline Cleanup – Way forward” by Mr Thiru R. Kannan, Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai	14-19
6.	Discussions and decisions on actionable points of previous meeting	20-22
7.	Discussions and decisions on new agenda points	23-28
8.	Concluding address by DGICG	29
9.	Actionable points of 22 nd NOS-DCP and Preparedness Meeting	30
10.	Glimpses of 22 nd NOS-DCP and Preparedness Meeting	31-33
11.	Programme	34
12.	List of Participants	35-40



CENTRAL COORDINATING AUTHORITY
भारतीय तटरक्षक/INDIAN COAST GUARD
तटरक्षक मुख्यालय/COAST GUARD HEADQUARTERS
राष्ट्रीय स्टेडियम परिसर/NATIONAL STADIUM COMPLEX
नई दिल्ली/NEW DELHI - 110001

टेलीफैक्स: +91 11 2307 4131
वेब: www.indiancoastguard.gov.in
ई-मेल: dte-fe@indiancoastguard.nic.in

Telefax: +91 11 2307 4131
Web: www.indiancoastguard.gov.in
E-mail: dte-fe@indiancoastguard.nic.in

EP/0720/22nd Meeting

Date : 21 September 2017

**Proceedings of the Twenty Second National Oil Spill Disaster Contingency Plan
(NOS-DCP) and Preparedness Meeting held at New Delhi on 10 August 2017**

1. The Twenty Second National Oil Spill Disaster Contingency Plan (NOS-DCP) and Preparedness meeting was held at India International Centre, 40, Max Mueller Marg, New Delhi on 10 Aug 2017. Director General Rajendra Singh, PTM, TM, Director General Indian Coast Guard, chaired the meeting. The meeting witnessed an active participation from various government departments, ports and oil companies. 102 representatives from 47 organizations attended the meeting.
2. The Chairman in his Inaugural address welcomed the delegates from various Ministries, Departments of the Central and State Government, Coast Guard Commanders & Regional Commanders of Indian Coast Guard, members from major ports, non-major ports, oil handling agencies and oil installation onshore. The text of the Chairman's Inaugural Address is placed at **Annexure 'A'**.
3. The Inaugural Address was followed by an overview of NOS-DCP activities since the last meeting held in Aug 2016 by Commandant Bhim Singh Kothari, Director (Environment). The presentation highlighted the need for early submission of Contingency Plans and provisioning of Pollution Response equipment at each facility to meet the obligation of NOS-DCP. Activation of online submission for Annual returns, reports on Joint Inspections and uploading of facility contingency plans with stakeholders login through ICG Webpage, training and cleanup operation undertaken were also highlighted in the presentation. A handout of the presentation is placed at **Annexure 'B'**.

4. A presentation was delivered on 'Combating Oil Spill in Port Limits' by Capt. AK Gupta, General Manager (MS), Kamarajar Port Ltd, Chennai. A handout of the presentation is placed at **Annexure 'C'**.
5. A presentation was delivered on 'Shoreline Cleanup – Way forward' by Mr Thiru R. Kannan, Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai. A handout of the presentation is placed at **Annexure 'D'**.
6. The important issues discussed and deliberated upon during the NOS-DCP meeting include preparation of Local Contingency Plans, Surveillance systems by ports against illegal discharge, Promulgation of 'No OSD Use' area, Use of OSD in Indian waters, Facility Contingency Plan and positioning of PR equipment at facilities, Monitoring Health of Marine Environment, OSD Disposal Centre and Inclusion of Rep of State Administration in joint Tier-1 Inspection. The discussions and decisions on Actionable Points of previous meetings and New Agenda points are placed at **Annexure 'E'** and **Annexure 'F'** respectively.
7. In the concluding remarks, the Chairman appreciated active participation by sharing of professional knowledge from all stakeholders during the proceedings. He also emphasised on lessons learnt and recommendations made by the presenters, which need to be incorporated for future operations. He emphasised that cohesiveness amongst stakeholders, frequent interaction and exercises at various levels for sharing of professional knowledge will enhance the robustness of the national system, for meeting the future challenges of pollution response. Lastly, the Chairman called upon all stakeholders for pledging to work together to make our marine environment pollution free by the 75th anniversary of our independence on 15 August 2022. The text of the Chairman's concluding address is placed at **Annexure 'G'**.
8. A summary of actionable points is placed at **Annexure 'H'**. Glimpses of 22nd NOS-DCP and preparedness meeting 2017 is placed at **Annexure 'J'**. The programme of the meeting and the list of delegates attending the meeting are placed at **Annexure 'K'** and **Annexure 'L'** respectively.



(Bhim Singh Kothari)
Commandant
Director (Environment)

INAUGURAL ADDRESS



Inaugural address
by
Director General Rajendra Singh, PTM, TM
Director General Indian Coast Guard
Chairman NOS-DCP

INAUGURAL ADDRESS BY THE DGICG
22ND NOS-DCP MEETING AT IIC, NEW DELHI, 10 AUG 17

1. Coast Guard Commanders, Officials representing various Ministries and Departments of the Central and State Governments, Members representing ports and oil handling agencies, Other stakeholders and distinguished participants. A very good morning, and warm welcome to you all, for the 22nd NOS-DCP and Preparedness meeting.
2. Ladies and gentlemen, unlike the past couple of years which have been largely incident free, we have witnessed four incidents of grounding and collision since the last NOS-DCP meeting on 05 Aug 16. One particular incident of collision between the MT Dawn Kanchipuram and MV Maple off Kamarajar Port, Ennore on 28 Jan 17 was particularly acute, with an estimated spill of about 196.4 metric tonnes of bunkers.
3. Despite prompt and coordinated response initiated by the Coast Guard, State Administration and Ennore Port, it was not long before the oil reached the shores as the spill had occurred less than 3 ½ kilometers from the port. 37 kilometers of Tamilnadu coastline was impacted by the spill, with Ramakrishana Nagar Kuppam area suffering the most damages. 37 agencies worked shoulder to shoulder for 14 days during the intense shoreline cleanup, to remove oil, and oily debris. The sincere and dedicated efforts put in by all concerned, speak volumes of our resolve and commitment, in tiding over such contingencies.
4. Besides, timely submission of claims by affected parties helped us in effecting quick relief and compensation, to the tune of about 9 crore rupees, recovered from the polluter.
5. If I have to express one concern related to the operation, it would be limited usage of safety gear, by personnel engaged in the shoreline cleanup operations. I would, therefore, like to appeal that in future operations, the concerned authorities may kindly consider kitting up of personnel with proper safety gear, when they are deployed to work in a hazardous environment, such as that created by an oil spill.
6. Having said that, just as any spill, the Ennore oil spill also offered as some points for

introspection. The valuable experience gained is being utilized to fine-tune our procedures, so that we can undertake pollution response operations at sea, and at shorelines, in a more professional and sound manner.

7. While the *Dawn Kanchipuram* spilled her bunkers and we are done with the cleanup, *MV Qing* grounded in Mormugao port on 29 June 2016, with approximately 350 tons of bunker fuel, continues to pose an imminent threat of oil spill and damage to the marine environment, as the fuel is yet to be removed from the wreck till date, despite a lapse of more than one year since her grounding.

8. I am of the opinion that, this case merits serious introspection, by all concerned agencies. There is also an urgent need to plug-in the loopholes, in the legal and administrative system, so that such cases may be swiftly handled in the future, and the marine environment protected from any harm.

9. Ladies and gentlemen, the Indian Coast Guard has been insisting on early formulation of facility oil spill contingency plan, and provisioning of necessary response equipment. I am happy to note that, since the last NOS-DCP meeting, there has been positive response from all of you, and a number of contingency plans have been received at the Coast Guard Headquarters. I assure that, while you make dedicated efforts from your side, the Coast Guard will continue to go all out in your support, and provide you the best possible services in meeting the national objective to preserve and protect the marine environment, and control marine pollution.

10. It certainly needs no emphasis that training and exercises are the key components of preparedness to meet any emergent situation, and the Indian Coast Guard has been regularly conducting training and exercises for all stakeholders.

