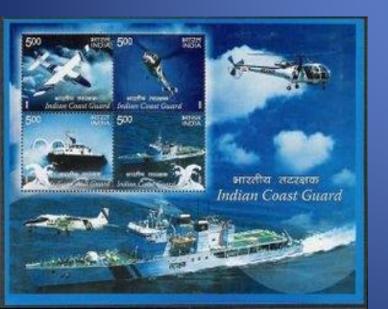
#### **INDIAN COAST GUARD**



#### **A MULTI MISSION SERVICE**



#### OVERVIEW OF NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN

INDIAN COAST GUARD PERSPECTIVE

BY COMMANDANT JBS VIRK,TM

## INTRODUCTION

#### **ENERGY OVERVIEW**

▶ 6<sup>TH</sup> LARGEST ENERGY MARKET

PRODUCTION 32-33 MMTPA

IMPORT 140.25 MMPTA WEST & 46.75 MMPTA EAST COAST



Manual on Oil Pollution







2nd edition, March 2000

## NATIONAL CONTINGENCY PLAN

- INTERNATIONAL CONVENTION ON OIL POLLUTION AND PREPARDNESS, RESPONSE AND COOPERATION (OPRC) 1990
- > APPROVED BY COMMITTEE OF SECRETARIES IN 1993
- DELINEATES RESPONSIBILITIES OF STAKEHOLDERS
- SYSTEMISES NATIONAL PREPAREDNESS AND RESPONSE
- > OBLIGES COMMITMENT OF RESOURCES FOR OSR

INDIAN COAST GUARD MEASURES AND INITIATIVES





**THREE POLLUTION RESPONSE TEAMS (PRT) AT MUMBAI, CHENNAI** 

AND PORT BLAIR.

**IN ADDITION READY RESPONSE EQUIPMENT AT VADINAR, KOCHI** 

**AND VIZAG** 

**THREE INDIGENOUS 2400 TONS PCVs** 

FURTHER AUGMENTATION IN EACH MARITIME STATE

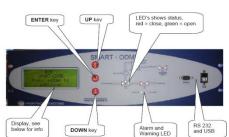
#### **ICG POLLUTION RESPONSE capabilities**



DEDICATED POLLUTION RESPONSE VESSEL
 > 02 COMMISSIONED
 > 01 WILL BE INDUCTED SHORTLY

#### **PCV PR EQUIPMENT AND SYSTEM**





- SWEEPING ARMS 02 Nos.
- > OPTI SKIMMER 02 Nos.
- DISK SKIMMER 02 Nos.
- WEIR SKIMMER 02 Nos.
  - > BOOMS 02 Nos.
- > HYDRAULIC WASTE COMPACTOR 06 Nos.
  - OIL RECOVERY OPERATIONS (ORO) SYSTEM
- OIL DISCHARGE MONITORING EQUIPMENT
   (ODME)



