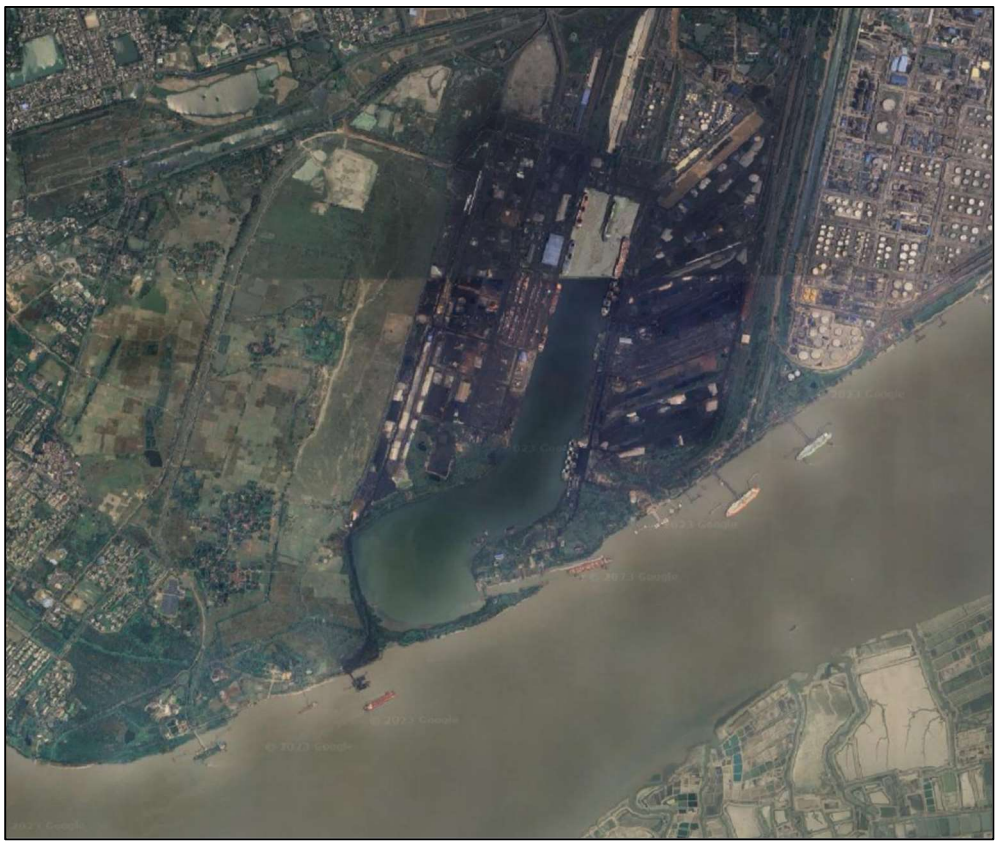
SYAMA PRASAD MOOKERJEE PORT – HALDIA DOCK COMPLEX



CRISIS MANAGEMENT PLAN (CMP)

By

IRCLASS
Indian Register of Shipping

April - 2024

This is to state that at the request of Syama Prasad Mookerjee Port (SMP), the undersigned surveyors have prepared Crisis Management Plan.

This work has been carried out for Haldia Dock Complex (HDC) as per their work order dated 08th June, 2023 and is confidential. No part of this report may be released to any outside organization unless explicitly advised by the owners in writing.

ISSUED BY:

Indian Register of Shipping

Prepared by

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REPORT REVISION RECORD

Revision No.	Revision Details	Date
0	Draft report issued for review and comment to SMP-HDC.	28.07.2023
1	Final report issued	19.01.2024
2	Final report issued	05.04.2024

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EXECUTIVE SUMMARY

Crisis is an event that has the potential to significantly impact or destabilise part of, or the entire port or that could significantly affect port personnel, operations, business continuity and environment.

The CMP is a comprehensive document covering all identified Hazards, Risk and Vulnerability analysis, Elements at risk and Standard Operating Procedure (SOP). The factual and timely communication to all the stakeholders of what needs to be done under specific circumstances to minimize losses is ensured. It lays down continuous preventive measures and provides steps for continuous improvement in managing crisis situations.

The plan outlined in this document does not replace the emergency procedures or contingency action plans already drawn up for the port, but it has instead been developed to address only the crisis situations. Despite the fact that care has been taken to include all aspects of crisis management in the document, there may still be occasions when an entirely new and unforeseen crisis situation could arise. Thus, it is necessary that the team of officers included in the CMP evolve a strategy to handle such unforeseen situations, which can later be included as a part of the CMP as a continuing process.

This plan has been prepared as per the template issued by MoPSW.

1. INTRODUCTION

Syama Prasad Mookerjee Port – Haldia Dock Complex (SMP-HDC) is committed to zero harm in its port and will take every rational precaution to avoid incidents by operating in a safe and responsible manner. HDC's Crisis management Plan undertakes to establish and maintain appropriate emergency and crisis event preparedness for all port site/facility operations.

This CMP provides a methodology for port Crisis Management Group (CMG) to operate, while coordinating strategic response to major emergency and crisis events, including the potential escalation. It provides guidelines to actively manage for preparatory actions, including responses and recovery.

1.1 CRISIS SITUATION

Broad category of potential crisis scenario threatening personnel, assets, environment or associated operations of port are as follows:

1. Cargo transfer/storage related:
    a. Fire/explosion
    b. Toxic release
    c. Corrosive &
    d. Gaseous cargo

2. Environmental related:
    a. Spills/uncontrolled releases - Oil, Chemical
    b. Fumes and Smoke

3. Operational related:
    a. Power failure
    b. Fire in Office buildings, Hospital, Electrical substations, Pump houses and control rooms at Lock gate, Warehouses, Coal stack yard, Container yard

4. Navigational related:
    a. Collision/Allision
    b. Grounding/Sinking

5. Natural related:
    a. Cyclone
    b. Flood
    c. Earthquake
    d. Tsunami
    e. Lightening

6. Human related:
    a. Breach of Port (maritime) security
    b. Terrorism
    c. Civil disturbance/ political unrest/protest
    d. Cyber Attack

1.2 CRISIS MANAGEMENT PLAN (CMP) FOR HDC OF SMP

1.2.1 Profile of the Port

Syama Prasad Mookerjee Port (SMP) established in 1870, the oldest Major Port in India, is located on the east coast. It is a riverine port located on the west bank of Hooghly River. As part of modernisation efforts to SMP for establishing a deep-water port, Haldia Dock Complex (HDC) was established as an extension in the year 1977. It is strategically located in the hinterland of major steel plants, power plants, iron ore and coal mines.

1.2.1.1 Haldia Dock Complex (HDC) Berths / Jetties mentioned as below:

- 14 +1 layup Berths inside (1 - 14),
- 3 Oil Jetties & OT-II on the river,
- 2 Barge Jetties for POL products,
- 4 Barge Jetties for Fly Ash,
  - HDC-1
  - IWAI-3
- 2 Floating crane facilities for anchorage operation,
- 1 Floating cargo handling terminal,
- Outer Mooring Buoy.

1.2.1.2 Cargoes handled at Berths & Oil Jetties at HDC:

Berth No.	Cargo Handled
1	Coking Coal, Limestone, Coke Breeze, Non-Coking Coal, Manganese Ore, Paraxylene, Gypsum, PTA, Iron Ore, Iron & Steel, Met Coke and R.P. Coke.
2	Para-xylene, POL Product, Palm Oil, Soya Oil, LSHS, N.C. Coal, Coke Breeze, R. Phosphate, Sand and Manganese Ore.
3	Palm Oil, Soya Oil and Veg Oil.
4	Coking Coal and Non Coking Coal.
5	Coking Coal, Manganese Ore, Coke Breeze, Cement Clinkers, Non Coking Coal, Met Coke, R.P. Coke, Gypsum, Limestone, Iron Ore, Rock Phosphate, Iron & Steel.
6	Coking Coal, Non Coking Coal, Met Coke, R.P. Coke, Manganese Ore, Limestone, Pyroxinite, Iron Ore, Bitumen, Palm Oil, Soya Oil, Phosphoric Acid, P. Cargo, Gypsum, Sulphur, Rock Phosphate and Wood Pulp.
7	Phosphoric Acid, Bitumen, CBFS, Benzene, Low Sulphur Heavy Stock, Palm Oil, Soya Oil, Veg Oil, MEG and Acetic Acid.
8	Phosphoric Acid, Bitumen, CBFS, Benzene, Palm Oil, Palm Fatty Acid, Soya Oil, Veg Oil, MEG, Acetic Acid, Nitric Acid, DEG, N.C. Coal, Manganese Ore, Pig Iron and Wood Pulp.
9	Coking Coal, Limestone, Manganese Ore, Non-Coking Coal, Met Coke, Pyroxinite, Dolomite, R.P. Coke, Gypsum and Iron & Steel.

10	Coking Coal, Non Coking Coal, Coke Breeze, Cement, Met Coke R.P. Coke, Limestone, Rock Phosphate, Sulphur, Manganese Ore, Pyroxinite, Soda Ash, Iron Ore, Iron & Steel Scrap, Zeolite in Bags, Rice, Iron Steel, Wood Pulp, P. Cargo and PTA.
11	PTA, Wood Pulp and Container
12	Wood Pulp and Container
13	Limestone, Sulphur, Pyroxinite, Fertilizer, Dolomite, Gypsum, Iron Ore, P. Cargo and Iron & Steel.
14	Coking Coal, Non Coking Coal, Coke Breeze, Cement Clinker, Met Coke, R.P. Coke, Rock Phosphate, Sulphur, Pyroxinite, Gypsum, Manganese Ore, Iron Ore, Sand and Limestone.
16 (HOJ-I)	POL Products, Liq. Ammonia, LPG, Paraxylene, Bengine, Butadine, MTBE and Methyl Alcohol.
17(HOJ-II)	POL Product and LPG
18(HOJ-III)	Crude, POL Product, LPG, Palm Oil, Soya Oil and MTBE.
19 (Floating Jetty)	Coking Coal, Non-Coking Coal, Cement Clinker, Met Coke, R.P. Coke, Limestone, Manganese Ore, Pyroxinite, Dolomite and Gypsum.
Outer Terminal -II	POL Product, Palm Oil, Soya Oil.

HDC has a mix of conventional and mechanized handling equipment at various berths for handling Dry Bulk and Break Bulk cargo like Wagon Tipplers, Stacker-cum-Reclaimer, Wagon loader, Mobile harbor cranes, dumpers, pay loaders, bulldozer, excavators, Rail Mounted Quay Cranes (RMQC), Rubber Tyre Yard Gantry Cranes (RTYGC), Reach Stackers, Tractor-Trailer combinations, Fork-Lift & Top Lift trucks etc.

Liquid cargo, hazardous and non-hazardous are handled at the Oil Jetties through Pipeline facilities and unloading arms/flexible hoses by various organizations like IOCL, BPCL, HPCL, HPL, IOPPL, MCPI, Indorama, Emami, PHBPL, Reliance. Ruchi Industries Ltd., Aegis Group, etc.

1.2.1.3 Railway Connectivity at HDC:

The HDC Railway system is connected with the South Eastern Railway at Gaurichak near Durgachak station in Panskura-Haldia broad gauge railway section through a fully electric single line corridor connecting general marshalling yard and further extended up to the Bulk handling yard which is 7 km from the take off-point.

The rail route from Mecheda to Haldia Dock Complex has already been converted to double line.

Figure 1.1: Railway Connectivity

1.2.1.4 Road Connectivity at HDC:

The Port of Haldia called as the "Gateway to Eastern-India".

The 4 lane National Highway 116 (*erstwhile NH41*) (Port Connectivity) connects the Port city with National Highway 16 (part of Golden Quadrilateral) at Kolaghat.

A State Highway also connects Haldia with Kolaghat via Tamluk town which is the District Headquarters as an alternate connectivity.