11. I would request all ports and oil agencies, to make arrangements for adequate numbers of qualified and trained personnel as per the NOS-DCP. Should the need be felt for any additional training modules, other than those scheduled in the annual training programme, kindly feel free to discuss your specific needs with the local Coast Guard office, and you have my personal assurance, that the requirement **will be met** by the Coast Guard.

12. Joint inspection of ports and oil handling agencies for oil pollution response preparedness, is another area which needs focus. The objective is to ensure standardization of SOPs, and updating of necessary records. The inspections also facilitate in undertaking functional checks of response equipment, and testing of the facility contingency plan.

13. Therefore, I would urge wholehearted involvement of all the stakeholders in the inspections, and request that, deficiencies indicated be made good, in a time bound manner.

14. As regards the national level oil spill exercises, NATPOLREX-VI was conducted in December 2016, and the Gulf of Kutch was chosen as the theatre for the exercise, considering its marine eco-sensitivity as well as the fact that the Gulf of Kutch accounts for nearly 70% of oil handled in India.

15. It is my pleasure to say that not only did the participating agencies demonstrate their oil pollution response capability and a very high order of professionalism but also, it was the first time ever that such a large scale participation has been witnessed during the NATPOLREX exercise. While I would like to thank one and all, for their contribution in making the exercise a resounding success, I personally believe that mutual learning is an important part of our exercises and interactions. For example, the ONGC has a crack Crisis Management Team which has responded to many major incidents. We could certainly benefit from their valuable experience.

16. Moving on to larger perspectives, it would be agreed that the marine environment is under severe stress and we have a collective responsibility for its mitigation. As you would be aware, the Indian Coast Guard has launched 'Swachh Sagar Abhiyan' in line with the Government of India's 'Swachh Bharat Abhiyan,' with the objective of extending the campaign to the maritime zones of India. Here, I would like to thank all the stakeholders for their positive synergy during various cleanup campaigns undertaken over the past year.

17. I would also like to take this opportunity urge all of you, to regularly undertake cleanup drives, and we will be glad to publish photographs of the event in our Blue Waters Newsletter, if they are forwarded to the Coast Guard Headquarters.

18. As you are all aware, the target set for achieving the goal of 'Swachh Bharat Abhiyan' is

2nd October 2019. I would humbly propose that we work synergistically to achieve the goal of 'Swachh Sagar Abhiyan' by 15th August 2022, when India celebrates her 75th year of Independence.

19. Before I conclude, I would like to add that the OPRC-HNS Convention is likely to come into force shortly, and all ports are expected to commence their preparations for smooth implementation of the provisions of the Convention, as and when it is incorporated in the Merchant Shipping Act. The best way to start is to begin, and the NOS-DCP 2015 edition already carries a few basic elements for consideration in the facility plan. Therefore, all contingency planners may develop their plans taking into consideration the possible aspects of HNS incidents.

20. Finally, I would like to compliment the members for their active participation in the contingency planning process, which is reflected in the action taken report, and the agenda proposals that we have received. I look forward to successful and positive deliberations during the meeting.


Vayam Rakshamah.... Jai Hind.

**PRESENTATION
ON
NOS-DCP OVERVIEW**



Presentation on "NOS-DCP Overview"
by
Commandant Bhim Singh Kothari
Director (Environment)

NOS-DCP OVERVIEW




OVERVIEW OF NOS-DCP

1/25

INDIA'S MARITIME STAKE

- 2.01 million sq km of EEZ (2/3rd of India's Continental mass)
- 7516 km coastline
- 9 Coastal states / 4 UTs
- 12 Major & 200 non-major ports
- Majority of industries along the coast
- 2.5 lakh fishing vessels (2nd Largest in world)



2/25

RISK OVERVIEW

- 2nd largest consumer of oil after China
- 70% of the world oil demand through the SLOCs
- Major ports of India handle over 7,000 tankers each year
- Over 80 companies are in operation in 228 offshore blocks and fields
- 6th largest energy market
- Production 32-33 mmtpa



3/25


TRANSFER OF RESPONSIBILITY

- Coast Guard Act 1978, mandates ICG
 - ✓ "Take such measures as are necessary to preserve and protect the maritime environment and to prevent and control marine pollution"
- Central Coordinating Authority for Marine Pollution Control in 1986,
- 2002 Amendment to the Government of India (Allocation of Business) Rules, 1961
 - ✓ Central Coordinating Agency for combating oil spills
 - ✓ Implement Contingency Plan for oil Spill Disaster

4/25

CHRONOLOGICAL ORDER OF NOS-DCP

- First promulgated in July 1996
- Updated in 1998, 1999, 2000, 2002, 2006, and comprehensively revised in 2015
- Originally designed for responding to oil spills in Indian Waters
- NOS-DCP facilitates national preparedness to HNS incidents and also fulfils obligation to have in place national plan to respond to HNS incidents



5/25

NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN

- Mandates
 - ✓ Coastal states – Local Contingency Plan for shoreline cleanup
 - ✓ Ports, OHAs and Oil Installation onshore – Facility Contingency Plan for Tier-I response



6/25

STATUS OF LOCAL CONTINGENCY PLAN

Coastal States and U/T	13
Plans received by CGHQ since last NOS DCP	02
Plans approved till date	01
Plans awaited	10



7/25

FACILITY CONTINGENCY PLAN

Agencies	Number	Plans received by ICG since last NOS-DCP	Plans approved till date	Plans awaited
Major Ports	12	05	01	06
Non-Major Ports	26	07	01	18
Oil Handling Agencies	20	10	Nil	10
Oil Installation on Shore	24	03	Nil	21

8/25

TRAINING



9/25

IMO LEVEL 1 TRAINING

- Develop pool of trained manpower for meeting National PR commitments
- Conducted by PRTs and ICGS Vadinar
- 1894 personnel from both public and private sector trained till date



94 personnel trained since last NOS-DCP

10/25

IMO LEVEL 2 TRAINING

- The Indian Coast Guard jointly with AMET University, Chennai conducts IMO OPRC Level II training at Chennai
- 40% of faculty assistance provided by Coast Guard
- 52 Coast Guard Officers and 324 personnel from stakeholders trained till date



Next IMO OPRC Level II course is scheduled from 28 Aug - 01 Sep 17

11/25

MOCK DRILLS AND EXERCISES

**43 Mock Drills/ Seminars and
25 Local Pollution Response Exercises
conducted since last NOS-DCP**



12/25

NATIONAL LEVEL POLLUTION RESPONSE EXERCISE

- NATPOLREX VI conducted on 20-21 Dec 16 in Gulf of Kutch
- 19 Units of ICG, Stakeholders and Resource agencies participated

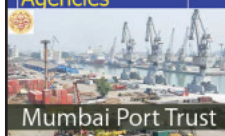


13/25

JOINT INSPECTION

- Ensure professionalism and standardisation of pollution response technique
- JI undertaken by reps from ICG & MoS and ICG & OISD, for Major Ports and Oil Handling Agencies respectively

Agencies	Total	Joint Inspections Planned	Joint Inspections conducted
Major Ports	12	12	01
Oil Handling Agencies	20	10	Commencing post monsoon



ANNUAL RETURNS (2017-18)

Agencies	Total	Received	Not Received
Major Ports	12	06	06
Non-Major Ports	26	08	18
Oil Handling Agencies	20	10	10
Oil Installation Onshore	24	08	16

15/25

DIGITAL INDIA CAMPAIGN

- Provision for uploading of Annual Return and Contingency Plan through Environment module on ICG website.
- Stakeholders data automatically transmitted
 - ✓ Coast Guard HQ
 - ✓ Coast Guard Regional HQ
 - ✓ Coast Guard District HQ



Agencies	Total	Registered till date
Major Ports	12	03
Non-Major Ports	26	14
Oil Handling Agencies	20	12
Oil Installation Onshore	24	Nil

