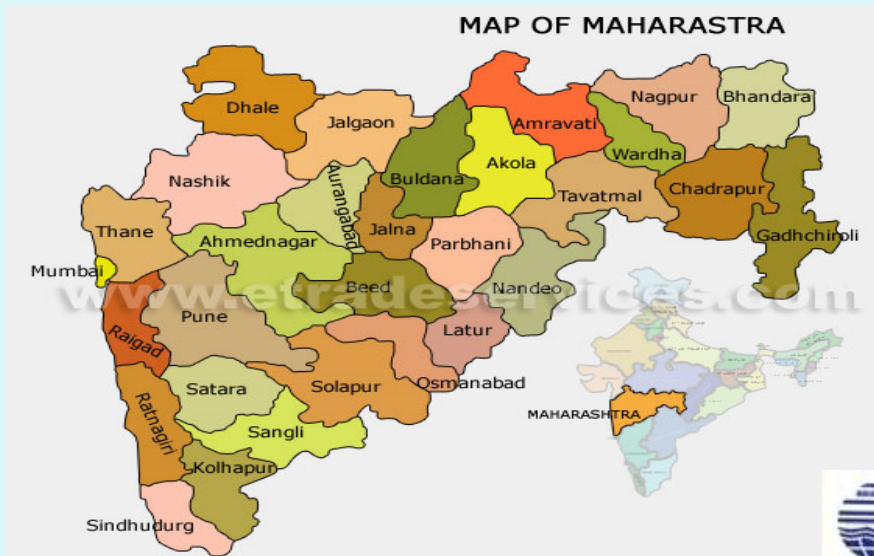


## Keynote :The role of Maharashtra Pollution Control Board(SPCB) during oil spills



**Dr. Y. B. SONTAKKE**  
Joint Director(Water Pollution Control)  
**Maharashtra Pollution Control Board**  
29<sup>th</sup> January 2015

## Maharashtra



## Ecological values of mangrove

- **Marine Fisheries** – It provide nursery habitat for many wildlife species, including commercial fish and crustaceans
- **Wildlife Habitat-** It support a range of wildlife species
- **Improving Coastal Water Quality** – It maintain coastal water quality by abiotic and biotic retention, removal, and cycling of nutrients, pollutants,
- **Protection of coastlines and Development** – It protect shorelines during storm events by absorbing wave energy and reducing the velocity of water passing through the root barrier



## Location of Mangroves near Mumbai



a5  
a7  
a8


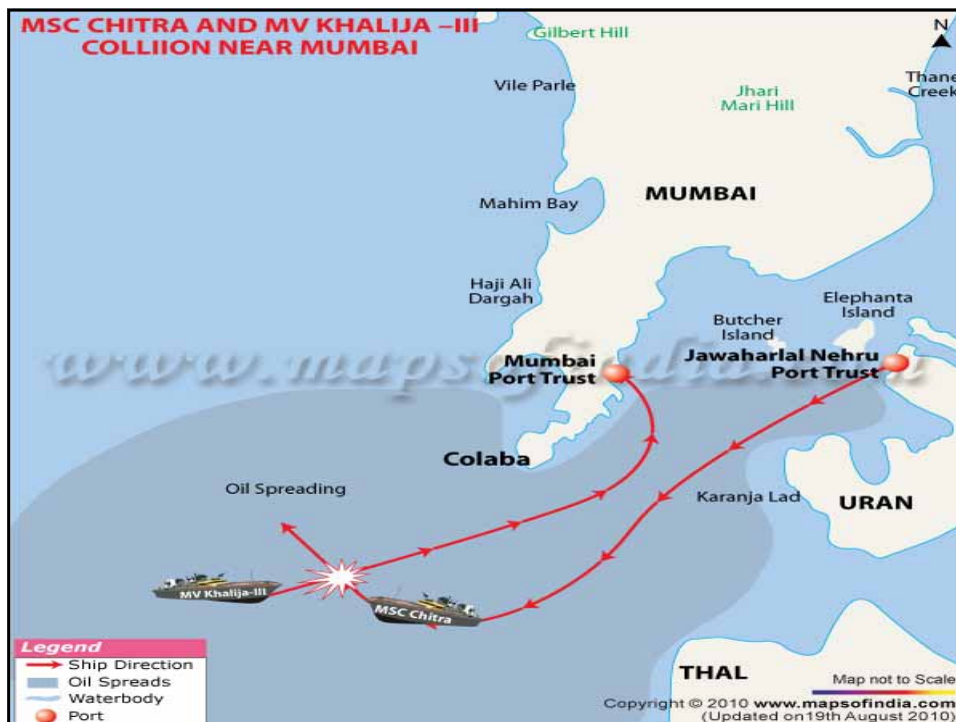
## Incident Details-Last 3-4 Yrs(India)

- MSC Chitra collided with M V Khalijia III, 7<sup>th</sup> August, 2010 .
- Navy Ship Vindygiri collided with MV Nordiak-31.01.2011
- MV Wisdom grounded on 11.06.2011
- MT Pavit grounded on 30.07.2011
- MV Rak Carrier sink on 04.08.2011
- ONGC oil spill on 21.01.2011
- ONGC Oil Spill on 06.10.2013
- BPCL OIL Spill on Nov.2013