#### >IPV AND SMALLER VESSELS CAN BE FITTED WITH OSD SPRAY ARMS

#### >HELI - SKIMMER SELF PROPELLED OIL RECOVERY SYSTEM



#### **DORNIER WITH OSD SPRAY PODS**



#### CHETAK WITH UNDER SLUNG TC-III SPRAY BUCKET





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# TRAINING

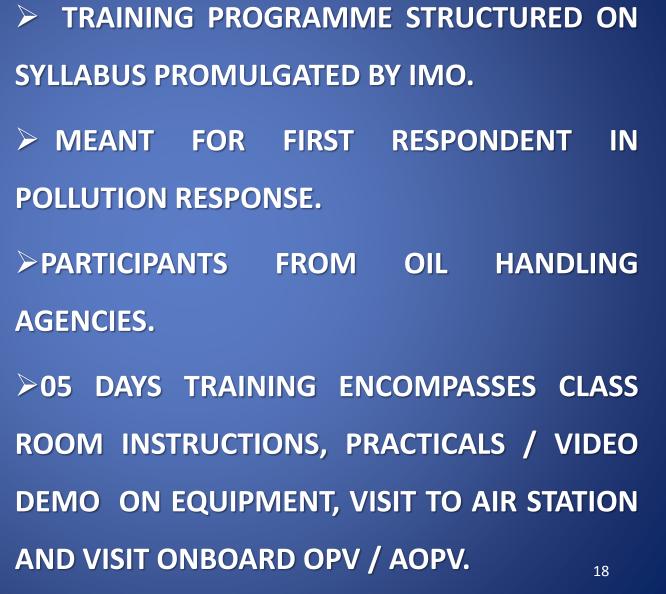
#### **IMO LEVEL -1 TRAINING**



#### **IMO LEVEL 1 TRAINING CONDUCTED BY PRTs FOR FIRST RESPONDERS**

#### **TRAINING – IMO LEVEL -1**











## **CLASS ROOM INSTRUCTIONS**



#### **PRACTICAL DEMONSTRATION**



#### **VISIT TO AIR STATION**



## **VISIT ONBOARD CGOPV**

#### **TRAINING – IMO LEVEL -2**







#### IMO LEVEL II OPRC TRAINING ORGANIZED BY INDIAN COAST GUARD & AMET UNIVERSITY

#### AMET UNIVERSITY

FROM 20 JULY 2009 TO 24 JULY 2009



IMO LEVEL- 2 TRAINING CONDUCTED JOINTLY BY COAST GUARD AND AMET UNIVERSITY AT CHENNAI

## TRAINING – IMO LEVEL -2





 TRAINING PROGRAMME STRUCTURED ON SYLLABUS PROMULGATED BY IMO.
 MEANT FOR ON SCENE COMMANDERS
 PARTICIPANTS FROM OIL HANDLING AGENCIES ARE TRAINED.

>05 DAYS TRAINING ENCOMPASSES CLASS ROOM INSTRUCTIONS, VISIT TO PRT(E), SHORE LINE ASSESSMENT MEDIA AND TABLE TOP EXERCISES.



## **CLASS ROOM INSTRUCTIONS**



**VISIT TO PRT** 



#### **SHORE LINE ASSESSMENT**



#### VALIDATION

#### **INTERNATIONAL TRAINING COOPERATION**



## TRILATERAL COOPERATION PROGRAMME INDO-SRILANKA-MALDIVES





- THE INDIAN COAST GUARD CONDUCTED IMO LEVEL 1 AND LEVEL 2 TRILATERAL TRAINING FROM 25 NOV 2013 TO 06 DEC 2013.
- SUBJECT MATTER EXPERTS FROM THE COAST GUARD AND DIFFERENT ORGANISATIONS INCLUDING NDMA, NIO, ONGC, STATE GOVT, MUMBAI UNIVERSITY ETC SERVED AS FACULTY.
- POST TRAINING, FOREIGN OFFICERS PARTICIPATED AS OBSERVERS IN THE FIFTH EDITION OF NATIONAL LEVEL POLLUTION RESPONSE EXERCISE AT SEA OFF MUMBAI ON 10 DEC 2013.