16/25

OIL SPILL OPERATION

- On 28 Jan 17 at about 0515 MRCC, Chennai received information regarding collision between MT Dawn Kanchipuram and MT BW Maple
- MT Dawn Kanchipuram was in bound and MT BW Maple outbound
- Incident took place at 0345 hrs on 28 Jan 17 near fairway buoy Kamarajar Port



MT Dawn Kanchipuram

17/25

OIL SPILL OPERATION

- Approx 02 tons oil spill reported
- PR operation immediately launched by ICG and Kamarajar Port
- Incident occurred approx 1.8 n mile (3.3 km) from the port
- Spilt oil reached the coastline within 33 hrs



18/25

OIL SPILL OPERATION

- Total 37 agencies removed maximum oily contaminated debris within 14 days
- Investigations reveal approx **196.4 MT** of bunker oil spilt
- **Compensation claimed**

Chennai Port Trust	US\$ 189,919.00
Kamarajar Port Ltd	US\$ 282,777.00
Indian Coast Guard	US\$ 413,113.00
Ennore Tank Terminal Pvt Ltd	US\$ 440,411.00
Indian Oil Corporation	US\$ 50,796.00
Bharat Petroleum Corporation Ltd	US\$ 3,848.00
Total	US\$ 13,80,864.00

19/25

INTERNATIONAL COASTAL CLEANUP

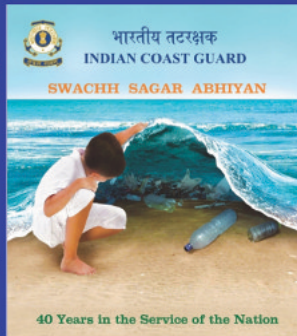
- 3rd Saturday of every Sep
- Last ICC conducted on 17 Sep 16
- Nationwide participation across all coastal states
- 20,062 individuals participated
- Approx 72,805 Kgs marine litter collected
- In addition two cleanup drive undertaken



20/25

PROTECTION OF MARINE ENVIRONMENT

- 'Swachh Sagar Abhiyan' launched Apr 16
- Objective to extend GoI drive of 'Swachh Bharat Abhiyan' to Maritime Zones of India
- Synergy towards Goal through collective responsibility
- **Targets**
 - ✓ 'Swachh Bharat Abhiyan' 02 Oct 19
 - ✓ 'Swachh Sagar Abhiyan' 15 Aug 22



21/25

CONCLUSION

- Collectively join hands to synergies efforts
- Meet obligation towards National Oil Spill Disaster Contingency Plan
- Contribute to preserve and protect marine environment and prevent and control marine pollution
- Leave a legacy of clean seas for future generations



22/25



"Cleaner Seas"
a way towards
"Swachh Bharat Abhiyan"

23/25



Thank you



24/25

**PRESENTATION
ON
COMBATING OIL SPILL
IN PORT LIMITS**



Presentation on
"Combating Oil Spill in Port Limits"
by
Capt. AK Gupta, General Manager (MS)
Kamarajar Port Ltd, Chennai

COMBATING OIL SPILL IN PORT LIMITS

Kamarajar Port Limited
(erstwhile Ennore Port Limited)
(A Mini Ratna Govt. of India Undertaking)



Welcomes

**All
to
22nd NOS DCP**


10 August 2017

- KPL handles chemicals, petroleum products and LPG in a dedicated terminal (MLT).
- As per the guidelines issued by the Ministry of Shipping, the Kamarajar Port was categorized as “Category B” port by ICG.
- Accordingly Port has procured the required inventory of TIER-I , OSRE

LIST OF OSRE AT KAMARAJAR PORT		
Item	Description	Quantity
1	Boom (Internal Rectangular type Foam Filled Boom) Including 4nos of Boom Reel) Boom Repair Kit for Boom	1000 m (40 Sec.) 2 Sets
2	Skimmer (Recovery capacity ranging from 20 to 25 TPH). Equivalent Power pack for Skimmer. Equivalent Valve and Spark Arrestor Set	4 Pcs 4 Pcs
3	Sorbent Boom Pack Sorbent Pads (1.4 x 1.3 feet (+/- 0.2), 25 pieces in a box)	50 pieces (5inc dia X 10 feet length) (each pack contain 5 pieces) 35 Boxes
4	Flex Barge (Floating Oil Bladder LFT) (5 KL) including 2sets Repair Kit for Flex Barge.	4 Nos.
5	Oil Spill Dispersant concentrate - Type II &III	4500 L
6	IMO Level 1 -6 persons	3 persons
7	IMO Level 2 - 2 Persons	2 persons
8	Others-10 Persons	11 persons (7 from berth side and 4 from craft side)
9	Work boats-2	2 Launch
10	Tugs-2	2 Tugs

VESSEL COLLISION IN ENNORE SEA WATER

The collision of the two vessels **M.T. Dawn Kanchipuram** and **B.W.Maple** occurred at the approach waters of Kamarajar Port on **28.01.2017** around **0345 hrs.** The said incident occurred **1.7 Nautical Miles** from North Break




REMEDIAL ACTION

- As a first step of remedial action, Tug Liberty cast off from jetty for assisting Vessel MT Dawn Kanchipuram.
- Vessel taken in cold move for anchoring. Mooring launch cast off from Jetty with Oil Boom and handed over to Tug.
- LPG/C BW Maple dropped anchor at outer anchorage.
- The booms were deployed cordoning the ship in such a way to avoid any spillage in the sea water around the vessel and thereby spillage in the seawater was controlled.
- Simultaneously a report sent to Indian Coast Guard, DG (Shipping), MMD, TNPCB Ambattur &MRCC (Maritime Rescue Coordination Centre) through mail.

ACTION FOR COMBATING OIL SPILLED

In terms NOSDCP the Coast Guard has also monitored the steps being taken by the port in moving the vessel, discharging the cargo and the cleaning up activity performed.

Safety measures in accordance with the TIER-1 Oil Spill Response Equipments (OSRE) was engaged and steps as per National Oil-spill Disaster Contingency Plan (NOSDCP) were initiated.



COMBATING OPERATION INSIDE THE PORT

For combating the oil spill due to the collision the following OSR equipments were deployed and following action were taken.

- The subject vessel was shifted safely to Oil jetty to unload the cargo from the ship.
- The vessel was put into constant vigil so as to arrest any further leakage to avoid the pollution in the sea water.
- About 500 mtrs. booms were deployed to avoid spreading spilled oil further in the sea.
- Skimmers were used to skim the spilled oil and transferred the oily mixture to the shore
- The skimmed oil mixture and oil sludge collected from the port are stored in the safer custody for recycling/incineration with the approval of Govt. authorities.
- On confirmation that there was no leakage from the subject vessel, she was shifted to idle berth.



Bio Remediation process with support from IOCL was carried out for about 160 Tons of Mixture of oil, water and sludge and about 25 Tons of oil mixture sand



MOCK OIL SPILL DRILLS CONDUCTED

1. 14.10.2009 – in presence of Coast Guard
2. 29.09.2011- at MLT jetty
3. 08.06.2012 – at Channel entrance
4. 19.02.2013- Turning circle
5. 10.12.2013 – Channel
6. 07.08.2014- MLT jetty
7. 21.11.2014- Near finger jetty
8. 14.07.2015- Near finger jetty
9. 12.12.2015- Near Coal berth
- 10.12.05.2016- Near GCB
- 11.11.11.2016- Near Oil jetty
12. 04.04.2017- Turning Circle



INSPECTION OF THE FACILITIES AT PORT BY AUTHORITIES.

1. 14.10.2009 – Indian Coast Guard
2. 17.07.2015- Ministry of Shipping, GoI.
3. 04.04.2017- ICG, MMD



OIL SPILL MOCK DRILL



OIL SPILL MOCK DRILL



ICG may suggest/recommend to use the synthetic Bio material (eco friendly) instead of oil at the time of mock drills on combating the oil spills to ensure the effective function of OSR equipments.