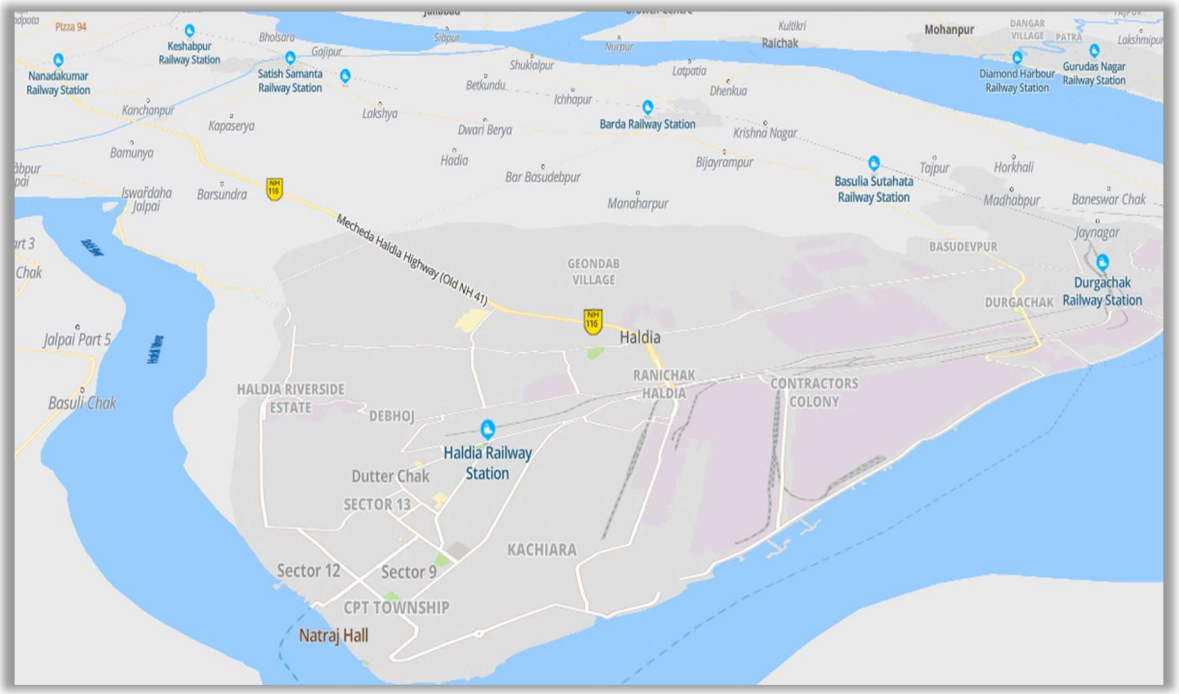

Figure 1.2: Road Connectivity

1.2.1.5 Inland Water Transport:

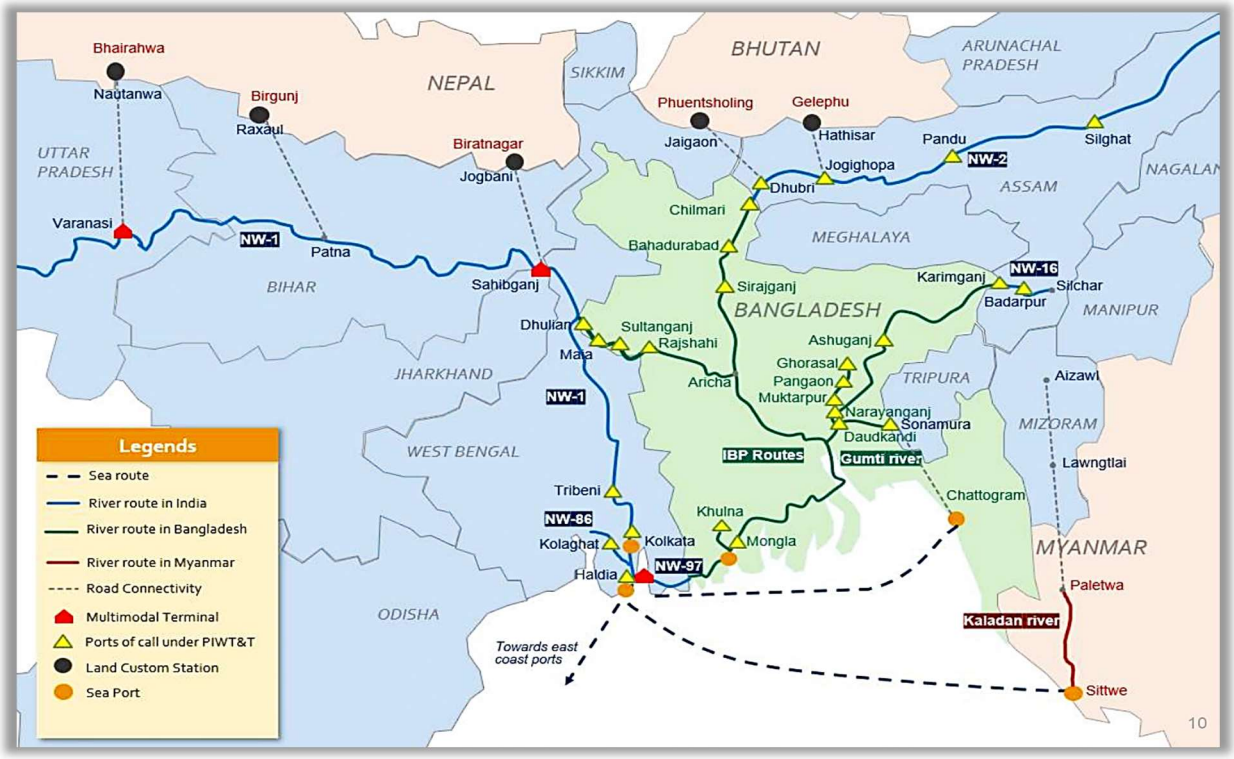

Figure 1.3: Inland water transport

1.2.1.6 Haldia Dock Complex (HDC)

HDC Port Layout

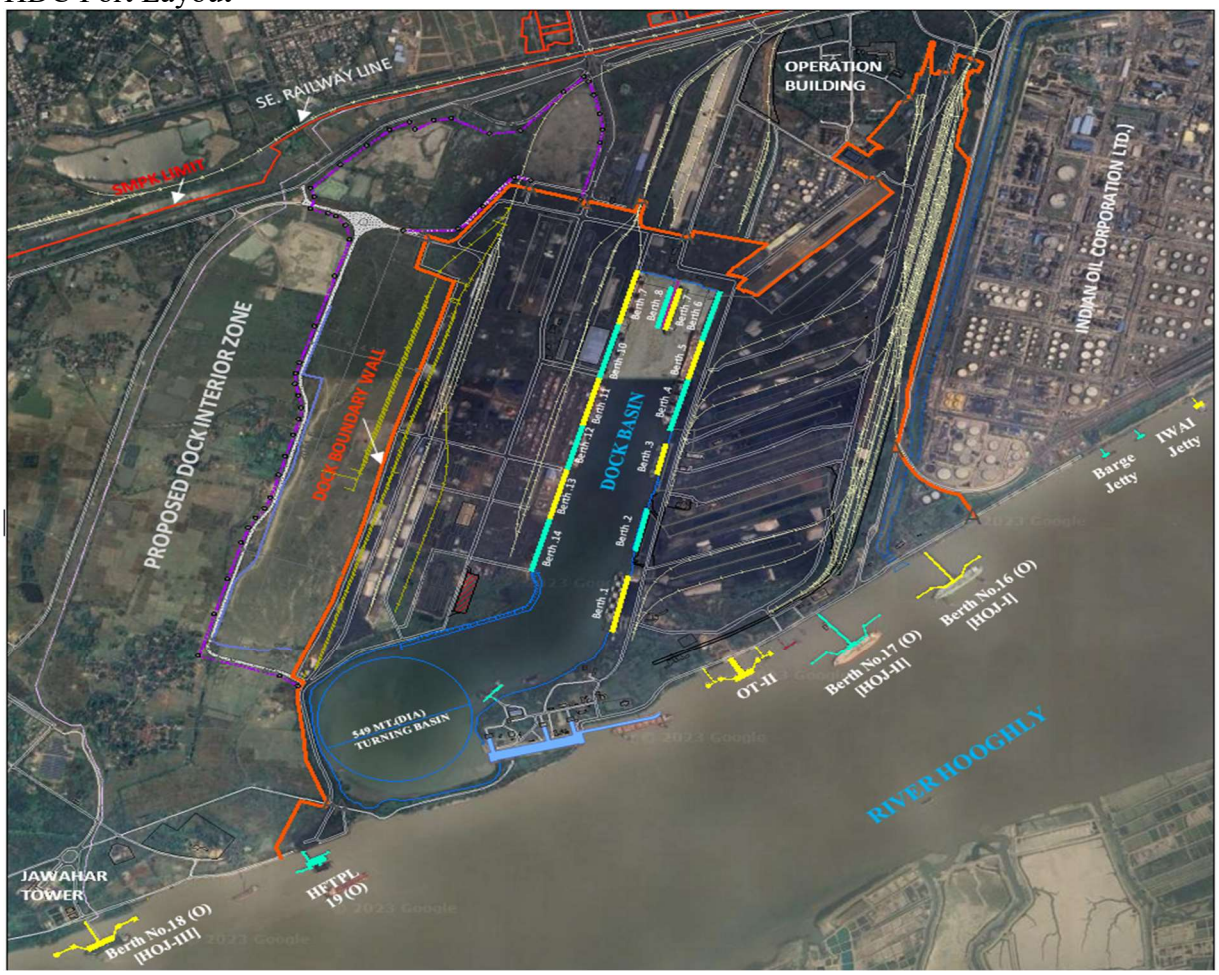

Figure 1.4: HDC Layout

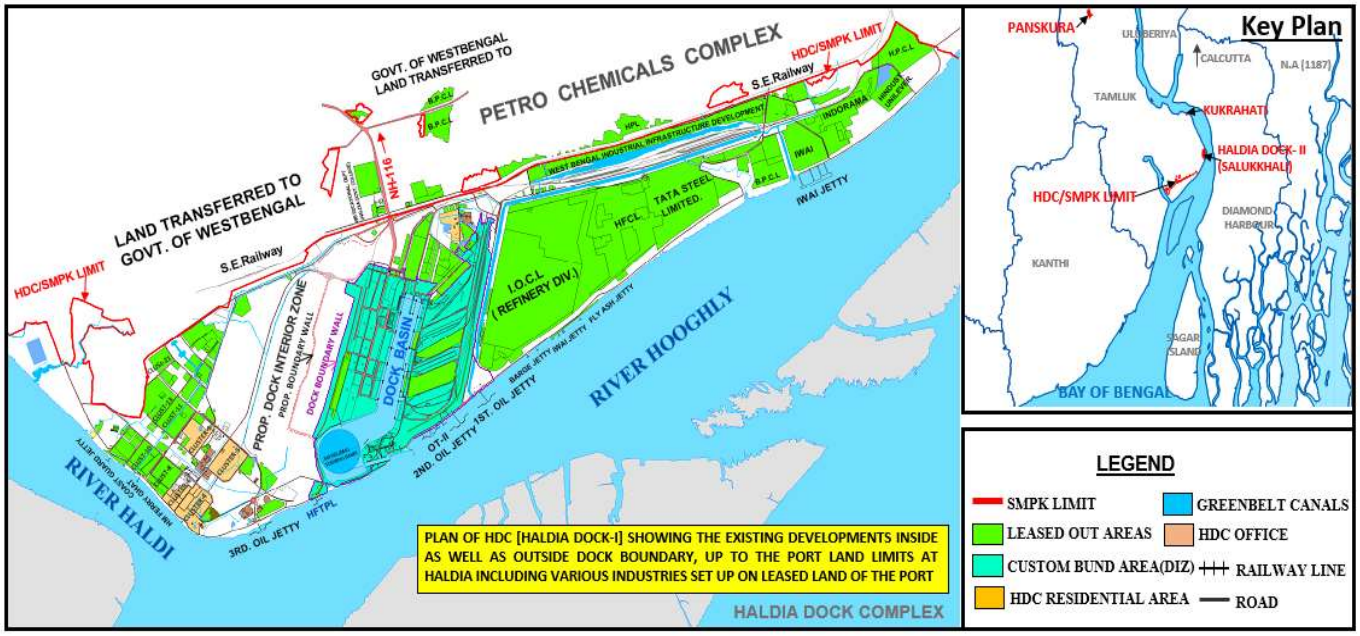

Figure 1.5: HDC land area layout

1.2.1.7 Navigational Facilities

SMP maintains two approach channels from sea one via Eastern channel for vessels visiting to KDS (KPD and NSD) and the other via Western channel / EDEN for vessels visiting to HDC as shown in **Figure 1.6**.

Currently Eastern Channel is being used for navigation for Kolkata bound vessels whereas Western Channel is used for navigation by Haldia bound vessels. Whereas, the Pilotage distance to Haldia is 115 kms comprising 30 kms of river and 85 kms of sea pilotage / VTMS.

The Port maintains a pilot Vessel/Station at Sagar Island. At Haldia, the pilot bringing the vessel from Upper Auckland hands over the vessel inside the lock to the Dock Pilot. All vessels bound for oil jetties are taken alongside by the Pilot.

1.2.1.8 Navigational Channel map

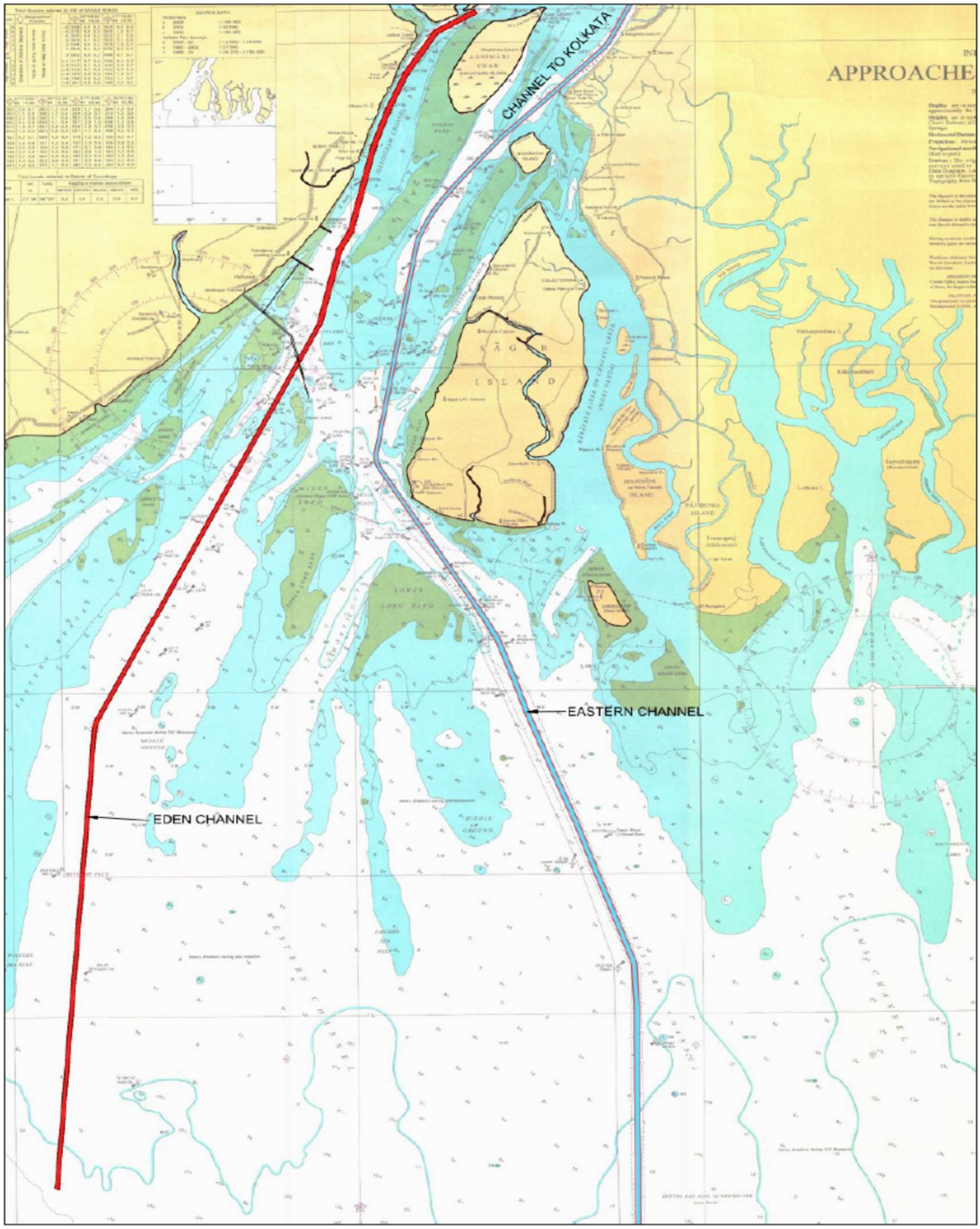

Figure 1.6: Navigational Channel layout

1.3 RATIONALE OF CMP

Ministry of Port, Shipping and Waterways (MoPSW) has issued a template for the preparation of Crisis Management Plan for the ports. The plan is prepared as per this template.

1.4 OBJECTIVES OF THE PLAN

The objective of the CMP is as follows:

a. Improve the understanding of crisis;
b. Prevent crisis and achieve substantial reduction of risk and losses in lives livelihoods, health, and assets;
c. Empower to have prompt response to any threatening crisis situation or crisis;
d. Protect the lives of the employees, stakeholders, contractors & visitors;
e. Limit damages to port & contractor assets and environment;
f. Safely restore operations back to normal as quickly as possible after occurrence of any accident.

1.5 SCOPE OF THE PLAN

The scope covers;

- To develop safety culture and risk management;
- The existing preventive and mitigation measures;
- Identification of potential crisis scenarios that are likely to occur considering risk profile of port;
- the preparedness to develop action plan when crisis occur;
- the responses that mobilize the necessary emergency services including responders like fire service, police service, medical service including ambulance, government as well as non-governmental agencies such as NDRF;
- the post crisis recovery with aim to restore the affected area to its original conditions.

1.6 MAKING OF THE CMP (METHODOLOGY)

- Identification of potential crisis scenarios through site visit, discussion with port personnel and documents review;
- Assigning Roles and responsibilities of CMG and IRT members;
- Preparation of SOPs for each crisis scenario;
- Review and update plan annually and lesson learned.

2. CRISIS MANAGEMENT PLAN (CMP)

The Crisis Management Plan (CMP) is a response document and provides the following information:

a) authority and responsibilities for key decisions and actions in a crisis;
b) key contact details: how staff are to be contacted in the event of a crisis;
c) crisis communications (internal and external);
d) the activation mechanism for dealing with a crisis;
e) details of levels of response across the organization and showing the sequence of actions;
f) the structure and role of the CMG;
g) where the CMG will meet (with alternative locations) and what resources are required;
h) an incident report template.

2.1 PHASES OF CRISIS

The CMP has been divided into three phases:

- Pre-crisis
- During-crisis
- Post-crisis

2.1.1 PRE-CRISIS PHASE

Crisis management is related to the management of risks and issues of potential significance to the port. It is concerned with the activities related to prevention and preparation in order to minimize the risk. This phase focusses on creating a mechanism for **surveillance, detection and alert warnings**. The potential situations/threats that may lead to crisis are as follows:

a. **Fire/Explosion on board ship/ashore in port area -** this can be caused due to ignition of loss of containment of hazardous cargo handled and general category fires (Class A & C fires). In addition, fire on vessel can occur in the sea/river approach channel.

b. **Oil /Chemical/Gas Pollution -** this can be caused due to collision and grounding of ships which have the secondary risk potential for causing oil/chemical spills during Bunkering or cargo operations etc.

c. **Vessel Accident Collision/Grounding -** this can be caused due to potential navigational scenarios which might occur in the port limit as follows:
   - Collision with vessels;
   - Collision/Allision with Jetty, channel and river marking buoys, Lock gate;
   - Grounding of vessels;
   - Listing / capsizing;
   - Dragging anchor (River and sea anchorage).

d. **Cyclone, Floods, Lightning, Tsunami, Earthquake, Maritime Casualties -** this can cause human casualty, damage to port infrastructures, mangroves, trees and cause flooding of low-lying areas coupled with poor drainage. In addition, ships in the harbor can also sustain serious damage and grounding (maritime casualty).

e. **Personal Injury on board ship/ashore in port -** are occupational hazards and can be due to following reasons:
   - Slip, Trip, Falls;
   - Working at heights;
   - Confined space working;
   - Hot work;
   - Electrical shocks;
   - Toxic inhalation;
   - Overboard / Drowning etc.

f. **Power Failure/Strike/Terrorist attack/Hijacking/Cyber Attack –**
   - **Power Failure** can be caused due to grid failures, substation and transformer related issues, cable faults and system related issues.
   - **Strikes** are situations which arise suddenly and that develop over a period.
   - **Terrorist attack/Hijacking –** these are situations that develop mostly without warning and needs specialized handling.
   - **Cyber Attack –** despite having cyber security plan in place, computer and information systems and data storages are prone to malicious activities. These have capabilities to completely paralyze the organization. Ports have also been a target in the past.

2.1.1.1 Surveillance:

The port has:

a) systems to provide early warning of potential crisis;
b) horizon scanning processes (e.g., daily roundup, debrief, data analysis) to identify potential crisis that might emerge.

To achieve this, the port has the processes to identify potential crisis, escalate them to the appropriate level and promote effective teamwork in the use of tracking, participation in drills and trainings, and surveillance equipment available at the port as follows:

- Electronic navigation charts,
- CCTV monitoring,
- RFID/Access Control,
- VTMS,
- Container Tracking system,
- Safety Audits, Safety Checks and Rounds by Security Personnel,
- ISPS audit,
- Cyber security audit,

- Automated tidal gauges with Artificial Intelligence,
- X-Ray,
- Radiological detection,
- Personnel checks,
- Weather monitoring,
- Visual monitoring,
- RADAR etc.

2.1.1.2 Detection – Information of the occurrence of incidents in and around the port area may come from a variety of sources. While dealing with the developing scenario the onsite team members and others will be required to remain calm and maintain situational awareness. They will be required to convey a best available appreciation of:

a) what is going on and what the impacts might be;
b) the degree of uncertainty;
c) the degree of containment;
d) exacerbating issues; and
e) what might happen in the future.

Thus, in a rapidly developing scenario the onsite team should be able to:

a) present information to decision makers in an appropriate form;
b) gather relevant information on the crisis;
c) evaluate that information in terms of quality and relevance to the crisis;
d) filter, analyze and make sense of that information;
e) communicate the information within the organization and externally as required.

On receipt of information designated personnel must carry out investigation to confirm the incident and gather as many details and as quickly as possible:

- Prepare a preliminary report.
- Immediately forward the report to and inform the GM (Marine) / Dy. Dock Master.

The information collected shall be maintained by making periodical log entries in a register.

2.1.1.3 Warning/Alert - The responsible person or any other person (First observer) noticing an unusual occurrence like a fire / gas release / collapse of structure etc., should immediately notify the VTMS / Port Control Room / CISF control room / Fire station with available means of communication and also contact the concerned officer of the area.
He would:

1. Raise alarm
2. Call fire station and Port control room (marine control room) and pass on following information:
   - Introduce himself
   - State briefly the type of emergency
   - Give the location of the incident.

3. Proceed to a safe place. If he is part of the action group, he would return to the location of the incident and place himself in a safe area cross-wind to the wind direction and standby to give assistance.

After receiving information from the First Observer, the VTMS / Port Control Room / CISF control room / Fire station would notify all the key personnel of the Port and direct the security personnel to activate Siren and will subsequently announce on the available means of Public Address System as follows:*

- Location of the crisis.
- Type of the crisis.
- Severity of crisis.

After hearing siren or the public announcement, all concerned personnel (identified in the plan) would move to their respective positions and will begin actions as documented in the plan.
*Improvised Public Address System through electronic Audio-Visual display board at different locations of the Dock connected through LAN.

2.1.1.3.1 Alert

These agencies are responsible for keeping track of developments in respect of specific hazards assigned to them and inform the designated authorities/agencies at National, State and District levels about the impending disasters.

Table 2.1: Competent agencies for issuing warnings

Agencies	Crisis
IMD	Earthquake
Central Water Commission (CWC)	Flood
IMD, Regional Specialized Meteorological Centre (RSMC) – Arabian Sea	Cyclone, Heavy rainfall
INCOIS	Tsunami and Storm Surge
IMD	Lightning

i. Cyclone

Indian Meteorological Department (IMD) has a developed detailed procedure for Four Stage Warning of Cyclone

1. **Pre-Cyclone Watch**: Pre-cyclone watch is an early warning issued about 72 hrs. in advance of the commencement of bad weather.
2. **Cyclone Alert**: Cyclone Alert is issued by IMD and depending upon various factors may be about 5 days prior to expected commencement of adverse weather.

3. **Cyclone Warning**: After formation of Cyclone, Cyclone warning is issued twice a day by high priority telegrams based on 0830 IST and 1730 IST charts till the weather improves. Depending upon the severity the frequency is increased and may be issued every 3 hours also.
4. **Post Landfall Outlook**: Post landfall outlook is issued at least 12 hours in advance of the landfall by concerned CWCs. On the basis of this outlook, the concerned Meteorological Centre will also issue cyclone warnings for the interior areas.