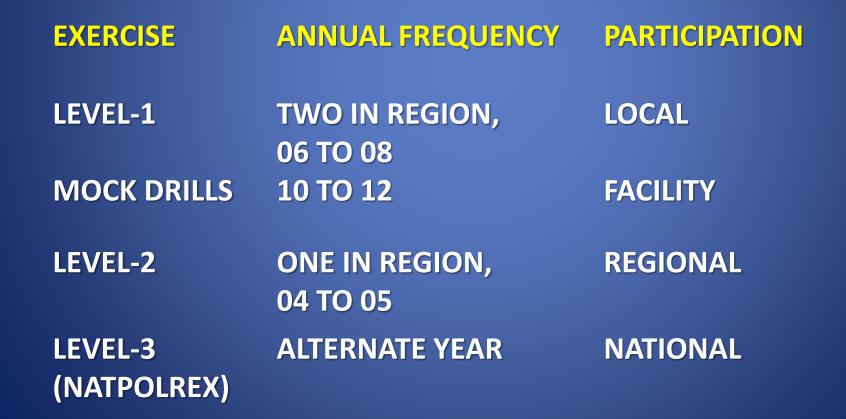
#### **BANGLADESH OFFICERS TRAINING AT CGTC KOCHI**



#### **CURRICULUM ON OIL SPILL RESPONSE WAS COVERED IN 26 SESSIONS**

## **EXERCISES**

#### **POLLUTION RESPONSE EXERCISES**



## **IMO LEVEL 3 EXERCISE**







#### **NATPOLREX - CLEAN SEA-V**

➢ THE INDIAN COAST GUARD DEMONSTRATED PREPAREDNESS AND READINESS TO INTERVENE EFFECTIVELY IN CONTAINING AN OIL SPILL RESPONSE EXERCISE OFF MUMBAI FROM 09-10 DEC 2013.

➢ A TABLE TOP EXERCISE WAS CONDUCTED ON 09 DEC 2013, WHEREIN A SIMULATION WAS CARRIED OUT TO REHEARSE THE STANDARD OPERATING PROCEDURES OF VARIOUS STAKEHOLDERS FOR SEARCH AND RESCUE, ACTIVATION OF NOSDCP, OIL SPILL TRAJECTORY ASSESSMENT, MITIGATION MEASURE FOR RESOURCES AT RISK AND SHORELINE PROTECTION.

➢AT SEA OIL SPILL RESPONSE EXERCISE WERE CONDUCTED ON 10 DEC 2013 OFF MUMBAI. EVOLUTIONS INCLUDED MOBILISATION OF VARIOUS RESOURCES, FIRE FIGHTING ASSISTANCE TO STRANDED SHIP, TOWING OF STRANDED VESSEL AWAY FROM COAST TO MINIMIZE THE EFFECT OF OIL SPILL ON THE COASTLINE AND PR OPERATIONS INCLUDED CONTAINMENT AND RECOVERY OF SPILT OIL, APPLICATION OF DISPERSANT BY ICG SHIPS/AIRCRAFT AND SHIPS OF OTHER RESOURCE AGENCIES.

> NINE INDIAN COAST GUARD SHIPS INCLUDING ONE POLLUTION CONTROL VESSEL, THREE CG CHETAKS, TWO DORNIER AIRCRAFT, ONE IAF SUPER HERCULES C130J AIRCRAFT, ONE INDIAN NAVAL SHIP, TWO TUGS FROM MBPT/JNPT, TWO OSVs FROM ONGC, TWO MMSVS/OSVS FROM OTHER RESOURCE AGENCIES AND ONE TANKER FROM SHIPPING CORPORATION OF INDIA PARTICIPATED.

>A TOTAL OF 58 PARTICIPANT FROM 35 AGENCIES PARTICIPATED IN THE EXERCISE. 35

#### JOINT INSPECTIONS





Pollution Response Equipment Preparedness

#### PREP CHECK

#### Introduction



The purpose of this document is to help those responsible for the first response to an oil spil to carry out a simple "Pollution Response Equipment Preparedness' (PREP) check on their first a response equipment and identify any gap areas in their operational readiness. It is specifically aimed at the facility operator that has Tier a response equipment on site.

This quick and easy-to-complete document will provide an indication of any particular areas that should be addressed to ensure that the first response equipment is kept at a high level of readiness.

Ports and oil handling agencies can also use this document as an audit protocol to gauge levels of response preparedness within their particular operation.



CONTINGENCY PLANS OF PORTS AND OIL HANDLING AGENCIES ARE VETTED BY THE COAST GUARD

INDIAN COAST GUARD AND MINISTRY OF SHIPPING (MoS) CONDUCT INSPECTION OF PORTS TO CHECK TIER -1 OIL SPILL RESPONSE CAPABILITIES.