SUGGESTION

- All the ports are equipped with requisite OSRE to combat oil spills within the port, For combating of oil spill outside the breakwater, a study has to be carried out. The committee has to be formed consisting of members from port to take a decision in this regard.
- NOS-DCP required to be revisit and modified accordingly.
- ICG may identify/recommend the OSR equipment's and BIO- chemicals for compacting the oil spills.
- The ICG approved list of firms dealing with OSR equipments may included in the NOS-DCP.



Thank you



**PRESENTATION
ON
SHORELINE CLEANUP –
WAY FORWARD**



Presentation on
"Shoreline Cleanup – Way forward"
by
Mr Thiru R. Kannan, Joint Chief Environmental Engineer
Tamil Nadu Pollution Control Board, Chennai

SHORELINE CLEANUP – WAY FORWARD



PRESENTATION ON SHORELINE CLEANUP- WAY FORWARD

Collision of ships at Kamarajar Port Limited on 28.01.2017 resulting in Oil Spill. Massive Clean-up Operations undertaken by TNPCB in co-ordination with State Government and with the assistance of Central Government Agencies

R.Kannan, JCEE, TNPCB, Chennai.

INCIDENT REPORTED

- ❖ At around 04:00 IST on 28th January 2017, 'M.T.BW MAPLE' (IMO:9320752) Flag ISLE OF MAN carrying LPG and 'M.T.DAWN KANCHIPURAM' (IMO:9116917) Flag INDIAN carrying POL met with collision out-side harbour while M.T.BW MAPLE was being outbound vessel and M.T.DAWN KANCHIPURAM was inbound vessel.
- ❖ At a depth of 17m, the vessel MT Dawn Kanchipuram sustained damage to the heavy fuel oil tank which led to spillage of oil.



- ❖ The officials of TNPCB had contacted Indian Coast Guard for cleanup of the said oil spill. A team of 25 work force along with two Assistant Commandants reached the site and commenced shoreline clean-up operations. Considering the magnitude of slick washed ashore, the work force was inadequate.
- ❖ As the spillages of oil affects the marine environment, the Tamil Nadu Pollution Control Board has taken regulatory action.

Mitigation Measures

- ❖ All Authorities were informed for taking necessary steps.
- ❖ Coast Guard's Vessel & Helicopter were deployed for using dispersants to break the oil slick observed in the sea.
- ❖ The available equipments like skimmers, super suckers, floating booms, oil dispersants, absorbent pads, etc have been put into use by both the Ports and Coast Guard to contain oil spread and cleaning of the spill.
- ❖ Manual removal of sludge had been carried out due to the coagulation of the spilt oil into slimy sludge
- ❖ For augmenting the on going Cleaning operations, Cavity Pumps and High Pressure Jet Pumps were used.

GAPS IN REPORTING

- Nature and properties of bunker oil which spilt in to the sea was not reported by the ship management and Kamarajar Port.
- The quantity of oil discharged in to the sea was not precisely assessed and reported.
- Extent of damage occurred to the ship bunkers was not reported.
- Inaccurate assessment of damage was reported only by observing the sea water surface around the ship. Oil leaked from the bottom of the ship was not considered. The oil boom laid for surface containment was ineffective.

INCOMPATIBILITY OF EQUIPMENT

- Available equipment was not suitable for removal of oil slick which had hardened in to slime. Manual cleaning was resorted to as there was no other option.
- No trained response team equipped with oil spill cleanup equipments was available with Kamarajar Port and the oil major corporations for effective response.
- Coast Guard vessels could not be maneuvered to the shallow areas adjacent to the shore to facilitate spraying of dispersants.
- Small boats with oil spill response equipments were not available with any agencies/authorities.

Action Taken by Tamil Nadu Pollution Control Board

- ❖ Rendering assistance to the District Collector and other lead agencies for shoreline clean-up.
- ❖ Facilitating restoration measures of the affected shoreline/coastal areas.
- ❖ Collected samples of oil sludge and Sediments for analysis.
- ❖ Initiated regulatory action as per the provisions of environmental legislations.
- ❖ Initiated action for storage & treatment of oil sludge/oil residue waste.
- ❖ Action has been taken to constitute Technical Expert Committee to assess the environmental damage and provide necessary remedial measures.

TASK FORCE MEETING

- ❖ The Chief Secretary to Government had held a meeting on 31.01.2017 with all the stake holders to initiate massive clean-up operation in Tiruvallur, Chennai and Kancheepuram Districts for mitigating the oil spill and resultant contamination of sea and coastal stretches due to the deposition of oily sludge and sediments spreading over a coastal length of around 60 kms

The respective District Collectors and following stakeholders joined for augmenting shoreline clean-up operations

State Government

- ❖ Revenue Department
- ❖ Directorate of Environment
- ❖ Forest Department
- ❖ Health and Family Welfare Department
- ❖ Animal Husbandry and Fisheries Department
- ❖ Greater Chennai Corporation
- ❖ Tamilnadu Pollution Control Board (TNPCCB)
- ❖ Highways and Minor Port Department
- ❖ Chennai Metro Water and Sewerage Board
- ❖ Tamilnadu Fire and Rescue Services Department
- ❖ Tamil Nadu Police Department
- ❖ Coastal Security Group (CSG)
- ❖ State Disaster Response Force (SDRF)

Central Government

- ❖ Ministry of Shipping
- ❖ Indian Coast Guard
- ❖ Director General(Shipping)
- ❖ Mercantile Marine Department
- ❖ Ministry of Environment Forest and Climate Change
- ❖ Central Pollution Control Board
- ❖ Ministry of Petroleum and Natural Gas
- ❖ ISRO
- ❖ Indian Navy

Continued...

Sea Ports

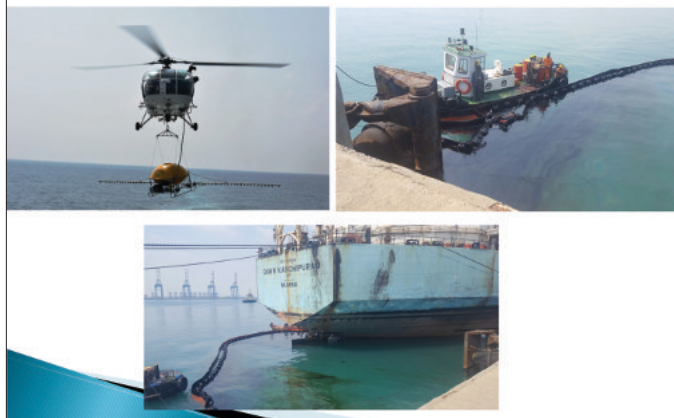
- ❖ Chennai Port Trust
- ❖ Kamarajar Port Trust
- ❖ Kattupalli Port

PSUs

- ❖ Indian Oil Corporation (IOCL), Chennai
- ❖ Hindustan Petroleum Corporation Ltd., (HPCL)
- ❖ Bharat Petroleum Corporation Ltd., (BPCL)

Various Non-Governmental Organizations, Marine Institutes, Educational Institutions and Fishermen Communities also participated

Deployment of Machines in Cleaning



Deployment of Machines in Cleaning



Manual Removal of Sludge at Ernavoor site

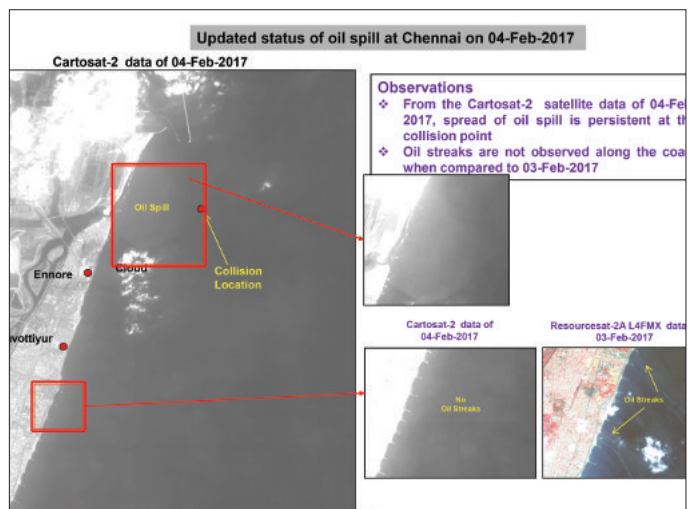


Cleaning of shore in Beaches



Beach at Kassimode Fishing harbour – Area before clean-up

Beach at Kassimode Fishing harbour – Area after clean-up



- ❖ More than 2000 persons were engaged from 01.02.2017 at various sites including Ernavoor, Chennai Fishing Harbour, Marina Beach, Besant Nagar, Kottivakkam, Palavakkam, Neelankarai and Injambakkam beaches;
- ❖ The following oil remnants has been collected as on 09.02.2017.
 - ❖ Oil & Sludge – 187 tonnes
 - ❖ Oil mixed with water – 109 KL
 - ❖ Tar & Sand Mixture – 81.5 tonnes.
- ❖ Around 8499 man days were used in the cleanup operations. The collected oil sludge and residues has been transported to KPL where bioremediation is being undertaken by specialists from R&D wing of Indian Oil Corporation Limited, Mumbai ,Kamarajar Port Limited Authorities in co-ordination with Tamilnadu Pollution Control Board.