Cyclone Warning Dissemination System (CWDS)

Cyclone Warning Dissemination System (CWDS) receivers have been established in vulnerable coastal areas using INSAT/METSAT. The system is being used extensively on operational basis during cyclone. The cyclone warning message originated from Cyclone Warning Centre (CWC) Kolkata whenever a storm is observed.

In addition, Cyclone Warning is disseminated through the following means:

a. Police Wireless network,
b. Warnings through All India Radio (AIR) Bulletins,
c. Television,
d. Press Bulletins,
e. Aviation Warning,
f. Telephone and Fax,
g. Telex,
h. Telegrams.

ii. Tsunami

INCOIS provides advance warnings on Tsunami likely to affect the coastline. Tsunami warnings and alerts are as follows:

Tsunami Warning (RED) contains information about the earthquake and a tsunami evaluation message indicating that tsunami is expected. This is the highest level wherein immediate actions are required to move public to higher grounds. Message also contains information on the travel times and tsunami grade (based on run-up estimates) at various coastal locations.

Tsunami Alert (ORANGE) contains information about the earthquake and a tsunami evaluation message indicating that tsunami is expected. This is the second highest level wherein immediate public evacuation is not required. Public should avoid beaches since strong current are expected. Local officials should be prepared for evacuation if it is upgraded to warning status. Message also contains information on the travel times and tsunami grade at various coastal locations.

Tsunami Watch (YELLOW) contains information about the earthquake and a tsunami evaluation message indicating that tsunami is expected. This is the third highest level wherein immediate public evacuation is not required, Local officials should be prepared for evacuation if it is upgraded to warning status. Message also contains information on the travel times and tsunami grade at various coastal locations.

Tsunami cancellation (GREEN) will be issued if the tsunami warning was issued on the basis of erroneous data or if the warning center determines from subsequent

information that only an insignificant wave has been generated. In addition, tsunami warning may be cancelled on a selective basis when a significant wave that has been generated clearly poses no threat to one or more of the areas the warning center warns, either because of intervening continents or islands which screen them or because the orientation of the generating area causes the tsunami to be directed away from these areas.

Tsunami All Clear (GREEN) bulletin indicates that the 'Tsunami Threat' is passed and no more dangerous waves are expected.

iii. Flood

Central Water Commission has developed a network of flood forecasting stations and issues Daily Flood Bulletins to all designated Authorities/Agencies of the Central Government and State Governments/ district Administration during the South East Monsoon season for all the major river basins in the following categories:

Category IV:
Low Flood (Water level between Warning Level and Danger Level)

Category III:
Moderate Flood (Water Level below 0.50m. less than HFL and above Danger Level)

Category II:
High Flood (Water Level less than Highest Flood Level but still within 0.50m. of the HFL)

2.1.1.3.2 In case of Terrorist attack / Hijacking, the information is received via communication, email, telephone calls, phone calls or messaging system. On receipt of this information, CISF control room take action and makes the alert to the relevant dept. of the port and/or external agencies while trying to gather maximum information from the caller or sender of the message.

2.1.1.4 Public Warning

The Port has in place the following process for information collection and dissemination of warning messages to the stakeholders.

i. Message content

The message needs to be announced at least in local language which may be for example Evacuate, Assemble etc.

ii. Public Warning System

The various types of warnings through hooters/sirens with indication locally and in control room, depending on the location of emergency.

iii. Siren for declaring Emergency/threat

On receipt of the information about the Emergency/threat, the port control room (EOC) will authorize CISF at Gate to actuate the Emergency Siren as follows: -

- Siren to be sounded continuously for 10 Seconds with an interval of 5 seconds for one minute.

iv. Siren declaring All Clear and returning to the work

On receipt of the information from the General Manager (Marine) or in his absence Dy. Dock Master, the port control room (EOC) will authorize CISF at Gate to actuate the Siren as follows:

- Continuous ringing of siren for 1 minutes

2.1.2 DURING CRISIS PHASE – This phase involves management attempts to respond to a crisis. For small scale or short duration responses, the local Emergency Operation Center (EOC) will be used inside the port. For larger scale responses, where external help is needed the main office area or as directed by the Chairman, will be utilized along with local EOC. This phase includes coordination and immediate response arising out of any crisis-situation.

2.1.2.1 PROTECTION AND RESPONSE

The Chief Incident Controller (CIC) / Site Incident Controller (SIC) will ensure mobilization of sufficient equipment and personnel resources required to protect and manage the response as mentioned in Chapter 4. Further Annexure A and B contain the equipment and personnel resources.

Access control and isolation of the Danger area

a) All gates and berths/jetties should be guarded,
b) Unauthorized person should not be allowed to the restricted area,
c) Authorized person will be entering the zone with special pass / ID and all the necessary PPEs,
d) The area should be cordoned off during operation,
e) Proper signage board and warning should be displayed at the place of the operation,
f) The restricted areas should be under surveillance at all times.

Site Control procedure is given in Table 2.2 where access is to be controlled. This includes the EOC, sites of shoreline cleanup, waste storage, response vessel mooring areas or any site containing hazards or hazardous materials.

Table 2.2: Site Control Procedure

Task	Action		Status
1	Identify perimeter of the "Hot" (secure or prohibited) zone. This may be:		
	i	Oiled shoreline. (Note: This zone should contain all hazards and sensitive areas where access should be restricted).	
	ii	Jetty/Berth area	
	iii	Area around the incident (e.g., Fire and Explosion).	
	iv	EOC	
2	Identify the "Hot" zone perimeter by sign-posting or establishing a cordon.		

3	Identify the "Warm" (exclusion, controlled or support) zone. (Note: This is a non-contaminated/ non-hazardous zone). For e.g.:		
	i	Shelter, canteen, car park etc.	
	ii	Any water area established to exclude non-response vessels.	
4	Identify the "Warm" zone perimeter by sign-posting or establishing a cordon.		
5	Establish any required "Hot" zone perimeter facilities. For example (i) and (ii) this may include:		
	i	Decontamination facility.	
	ii	Temporary waste storage.	
6	Establish "Warm" zone perimeter facilities. Generally, this is site security.		
7	Establish support facilities within Warm zone as required		

Note 1: Entry to a Hot Zone should be restricted to:

- Personnel involved in the on-site work.
- Personnel equipped with appropriate protective gear.
- Personnel who have undergone correct training and induction.

Note 2: The Warm Zone surrounds the Hot Zone and is the zone and is generally:

- The area from which personnel and equipment are deployed.
- The perimeter where site control is exercised i.e., the entry points to the Hot Zone.
- Restricted to those people who operate in the Hot Zone and those who support them.

Note 3: The Cold Zone is all public or otherwise unrestricted areas, i.e., those areas outside of the controlled site.

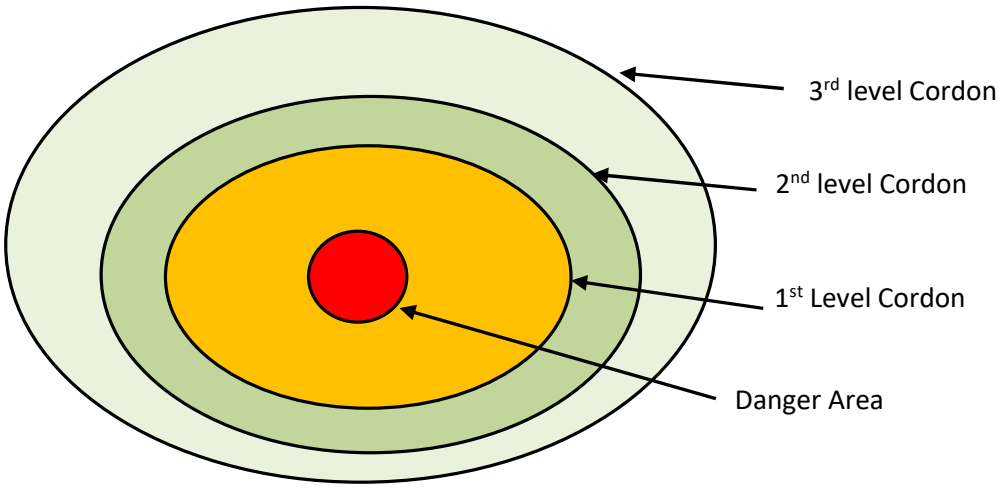

Figure 2.1: Isolation of Danger Area

Danger/Hazardous area

- 1st Level Cordon off
- 2nd Level Cordon off
  - Site Control point
  - Ambulance
  - Casualty Clearing point
- 3rd Level Cordon off
  - Traffic Control

Note: *Positions will depend on the wind directions*

2.1.2.2 SITUATION MANAGEMENT

In a crisis situation, the CMG would be a hierarchy of teams. As a good practice it will comprise of strategic group, supported by a tactical and operational team(s). It will undertake periodic strategic review of developing events on the need of the hour and take crucial decisions which will be based on:

i. Situational awareness as the crisis is developing will comprise of the following;
   a. Factual developments,
   b. Implications and impacts on the port,
   c. Consequence of the potential worst cases and mitigative measures;

ii. Defining (and continuously reviewing) the strategic direction of the response;

iii. Identifying issues, making decisions, assigning actions and confirming the implementation and results of actions;

iv. Confirming, monitoring and reviewing internal and external communications and strategy;

v. Reviewing and monitoring the work of the crisis management to ensure that priorities are understood clearly and that its performance, and the flow of information, are appropriate to the demands of the situation;

vi. Examining the impact and management of the crisis on business as normal;

vii. Carrying out a continuously reviewed analysis of interested parties;

viii. Monitoring and reviewing continuously the objectives and effectiveness of teams managing incidents at other levels of the response;

ix. Ensuring that strategic planning for recovery starts as early as possible.

Considering on the above points, CMG will finalize the following operations:

i. Fire Fighting response

Fire-fighting facilities and related resources should be available till the operation is terminated. (Refer Annexure B)

ii. Oil spill response

Oil spill response equipment at per Tier 1 requirement and related resources should be available till the operation is terminated. (Refer Annexure B)

iii. Search and rescue

Search and Rescue shall start as soon as the public warning signal has been issued and should be carried out as per the instructions of CIC/SIC.

iv. Evacuation

On the blast of Crisis warning siren, the personnel will assemble at the respective assembly points to be transported to the refuge centers.

Foreign nationals – Evacuation and Rescue:

A list of foreign nationals working on ships and ashore will be maintained by CISF. Their agents and employers will be required to register such foreign nationals prior to their calling inside port. They will be handed over the checklist of do's and don'ts, evacuation routes, emergency contact details whenever they enter the work premises. In the event of an emergency evacuation, they will be required to report to the security gates of the facility or assembly areas.

a. Evacuation Routes

The most significant risk affecting the township population and neighboring industries is that of toxic materials release. The duty of the CIC is to alert outside authorities and advise them about the actions that should be taken to protect the public, if any.

The evacuation route could be by two ways:

a. Land side
b. River side

1. The vehicle-carrying casualty should be given priority in traffic movement.
2. While assessing the evacuation route, constant communication link should be maintained with the EOC as well as with the individual assembly point station from where the evacuation is to be undertaken.

The evacuation route at HDC is as follows;

Table 2.3: Evacuation routes

Sr. no.	Crisis	Evacuation routes
1.	Natural Calamities	Assemble near assembly points to proceed to the Relief Centers or to other shelters (Coordinated by CISF-Security)
2.	Fire at Oil Jetty 1, 2	Assemble at the fire station to proceed out from Gate as directed (Coordinated by Port Fire dept. & CISF-Security)
3.	Fire at Oil Jetty 3	Assemble near to Control room to proceed out as directed (Coordinated by Port Fire dept. & CISF-Security)
4.	Toxic gas Release	The route decision will be determined depending upon the wind direction at the time of the incident. It will be in the up-wind direction of the outflow source direction. (Coordinated by Port Fire dept. and CISF-Security)

5.	Fire at General Cargo berth	Assemble at the Assembly points near to berth (Coordinated by Port Fire dept. & CISF-Security)

Following areas are earmarked as assembly areas.

1. Near firefighting pump house in L-3 as marked on the plot plan.
2. Pump house, Light tower near to the concrete road.
3. GC berth canteen building.
4. Near gate no. 4.
5. Near fire station – in the case of crisis other than in Oil Jetty – 1 and 2
6. Marine house
7. Near Operator control room

b. Evacuation Shelters

In the event of an impending crisis the affected population would have to be transported to intermediate evacuation shelter. The temporary shelters identified are canteen, community halls, located at Port Area. Additionally, the evacuation shelters may be schools and colleges located at the City or as instructed by district authorities.

Administration department shall ensure adequate quantity of water supply and food at all the temporary evacuation centres.

c. Transportation

All Port or hired vehicles should be parked in the location as decided for immediate use as soon as the people move into action.

v. Generator Sets

Wherever generator sets are required, Engg. department shall be contacted, who shall immediately hire/procure.

vi. Decontamination

Decontamination of personnel and equipment is required in case of contact with hazardous materials.

vii. Medical Facilities

Depending on the nature of the emergency, it may be necessary to alert medical facilities within and outside the port.

Medical facilities will need to be informed:

- The nature and location of the emergency,
- The likelihood or number of casualties,
- Whether medical staff are required at the location of the emergency,
- Actual details of the casualties, including the names, as soon as these are known.

First Aid treatments provided at the port and the Port ambulance placed at every First Aid center and hired vehicles, can be used for taking the person to the medical center.

viii. Logistics/Service Delivery Mechanism

The required/necessary equipment and assistance during various types of crisis can be requested from the Local Industry crisis groups, District crisis group, MoU signed with Industry association operating in port. Additional resources available for disaster relief with the various departments in the Purba Medinipur District can be found from IDRN (https://idrn.nidm.gov.in/).

ix. Cyber incident management

(a) Observe, by maintaining situational awareness: i.e., to understand potential, emerging and actual threats to the port/port facility operations. Observation includes detection of unauthorized changes to port systems or port data, non-secure modes of operation and unauthorized access to port assets.
(b) orient, by analyzing the risk to operations from new or changed threats and determine whether proactive measures are required to reduce the risk to an acceptable level.
(c) decide, what action may be appropriate either to deny further access to the port asset or to respond to the event by identifying suitable controls and mitigations.
(d) act, by implementing the decision(s).

2.1.3 POST-CRISIS PHASE

The objective of this phase is to **recover and restore** the normal situation and be prepared for any unknown crisis situation.

2.1.3.1 Terminating The Response

The decision to terminate a response is taken in consultation with the Chairman/Dy. Chairman.

2.1.3.1.1 Conditions For Termination

i. **In the case of Natural Disaster,** Response action can also be terminated as per the information received from the "Competent early warnings agencies e.g., IMD".

ii. **Fire Extinguishing operation** should be terminated when:
- Fire has been completely extinguished,
- Area has been declared as "Risk or Hazardous or Smoke' free area.

iii. **Marine Response Operations in case of oil spill** should be terminated when:
- Oil has been recovered to the extent practicable; or
- The surface oil slick has broken up; or
- Oil has impacted shorelines and is no longer on the water.

In the last case marine response resources must remain on standby and equipment maintained at the ready until shoreline response operations have been completed.

iv. **Shoreline Response Operations** should be terminated when:
- All accessible shorelines are clean to the extent practicable.
- Cleanup is having no further net beneficial effect or having a deleterious effect on

the shoreline or associated plants or animals.

Shoreline cleanup operations may be terminated only upon the instruction of the **WBPCB/Coastguard.**

v. Land Spill Response Operations should be terminated when:

- Chemical has been recovered to the extent possible,
- Area has been declared "Risk or Hazardous" free.
- Source of leakage is stopped, and the condition of the area is safe for operation.

Land spill cleanup operations may be terminated only upon the instruction of the **WBPCB.**

vi. Human Induced Crisis response may be terminated when;

- Threats are evaluated by the security agencies and as such the response may be terminated gradually in stages as per the input received from them.
- Cyber-attack – Affected site to be restored as per Cyber Security Management Plan.

2.1.3.1.2 Stand-Down Procedures

i. Return of Equipment

Upon completion of the response, the SIC (or delegate) will:

- Arrange recovery of all equipment and unused materials.
- Ensure that all equipment is cleaned and decontaminated.
- Ensure that all equipment is returned to the owner.

ii. Debrief

The SIC may hold a post-incident debriefing. Debriefing should address:

- Spill causes (if known) and future prevention methods.
- Speed of response activation.
- Effectiveness or suitability of strategies, tactics and equipment.
- Health and Safety issues (if any).
- Any other issues required to be communicated.
- Damage in terms of life, injury and loss of property should be assessed.

iii. Incident Report

The Chairman/Dy. Chairman and relevant authority may request the preparation of an Incident Report (Refer Forms and Formats).

iv. Cost recovery

1. Damage and loss assessment need to be carried out.
2. All records of costs must be collated for submission to the relevant insurer.
3. For expenses incurred assisting third parties, costs should be kept and submitted to the relevant authority.

2.1.3.1.3 Recovery Planning

i. Short-term recovery planning

Short-term recovery planning runs parallel to short term response and begins during and immediately after an incident.

ii. Medium-term recovery planning

In the medium-term recovery planning, port will engage in contracting and setting up for large scale reconstruction and reconstitution operations. This may include financial planning, contracting, and the formation of joint venture agreements to assist in long-term business continuity.

Initial reconstruction of damaged or destroyed facilities begins, as structural and civil engineers rehabilitate existing port structures. They use appropriate methods of lightering and port construction to handle cargo.

The reconstruction activities which may require an Environmental Impact Assessment are as follows:

a. Debris Removal
b. Emergency Protective Measures
c. Repair to Pre-Crisis Condition
d. Modification, Expansion, and Mitigation Projects
e. New Construction and Ground Disturbance

iii. Long-term recovery planning

In the event that a part of the entirety of a port becomes unusable or requires rebuilding, the long-term reconstruction considerations will be taken by Ministry of Port, shipping and Waterways (MoPSW) taking into account the financial planning and resources that may be involved in the process. This may include budgetary support.

2.1.3.1.3.1 Re-Opening of Berths to Vessels

After the channel to the Port has been re-opened and the Port infrastructure is found to be restored and in good condition, the Port will be in a position to begin accepting request for berthing. This will require coordination between the Port, ship pilots, and terminals.

Areas of consideration for prioritizing the calling vessels include:

- Available depth in the channel/draft of vessel;
- Condition of facilities to receive the vessel;
- Availability of labor to offload/load cargo;
- If vessel carrying a critical feedstock;
- If vessel carrying commodities that can be used in recovery.

2.1.3.1.3.2 Rail Rake Deliveries

After the Port has found the rail infrastructure in good condition, the Port will be in a position to begin accepting rail rake deliveries. This will again require coordination between the Port, rail authority, and terminals.