➢INDIAN COAST GUARD AND OIL INDUSTRY SAFETY DIRECTORATE (OISD) CONDUCTS INSPECTION OF CONCERNED OIL HANDLING AGENCIES

# **GLIMPSE OF INCIDENTS/ACCIDENTS**

## **MV AMSTERDAM BRIDGE** FLAG - ANTIGUA AND BARBUDA



> FIRE ONBOARD AT 1725H ON 09 **SEP 12** 

> MUMBAI INNER ANCHORAGE



> 20 TONS FLAMMABLE LIQUIDS AND 7.6 TONS FLAMMABLE GAS

CONTAINING CONTAINERS > 24 **DANGEROUS CARGO** 





## **MV AMSTERDAM BRIDGE**

SOLID AND LIQUID SUBSTANCES – MARINE POLLUTANTS

> OPERATION *"AGNISHAMAN"* BY ICG, MBPT AND STAKE HOLDERS

ICGS SANKALP, SAMRAT, SAMUDRA PRAHARI TOGETHER WITH MBPT TUGS AND ONGC OSVs WERE DEPLOYED TO CONTAIN FIRE. CG HELO KEPT AIR SURVEILLANCE

> PRT (W), CG DORNIER STANDBY

EMBARKATION BY PROFESSIONAL SALVERS – 11 SEP 2012

TERMINATED – 12 SEP 2012

## **MV MOL COMFORT**



> ON 17 JUN 13, MRCC(MB) COORDINATED RESCUE OF 26 CREW OF MV MOL COMFORT 900NM OFF WEST COST OF INDIA . AFTER THE CONTAINER VESSEL SUSTAIN UNCONTROLLED FLOODING DUE TO CRACK IN THE HULL.

> CONSTANT SURVEILLANCE WAS MAINTAINED BY AERIAL AND SURFACE UNITS .

AFT PORTION OF THE VESSEL SANK ON 27 JUN 13

➢ICGS SUMDRA PRAHARI ENGAGED IN FIRE FIGHTING OF FORWARD PORTION OF THE SHIP IN EXTREME WEATHER CONDITIONS. THE FORWARD PORTION SANK ON 11 JUL 13