Transportation & Disposal of sludge to Bio- Remediation Site at KPL



- ❖ Prof.S.Mohan, Indian Institute of Technology, Madras and R&D unit of Indian Oil Corporation Ltd., has been associated to provide technical expertise for proper collection and treatment of the oily sludge/residue
- ❖ The D.G Shipping conducted a meeting on 06.02.2017 with all stakeholders for assessing the compensation due to loss of livelihood to the fishermen community. During the meeting the Commissioner of Fisheries insisted that the insurer should provide forms and make the claim procedure simple as the fishing activity is very traditional and the fishing community is not as educated like their counterparts in the developed countries.

- ❖ Subsequently, a follow up meeting was held on 10.02.2017 with all the stake holders and the DG Shipping insisted the ship owners to take necessary action for cleanup of oil spill and oil sludge residues deposited on the rocks at Ernavoor by mobilizing resources at their cost.
 - ❖ The commissioner of fisheries was requested to prepare documents substantiating the financial loss incurred by the fishing communities so that necessary compensation could be obtained from the shipping company and it's insurance agents.
 - ❖ Director of Environment was requested to assess the Environmental impact due to the oil spill and cost involved for restoration of marine environment.

- ❖ As per the order of the Hon'ble NGT dated 01.02.2017 made in Application No. 14 of 2017 (SZ) the official of the CPCB and the State Pollution Control Board have inspected on 12.02.2017 the entire places where the effect of oil leakage as spread.
- ❖ During the joint inspection the CPCB inspected the rocky shore at Ramakrishnapuram Nagar Kuppan ,Bharathi Nagar Ernavoor where the major quantity of oil sludge was deposited , the Kamarajar Port Limited and the damaged ship MT Dawn Kanchipuram and the bio-remediation site at Kamarajar Port Limited. After the port inspection Chairman CPCB convened a meeting with all stake holders .

In the meeting it was concluded by the Chairmen of CPCB / TNPCB as follows:-

- ❖ The advance preparedness in dealing with such disasters would facilitate faster response and therefore contingency plan dealing with oil spill disasters, as suggested by the Indian Coast Guard, may be prepared by the State Government.
- ❖ The oil sludge waste which has been collected and stored in the premises of Kamarajar Port Ltd, is required to be disposed in a scientific manner as per Hazardous Waste Management Rules. Therefore, necessary authorisation for disposal of this waste has been given by Tamil Nadu State Pollution Control Board.

- ❖ Ecological status and restoration of marine Environment, requisite steps may be immediately undertaken by the Director of Environment, Chennai. For this purpose, services of experts including those from CPCB may be enlisted.
- ❖ The boom may continue to be placed in the sea till cleaning process is completed.
- ❖ Staff from Coast Guard may be posted in the area till rock cleaning operations are completed.

Inspection of Ernavoor shore by CPCB & TNPCB Officials



Inspection of Kamarajar Port and Damaged ship by CPCB & TNPCB Officials



Meeting convened by Chairman CPCB with stake holders



Rock cleaning operations at Ramakrishnanagar Kupppam Beach - Ernavoor

- ❖ The cleanup of rock boulders has been carried out with four numbers of Hot water high pressure washers which uses the fresh waters which is heated up to almost 70°C hot water high pressure flushers on the sea shore from 13th February 2017
- ❖ The booming operations and the skimming of oil can be carried out only when sea coast is not having rough weather with higher amplitude waves.
- ❖ High volume low pressure cold water flushing was also employed in boulders in order to release any oil trapped in rocks.

ROCK CLEANING



Medical Camps



- ❖ Nine Medical teams consisting of 25 Doctors , 30 Staff Nurses, Two pharmacist conducted health camps 30.01.2017 till 05.02.2017
- ❖ Four teams of hospital on wheels and two stationary Medical teams are continuing the duty to handle health issues

Cases Filed in the Hon'ble NGT

- ❖ Initially two cases are filed before the NGT Southern Zone Chennai
Application No 14 of 2017 ,Meenavar Nala Sangam Royapuram
Application No 16 of 2017 ,Saravanan Daksinamurthy Chennai
- ❖ Subsequently following two cases filed before the NGT Principal Bench New Delhi was transferred to NGT Southern Zone
Application No 38 of 2017 filed by Aswinikumar
Application No 40 of 2017 filed by P Somasundaram
- ❖ E & F Department filed Reply Affidavit on behalf of State of Tamilnadu
- ❖ The Case was Listed on 20.02.2017 & after hearing the case is posted on 13.03.2017

WAY FORWARD

- The state oil spill disaster contingency plan shall be finalized and made operational.
- District level oil spill disaster contingency plan should be defined with clear scope of control and responsibilities.
- All materials required for oil spill removal must be made available near the coast in all coastal districts in a designated area under the control of the responsible authorities like the proposed marine police station.
- Small fiber glass boats capable of holding oil spill response equipments and dispersants should be provided for all coastal districts.
- Directory of oil spill response team should be placed in the proposed marine police stations and regular training should be provided to the responders and frequent mock drills should be conducted to ensure co-ordinated effective emergency response to the oil spills.

Thank you
And wishing no more oil spills



ACTIONABLE POINTS OF PERVIOUS MEETING

DISCUSSIONS AND DECISIONS - ACTIONABLE POINTS OF PREVIOUS MEETING

1. Preparation of Local Contingency Plan.

Coastal States/ Union Territories to progress Local Contingency Plan for early promulgation and initiate necessary steps to form the local Action Group and Local Action Group Support Team for shoreline response to oil spills as per the NOS-DCP. As a part of the Local Contingency, Coastal States may also pursue provision of trailer mounted inventory for shoreline response to oil spills. Regional Commanders may continue to render guidance and support to the State Governments.

Deliberations

Director (Environment) apprised the chairman on the present status of Local Contingency plan. Since last NOS-DCP meeting, LCP of A&N Administration has been received and the same was scrutinized at CGHQ. Observations have been forwarded and updated plan post liquidation of observation is awaited. Concern was expressed over very slow progress being made on this front.

State Representatives were requested for updates. Gujarat, Maharashtra, Tamil Nadu, Orissa, and A&N apprised the Chairman on the progress on LCP and assured early submission to ICG.

COMCG(West) apprised the Chairman that not only ICG but communication from Cabinet Secretary Security office has been forwarded twice to all the coastal states Chief Secretaries on LCP, however there is limited progress made on this front.

Chairman assured all the stakeholders full cooperation and support from ICG. He opined that if someone takes one step, ICG would take three steps, but the first step should necessarily be that of the stakeholders.

Decision

Coastal States/ Union Territories to expedite preparation of LCP as it is the first step towards protection of marine environment. Coast Guard Regional Commanders to continue to provide assistance. **Point to be retained.**

Action by: All Coastal States/UTs

2. Fitment of oil detection system is critical for early detection of accidental/ unreported oil spills. All ports and oil agencies are to undertake fitment at an early date. All Regional Commanders are to monitor the progress.