2.2 ACTIONS AND RESPONSIBLE AGENCY CONSIDERING ALL PHASES

When the incident is in developmental stage and has a potential to transform into crisis, the operational staff of all the following stakeholders are responsible for prevention, precaution and response actions during pre-crisis situations. Emergency Action Plan of respective stakeholders will be brought in before transition to a full-grown crisis.

1. Port Authority,
2. Ship owners and operators,
3. Berth / Jetty operators,
4. Stevedoring and shore handling agencies,
5. Port Railways,
6. Truck and Shipping companies,
7. Contractors to support the day- to- day activities of the port,
8. Govt. of West Bengal – River Transport dept. and district agencies including marine police, etc.

During crisis and Post crisis scenarios, the responsible agencies will be the CMG and IRT as formed during the Pre-crisis phase. SOP's are placed in the preceding section.

2.3 SPECIFIC RESPONSE STRATEGIES FOR IDENTIFIED HAZARDS

Port has formulated strategic measures for dealing with cyclone and navigational hazards which are in the form of departmental orders, notices and advisories. These are based on the challenges faced in the past and being keep updated depending on the experience gained.

Prioritization and allocation of resources with respect to the response and mitigation measures can be done on the basis of Risk Ranking as per the vulnerability assessment considering the vulnerable areas and the threats in **Table 2.5**.

2.3.1 Vulnerability Assessment

An assessment of vulnerabilities and threats is carried out and a representative matrix has been prepared depicting the vulnerability as low, moderate and high categories for various operational areas inside the port limit.

Bay of Bengal and SMP, are highly vulnerable to Cyclones and tidal fluctuations. Besides navigational challenges of approx. 115 km channel (30 km river and 85 km sea) channel are also a major hazard.

Table 2.4: Vulnerability Assessment

Threats / Vulnerable Areas	Fire / Explosion onboard ship / ashore in port area	Oil / Chemical / Gas Pollution	Vessel accident – Collision / Grounding	Cyclone / Floods / Lightning / Tsunami / Earthquake / Maritime Casualties	Personal Injury onboard ship / Ashore in port	Power Failures / Strike / Terrorist Attack / Hijacking / Cyber Attack
Oil Jetties - Riverine	xxx	xxx	x	xxx	xx	xx
Approach Channel	xx	xx	xxx	xxx	xx	xx
Pipelines	xx	xx	-	xx	xx	xx
Port tugs, crafts, dredger, launches	xx	x	-	xxx	x	xx
Lock Gate	x	x	x	xxx	x	xx
Electric Substations	x	-	-	xxx	x	xx
Trucks/Mobile equipment (Cranes & Ship Loaders)	x	x	-	xxx	x	xx
Container Storage Yard	x	x	-	xx	x	x
Rail Infrastructure	xx	x	-	xx	x	x
Stackyard & Conveyor system - Coal	x	x	-	xx	x	xx
Administration / VTMS / office Buildings / Fire stations	x	x	-	xx	x	x
Control gates for personnel and vehicular movement	x	-	-	x	x	xx
Impounding Basin Berths	x	x	-	xx	x	x

Note: x=low; xx=moderate; xxx=high

Table 2.5: Risk Ranking of the vulnerable areas.

Rank	Vulnerable areas
1.	Oil Jetties – Riverine
2.	Approach Channel
3.	Pipelines
4.	Port tugs, crafts, dredger, launchers
5.	Lock gate for vessel movement
6.	Electric Substations
7.	Mobile Trucks & equipment (Mobile harbour cranes and RTG cranes)
8.	Container Storage yard
9.	Port railway infrastructure
10.	Coal stackyard and conveyor system
11.	Administration/office Buildings/VTMS/Office buildings/Fire stations
12.	Control gates for personnel and vehicular movement
13.	Impounding Basin berths

3. IMPLEMENTATION FRAMEWORK

3.1 Crisis Management Framework for Haldia Dock Complex (HDC)

The development of a crisis management capability in HDC is strategically directed from the top management and implemented through a crisis management framework. Roles and responsibilities required to implement all crisis management capabilities have been identified, documented and communicated. Consideration has already been given to people's knowledge, skills and experience. HDC will consider the resources needed for each element of the capability and the associated requirements for training.

3.2 Composition of the Crisis Management Group

The Crisis Management Group is headed by of the Chairman / Dy. Chairman and comprises of:

1. General Manager (Marine Operation),
2. General Manager (Management & Services),
3. General Manager (Engg.),
4. General Manager (Traffic),
5. General Manager (Finance),
6. Sr. Dy. Manager (Administration),
7. Sr. Dy. Manager (Material Management),
8. Sr. Fire & Security Officer (Fire unit),
9. Sr. Commandant / Commandant CISF,
10. Medical Superintendent-I (Port Hospital).

Action Group (Incident Response Team)

The action group carries out the decisions made by CMG. It shall be formed at the time of crisis with Manager Marine Operation Haldia (MMOH) / DY. MMOH as the head and comprises of,

1. Dy. Dock Master.
2. Port Control Room,
3. Sr. Dy. Manager (Plant & Equipment),
4. Sr. Dy. Manager (Port Railways),
5. Sr. Dy. Manager (Shipping & Cargo handling),
6. Sr. Dy. Manager (Infrastructure & Civic Facilities),
7. Fire & Security Officer / Dy. Fire & Security Officer (Fire unit),
8. Safety and Anti-Pollution Officer,
9. Sr. Dy. Traffic Manager,
10. Safety Officer,
11. Dy. Commandant / Asst. Commandant, CISF,
12. On duty Medical Officer (Port Hospital),
13. Respective Terminal/Berth Operator.

Refer **Figures 3.1, 3.2 and 3.3** for CMG, Onsite and Offsite Emergency Organization Chart.

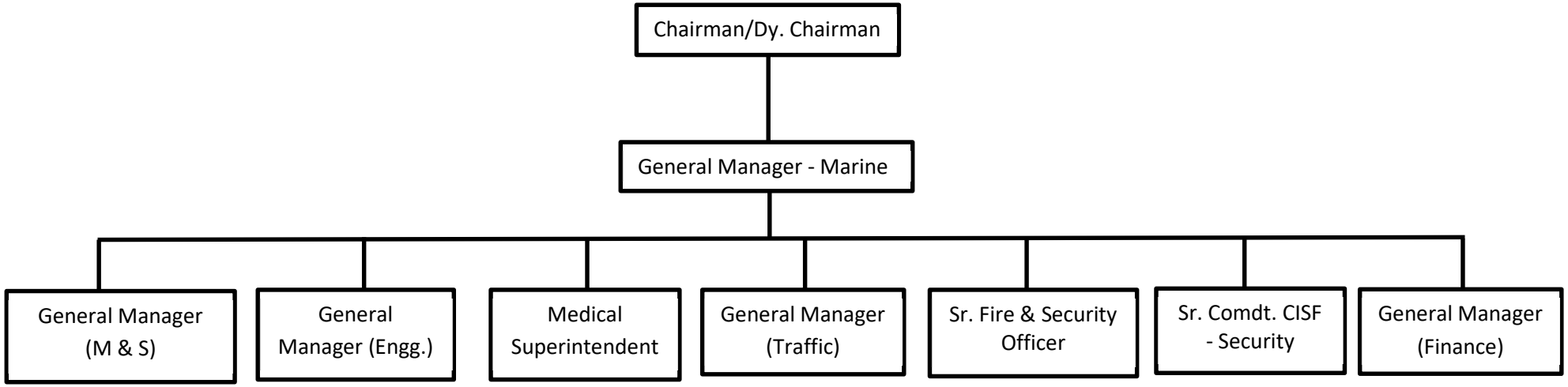

Figure 3.1: Crisis Management Group Chart

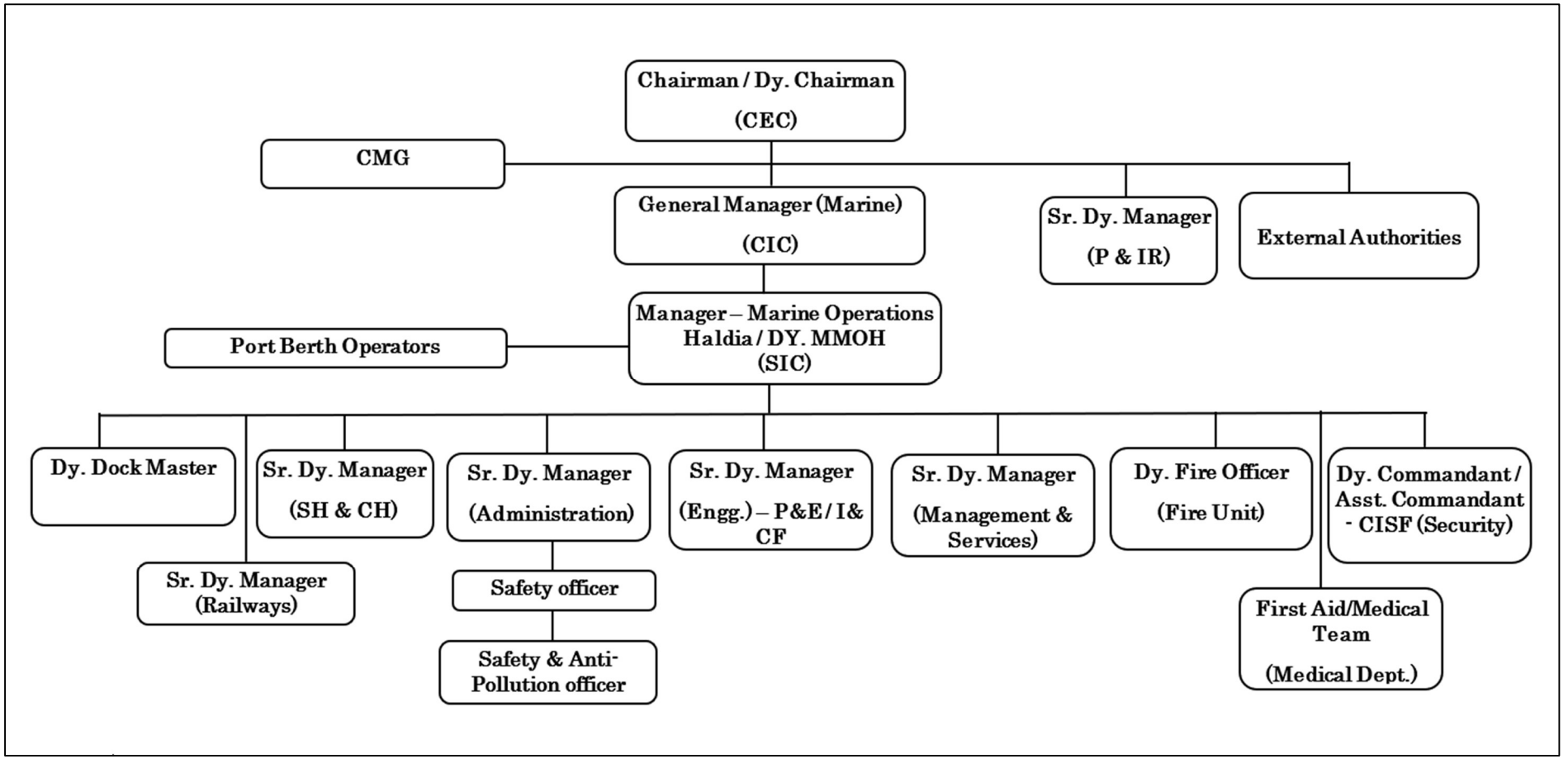

Figure 3.2: Onsite Emergency Organization Chart

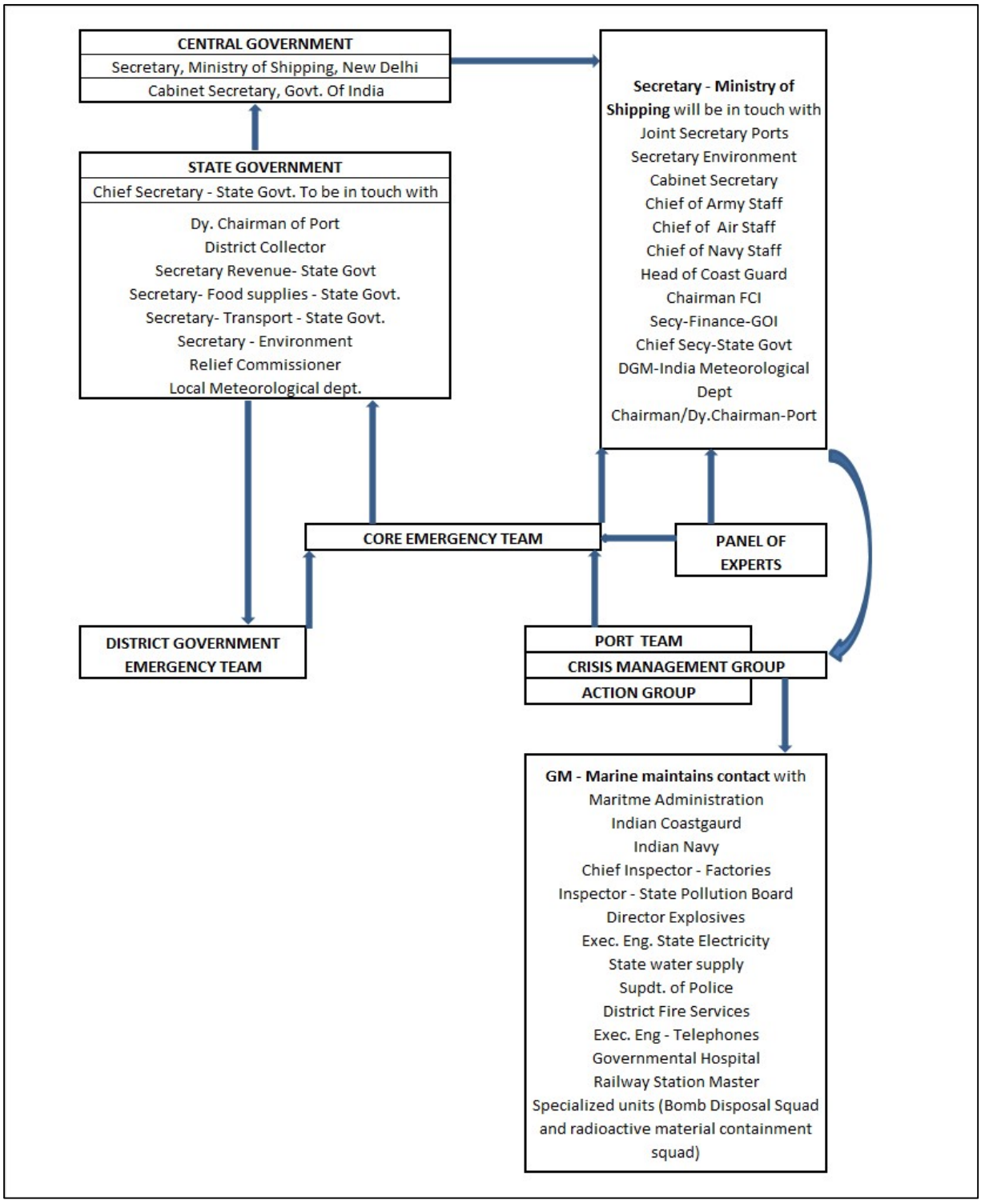

Figure 3.3: Off-Site Emergency Organization Chart – Level 2 and 3

3.3 Monitoring and reporting Control Rooms – EOC

3.3.1 Emergency Operation Centre (EOC) - Equipment

Emergency Operation Centre should have the following provision in general for monitoring and reporting and taking decision promptly:

1. Telephone lines and Mobile phones.
2. VHF / Walkie talkies / Satellite Phone etc.
3. Radio frequency (as required).
4. Regional Maps and Charts: Nautical charts, Topographic maps
5. Overhead projector (in nominated briefing room).
6. Whiteboards.
7. Copy(s) of the SMP CMP, DMP and OSCP.
8. Computer and Printer.
9. Stationary: Markers, Pens, Pencils and A4 white paper.

3.3.2 Communication Equipment & Dissemination Strategy

Communication plays an important role in all the four distinct phases of crisis management namely prevention & mitigation, preparedness, response and recovery. The following table provides information on the communication equipment within the port.