----National----

- Oil leakage at Chennai
- Crude oil leakage at Nagapattanam
- Fire at storage yard/tank farm at Jaipur

a6

## Slide 5

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- a5** abc, 18/06/2013
- a6** abc, 18/06/2013
- a7** abc, 18/06/2013
- a8** abc, 18/06/2013

## Govt Initiatives

- The report of collision of two ships received by MPCB on 07.08.2010
- FIR Vide No. 31/10 dt. 08/08/2010 is launched at Yellow Gate Police Station.
- The MPCB team has visited the Coast Guard Office and discussed the issue and threat being caused due to oil spill and Hazardous Cargos.
- Show cause notice is issued to MSC Chitra (Agency) India Pvt. Ltd., Compania Naviera Citra S. A. Panama on dt. 27-08-2010
- Board has also issued show cause notices and directed to Mumbai Port Trust and to Jawaharlal Nehru Port Trust to cope with incident and accelerate clean up in their jurisdiction.



## Affected Sites

MPCB Field Officers, Revenue Authorities & Local Body Officials reported following affected sites:

- Geeta Nagar, Mumbai
- Vashi, Navi Mumbai
- Coloba, Mumbai
- U S Club, Mumbai
- Navy Nagar, Mumbai
- Elephanta Caves, Mumbai
- Uran, Raigad
- Kihim Beach, Raigad
- Awas Beach, Raigad
- Revas Beach, Raigad
- Mandwa Beach, Raigad
- Dighodi Beach, Raigad



## Environmental Impact Assessment Study

- MPCB appointed National Institute of Oceanography and National Environmental Engineering Research Inst.
- NIO – Characteristics and threat of spilled oil.
  - Model prediction of movement of oil and cargo
  - Ecological Assessment such as impact on sediment quality, Flora and Fauna
  - Impact of Genotoxic, Neurotoxic and Xenobiotic contaminants on zoo plankton, mollusks and fishes noticed.
  - Impact of oil on marine environment is difficult to assessment.



## Contd...

### NEERI

- The Risk Assessment Study has been carried out by NEERI.
- - It includes clean-up cost.
- - Damage cost without any clean-up.
- - Cost of Damages as per NEERI's draft Report.
- - Total damages without clean-up – Rs. 525 Crores
- - Total damages with clean-up – Rs. 514 Crores



## Local Oil Spill Contingency Plan

- Preventive Mechanism for minimising impact of Oil spill on the environment.
- Better co-ordination among the stack holders of LCP.
- Acceleration of clean-up mechanisms.
- District Collectors to co-ordinate.
- Local Bodies has to play active role in clean-up.
- Activating the prediction models to anticipate areas.
- To finalised the agencies for final disposal of waste.



## Observations & Suggestions

1. Delay in Salvage Operations
2. Oil Cess Fund to be used for this purpose
3. Generation of Special Disaster Management Fund
4. Required stringent laws with very high penal charges
5. Augmentation of Mercantile Marine Department






### ONGC Oil leakage`

- The incidence of leakage of crude oil on 07/10/2013 at M/s. ONGC, Uran, Dist. Raigad.
- Incidence of oil leakage was identified and stopped oil flow by industry through diverting flow to Heera-Uran-Trunk line.
- Spilled oil reached sea water through storm water drain.
- Industry has provided 2 nos of Gunny bag bunds in storm water drain to prevent oil spillages.
- pumped oily effluent send to ETP for treatment.