Deliberations

Director (Environment) brought out that the possibilities of oil spill detection through Remote Sensing system have been explored and ONGC has taken up the Joint Pilot Project with National Remote Sensing Agency (NRSA). The project is for two years and currently KG Basin area of Eastern offshore is taken as study area. The same technology will be extended and adopted for all the offshore operational areas of ONGC after successful completion of this project.

Chairman appreciated the efforts of ONGC with regard to accidental/deliberate spill monitoring. He requested ONGC rep to apprise the meeting on the subject.

ONGC rep apprised that the project was initiated on directives from PMO on request of Ministry of Petroleum for utilization of Satellite Remote Sensing Technology by oil installations. ONGC was identified for the project and a MoU is being signed shortly. ISRO has the capability for the real time monitoring of spill movement and the pictures can be shared after 3 days interval. Instant spill movement can be traced and provided by ISRO on sharing of spill area coordinates in latitude/longitude, however, the service will be on payment basis. Alternately, the data can be shared after 03 days by ISRO.

DDG(OPS&CS) brought out that presently discussions are in progress on the pilot project by ONGC and on successful completion, all stakeholders views on the subject will be amalgamated thereafter.

Decision

ONGC to share progress on the project with CGHQ from time to time. **Point to be closed.**

Action by: All Coastal States/UTs, Ports & OHAs

3. **Promulgation of “NO OSD USE” area.**

On completion of Environment Sensitive Index Mapping by MoEF & CC, “**NO OSD USE**” area to be identified in consultation with MoEF & CC and other concerned agencies. The same will be promulgated through Chairman’s Circular.

Deliberations

Director (Environment) apprised the chairman that MoEF has intimated that Environment Sensitive Index Mapping has been completed and is awaiting vetting by Coastal States.

Decision

MOEF&CC to intimate CGHQ, on vetting of Environment Sensitive Index Mapping by Coastal states and UTs so that a technical committee can be constituted for identifying “**NO OSD USE**” area. **Point to be retained.**

Action by: MoEF & CC

NEW AGENDA POINTS

DISCUSSIONS AND DECISIONS ON NEW AGENDA POINTS

1. Use of OSD in Indian waters.

Guidelines for use of Oil Spill Dispersant (OSD) in Indian waters were promulgated in 2009 and the same needs to be reviewed. While reviewing, guidelines wrt use of bioremediation OSD may also be included.

Proposed by: CGHQ

Deliberations

Director (Environment) brought out that a number of companies are entering in manufacturing of OSD. Guidelines for use of OSD in Indian waters were promulgated by ICG in 2009 and since then, a number of stringent regulations have been brought in force by various countries with regard to testing of chemical OSDs. Further, bioremediation OSDs are also being used in PR Operations. Therefore, there is a need for a study to be undertaken with regard to regulations/directives in force on the subject in the developed countries and new guidelines be formulated for use of OSD in Indian waters.

Chairman requested NIO rep to elucidate on the issue as NIO was involved in formulating previous guidelines.

NIO rep brought out that as per toxicity protocol, toxicity above 10,000 PPM is considered safe i.e. non-toxic, however this concentration is considered very high. As per US Environment Protection Agency (EPA), the toxicity level between 1000 to 10,000 PPM is considered non-toxic. As on date, there is no compound/products by any company, which has these concentration. NIO generally quote/follow CG's protocol however for toxicity limitations US EPA standards are considered while testing the OSDs .

Decision

Testing standards are required to be stringent, so that, the marine environment is not polluted by adding toxic OSDs. A committee with reps from ICG, NIO, MOEF&CC, Ports, OHAs and other concerned stakeholders may be constituted for drafting fresh guidelines on the subject. **Point to be Retained.**

Action by: MoEF&CC, CGHQ, Ports, OHAs, NIO
and other concerned stakeholders

2. **Local and Facility Contingency Plan.**

Majority of major & non-major ports, oil handling agencies and oil installation onshore are not in possession of approved contingency plan and PR equipments as per NOS-DCP.

Proposed By: CGHQ

Deliberations

Director (Environment) apprised that as per para 4.5 of NOS-DCP, the local contingency plan for shoreline cleanup is to be maintained by the Coastal State. Every sea port facility, offshore oil installation and every oil installation onshore with a risk of marine oil or chemical pollution is required to maintain a facility contingency plan approved by the Coast Guard.

It was further brought out that the point has been deliberated over many years now and as the Chairman clearly brought out that there was a need to work with a deadline, since Contingency Plan is the first step for effective pollution response set up and we are unable to progress on this front.

Rep from Ministry of Shipping apprised the chairman that the Secretary Shipping had raised this issue with the Coastal States/UTs Chief Secretaries. Further, Ministry of Shipping has promulgated Central Sector Scheme for providing assistance to oil handling agencies, Major and Non Major Ports to procure pollution response equipment/material necessary for combating Tier-I oil spill, the scheme provides 50% fund assistance. Out of 38 ports identified, proposals from 13-14 Ports have been received by the Ministry of Shipping till date, thus the scheme has been now extended to FY 2019–20. Chief Secretaries of all Coastal States/UTs, CEOs of all State Maritime Boards and Chairman of all Major Ports have been requested to submit their proposals on priority.

Detailed discussions were held with regard to quantity of PR equipment, utility of booms in high current area and requirement of PR equipment by facility handling oil products. Director (Environment) clarified that all the apprehension of the stakeholders highlighting that the onus to combat Tier-I spill originating from a facility cannot be transferred to another stakeholder. Further, he brought out that during recent oil spill off Ennore, MT Kanchipuram was also a product tanker. Thereby, requesting all stakeholders to expedite meeting the NOS-DCP requirements on priority, is the only way out in meeting individual facility obligation for protection the marine environment.

Stakeholders brought out that as per existing requirement, they are required to obtain approval of ICG prior using dispersant during oil spill operation. Further, areas with high current will have negligible window of opportunity and seeking approval may lead to loss of the opportunity. Further, it was brought out that considerable time is being taken by ICG for approving contingency plan and in the process of approval a number of CG authorities forward observations in the plan. It was requested that consolidated observations if forwarded may save time. Chairman agreed to both the proposal and directed to withdraw approval requirements and workout procedure for forwarding consolidated observation for contingency plan.

Chairman appreciated the initiative of Ministry of Shipping in supporting stakeholders in procurement of PR equipment. Further, he highlighted the need of contingency plan and PR equipment at facility to meet the obligation of NOS-DCP which is inevitable and needs to be accomplished in a time bound manner.

Decision

The need for contingency plan and positioning of PR equipment at each facility has been deliberated over the years and requires to be accorded highest priority by all stakeholders. All facilities are to ensure that they have the ICG approved plan and the requisite Pollution Response equipment at their facilities by 31 Dec 19. ICG to revise provision of OSD approval and forwarding of observation while scrutinizing contingency plan. **Point to be retained.**

Action by: All Coastal States/UTs, CGHQ, Ports and OHAs

3. Monitoring Health of Marine Environment.

Marine environment has deteriorated over the years. Measures need to be taken to improve the health of marine environment. It is recommended that study on present health be undertaken by testing of water samples and six monthly progress report is to be submitted for publishing.

Proposed by: CGHQ

Deliberations

Director (Environment) brought out that Indian Coast Guard has been entrusted with the responsibility, for taking such measures as are necessary to preserve and protect the maritime

environment and to prevent and control marine pollution. Govt of India has initiated 'Swachh Bharat Abhiyan' for ensuring cleanliness including health of rivers. In line with the Govt of India policy, ICG has initiated 'Swachh Sagar Abhiyan'. Marine Stakeholders have been undertaking cleanup operation in their area of responsibility from time to time. However, there is no mechanism presently existing to ascertain, the affect of measures being taken to gauge the health of marine environment. Therefore, there is a need to develop a database by testing of water column for ascertaining present levels of pollution. Report of the data be published bi-annually for general public information.