Table 3.1: Communication Equipment

Services & Authorities	Communication Equipment
Fire Service	Special fire alarm and normal communication system-VHF-TELEPHONE-WALKIE TALKIE- MOBILE
Personal and internal Medical services	Normal communication services
Fire-fighting craft and Rescue launches	UHF/VHF Radio telephones, via port authorities as reserve
Ships at Berth	Normal UHF/VHF Radio telephone link used in cargo operations. Terminal/Berth Operator representative at tanker berth to also have own radio-SATCOM
Civil authorities Including fire services, Police and medical services	UHF/VHF radio, telephone or public telephone system. SATCOM Cascade system to be used i.e. through department heads to subordinates
Harbor authorities, Pilots, tugs and other harbor craft	UHF/VHF Radio, telephone or public telephone SATCOM
District Collector or State Secretary	UHF/VHF Radio telephone, public telephone-hot line for emergency level 2 & 3-SATCOM

Jt. Secretary-Ministry of Ports, Shipping and Waterways, New Delhi	Public telephone-hot line for emergency level 2 & 3 SATCOM

3.3.3 Communication Flowcharts

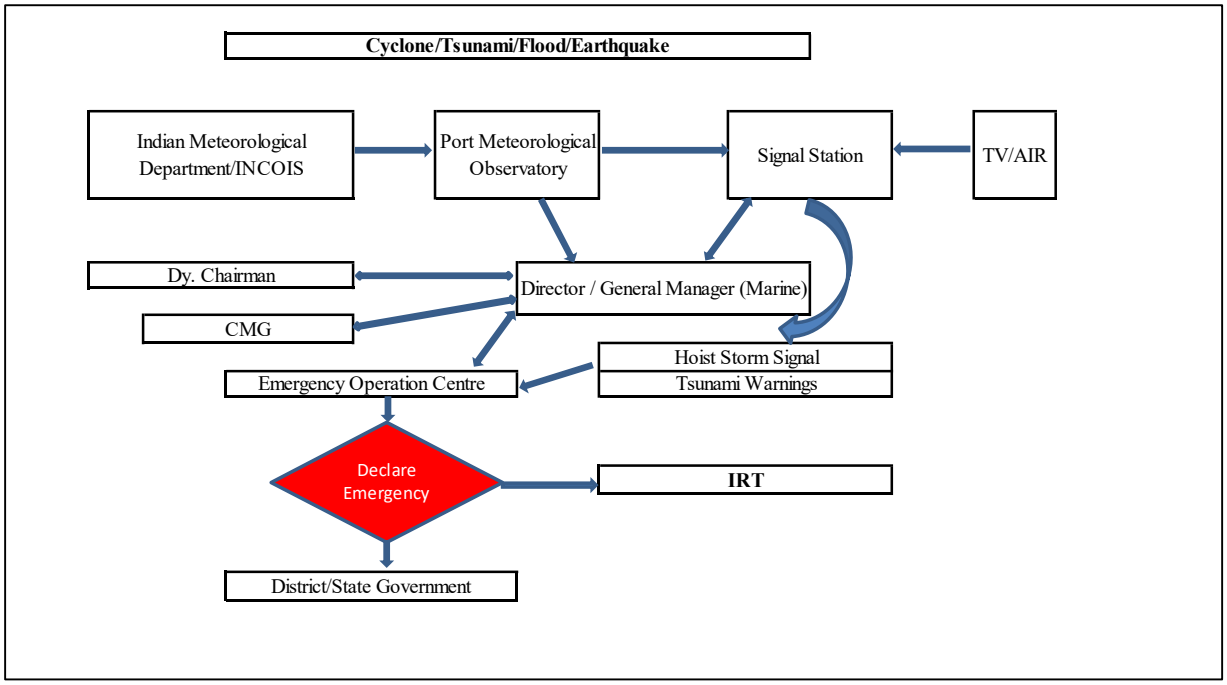

Figure 3.4: Cyclone /Tsunami/Flood/Earthquake

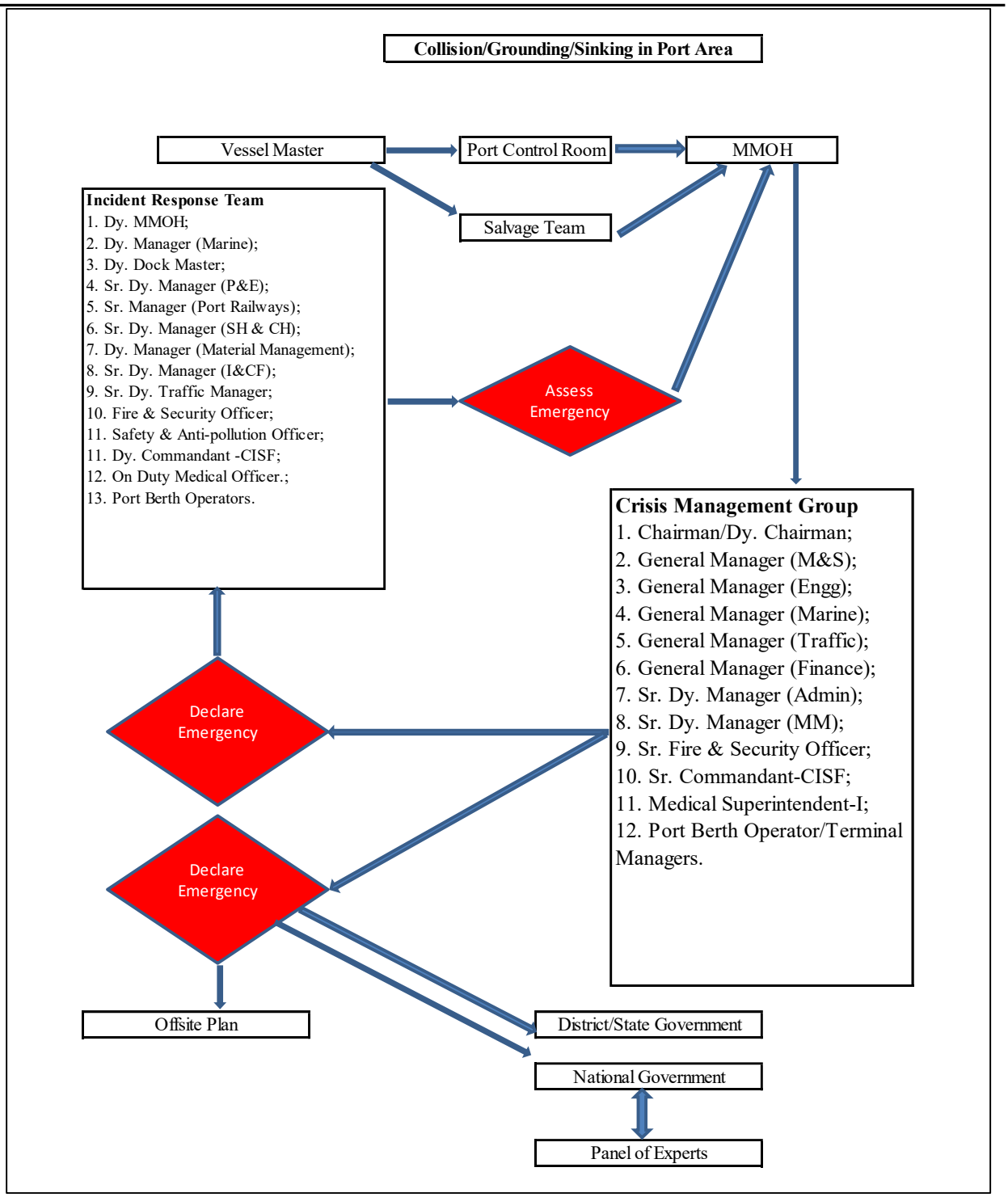

Figure 3.5: Collision/Grounding/Sinking

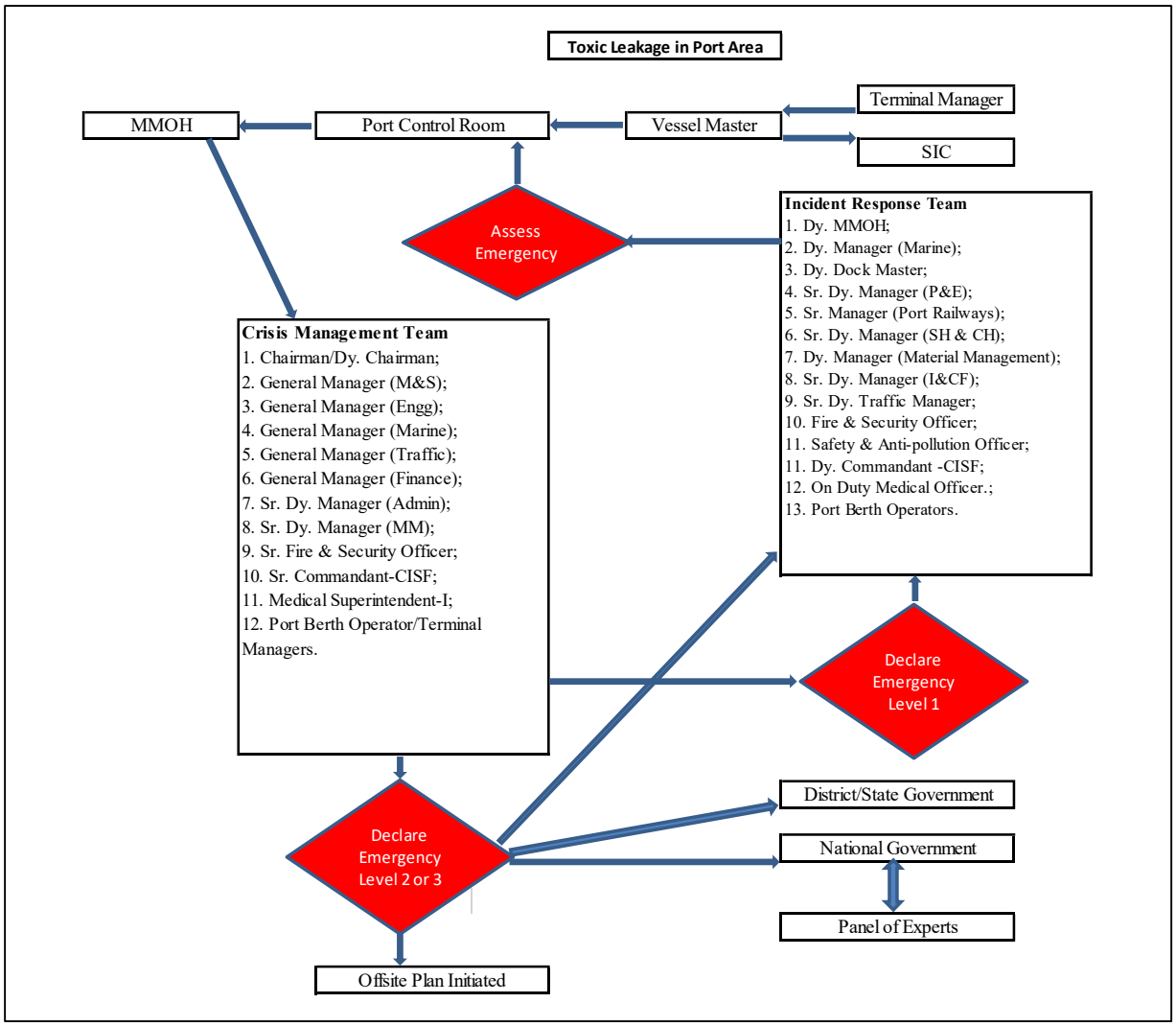

Figure 3.6: Toxic

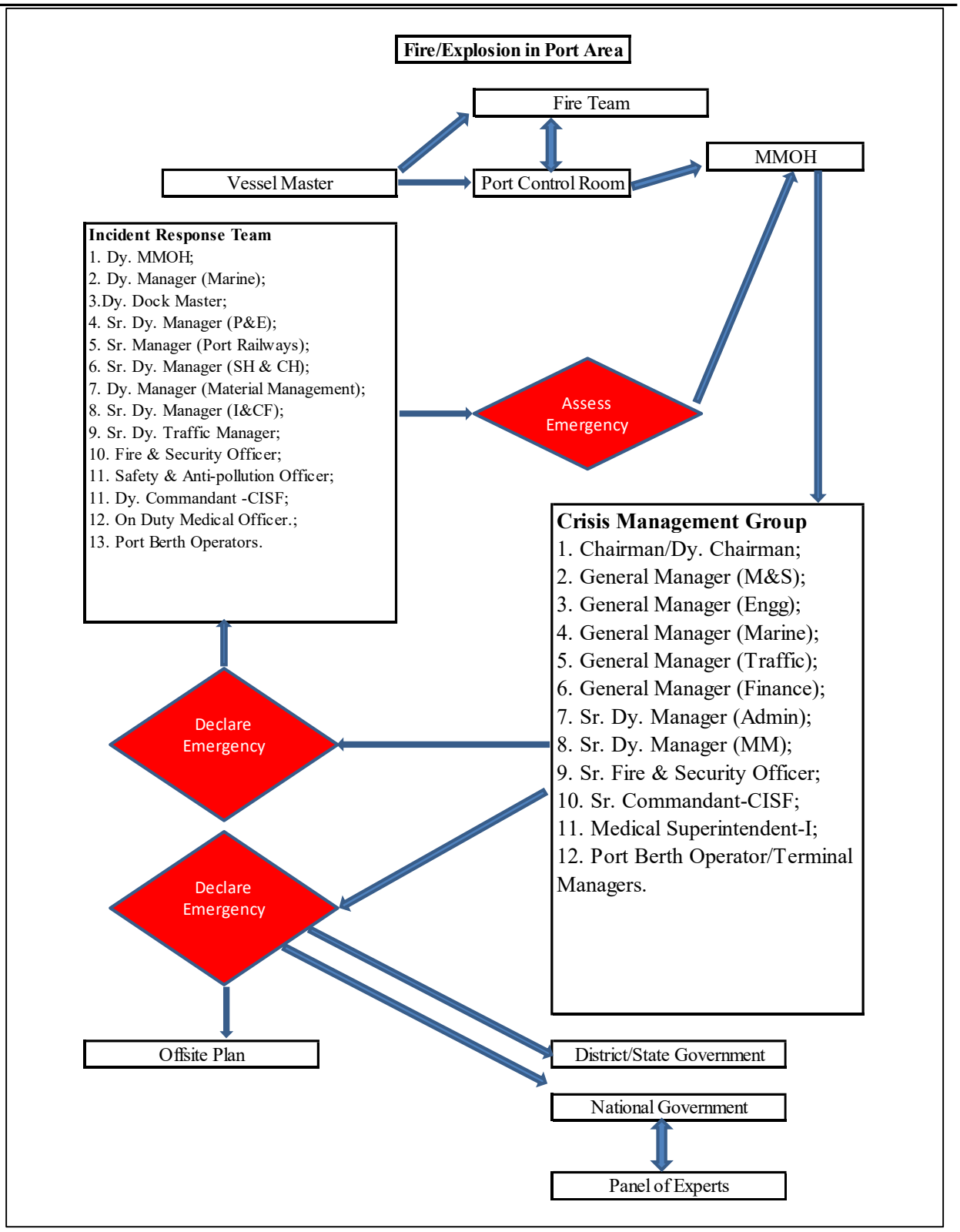

Figure 3.7: Fire/Explosion

3.4 Dissemination of Information and Media Management

3.4.1 Media briefing

The Chairman/Dy. Chairman assisted by the secretary will engage the media including social media to clarify on any issues that may have an impact on the ongoing crisis. The port may appoint/call for regular briefings if the situation demands. This can be done as a media briefing. In this regard the following points are relevant:

- Clear, straightforward communication process in place,
- Communicate quickly and appropriately, indicating that more information will be given when possible,
- Keeping track of what is happening,
- Release what is known; "little and often" is better than waiting to release everything,
- Use facts and avoid rumour, conjecture and assumptions,
- Develop core message(s) and the supporting themes, and keep building them,

Port's media policy is intended to ensure all media enquiries during a major emergency or crisis event are managed professionally, efficiently and to assist port to build and maintain positive relationships with the media. The media policy is underpinned by four guiding principles:

- Only an authorised port spokesperson can provide comment to the media.
- Members of the media are always to be treated with courtesy and respect.
- All received media calls are to be logged and returned as promptly as possible.
- Any media statement must be validated, consistent with other external / internal port communication and have received an appropriate level of legal review.

3.4.2 Key considerations for effective visual media communications (TV/Local Cable Network) and radio communications (Radio)

- Chronological file of all media coverage will be maintained;
- Inaccuracies in the stories reported by the media may be catalogued reported to the CMG Leader;
- follow-up media to correct misinformation.

3.4.3 Other media awareness and communication options

Twitter and other social media handle will be handled by the responsible person in consultation with the Charmain/Dy. Chairman.

3.5 Futuristic scope of further improvement

- Since the initial response in any crisis should be timely and speedy, the Crisis Management Plan should be **up-to-date,**
- Effective **coordination** is essential with the district and sub-district levels for rescue/relief operations and to ensure proper receipt and provision of relief.
- **Standard operating procedures (SOPs)** are developed for each crisis at the port level, keeping in mind the crisis vulnerability of the area. SOP need to be updated based on the **incident occurred and lessons learnt**,
- **Regular Drills and Exercises:** The plan should be **validated** annually through mock drills and it should be backed by capacity building efforts. As a part of the implementation framework the port will undertake regular drills and exercises simulating crisis situations. The time taken to respond to each situations will be monitored and recorded. The gaps will be identified and corrective actions will be taken. Training calendar will be promulgated in advance for the whole year.
- **Periodic Trainings** will be provided by external agencies e.g. BARC, NDMA, Civil defense, NDRF, CBRN.

4. Standard Operating Procedures (SOPs)

4.1 Scenario 1 – Fire / Explosion on board ship / ashore in port area

Initial Action:

ANY person(s) discovering or suspecting the above will raise the alarm by calling:

a. Port Control Room (Marine Control Room) OR
b. Port Fire Station OR
c. CISF Control Room

If trained, he will endeavour to fight the fire with the help of locally available portable extinguishers alternatively take help of nearby security personnel and raise alarm.

Role of Master of Vessel

1. Should raise vessels emergency alarm/siren and activate shipboard emergency action plan.
2. Stop cargo transfer operation (as per SOP).
3. Inform terminal operator, loading manager and vessel owner.
4. Fight the fire with vessels own resources as well as with the available support from Port - IRT.
5. Remain prepared to un-berth the vessel to the safe area.
6. The siren should be continued till the vessel is taken to a safe location as per CIC instructions.

Role of Port Control Room (Port Control room coordinator)

The Port control or the CMG member informed of an incident will follow the below procedure:

1. Communication on VHF channel-16 should be maintained. Notify Fire Station and CISF.
2. Start a log of the incident, recording the time of the report.
3. Obtain the preliminary details of the emergency and ensure the CMG members are informed.
4. Ensure that the incident area is isolated and guided by wind direction.
5. Notify all stakeholders, Vessels in the vicinity within Port.
6. Liaise with Master of the Vessel/Pilot.
7. Notify Maritime Administration as pe the instruction of CIC/SIC.
8. Liaise with the District Authorities, Hospitals and Mutual Aid Partners, if required.
9. Organize tugs, mooring boats and Pilots for combating the fire and rescue.

Role of Chief Incident Controller (General Manager – Marine operation) / MMOH

On obtaining information, the CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. When the CMP is activated, the principal role is as follows;

1. Obtain details of crisis from Port Control Room.
2. Investigate the reported incident.
3. Establish Emergency Operation Center (EOC) and carry out review and authorize IRT for fire-fighting operation by port fire-fighting team. Authorise use of ship-shore connection, on request.

4. Authorize use of external aid e.g. fire tenders to SIC and Port Control Room.
5. Review the situation and inform to the Chairman / Dy. Chairman.
6. Assess the condition of site and of potential affected area and take decision on evacuation and in consultation with SIC.
7. In case spillage of the radio-active material co-ordinate with AERB for expert advice.
8. Authorize use of Ambulance for evacuation along with medical staff to identified hospital/dispensary.
9. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
10. Be in constant touch with District and Local Administration-Police.
11. Terminate the response and debrief before allowing normal operation.

Role of Site Incident Controller (Manager Marine Operation Haldia – MMOH / DY. MMOH)

The Site Incident Controller will take charge of the scene of the incident. Depending upon the scale of the emergency, he will allocate tasks to team members.

1. Ensure establishment of the exclusion zone around the area of the incident.
2. Establish communication on VHF.
3. Collect all information from the Port Control Room.
4. Conduct initial Briefing and report the situation to CIC.
5. Assess the condition of site and of potential affected area and take decision on evacuation in consultation with CIC.
6. Authorize use of ship-shore connection, on request.
7. Instruct the Fire Team to keep the water tenders in a state of readiness & activate if required. Authorize use of appropriate fire extinguishers for general/electrical/oil fires.
8. Ensure isolation of HVAC and electrical equipment.
9. Instruct pilots to keep tugs ready for firefighting.
10. Extend all necessary help to the Master of the vessel in case fire is on ship including establishing ship-shore fire main connection.
11. Instruct pilot/master of vessel to be ready to take the vessel out of berth.
12. Coordinate with all functional heads to take action.
13. Coordinate with terminal in-charge to take actions.
14. Arrange for medical aid.
15. In case of fire in building, ensure head count of people evacuated.
16. Ensure rerouting of traffic and shifting of DG Containers in case there is a fire in the container yard/railway rake and assist the terminal operator for firefighting.
17. In case of substation fire authorize use of fixed CO_2 release system.