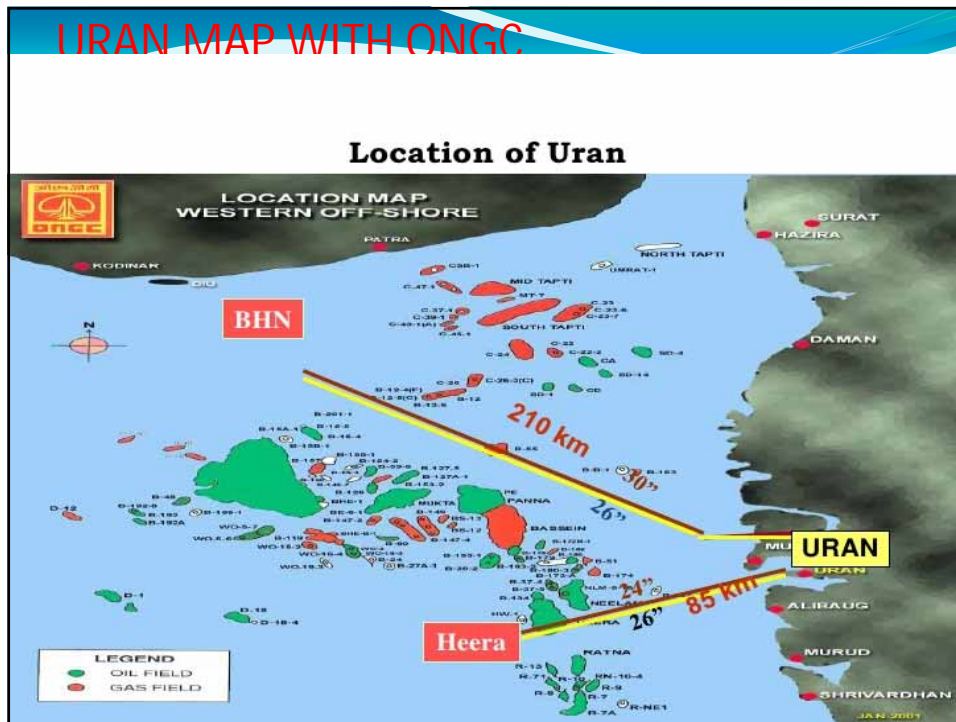


## Quantification of crude oil

Sr No	Particulars	Quantity LTR
1	Crude oil leakage	5000
2	Crude oil collected in plant	1930
3	Crude oil recovered outside plant	1870
4	Crude oil recovered from sea	100
5	Not Recovered	1100



## URAN MAP WITH ONGC



## Issues

1. Need of efforts to reduce dependency on overseas support to save the cost & time.
2. oil spill management and contingency plan by all stakeholders to save the coastal line of Maharashtra State.
3. Finger printing of spills is a big challenge
4. Pipeline network, handling & maintenance with emergency plan & procedure.
5. The pipeline owned by IOCL are not in use 24X7 and used from time to time
6. Delay in reporting of spills/accidents by companies to regulatory agencies.




## Problems oil companies

1. Petroleum pipelines are not regarded as priority public utility.
2. Pipeline passing through congested & thickly populated areas.
3. Pipelines vulnerable for damage by miscreants/terrorist attack.
4. Construction of drains/nullah/sewers /roads either parallel or across the pipelines after laying without proper gradient and notice.
5. Unplanned infrastructure development in & around pipelines..
6. Traffic congestion causing delay in responding to emergencies.
7. Periodic review meets to be organized by District Crisis Cell.
8. Non-availability of documented Mutual Aid Scheme between Oil Companies & Statutory Authorities.
9. Non-exchange of health condition report of dock lines amongst stake holders on annual basis.



### Oil spill Response Mechanism- Tier-I facility

- ❖ At present in the Mumbai area MbPT and JNPT as well as Oil refineries do not have facility to deal with the oil spill incidences, which is unfortunate considering the sensitivity of Mumbai area.
- ❖ As per National Oil Spill Disaster Contingency Plan (NOSDCP) the concerned oil companies shall provide Tier-I oil spill response capability at individual industry level.
- ❖ MbPT is responsible to have TIER – I oil spill response facility for Mumbai and Harbor on behalf of oil companies.
- ❖ MoU signed between Port authorities & stakeholders on 18th Feb 2011.
- ❖ In this regards MPCB has issued directions and obtained B.G. of Rs.25 Lakh from MbPT.
- ❖ After rigorous follow up MbPT has issued work order on 25/08/2014 to M/s Sadhav Shipping Ltd for commissioning of Tier-I facility.
- ❖ Expected date of commissioning of Tier-1 facility is Feb 2015.



**Sadhav Shipping Ltd.**

### Synopsis of Contract & Schedule of Execution

MBPT OSR Tender		Sept		Oct		Nov		Dec		Jan		Feb	
Synopsis of Contract & Schedule of Execution		1 to 15	16 to 30	1 to 15	16 to 31	1 to 15	16 to 30	1 to 15	16 to 31	1 to 15	16 to 31	1 to 15	16 to 28
Description	Dates												
1 LOI Received	15.08.14												
2 Acceptance / Acknowledgement	27.08.14												
3 Performance Guarantee ( Rs2.78 cr)	22.09.14												
4 Signing of Contract	30.09.14												
5 Phasing of Work													
Furnish Phased Program of Work	03.09.14												
Per/CPM Chart / Kick Off Meeting	08.09.14												
6 Establish Oil Spill Response Centre (OSRC)													
Inspection of site at MCT, Jawahar Dweep	05.09.14												
Submission of Plan for OSRC	30.09.14												
Approval of OSRC Plan by MbPT	10.10.14												
Hand Over of OSRC Site by MbPT	15.10.14												
Disposal of Old Equipments	15.11.14												
Construction of OSRC Office	15.12.14												
Purchase & equip OSRC Office	30.12.14												
Develop storage space	30.12.14												
Develop repair & maintenance yard	30.01.15												
Develop water front mooring & shelter facilities	30.01.15												
7 OSR Contingency Plan :													
Preparation and Submission of Plan	15.10.14												
Approval of draft plan by MBPT / JNPT	20.10.14												
Approval by Coast Guard	30.10.14												
Preparation of HSE Plan	15.11.14												
Preparation of Operations Manual	20.11.14												
Call - off support services Agreement	30.01.15												
8 Purchase & Mobilisation of OSR Equipments													
Submission Vendor List to MbPT	15.09.14												
Approval of Vendors by MbPT / SCG	20.09.14												
Issue Purchase Orders	25.09.14												



## Destruction of mangroves



**THANK YOU**