>A VESSEL CARRIED ESTIMATED 2567 MT OF BUNKER FUEL AND 3355 MT OF HAZARDOUS CARGO AND MARINE POLLUTANTS



# **MSC CHITRA**

#### **MSC CHITRA**



OIL SPILL OCCURRED AFTER MSC CHITRA AND MV KHILIJIA-3 COLLIDED IN MUMBAI HARBOUR ON 07 AUGUST 2010







## INCIDENT

• RUPTURE OF TWO FUEL TANKS SITUATED ON THE PORT SIDE

OIL SPILL AT A STEADY RATE OF 20
 TONS PER HOUR

 OIL EGRESS FROM THE TANKS STOPPED AFTER 48 HOURS RESULTING OIL SPILLAGE OF ABOUT 879 TONNES

300 CONTAINERS FELL OVER BOARD



Mangroves Navi Mumbai Mumbai Mumbai, Maharashtra, India

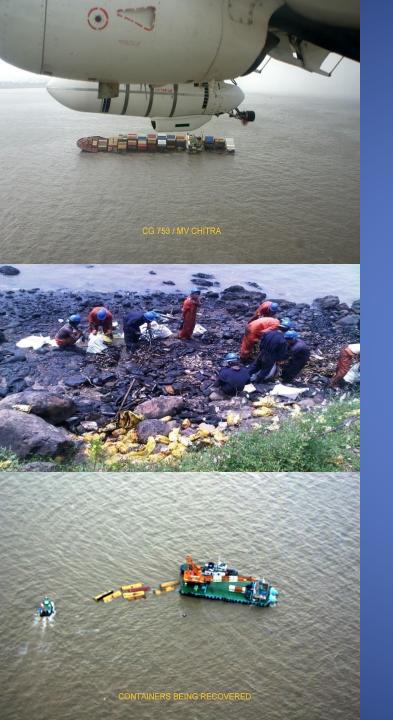


## **IMPACT**

60 KMS OF SHORELINE AREA, INCLUDING RESIDENTIAL, FISHERIES, MANGROVES, PORTS AND HISTORIC ISLANDS WERE AFFECTED

SPILT OIL IN COASTAL AREAS AFFECTED FISHER FOLKS SERIOUSLY

PORT'S TRAFFIC WAS CLOSED DUE TO FLOATING CONTAINERS



## **OIL SPILL RESPONSE**

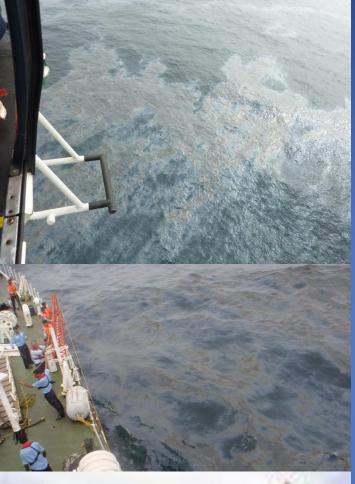
- ICG DEPLOYED 05 SHIPS, 02 HELICOPTERS AND 02 DORNIER AIRCRAFT
- SHORELINE RESPONSE TEAM
   INCLUDING OSRL, SINGAPORE
   UNDERTOOK SHORELINE CLEAN-UP
- END AUGUST 10, ALL THE SUNKEN CONTAINERS WERE IDENTIFIED AND REMOVED
- CONTAINERS ONBOARD WERE
   SAFELY REMOVED BY NOVEMBER 10
- TRAPPED OIL OF ABOUT 1200
   TONNES OF FUEL WAS REMOVED BY
   THE SALVORS

# **MV RAK CARRIER**



## INCIDENT

- EXPERIENCED HEAVY FLOODING AND REQUESTED FOR ASSISTANCE ON 04 AUG 11
- CG AND IN HELICOPTERS SUCCESSFULLY EVACUATED ALL CREW OF ILL FATED VESSEL TO ASHORE
- SHIP SUBSEQUENTLY SANK DUE TO EXCESSIVE FLOODING
- SHIP WAS IN POSSESSION OF 340 T OF FUEL/DIESEL OIL ONBOARD
- CG SHIP REPORTED OIL SPILL FROM VESSEL ON 05 AUG 11





## **OIL SPILL RESPONSE**

- COAST GUARD COMMENCED
   POLLUTION RESPONSE OPERATION
- COAST GUARD SHIPS AND AIR EFFORTS WERE DEPLOYED FOR 20 DAYS AND 8500 LTRS OF OIL SPILL DISPERSANT WAS SPRAYED
- CG TEAM COMPRISING OF 30
   ENROLLED PERSONNEL ALONG WITH
   70 WORKERS OF BMC COORDINATED
   SHORELINE CLEANUP OPERATIONS
- SURVEILLANCE ON THE WRECK WAS KEPT BY CG SHIPS

#### **BLUE WATERS**





**Conservation of Coastal Zone Environment** 



PUBLISHES MARINE ENVIRONMENT NEWS LETTER "BLUE WATERS" BI-ANNUALLY

TO CREATE MARINE ENVIRONMENTAL AWARENESS

## CONCLUSION

- MARITIME ENVIRONMENTAL PRESERVATION, PROTECTION AND POLLUTION PREVENTION AND CONTROL (P3C) IS A CHARTERED DUTY UNDER SECTION 14 OF CG ACT 1978
- COAST GUARD IS COMMITTED TO ACHIEVE AND MAINTAIN PREPAREDNESS WITH CO-OPERATION FROM ALL THE RESOURCE AGENCIES

# THANK YOU