Role of Fire & Security Officer (Fire Services)

Will assume the role of Incident Controller (Fire);

1. Lead the fire-fighting team and mobilize fire tenders, men & fire-fighting equipment to the scene & extend all necessary support to the Master of the vessel/berth operator for firefighting.
2. Assist CISF in evacuation to the assembly points.
3. Inform SIC for arrangement of any additional equipment as required.

Role of Dy. Commandant - CISF (Security and Evacuation Services)

Will assist SIC;

1. Cordon off the area.
2. Control & Direct gate security and traffic in the area.
3. Facilitate evacuation, transport, first aid and rescue of personnel from the scene at the time of emergency.
4. Facilitate the evacuation and rescue of the foreign nationals.
5. Control the entry of unauthorized/authorized persons and vehicles.

Role of Sr. Dy. Manager (P&E / I&CF)

1. Assist the SIC by providing resources both in terms of personnel and equipment.
2. Remain alerted on duty for any electrical isolation of equipment during the crisis management.
3. Render and monitor assistance for extricating trapped personnel.
4. Assess damage and provide technical assistance to determine the operability of damaged units.

Role of Sr. Dy. Manager (SH & CH)

1. Assist the SIC.
2. Coordinate with CMO, hospital for necessary medical assistance.
3. Arrange to shift the nearby ships to other jetties or anchorage.

Role of Sr. Dy. Manager (Railways)

1. Ensure the stoppage of the movement of wagon at the affected yard and movement of other wagons towards the affected area till the crisis situation over.
2. Assess the situation and contact the concern oil company and SE railway official for rendering assistance.

Role of Engineering Services

The engineering services will follow below procedure in relation to the civil, mechanical and electrical work:

1. Isolate equipment during crisis, if necessary.
2. Arrange for uninterrupted electrical supply to vital equipment and utility at the berth.
3. Assist Firefighting team to fight fire in electrical substations and other electrical machinery.
4. Carry out urgent civil works.

Role of on duty - Medical Officer (Medical Services)

The Medical team will follow the below procedure

1. Organize and dispatch first aid team with ambulance as required.
2. Arrange for transportation and treatment of injured persons.
3. Check updated list of Blood group of employees is available.
4. Coordinate with the local hospitals.

Role of Dy. Dock Master (Pollution Control Services) / DY. MMOH

The pollution control service team will follow below procedure to contain the spill

1. Ensure clean- up work conducted by terminal personnel after spill containment.
2. Coordinate with SIC and WBPCB and agencies.

Role of IOCL/BPCL/HPCL/Others - Manager (Berth Operator)

The berth operator will follow below procedure to firefighting

1. Shut down of cargo transfer operation & coordinate with port and render necessary assistance to SIC for firefighting operation.
2. Take actions as per the terminal EAP / ERDMP.

4.2 Scenario 2 – Oil / Chemical / Gas Pollution

Initial Action:

ANY person(s) discovering or suspecting the above will raise the alarm by calling:

a. Port Control Room (Marine Control Room) OR
b. Port Fire Station OR
c. CISF Control Room

Role of Master of Vessel

1. Should raise vessels emergency alarm/siren and activate shipboard emergency action plan.
2. Stop cargo transfer operation (as per SOP).
3. Inform terminal operator, loading manager and vessel owner.
4. Fight the fire with vessels own resources as well as with the available support from Port - IRT.
5. Remain prepared to un-berth the vessel to the safe area.
6. The siren should be continued till the vessel is taken to a safe location as per CIC instructions.

Role of Port Control Room (Port Control room coordinator)

The Port control or the CMG member informed of an incident will follow the below procedure:

1. Obtain the fullest details of the emergency, i.e., type of emergency, location and details such as cargo, container identification number, UN number, quantity etc. and ensure the CMG members are informed.
2. Notify the other Authorities and stakeholders within Port as per instructions.
3. Liaise with Master of the Vessel/Pilot and Terminal.
4. Berth operator, Vessel in the vicinity and Port should be informed of any incident on the vessel.
5. As per the instructions of the CMG head liaise with the CISF- Security, Mutual Aid Partners, District Authorities, hospitals and Stevedores/Shipping agents.
6. Organize tugs, mooring boats and Pilots for combating the fire and rescue. Hire additional crafts as necessary.
7. Notify Maritime Administration as pe the instruction of CIC/SIC.
8. Start a log of the incident, recording the time of the report.
9. Listening watch to be maintained on VHF channel-16.
10. Ensure that the incident area is isolated.
11. The action team must be guided with the direction of wind.
12. Liaise with Coastguard as per instructions of CIC/SIC.

Role of Chief Incident Controller (General Manager – Marine operation) / MMOH

The CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. When the CMP is activated, the principal role is as follows

1. Double check that the IRT has been informed.
2. Obtain details of emergency from Port Control Room.
3. Investigate the reported incident.
4. Establish EOC and be stationed to review & assess possible developments to determine the most necessary course of action.
5. Give necessary instructions to SIC and Port Control Room & arrange for external aid as necessary.
6. Review the situation and accordingly inform to the Chairman / Dy. Chairman.
7. Assess the condition of site and of potential affected area and take decision on evacuation in consultation with SIC.
8. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
9. Be in constant touch with District and Local Administration for rescue and relief operation including evacuation.
10. Terminate the response and debrief before allowing normal operation.

Role of Site Incident Controller (Manager Marine Operation Haldia – MMOH / DY. MMOH)

The Site Incident Controller will take charge of the scene of the incident. Depending upon the scale of the emergency, he will allocate tasks to team members as required, including:

1. During Crisis collect all information from the Port Control Room.
2. Conduct initial Briefing with the team members.
3. Report the situation to the CIC and assist in assessing the incident.
4. Assess the condition of site and of potential affected area.
5. Assess and decide on the evacuation of the personnel considering the direction of wind and dispersion of toxic gas and will instruct CISF-Security to carry out the evacuation in a safe manner.
6. Take decision as per Oil Spill Contingency Plan (OSCP) in case of Oil/HNS spill.
7. Extend all necessary help to the Master of the vessel to fight the fire.
8. Ensure establishment of the exclusion zone around the area of the incident.
9. Instruct the Fire Team to keep the water tenders in a state of readiness & activate if required to fight fire or for disperse the vapor cloud as per MSDS.
10. Instruct pilots to keep tugs ready for fire-fighting and be ready for taking the vessel out of berth and be ready for providing any assistance on site.
11. Coordinate with all functional heads to take actions.
12. Coordinate with terminal in-charge to take actions.
13. Arrange for the medical aid.

Role of Fire & Security Officer (Fire Services)

The Fire Officer will assume the role of Fire Services Incident Controller and will follow the below procedure

1. Lead the fire-fighting team and mobilize fire tenders, men & fire-fighting equipment to the scene & extend all necessary support to the Master of the vessel/berth operator for fire-fighting.
2. Open the valves of the monitors and direct the jet on the seat of fire, in case of fire.
3. Use water sprays and portable nozzles to maintain curtain and dilution.
4. In case of leakage/fire onboard assist Master in arresting the leak/diluting the vapor/ fighting fire as per Master's Instructions.
5. Make use of portable relevant extinguisher from upwind position.
6. Ensure all the ignition sources in the vicinity are extinguished.
7. Inform SIC for the arrangement of any additional equipment as required.
8. Assist CISF in evacuation to the assembly points and report to the EOC.

Role of Dy. Commandant - CISF (Security and Evacuation Services)

The CISF will follow the below procedure for the security and evacuation

1. Cordon off the area.
2. Control & Direct gate security and traffic in the area.
3. Announce in mobile van with PA system in the effecting zones to evacuate the zone. Facilitate evacuation, transport, first aid and rescue of personnel from the scene at the time of emergency.
4. Facilitate the evacuation and rescue of the foreign nationals.
5. Control the entry of unauthorized/authorized persons and vehicles.
6. Liaise with the Police authorities.

Role of Dy. Dock Master (Pollution Control Services) / DY. MMOH

He will follow the below procedure for the safety of personnel, environment and asset

1. Inform WBPCB and other environmental agencies and take necessary guidance.
2. Ensure clean- up work conducted by terminal personnel after spill containment.
3. Coordinate with SIC and WBPCB and agencies.
4. Mobilize and dispatch sufficient number of vehicles to the site of emergency.
5. Assist in evacuation of the personnel to the assembly point.

Role of Safety & Anti-Pollution Officer

1. Determine the level of contamination of the site.
2. Monitor and coordinate with the Oil spill response organization for the actual clean-up work during and after oil/chemical spills.

Role of Engineering Services

The engineering services will follow below procedure in relation to the civil, mechanical and electrical work

1. Carry out urgent civil works.
2. Arrange for uninterrupted electrical supply to vital equipment and utility at the berth.
3. Isolate equipment during crisis, if necessary.

Role of on duty Medical Officer (Medical Services)

The Medical team will follow the below procedure

1. Organize and dispatch first aid team with ambulance as required.
2. Arrange for transportation and treatment of injured persons.
3. Check updated list of Blood group of employees is available.
4. Coordinate with the local hospitals.

Role of IOCL/BPCL/HPCL/Others - Manager (Berth Operator)

The berth operator will follow below procedure to firefighting

1. Shut down of cargo transfer operation & coordinate with port, Master of the Vessel and render necessary assistance to SIC for firefighting operation.
2. Take actions as per the terminal EAP / ERDMP.
3. Inform port of any spill / leakage.
4. Assist IRT and provide all necessary equipment.

Role of Oil Spill Response Organisation - Officer

The OSRO will follow below procedure to contain and recover the oil

1. Take actions as per the Oil Spill Contingency Plan of the port.
2. Coordinate with the SIC to mobilize the OSR equipment's to the affected location.

4.3 Scenario 3 – Vessel accident – Collision/Grounding

Initial Action:

ANY person(s) discovering or suspecting the above will raise the alarm by calling:

a. Port Control Room (Marine Control Room) OR
b. Port Fire Station OR
c. CISF Control Room

Role of the Master of Vessel

1. Should raise vessels emergency alarm/siren and activate shipboard emergency action plan.
2. Stop cargo transfer operation (as per SOP).
3. Inform terminal operator, loading manager and vessel owner.
4. Take appropriate damage control measures in case of flooding including leak stoppage and pumping out, vessel list correction etc.
5. Estimate the extent of underwater damage, sounding of tanks and actions for the refloating of the vessel.
6. Fight the fire with vessels own resources as well as with the available support from Port - IRT.

Role of the Port Control Room (Port Control room coordinator)

The Port control or the CMG member informed of an incident will follow the below procedure:

1. Obtain the preliminary details of the emergency, i.e., type of emergency, location and details such as cargo, container identification number, UN number, quantity etc. and ensure the CMG members are informed.
2. Listening watch to be maintained on VHF channel-16.
3. Ensure that the incident area is isolated.
4. The action team must be guided with the direction of wind.
5. Notify the other Authorities and stakeholders within Port as per instructions.
6. Liaise with Master of the Vessel/Pilot.
7. Notify Maritime Administration as pe the instruction of CIC/SIC.
8. Berth operator, Vessel in the vicinity and Port should be informed of any incident on the vessel.
9. As per the instructions, liaise with the Salvage Association, CISF- Security, Mutual Aid Partners, District Authorities, Hospitals and Stevedores/Shipping agents.
10. Plot exact location of the incident in coordination with the hydrographic surveyor.
11. Organize tugs, mooring boats and Pilots for towing and combating the fire and rescue. Hire additional crafts as necessary.
12. Start a log of the incident, recording the time of the report.

Role of Chief Incident Controller (General Manager – Marine operation) / MMOH

The CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. When the CMP is activated, the principal role is as follows

1. Obtain details of emergency from Port Control Room.

2. Investigate the reported incident.
3. Establish EOC and be stationed to review & assess possible developments to determine the most necessary course of action.
4. Give necessary instructions to SIC and Port Control Room & arrange for external aid as necessary.
5. Review the situation and accordingly inform to the Chairman/ Dy. Chairman.
6. Assess the condition of site and of potential affected area and take decision on evacuation in consultation with SIC.
7. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
8. Ensure Salvage association is informed.
9. Be in constant touch with District and Local Administration for rescue and relief operation.
10. Terminate the response and debrief before allowing normal operation.

Role of Site Incident Controller (Manager Marine Operation Haldia – MMOH / DY. MMOH)

The Site Incident Controller will take charge of the scene of the incident. Depending upon the scale of the emergency, he will allocate tasks to team members as required, including:

1. During Crisis collect all information from the Port Control Room.
2. Conduct initial Briefing with the team members.
3. Report the situation to the CIC and assist in assessing the incident.
4. Assess the condition of site and of potential affected area and take decision on evacuation in consultation with CIC.
5. In case of fire on board the vessel after collision or contact, he will extend all necessary help to the Master of the vessel.
6. Ascertain leak source. Take decision as per Oil Spill Contingency Plan (OSCP) in case of Oil / HNS spill.
7. Obtain information regarding stability and hull stress of the vessel.
8. If vessels have blocked or a possibility of blocking the channel, in co-ordination with the Master, the vessel shall be taken to berth / anchorage.
9. In case of grounding, make arrangements through Pilots to proceed to the spot and to take soundings, plot them in a chart and to ascertain the location of grounding damage on the hull.
10. Depending on the way the vessel is grounded and the available high tide on the day, all advance preparations should be made to commence the towing operation at least two hours before the high water or as advised by CIC/SIC.
11. Inform MoEF and WBPCB approved parties for safe disposal and providing reception facilities for Oil/Sludge. Also, inform Salvage association.
12. Instruct the Fire Team to keep the water tenders in a state of readiness & activate if required.
13. Instruct pilots to keep tugs ready for fire-fighting and be ready for taking the vessel out of berth and be ready for providing any assistance on site.

14. Coordinate with all functional heads to take actions.
15. Arrange for the medical aid.

Role of Fire & Security Officer (Fire Services)

The Officer will assume the role of Fire Services Incident Controller and will follow the below procedure

1. Lead the fire-fighting team and mobilize fire tenders, men & fire-fighting equipment to the scene & extend all necessary support to the Master of the vessel/berth operator for fire-fighting.
2. Assist CISF in evacuation to the assembly points.
3. Inform SIC for arrangement of any additional equipment as required.

Role of Dy. Commandant - CISF (Security and Evacuation Services)

The CISF will follow the below procedure for the security and evacuation

1. Cordon off the area.
2. Control & Direct gate security and traffic in the area.
3. Facilitate evacuation, transport, first aid and rescue of personnel from the scene at the time of emergency.
4. Facilitate the evacuation and rescue of the foreign nationals.
5. Control the entry of unauthorized/authorized persons and vehicles.
6. Liaise with the Police authorities.

Role of Dy. Dock Master (Pollution Control Services) / DY. MMOH

He will follow the below procedure for the safety of personnel, environment and asset

1. Inform WBPCB and other environmental agencies and take necessary guidance.
2. Mobilize and dispatch sufficient number of vehicles to the site of emergency.
3. Assist in evacuation of the personnel to the assembly point.
4. Ensure clean- up work conducted by terminal personnel after spill containment.
5. Coordinate with SIC and WBPCB and agencies.

Role of Safety & Anti-Pollution Officer

1. Determine the level of contamination of the site.
2. Monitor and coordinate with the Oil spill response organization for the actual clean-up work during and after oil/chemical spills.

Role of Engineering Services

The engineering services will follow below procedure in relation to the civil, mechanical and electrical work

1. Hire the barges for collecting the spilled oil and coordinate with the parties involved in the safe disposal of the oil/sludge.
2. Arrange for uninterrupted electrical supply to vital equipment and utility at the berth.
3. Isolate equipment during crisis, if necessary.
4. Carry out urgent civil works.

Role of on duty Medical Officer (Medical Services)

The Medical team will follow the below procedure

1. Organize and dispatch first aid team with ambulance as required.
2. Arrange for transportation and treatment of injured persons.
3. Check updated list of Blood group of employees is available.
4. Coordinate with the local hospitals.

Role of IOCL/BPCL/HPCL/Others - Manager (Berth Operator)

The berth operator will follow below procedure to firefighting

1. Shut down of cargo transfer operation & coordinate with port and render necessary assistance to SIC for firefighting/oil spill response operation.
2. Take actions as per the terminal EAP / ERDMP / OSCP.

Role of Oil Spill Response Organisation - Officer

The OSRO will follow below procedure to contain and recover the oil spill

1. Take actions as per the Oil Spill Contingency Plan of the port.
2. Coordinate with the SIC to mobilize the OSR equipment's to the affected location.

4.4 Scenario 4 – Cyclone/Floods/Lightning/Tsunami/Earthquake/Maritime casualties

Note: *Natural crisis and climate change issue impact on marine infrastructure of port.*

Initial Action:

- Communication with the competent agencies and Maritime Administration should be maintained,
- Continuous weather monitoring should be done,
- Should continuously keep track of the conditions on social media, Doordarshan, TV channels etc.

Role of Master of Vessel

1. Coordinate with Port Control Room and provide the Port Authority with relevant details of casualty.
2. Should raise vessels emergency alarm/siren and activate vessel board emergency action plan.
3. Having raised the alarm, the Master will be responsible for taking all immediate steps to safeguard his ship.
4. Stop cargo transfer operation (as per SOP) & inform terminal loading manager and ship owner of the vessel.
5. Remain prepared to un-berth the vessel to the safe area.
6. The Master will follow the instruction of the CIC/SIC and be in continuous liaise with the CIC/SIC/Port Control Room (Marine Control Room).
7. The siren should be continued till the vessel is taken to a safe location as per CIC instructions.

Role of the Port Control Room (Port Control room coordinator)

1. Gather information related to the vessel type and position in the port limit. Gather information related to the weather conditions by liaising with competent agencies for issuing warnings. Gather information of maritime casualty/casualty, port infrastructure damage, if any.
2. Monitor the weather map either through Internet or Television and record approximate position of the weather and information about its movement as given in the news.
3. Liaise with Master of the vessel/Pilot.
4. Ensure that both IT and telephones, VHF and walkie-talkie all are operational in the Port Control Room. Listening watch to be maintained on VHF. Satellite phones should be kept ready.
5. Notify to CIC/SIC and the vessels moving into, through and inside the port. Keep CIC/SIC informed of all the messages received by telephone, VHF or by messenger.
6. Notify the other Authorities and stakeholders as per instructions of CIC/SIC.
7. Notify the information to the owner of the vessel as per the instruction of CIC/SIC/Master of the vessel. Pass the information to various Port departments and other port related organizations such as operators through telephones and VHF.