Ministry of Earth Science Rep informed that sea water pollution monitoring close to coast is ongoing since 1990's under the programme called Monitoring of Marine Pollution through Coastal Ocean Monitoring and Prediction System (COMAPS). Presently, 25 locations are being monitored all over Indian Coast, and recommendations of installing automated system, in ports Integrated Coastal and Marine Area Management Project Directorate (ICMAM PD), Chennai will be able to facilitate monitoring the health of marine environment and the data can be made available at INCOIS website.

DDG(OPS &CS) brought out that it is prudent for all ports to install the system as mentioned by the Ministry of Earth Science Rep, so that, they can monitor the health of marine environment within port limits.

Kamarajar Port Rep brought out that during Ennore incident, the environment assessment was undertaken through IIT. The study shall continue for 02 years and reports will be submitted six monthly. Since, IITs have an entire division for testing of water sample, tasking of IITs may be considered.

Director (Environment) requested scientific community to forward reports of their study to CGHQ for compilation and publishing for general public knowledge/awareness.

Decision

All the scientific communities are to forward their study reports to CGHQ for compilation and publishing for general public awareness. **Point to be closed.**

Action by: MoEF&CC, MoES and CGHQ

4. **OSD Disposal Centre.**

Mechanism for timely disposal of Oil Spill Dispersant may be introduced by setting up of OSD disposal centre at all coastal States for timely disposal of expired OSD by all PR capability agencies.

Proposed by: RHQ(W)

Deliberations

Director (Environment) apprised that as per NOS-DCP, all ports, oil handling agencies and Oil installation onshore are required to possess Oil Spill Dispersant (OSD) for meeting their obligation of Tier-I PR operation. The OSDs have a shelf life and is required to be disposed off in an environmental friendly manner as per existing regulation.

Decision

Director Environment to study the proposal for further necessary action. **Point to be closed.**

Proposed by: CGHQ & RHQ(W)

5. **Inclusion of Rep of State Administration in Audit of Tier-1 Inspection.**

A suitable representative from State Administration in audit team will provide the required impetus for procurement of PR equipment by ports. Hence, it is proposed that a representative of State Administration may also be included in the audit of Tier-1 inspection.

Proposed by: RHQ(NE)

Deliberations

Representatives of all Major Ports suggested that inclusion of state administration rep in the joint inspection is not required.

Director (Environment) brought out that presently, Major Ports and Oil Handling Agencies are being jointly inspected by nominated Coast Guard officer and rep of concerned statutory authority

in accordance with para 4.9 of NOS-DCP. However, some of the non-major ports are handling traffic equal or more than some of the Major Ports. Inspection on preparedness of non-major ports to combat Oil and HNS spills be instituted in line with major ports. The joint inspection is to be undertaken by ICG and Coastal State Maritime Board/ Coastal State Pollution Control Board.

Decision

Joint inspection of specified non-major ports by ICG and State Maritime Board/ Coastal State Pollution Control Board be instituted wef 2018. **Point to be closed.**

Action by: All Coastal States/UTs, & CGHQ

6. Chairman suggested constituting a trophy for award to best port that has instituted measures for protection of marine environment in the area of responsibility and the same to be awarded annually during the NOS-DCP meetings. The proposal was endorsed by all stakeholders. The constitution of committee and the parameters for evaluation are to be promulgated in due course. The Chairman further advised that while developing parameters/criteria, MoS may be consulted as they have promulgated the norms for green port award.

Action by: CGHQ

CONCLUDING ADDRESS

**CONCLUDING ADDRESS BY THE DGICG AT THE 22ND NOS-DCP AND
PREPAREDNESS MEETING AT NEW DELHI ON 10 AUG 2017**

Good afternoon,

1. It was hearting to see purposeful discussion being carried out on various aspects of pollution response. I appreciate the active participation by all stakeholders in a positive atmosphere where professional knowledge was shared on the subject matter. It is to be noted that today's discussion will reach its logical conclusion only if; all the stakeholders make dedicated efforts in their respective area of expertise.
2. The presentations on oil spill incident of Ennore Port due to collision of MT Dawn Kanchipuram and MT MW Maple were very informative. Some corrective measures are required from concerned authorities, so that shortfalls in the present setup shall be overcome in the future. Cohesiveness amongst the stakeholders is the key in pollution response operation. Frequent interaction and exercises at various levels need to continue in the future too, for sharing of professional knowledge and competence, so as to make a robust national system for meeting the challenges of pollution response.
3. World over, it has been observed that pollution response operations are labour intensive and require integration of professional knowledge from various walks of life. It is difficult for any single organisation to be fully competent in meeting the challenges of such complex operations. Synergy of stakeholders is vital in achieving the national objective for preserving the marine environment. I would like to urge all the stakeholders to continue their efforts to improve the marine environment in their area of responsibility, so that by 15 Aug 2022, the citizens of this country will be able to enjoy the clean and clear marine environment.
4. Before I conclude, I would like to convey my appreciation to all the members who have attended the meeting today and actively participated in the discussions with fervent enthusiasm.

Thank you. Jai Hind.

ACTIONABLE POINTS



Annexure 'H'
(Refers to para 8)

ACTIONABLE POINTS OF 22nd NOS-DCP AND PREPAREDNESS MEETING

1. **Preparation of Contingency Plans and positioning of PR equipments at facilities**

Coastal States and Union Territories, Ports, OHAs and Oil Installation Onshore are to expedite preparation of contingency plan and position PR equipment at their facilities to meet Tier-I obligation of NOS-DCP by 31 Dec 19. Regional Commanders may continue to render guidance and support to the stakeholders.

Action by: All Coastal States/UTs, Ports, OHAs and Oil Installation Onshore

2. **Promulgation of “NO OSD USE” area**

MOEF&CC to intimate CGHQ, on vetting of Environment Sensitive Index Mapping by Coastal states and UTs so that a technical committee can be constituted for identifying “**NO OSD USE**” area.

Action by: MoEF&CC

3. **Constitution of Green Port Trophy for Protection of Marine Environment**

Constituting of green port trophy for awarding to port that has instituted measures for protection of marine environment in its area of responsibility.

Action by: CGHQ

**GLIMPSES OF 22ND NOS-DCP
AND
PREPAREDNESS MEETING**

Annexure 'J'

(Refers to para 8)

GLIMPSES OF 22ND NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN (NOS-DCP) AND PREPAREDNESS MEETING







PROGRAMME

PROGRAMME
22nd NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN
AND PREPAREDNESS MEETING

Date : 10 Aug 2017

Venue : India International Centre, 40, Max Mueller Marg, New Delhi-03

Ser	Time	Event
1002	1000	Delegates Arrive & Registration
1004	1030	Chairman Arrives
1006	1035	Inaugural Address by the Chairman, NOS-DCP
1008	1045	NOS-DCP Overview by Director (Fisheries&Environment)
1010	1100	Presentation on "Combating Oil Spill in Port Limits" by Capt. AK Gupta, General Manager (MS), Kamarajar Port Ltd, Chennai
1012	1110	Presentation on "Shoreline Cleanup – Way forward" by Mr Thiru R. Kannan, Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai
1014	1120	Book Release: "National Contact Directory for Marine Oil Spill Response"
1016	1125	Tea Break
1018	1150	Discussion on Actionable points and Agenda points
1020	1300	Closing Address by the Chairman, NOS-DCP
1022	1310	Lunch
1024	1410	Discussion on Local and Facility Contingency Plan

Note : Rig 8A for Service Officers

PARTICIPANTS LIST

Annexure 'L'

(Refers to para 8)

22nd NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN (NOS-DCP)**AND PREPAREDNESS MEETING - 10 AUG 17****LIST OF PARTICIPANTS**