8. All traffic within the port limits and in the vicinity of the port are to be monitored closely to ensure that the vessels are clear of the high-risk areas of the system.
9. Inform the MMOH / DMMOH of any buoys or crafts or any port installations is seen adrift.
10. Hoist signals or raise alarms, as per the warnings received by the competent agencies for issuing warnings.
11. All operators should be advised to secure their equipment properly.

Role of Tidal Observatory

1. The Gauge Clerk will record/keep a check on the range of tide, time and heights of high and low water and will report to Senior Hydrographic Surveyor who in turn will apprise the CIC and the SIC of the actual and predicted tides.

Role of Chief Incident Controller (General Manager – Marine operation) / MMOH

The CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. When the CMP is activated, the principal role is as follows:

1. Obtain details of crisis from Port Control Room.
2. Establish EOC and be stationed to review & assess possible developments to determine the most necessary course of action. Handheld walkie-talkie sets should be made available to all the key personnel.
3. Give necessary instructions to SIC and Port Control Room & arrange for external aid as necessary.
4. Review the situation and accordingly inform to the Chairman/ Dy. Chairman.
5. Assess the condition of site and of potential affected area and take decision on evacuation in consultation with SIC.
6. Decide on clearing of ships as soon as the crisis is confirmed.
7. Plan movements of vessels such that the vessels are cleared in shortest possible time.
8. Ensure the advisories of the Maritime Administration, GM(Marine) and weather advisories are adhered to.
9. All the high-risk vessels must be informed to the Maritime Administration, and must be prioritized for shelter, when and if required.
10. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
11. Attend meeting with the Maritime Administration to discuss the weather conditions and actions required to be taken by port especially regarding the high-risk vessel and port operations.
12. Direct the Master of the vessels in the port to ensure that the vessels at berth are secured with adequate number of lines and vessels at anchor have adequate length of chain in the water as per the prevailing circumstances.
13. Be in constant touch with District, Local Administration, SDRF and NDRF for rescue and relief operation.
14. Coordinate with external agencies/authorities such as Indian Navy and Coastguard at the earliest and extent possible.

15. Terminate the response and debrief before allowing normal operation. Report regarding the damage or casualty, if any to be forwarded to the Maritime Administration.

Role of Site Incident Controller (Manager Marine Operation Haldia – MMOH / DY. MMOH)

The Site Incident Controller will take charge of the scene of the incident. Depending upon the scale of the crisis, he will allocate tasks to team members as required, including:

1. Collect all information from the Port Control Room.
2. Conduct initial Briefing with the team members.
3. Report the situation to the CIC and assist in assessing the incident.
4. Ensure Port Control Room, hoists appropriate storm signal as per the situation.
5. Assess the condition and of potential affected area and take decision on evacuation in consultation with CIC.
6. He will keep close liaison will IMD, Radar Station, Police Wireless Station, Coast Guard and Vessels in Port in regard to the likely weather conditions in the near further.
7. Inform vessels alongside berths to double up their moorings, provide shore gang assistance and ask Masters to keep their vessels ready to proceed to the sea at short notice as per the instruction of CIC.
8. Instruct the Fire Team to keep the water tenders in a state of readiness & activate if required.
9. Instruct pilots to keep tugs ready for fire-fighting and be ready for taking the vessel out of berth and be ready for providing any assistance on site.
10. Ensure that the hazardous cargoes are shifted out of the port or secured/stored in a safe manner.
11. Ensure securing of dock cranes and loose items.
12. Coordinate with all functional heads to take actions.
13. Arrange for the medical aid.
14. Ensure that the operations are brought back to normal after the termination of the emergency procedure.

Role of Pilots

1. Shall be called from standby position and asked to be ready on site for taking the vessel out of berth or will not bring the vessel to berth as per the instruction given by CIC/SIC.
2. Inform the Masters of all vessels at the berths to double the moorings and to keep engine ready to proceed out to sea/shelter if situation warrants.
3. Decision regarding moving vessels to the anchorage will be taken depending on the strength of the crisis likely to be encountered and number of vessels in the Port.
4. Monitor and follow departmental advisories issued with respect to the emergencies.
5. Ensure all other crafts are placed in a safe place and properly secured except for one pilot launch and one standby launch used for inspection and emergency duties.
6. Fender and extra lengths of ropes/wires will be kept ready so as to attend to any craft whose moorings may part.

7. Ensure shifting of crafts at suitable places as directed by the SIC and will secure them suitably with additional moorings.

Role of IOCL/BPCL/HPCL/Others - Manager (Berth Operator)

1. Activate EAP/ERDMP and inform Port and be in a state of readiness to move out all types of cargo, equipment and vehicles (mobile cranes) outside the port area.
2. Shall be responsible of shutting down of cargo operation (as per SOP and/ contingency plan) & coordinate with Port and Master of the Vessel and rendering necessary assistance to the SIC and vessel by providing emergency equipment as required.
3. Make arrangements to protect cargo.
4. Assist IRT and provide all necessary equipment.
5. He will direct operation staff.
6. Coordinate with the vessel in-charge/C & F Agents/stevedores.

Role of Engineering Services

The engineering services will follow below procedure in relation to the civil, mechanical and electrical work

1. Shall ensure the standard procedure before the monsoon has been followed and complied with by all the divisions.
2. Carry out urgent civil works. Sufficient number of payloaders may be kept ready at strategic locations.
3. All types of cranes, forklifts, heavy earth moving equipment to be secured in a safe manner. Hydraulic ladder, diesel/battery operated saw to be kept in ready condition, at strategic locations.
4. Pump house equipment, all generator sets, emergency lights and torches shall be tried out and kept ready and kept at strategic locations. Diesel pumping stations should be refilled.
5. Ensure all the drains and obstructions in the creeks/ culverts are cleaned for easy discharge of sludge water.
6. Arrange for uninterrupted electrical supply to vital equipment and utility at the berth. All electrical sub-station, panels and main cables to be thoroughly checked to prevent leakage and ensure adequate insulation.
7. Isolate equipment during crisis, if necessary.
8. Deploy engineers to direct or guide earth moving equipment and cranes to remove debris.
9. Secure lock gates and lock machinery rooms.

Role of Sr. Manager - Traffic

1. All traffic within the port limits and in the vicinity of the port are to be monitored closely to ensure that the vessels are clear of the high-risk areas of the system.
2. Submit consolidated list of dangerous goods in port area.
3. Coordinate with the truck contractors.
4. Ensure availability of vehicles and mobilize and dispatch sufficient number of vehicles to the site during emergency.

Role of on duty Medical Officer (Medical Services)

The Medical team will follow the below procedure

1. Organize and dispatch first aid team with ambulance as required.
2. Arrange for transportation and treatment of injured persons.
3. Check updated list of Blood group of employees is available.
4. Coordinate with the local hospitals.

Role of Dy. Commandant - CISF (Security and Evacuation Services)

The CISF will follow the below procedure for the security and evacuation

1. Cordon off the area.
2. Control & Direct gate security and traffic in the area.
3. Facilitate evacuation, transport, first aid and rescue of personnel from the scene at the time of emergency.
4. Facilitate the evacuation and rescue of the foreign nationals.
5. Control the entry of unauthorized/authorized persons and vehicles.
6. QRT Patrolling van with adequate manpower should be patrolling port area to send first-hand information to the control room.
7. Liaise with the Police authorities.

Role of Dy. Dock Master (Pollution Control Services) / DY. MMOH

He will follow the below procedure for the safety of personnel, environment and asset

1. Ensure workers within perimeter of safety dangerous / chemical tank farms shifted to sheltered location.
2. Mobilize and dispatch sufficient number of vehicles to the site of emergency.
3. Assist in evacuation of the personnel to the assembly point.
4. Ensure clean- up work conducted by terminal personnel after spill containment.
5. Coordinate with SIC and WBPCB and agencies.

Role of IT - EDP (Electronic Data Processing)

1. FMS vendor to be advised to take appropriate measures to provide uninterrupted internet facility to the SMPK users.
2. FMS vendor to be advised to switch off all the SMPK IT installations during natural crisis (in consultation with CIC) depending upon the severity.
3. The service provider of RFID based PACS to be advised to take preventive action for the protection of RFID equipment and assets against natural crisis and also to take necessary actions depending on the severity.

Role of Fire & Security Officer (Fire Services)

The Officer will assume the role of Fire Services Incident Controller and will follow the below procedure:

1. Lead the fire-fighting team and mobilize fire tenders, men & fire-fighting equipment to the scene & extend all necessary support to the Master of the vessel/berth operator for firefighting.
2. Assist CISF in evacuation to the assembly points.
3. Inform SIC for arrangement of any additional equipment as required.
4. Liaise with State Fire brigade for any assistance.

Role of Material Manager

1. During cyclonic season sufficient stock of stores like corrugated iron sheets, J. Hooks, screw hinges, gunny bags, tarpaulins, ropes and wires for Port Crafts, diesel oil, kerosene oil, hurricane lantern, kerosene lamps, torch lights with batteries and bulbs, electrical items etc. is kept.

4.5 Scenario 5 – Personal Injury on board ship/ashore in port

This emergency may occur to port personnel while carrying out cargo operations inside the port and generally be a part of dock worker safety and provisions of dock safety rules and relevant legislations will apply.

In case of injury sustained on board ship, the decision to provide medical support and evacuation ashore will be consultation with the Master of Vessel and their agents.

Note: Personal injury on board ship/ashore in port can be due to following reasons:

1. During operation on vessel/ in port;
2. Due to bad weather/natural crisis;
3. Due to fire/explosion on board/in port;
4. Due to toxic gas;
5. Drowning;
6. Overboard.

Hence, the relevant actions from scenarios 1 to 4 will apply above. However, the medical team needs to be ready and prompt as per their SOP.

4.6 Scenario 6 – Power Failure/Strike/Terrorist Attack/Hijacking/Cyber Attack

❖ Power Failure

Role of Engineering services will be as follows:

- Switch on emergency generator power supply and ensure emergency power supply is available at hospital, berth, oil jetties, at the gates, control rooms, EDP, administrative building and other critical locations.
- Contact State Electricity Board and find out the facts and the level of crisis.
- Depending on the level of crisis arrange for alternate supply, hiring of diesel generator sets and emergency lamps as per the requirements.
- Co-ordinate in restoration work and assist the Electricity Board.
- An electrical supply failure alarm / announcement will not initiate an evacuation.
- Ensure all electrical equipment are switched off before restarting power.
- Inform CIC/SIC and apprise users of the alternative measures taken to meet the situation. Inform concerned departments / agencies.
- Investigate to assess the extent of breakdown and damages caused if any to other components, plans etc.
- Check position of required spares with outside agencies having similar equipment if not available in Port Stores.
- Contact manufacturers / suppliers of the equipment for technical advice / spares required / services required etc. as found necessary.
- Plan and organise department facilities, staff, tools etc., for attending the breakdown on round the clock basis.
- Contact outside agencies, contractors for services / facilities, if necessary.
- Re-commission the equipment after necessary trials.
- Investigate in detail the causes of failure and remedial steps to prevent its recurrence.

❖ Strike

Role of CISF (Port Security)

The role is to ensure that there is no loss/damage to the property or threat to other workers and management officials. A high alert is to be maintained with regard to general order and threat to port property and personnel.

Preparatory stage

The following points should be taken into account;

1) Advance intelligence collection regarding activities of various Unions and their nature of strategy for Strike.
2) Liaison with Union leaders.
3) Liaison with management official.
4) Ensure effective communication system in CISF Control Room and at other places.

Operational stage

1) Ensure mobilization of adequate force at the site of Strike.
2) The safety of vital installation to be ensured.

3) The local police should be informed to assist if situation warrants so.
4) The deployment to deal with Strike will be done as additional deployment without disturbing normal security deployment of the port.
5) Time to time situation report should be given to Control Room from all points.
6) Ensure continuous monitoring of situation, collection of information and passing it to superior officers.

Post - crisis stage

1) The movement of strike is called off; the deployment should be withdrawn step by step.
2) A detailed report may be prepared and sent to higher formation.

❖ **Terrorist Attack & Hijacking**

Precautions: Protection of the port facilities receiving seagoing vessels from terrorist attacks and hijacking is as per the provision of the "The International Vessel and Port Facility Security Code (ISPS Code)".

Security of the HDC is being provided by CISF.

The measures for port security include "installation of VTMS, CCTVs, Biometric Access Control System, patrolling of port areas by vehicles, creation of deterrence by creating proper perimeter wall, illuminating port area, cancelling access to ports and vessels, conducting physical verification etc."

Prior Emergency Situation (after warnings/inputs)

- Set up Crisis management center and manned continuously.
- CMG to declare plan/guideline to be followed which could be based on CISF Contingency Plan/Government of India/Statutory bodies/Indian Navy/Air Force/Government of West Bengal etc. instructions.
- CMG to ensure utmost vigilance in identified area to ensure the adequate resources in terms of security personnel, experts in handling equipment, trained manpower, and flood lights, earth moving equipment, mobile cranes, and rescue crafts are available to guard all gates, roads etc. In case of any unidentified/unauthorized person is found, he must be handed over to police.
- CMG to ensure that evacuation plan is prepared and backup systems such as power generator, communication equipment, and safety systems are working. CMG should also ensure that all required manpower such as electricians/technicians/laborer is available all time.
- All terminal/berth operators and sensitive locations should be informed.
- No movement of the vessels in the port vicinity will be allowed.

During Emergency

- CMG to adopt relevant ISPS security plan to combat the emergency.

- In case of an enemy attack inform relevant authorities & internal security to defend installations till external support arrives.
- When additional security (State ATF/ARMY/BSF) arrives, the situation is to be handled jointly.
- CMG to ensure sufficient supply of food and water.
- All vessels inside the port and at the anchorage will observe blackout as per the instruction of CMG & NDRF.

❖ **Cyber Attack**

Role of Port Chief Information Security Officer:

- Identify cybersecurity threats, including those posed by inappropriate use and poor cybersecurity practices;
- Identify and assess risk and vulnerabilities of assets within the port;
- Develop inventories of port systems with direct and indirect communications links;
- Develop protection and detection measures;
- Establish response plans, including contingency plans to respond to cyber-risks and tackle the effects of potential attacks on port safety and security; and
- Respond and recover – from any cyber security incidents using the contingency plan, then report on the effectiveness of the response plan, update it, and reassess threats and vulnerabilities.

Cyber Crisis handling steps are as follows:

1. Document everything. This effort includes every action that is performed, evidence, and conversation with users, system owners, and others regarding the incident.

2. Analyze the evidence to confirm that an incident has occurred. Perform additional research as necessary (e.g., Internet search engines, software documentation) to better understand the evidence. Reach out to other technical professionals within the organization for additional help.

3. Notify the appropriate people within the organization. This should include the chief information Security officer (CISO), the head of information security, and the local security manager. Use discretion when discussing details of an incident with others; tell only the people who need to know and use communication mechanisms that are reasonably secure. (If the attacker has compromised email services, do not send emails about the incident.)

4. Notify CERT-IN and/or other external organizations for assistance in dealing with the incident.

5. Stop the incident if it is still in progress. The most common way to do this is to disconnect affected systems from the network. In some cases, firewall and router configurations may need to be modified to stop network traffic that is part of an incident, such as a denial of service (DoS) attack.

6. Preserve evidence from the incident. Make backups (preferably disk image backups, not file system backups) of affected systems. Make copies of log files that contain evidence related to the incident.

7. Wipe out all effects of the incident. This effort includes malware infections, inappropriate materials (e.g., pirated software), Trojan horse files, and any other changes made to systems by incidents. If a system has been fully compromised, rebuild it from scratch or restore it from a known good backup.

8. Identify and mitigate all vulnerabilities that were exploited. The incident may have occurred by taking advantage of vulnerabilities in operating systems or applications. It is critical to identify such vulnerabilities and eliminate or otherwise mitigate them so that the incident does not recur.

9. Confirm that operations have been restored to normal. Make sure that data, applications, and other services affected by the incident have been returned to normal operations.

10. Prepare a final report. This report should detail the incident handling process. It also should provide an executive summary of what happened and how a formal incident response capability would have helped to handle the situation, mitigate the risk, and limit the damage more quickly.