Sl.	Organization Name	Name & Rank	Designation
1.	Indian Coast Guard	Director General Rajendra Singh, PTM, TM	DGICG
2.	Indian Coast Guard	Additional Director General VSR Murthy, PTM, TM	ADG CG
3.	Indian Coast Guard	Additional Director General K Natarajan, PTM, TM	CGC(WS)
4.	Indian Coast Guard	Additional Director General KC Pande, PTM, TM	CGC(ES)
5.	Indian Coast Guard	Inspector General KR Nautiyal, PTM, TM	COMCG (W)
6.	Indian Coast Guard	Inspector General KS Sheoran, PTM, TM	COMCG (NE)
7.	Indian Coast Guard	Inspector General Ranjan Bargotra, TM	COMCG (E)
8	Indian Coast Guard	Inspector General Rakesh Pal, TM	COMCG (NW)
9.	Indian Coast Guard	Inspector General S Paramesh, TM	DDG(Ops & CS)
10.	Indian Coast Guard	Inspector General KR Suresh, TM	COMCG(A&N)

Sl.	Organization Name	Name & Rank	Designation
11.	Indian Coast Guard	Deputy Inspector General AA Hebbar, TM	CGA to DGICG
12.	Indian Coast Guard	Deputy Inspector General DR Sharma	PD(Ops)
13.	Indian Coast Guard	Deputy Inspector General SS Azad	CLO
14.	Indian Coast Guard	Deputy Inspector General Yoginder Dhaka	CSO(Ops), NE
15.	Indian Coast Guard	Commandant JBS Virk	Oi/C PRT(A&N)
16.	Indian Coast Guard	Commandant Bhim Singh Kothari	D(FE)
17.	Indian Coast Guard	Commandant S Prem Kumar	Oi/C PRT(E)
18.	Indian Coast Guard	Commandant S Chandola	RFEO(E)
19.	Indian Coast Guard	Commandant Amitava Das	Oi/C PRT(W)
20.	Indian Coast Guard	Commandant Dalip Singh	RFEO(A&N)
21.	Indian Coast Guard	Commandant Tanuj Gautam	RFEO(NW)
22.	Indian Coast Guard	Commandant (JG) Dinesh Tamta	DD(FE)
23.	Indian Coast Guard	Deputy Commandant R Gokhale	RFEO(W)

Sl.	Organization Name	Name & Rank	Designation
1.	Ministry of Defence	Capt Harish Bahuguna	DNO(MSP)
2.	Ministry of Earth Science	Shri Pravakar Mishra	Scientist-F
3.	Ministry of Earth Science	Mr. E. Haque	Scientist – C
4.	Department of Science and Technology	Dr. AK Singh	Head(NRDMS)
5.	Ministry of External Affairs	Shri Mohammad Hussain	Law Officer
6.	Directorate General of Hydrocarbons	Shri Kuldeep Sharma	HOD(Environment)
7.	National Disaster Management Authority	Shri Kunal Sharma	Consultant (Chemical, Industrial and Hazardous Material Transportation Disaster Preparedness)
8.	Indian National Centre for Ocean Information Service	Mr. Prasad SJ	Project Scientist-B
9.	National Institute Oceanography	Dr. Prabha Devi	Sr. Technical Officer
10.	DG Shipping	Capt Mohit Kumar Behl	Nautical Surveyor-cum-Dy. Director General (Tech)
11.	Gujarat Pollution Control Board	Y.A. Tai	Environmental Engineer
12.	Gujarat Maritime Board	Atul Arvind kumar Sharma	DGM (Env.)
13.	Maharashtra Maritime Board	Comdt. SK Nath	Coastal Safety & Security Officer
14.	DDMA DK District Karnataka	Sri Vijay Kumar	Disaster Professional

Sl.	Organization Name	Name & Rank	Designation
15.	Tamil Nadu Pollution Control Board	Thiru R. Kannan	Joint Chief Environmental Engineer
16.	Tamil Nadu Maritime Board	Capt. M. Anbarasan	State Port Officer
17.	Orissa State Pollution Control Board	A Behera	SES cum Nodal Officer
18.	Andhra Pradesh	Capt B. Adi Narayana	Special Officer, Bhavanapadu Port Project
19.	Kandla Port Trust	Capt AK Mathews	Harbour Master
20.	Jawaharlal Nehru Port Trust	Capt Amit Kapoor	Dy. Conservator
21.	Cochin Port Trust	Capt Gouri Prasad Biswal	Deputy Conservator
22.	VOC Port Trust	Capt. Bhabatosh Chand	Deputy Conservator
23.	Chennai Port Trust	Capt. P.T. Sadanandan	Deputy Conservator
24.	Kamarajar Port Ltd	Capt. AK Gupta	General Manager (MS)
25.	Kamarajar Port Ltd.	Shri M Vijayan	Asst. Manager (HSE)
26.	Paradip Port Trust	Capt Sanjam Dash	Pilot-cum-Officer-in-charge, Pollution Control Cell
27.	Kolkata Port Trust	Capt JJ Biswas	Director, Marine Department
28.	New Mangalore Port Trust	Capt Gaurav Mathur	Dock Master
29.	Adani Ports and SEZ	Shri Anand Raithatha	Manager, Marine Services
30.	Hazira Port Pvt. Ltd.	Capt Mithilesh Kumar Sinha	Pilot

Sl.	Organization Name	Name & Rank	Designation
31.	Essar Bulk Terminal Ltd. Hazira	Capt Rituparn Raghuvanshi	Harbour Master
32.	JSW Jaigarh Port Ltd.	Shri Atul Karandikar	Head HSE
33.	Gopalpur Port Ltd.	Capt. Lalit Mohan Rath	Dy. Conservator
34.	RIL, Hazira, Dahej	Capt Kuldeep Raj	Vice President (Shipping)
35.	Essar Oil Vadinar	Capt Alok Kumar	Head Marine Operations
36.	Bharat Oman Refineries Limited, Vadinar	Ramesh K Thakkar	Vice President
37.	RIL, Jamnagar	Sh. Prashant Gogate	Head-Environment
38.	RIL, Jamnagar	Sh Mithilesh K Singh	Head-Marine
39.	RIL, Jamnagar	Ramesh Vekariya	Sr. Manager-Environment
40.	HPCL-Mittal Pipelines Ltd.	Ashok Tiwary	Dy Manager
41.	Reliance Industries Limited, Mumbai	Ashok Kumar Sriram	Sr. Lead, HSE
42.	BPCL, Mumbai	D B Kamble	DGM (HSSE)
43.	BPCL, Mumbai	Shri R Lakshminarasimhan	GM(HSE)
44.	BPCL, Mumbai	Shri C. Sainath	DGM(Environment)
45.	BPCL, Mumbai	Mr Damien Gracious	CGM(HSE)
46.	BG Exploration and Production India Limited	Mr. P. Murali	Lead HSSE & Technical Safety
47.	BG Exploration and Production India Limited (BGEPIIL)	Mr. Abhijit Das	HSSE Advisor Logistics, WE & Services
48.	Finolex Industries Ltd. Ratnagiri	Mr. Dhananjay P Tikekar	Asstt. Manager (Mechanical)

Sl.	Organization Name	Name & Rank	Designation
49.	Indian Oil Corporation Terminal, Bangalore	Mr. RK Sayal	Chief General Manager(O)
50.	Indian Oil Corporation Terminal, Mangalore	Mr. SK Chaudhuri	Deputy General Manager(T)
51.	Cairn Oil & Gas, Vedanta Limited, Gurgaon	Mr. Pradeep Thatte	GM, Pipeline Operations
52.	Cairn Oil & Gas, Vedanta Limited, Gurgaon	Mr. KK Nayak	GM- Environment, Sustainability & Compliance
53.	Cairn Oil & Gas, Vedanta Limited, Gurgaon	Mr. Harish Belwal	DGM-Marine Operations
54.	Cairn Oil & Gas, Vedanta Limited, Gurgaon	Mr. Dlip Kumar Bera	Sr. Manager- Environment
55.	OSCT LLP (INDIA)	Capt Kedar Chaudhary	Managing Director
56.	Bharat Oman Refineries Ltd. New Delhi	Captain Sanjeev Khanna	Senior Pilot
57.	Oil and Natural Gas Corporation	Dr JS Sharma	GM(HSE)
58.	Oil and Natural Gas Corporation	Mr. Alaknanda Dubey	EF (Environment)



"Synergy for Swachh Sagar Abhiyan"