ANNEXURES

ANNEXURE A
EMERGENCY CONTACT NUMBER

Name of Authority	HDC Office (STD code: 03224)	Mobile No.
Chairman	033-22305370	6292311236
Dy. Chairman	033-22305438 / 263209 (H)	9948298304
Director-Marine	033-22303451	9836298639
General Manager (Marine)	263303, 264818	9836298699
Manager (Marine)		8989429782
General Manager (M&S)	263171, 264943	9434054419
General Manager (Engg.)	263255 / 264496	7478005099
General Manager (Finance)	264466, 263170	9434062313
General Manager (Traffic)	263229, 264433	9434063416
Sr. Dy. Manager (Admin)	265490	9434083699
Sr. Dy. Manager (Finance)	263724	9434018021
Sr. Dy. Manager (I & CF)	252844, 252118	9434721138
Sr. Dy. Manager (P & E)	252662	9434735407
Sr. Dy. Manager (P & IR)	263160, 264848	9434031386
Sr. Dy. Manager (Railways)	252209	9434031412
Sr. Dy. Manager (SH & CH)	252208, 252246	9434031407
Sr. Dy. Manager (Material Management)	263358	9434015761
Sr. Fire & Security Officer	265211	9434065452
Dy. Manager (MM)	263358	9434015761
Dy. Manager (M.O.)		8989429782
Dy. Manager (M.E.)		9434031280
Dy. Manager (Traffic)	252067	
Safety & Anti-Pollution Officer		8972989196
Commander (SD&DS)		8170052312
Dy. Manager (Railways)	252209, 252058	9434031412
Dy. Dock Master	252513	

Safety Officer	263993	
Sr. Commandant (CISF)	252229	9434052230
Dy. Commandant (CISF)	252457	9434031098
Asst. Commandant (CISF)	252418	9434063389
Medical Superintendent	263265, 265848	
CISF Control Room, CJP Ops. Building	252222	
1st Oil Jetty Fire Station – Control Room	-	8945523379
2nd Oil Jetty Fire Station – Control Room	-	8945523378 / 8016413657
3rd Oil Jetty Fire Station – Control Room	264874	9434143006
Dock Fire Station – Control Room	-	8945523380 / 9434143025
Central Gate Complex – CISF	252222	
GC Berth Main Gate	252466	
Port Hospital	263388, 266021	
Ambulance Room – Shift Office	263388, 266021	
Marine Office Port Control		8373062386

Name of Authority and Contact Details	
Chief Controller of Explosives, Nagpur - 440006	0712 – 2510389 / 2510103 / 250102
Joint Chief Controller of Explosives, Kolkata	033 – 22439322
District Magistrate, Purba Medinipur	03228 - 263098
Addl. District Magistrate	03228 – 263667
Municipal Commissioner, Haldia	03224 – 252996
WBSEB, Chiranjibpur	252182
St. John Ambulance	033 – 24636031
District Superintendent of Police, Purba Medinipur	2659580
Police Control Room	252335
Police Control Room (Durgachak)	252378
Police Station, Haldia T/S	263487
Water Supply Station, HDC	266124
Dy. Director, Inspectorate Dock Safety, Kolkata	033 – 22830719
Asst. Director, Inspectorate Dock Safety, HDC	--
Member Secretary, WBPCB, Kolkata	18003453390
Regional Officer, WBPCB	03224 – 252996
MMD Haldia	03224 – 252323 / 252968
Customs	03224 – 251931 / 9836587004
Immigration	9083508053

Transport Services	
SBSTC – Durgachak	274439
SP, Purba Medinipur	269580
Other Police officals and Police station	263487
Dy. Controller of Civil Defence	272986

Port Users – Contact Details	
Indian Oil Corporation Ltd.	08083804927
HPCL	03224 - 274007
BPCL	09051644240
Petronas (IPPL)	0603-20515000 / 20265000
HPL (Plant)	03224 – 274007 / 877 / 876 / 400 / 882 / 384
MCPI	03224 – 275572 / 73
Tata Power	251399
Reliance Petroleum	0288 - 22785214
HBCPL	03224 – 274999
Aegis	7506906794
Indorama	9679998861
ISHPL	9434710658

Fire Services	
West Bengal Fire Service	252500
Haldia Refinery, Haldia	252322 / 252562
HBCPL, Haldia	03224 – 274999
MCPI	03224 – 275572 / 73
Haldia Petrochemicals Ltd.	03224 – 274007 / 877 / 876 / 400 / 882 / 384

Health & Medical	
CMOH – Purba Medinipur	09233176634
Sub Divisional Hospital, Durgachak	274108
CMO, IOCL, Haldia Refinery	08083804927
CMO, B. C. Ray Hospital, Haldia	269048
District Hospital, Tamluk	03228 - 266059

Coast Guard		
HQ Coast Guard Region NE, Coast Guard	Newtown Rajarhat, Kolkata 700157	033-2324 8002 email: ops-ne@indiancoastguard.nic.in

Officer In Charge MRSC, Haldia, HQ	Coast Guard District No 8 (West Bengal) Anchorage Camp Haldia, West Bengal 721605	03224-264541; email: dhq8@indiancoastguard.nic.in
Officer In Charge MRCC, Chennai, HQ	Coast Guard, Region (East) Chennai 600009.	044-2536 3209 email: east@indiancoastguard.nic.in

Emergency Telephone no.	
Fire	252433
Doctor On Duty	263388, 266021
HDC Hospital	265862, 266558
Marine House Control Room	252313

Navy Office		
	Chief Staff Officer to NOIC Staff Officer (Operation) to NOIC Officer of the day, INS, Netaji Subhas, Hastings, Kolkata – 700 022	033-2242- 0430/ 0432/0503/0441
Inspectorate of Dock Safety		
Dy. Director (Safety) Inspectorate	Dock Safety, Kolkata Nizam Palace, 1st floor, 2nd M.S.O.Bldg. 234/4 A.J.C. Bose Road, Kolkata-700020.	033-2574-5512; 8285412802; 033- 22830719(O)/ Fax: 033 2283-0718 **email:** idskolkata@dgfasli.nic.in , idskol@rediffmail.com
Shipping Corporation of India		
	Regional General Manager Shipping House 13, Strand Road Kolkata – 700 001	033 2254 3415
Specialised Agency		
Bomb Detection & Disposal Squad	Bhabani Bhaban, 31 Belvedere Road, Alipore, Kolkata -700 027	(033) 24506100 / 24506174 email: occomp.cid-wb@gov.in

Directorate of Fire & Emergency Services		
	West Bengal Fire Services 13-D, Mirza Galib Street Kolkata – 700 016	033-2358-1130
Director	West Bengal Fire Services 13-D, Mirza Galib Street Kolkata – 700 016	033-2252 1165
Petroleum & Explosives Safety Organisation, East Circle		
Joint Chief Controller of Explosives	8, Esplanade East, 1st Floor, Kolkata – 700 069.	2213 0895; 033-2248 0427/ 2248 9524/ 2248 6600/ 2242 0686
Disaster Management Department		
	Nodal Officer of Disaster Management Dy. Director Public Health & communicable Disease	2214-5601 2214-3371 (Ext.226)
West Bengal Pollution Control Board		
	Paribesh Bhavan, Block – LA, Bldg.No.10A, Sector-III, Salt Lake, Kolkata – 700 091	033-2335-6731/9088/0261
Name of Agency and Contact Details		
	WBWMPL	03224-278240 / 9898449137
	Used + Waste Oil Receiver	8777741235

Bhaba Atomic Research Centre	BARC, Kolkata BARC, Mumbai	033-337 1230 022- 25505050/ 25592000
Government of India Department of Atomic Energy Variable Energy Cyclotron Centre	Sector-I, Block-AF, Bidhan Nagar, Kolkata - 700 064	033-2337- 1230 / 1231 / 1232 / 1233 / 1238 / 4831 / 4832 /4838, 033-2359-4008/2321-4435/ 033-2321-4435
Mercantile Marine Department	Principal Officer Marine House, Hastings, Kolkata – 700 022	033-22230238

OTHER EXPERTS AND AGENCIES	
Name of body	**Telephone / fax**
Indian Register of Shipping, Mumbai	022-30519400 / 25703611 ho@irclass.org
IIT – Mumbai	022-2572 2545 / 2572 3480
Meteorological Centre, Kolkata	033-2479 3167/24790596 kolkatarmc@gmail.com
The National Environmental Engineering & Research Institute (NEERI), Nagpur	0712-2249999 / 660 / 2244900
Ministry of Petroleum & Natural Gas	011-23382426 / 23383100
National Institute of Ocean Technology (NIOT), Chennai	044-66783300 / 22460275 / 22460645
National Ship Design and Research Centre, Visakhapatnam	0891-2578360 / 2577754 nsdrc@itpvis.ap.nic.in

NDRF – 2nd BATTALION					
Name & Designation	**Address**	**Contact & email id**	**Fax no.**	**Mobile**	**Control room no**
Sh. Nishit Upadhyay (Commandant)	2nd BN NDRF, Near RRI Camp. Haringhata, Mohanpur, Nadia, (West Bengal) Pin - 741246	033-25875032 wb02-ndrf@nic.in	033-25875032	09474061104, 09474116775	033-25875032

FIRST AID CENTRES			
Sr. no.	**Name of institution**	**Area**	**Telephone**
1.			
2.			
3.			

Contact of CERT – IN / CERT – O and Incident Procedure:

Control Room details of CERT – IN / CERT – O

Primary Contact - CERT – IN		
Name	**Designation**	**Contact details**
Dr. Gulshan Rai	Director	Tel No. Off : 011 – 24368544 Res : 011 – 24323085 Fax : 011 – 24366806 Mobile : 9810643244 Email : grai@cert-in.org.in, grai@mit.org.in
Alternate contact - CERT – IN		
Shri Anil Sagar	Operations Manager	Tel No. Off : 011 – 24368579 Res : 011 – 24368579 Mobile : 9810874430 Email : anil@cert-in.org.in, anil@mit.org.in
Incident Response Help Desk - CERT – IN		
Tel No. (Toll Free) – 1800-11-4949 Tel No. : 011 – 24368572 Fax (Toll Free) – 1800-11-6969 Fax : 011 – 24368546 Email : incident@cert-in.org.in, info@cert-in.org.in		

Primary Contact - CERT – O		
Name	**Designation**	**Contact details**
Alternate contact - CERT – O		
Incident Response Help Desk - CERT – O		

ANNEXURE B
EQUIPMENT LIST

B.1 Firefighting facility at HDC:

Sr. No.	Fire Fighting	Equipment No.	Capacity & Specifications	Location
1	Foam Crash Tender	4	Each FCT Contains: Water: 3600 L Foam: 900 L CO_2 Cylinders: 135 kgs DCP extinguishers: 45 kgs. Pump Capacity: 1800 LPM Water/Foam Monitor: range 60 / 45 m.	1 FCT at HQFS 1 FCT at DFS.
2	Foam Trailer Pumps	5	Pump Capacity: 1800 LPM	
3	Fire-fighting arrangement	Fixed system	As mentioned table below	HOJ-I, II, III, OT-II and Barge Jetty-I , II
4	Hydrant network		Centrifugal pumps	Dock area – hydrants 127 nos.
5	Hydrant feeding pumps	6	Centrifugal pumps	Berth no. 3, 5 & 13.
6	Wet riser system	1	Centrifugal pumps	Jawahar tower – landing valves 39 nos.

Fire-fighting facilities available at the Oil Jetty I, II, two Barge Jetties and Outer Terminal II:-

Location	Description	Number	Capacity
HOJ-I	Tower monitor/water-cum-foam monitor	3	5678 lpm
	Ground Monitor	2	2400 lpm
	Double Hydrant	8	900 lpm
	Jumbo Curtain Nozzle	3	6000 lpm
HOJ-II	Tower monitor/water-cum-foam monitor	3	5678 lpm
	Ground Monitor	2	2400 lpm

	Double Hydrant	8	900 lpm
	Jumbo Curtain Nozzle	3	6000 lpm
BJ-I	Ground Monitor	2	2400 lpm
	Double Hydrant	2	900 lpm
BJ-II	Ground Monitor	2	2400 lpm
	Double Hydrant	2	900 lpm
OT-II	Double headed Hydrant	5	900 lpm
	Tower Monitor	3	5678 lpm
	Ground monitor	2	2400 lpm
	Jumbo Curtain nozzle	3	6000 lpm
	Water curtain nozzles	3	6000 lpm
Common Pump House	Main fire water Pumps	5	3x920 m^3/hr. Main + 2x920 m^3/hr standby.
	Jockey Pumps	2	1x140 cum/hr. (1 Main+ 1 standby)
	Foam Pumps	2	1x30 cum/hr. (1 Main+ (1standby)
	Foam Tank	1	33 KL
	Fire water Tanks	2	17000 KL

Fire-Fighting Facilities already available at Oil Jetty I, II and two Barge Jetties of HDC:

- **Oil Jetty I:**

i. Dedicated fire water main with fire hydrants inside the jetty is available. This fire water main is connected with a fire pump house situated on the bank of Green Belt Canal. The pump house consists of 02(two) identical capacity fire pumps-one is diesel driven and the other is motor driven.

ii. 01(one) Foam Crash Tender, i.e., Combined type Fire Tender with in-built water tank, foam tank, CO_2 and DCP system or portable type CO_2 & DCP extinguishers is available for the jetty round the clock.

iii. 04 no. 10 Kg capacity DCP, 04 no. 09 liters capacity Foam and 02(two) no. 25 Kg capacity DCP Extinguishers are kept at the Service Platform of the Jetty.

iv. One hand-siren at the Service-Platform of the jetty and one electricity-operated siren on the roof of HOJ-I Fire Station are installed for raising alarm in the event of emergencies at the Oil jetty.

- **Oil Jetty II**:

i. Dedicated 01 (one) no. foam tender has been kept round the clock just in front of the jetty.

ii. A Fire Pump House is there where 02 (Two) no. diesel driven main fire-water pumps, 01 (one) no. motor driven stand-by pump of identical capacity, 02 (Two) no. Foam Feeding Pumps with 02 (two) no. Overhead Foam Tanks are installed.

iii. 02 (two) no. water cum foam monitors (Base Monitors), Fish Tail Nozzles, 05 (five) no. Portable Foam Extinguishers (9 liters capacity), 01 (one) no. DCP (10 kg. Capacity), 04 (four) no. DCP (09 kg. Capacity) and 02 (two) no. 25 kg capacity DCP Extinguishers and one hand siren have been installed in the jetty.

- **Oil Jetty III:**

The fire-fighting facilities has been recently upgraded to OISD-156 standard where the detailed requirement of fire pumps, monitors, jumbo nozzles, water curtain, hydrants, etc.

i. **Main, Jockey Pumps and Pipelines**: 04 (four) no. diesel driven main fire pumps, 01(one) no motor driven stand by fire pump of identical capacities and 03 nos. Jockey Pumps are installed. These pumps can cater:-
   - 08 no. Fire Hydrants,
   - 02 no. Ground Monitors (water cum foam monitors),
   - 03 no. Jumbo Nozzles in front of Tower monitors,
   - Sprinkler System,
   - 10 no. fish tail nozzles for Water Curtain System and
   - 03 no. Tower Monitors as per requirement.

ii. **Fixed Foam installation**: 02 (Two) no Foam Feeding Pumps with 02 (Two) no Foam Tanks are installed to feed foam compound to the main water stream.

iii. The Operation of Tower Monitors, Ground Monitors and Jumbo Nozzles, Water Curtain System, Sprinkler System are done from the control room with remote operation facilities.

iv. **Manual Call Points and Public Address & General Alarm (PAGA) Systems:** The system comprises of 08 nos. Manual Call Points and PAGA System at various locations within the jetty. The Fire Alarm Panel with hooter is located in the control tower and 01 no. hooter is located in the Pump House with associated cabling.

v. **Automatic Detection System**: There are 02 Gas Detectors and 03 Flame Detectors at the service platform. These detectors are inter connected with the water sprinkling system and a detectors' panel is installed at the Fire Control Tower.

vi. **Portable Fire Extinguishers**: DCP fire extinguishers of capacity 9 Kg – 8 nos. and 75 kg capacity – 2 nos. have been kept at the service platform of the jetty.

vii. 01 (one) no. **Foam Crash Tender** (multi-purpose) has been kept for the jetty round the clock.

- **Barge Jetties:**

There are portable fire extinguishers of different capacities for fire-fighting at Barge Jetty I & II.

i. DCP 9 kg-1 no

ii. DCP 10 Kg-1

iii. Mechanical Foam 9 liters – 3 no.

- **Outer Terminal-II:**

This Terminal as well as the fire-fighting facilities have been recently commissioned. Besides the mechanical items as given above, the following fire-fighting equipment are provided: -

i. Hose Boxes with 2 no hoses: 5 nos.
ii. DCP extinguisher 75 kg capacity: 2 nos.
iii. Mechanical Foam extinguisher 45 liters capacity: 2 nos.
iv. Manual Call Points: 12 nos.

B.2 Oil Spill Response Facility available at HDC:

Sr. No.	Item Description	Total quantity available and operational status
1	RO Boom SPI 100 m sections with accessories	3 nos. (total 300 M) (Operational)
2	Weir Skimmer and associated TED Mechanisms	2 sets (Operational)
3	Flex Barge (10 Tonnes Capacity) and accessories	4 sets (Operational)
4	Boom reel for RO boom and associated Mechanisms	1 Set (Operational)
5	Permanent Boom 25 m section with accessories	68 nos. each (total 1700 m) (installation is in progress at oil jetties for pre-booming) – operational
6	U-Boom 200 m with accessories	1 Set (Operational)
7	Boom reel for U Boom and associated Mechanisms	1 Set (Operational)
8	Air Blower with accessories	3 Set (Operational)
9	Multi-skimmer (Brush/Disc/Drum) and associated Mechanisms	2 Set (Operational)
10	Shore Cleaning equipment (Vacuum pump, Oil transfer pump, Hopper with vacuum head, Oil spill dispersant applicator-back pack type, Temporary storage tank) with accessories	5 Set (Operational)

11	Oil Spill Dispersion applicator with nozzle and spray arms and its associated Mechanisms	6 Set (Operational)
12	Sorbent Boom pack	500 m (Operational)
13	Oil Spill Dispersant	1000 Ltrs. (Operational)
14	Sorbent Pads	140 packs (1 pack contains 100 sheets, Operational)
15	Anti-Pollution vessel / work boat	1

B.3 Fire Dept. Employee Details:

Sr. no.	Category	Availability
1.	Sr. Fire & Security Officer	1
2.	Fire Supervisor	1
3.	Sr. Leading Fireman (Cl-3)	7
4.	Fire Engine Driver-cum-Pump Operator (on contract)	17
5.	Skilled laborer to work as Fireman	40

B.4 Port maintains following schedule for the contingency Mock drill

Sr. no.	Drill	Period	Area of consideration
1.	Fire Drill	April to June	1st oil jetty, 2nd oil jetty, Barge jetties, OT-III, Lock area.
2.		July to Sept.	Anywhere from Berth no. 1 to 14 inside dock.
3.		October to December	Chiranjibpur operational building, Power house, Loco shed.
4.		January to March	3rd oil jetty, Jawahar tower complex, Port Hospital.
5.	Oil Pollution Emergency drill	Quarterly (Feb, May, Sept. every year)	Response drill is conducted with coastguard

B.5 IMO Level trained personnel:

Sr. no.	Name	Designation	IMO Level
1.	Capt. Pushpendra Sharma	DMMOH	IMO Level - II
2.	Shri Abhijit Moitra	Dy. Dock Master	IMO Level - II
3.	Shri Jayanta Giri	Asst. Dock Master	IMO Level - II
4.	Shri Sujit Chatterjee	Chief Engineer	IMO Level – I
5.	Zaidul Haque Munshi	Asst. Dock Master	IMO Level – I
6.	Shri Rajesh Rajoo Tirkey	Asst. Dock Master	IMO Level – I
7.	Shri Vijith Valsalan	E.I.C.	IMO Level - I
8.	Shri Ravi Singh	E.I.C.	IMO Level – I
9.	Shri Somnath Giri	Berthing Pilot	IMO Level – I
10.	Shri Jaydeep Dey	Berthing Pilot	IMO Level – I
11.	Shri Anish Mondal	Berthing Pilot	IMO Level - I
12.	Shri Tapan Kumar Maiti	Jr. Marine Officer	IMO Level - III

B.6 Other equipment including rescue items:-

Sr. no.	Nomenclature
1.	B.A. Set
2.	Fire Entry Suit
3.	Aluminum Proximity Suit
4.	Chain Saw
5.	Hydraulic pump
6.	Circular Saw
7.	Bolt Cutter
8.	Tripod
9.	Dragon Search Light
10.	Life Buoy
11.	Life jacket

B.7 Floating Crafts

Sr. no.	Type of Floating Craft	Nos.	Make	Year	Capacity (BP/BHP)	Speed (Knots)
1	Dredger (hired) – GD Marine 60	1	M/s Reach Asia of 109/28, Hazra road, Kolkata	2020	540	8.23
2	Tugs					
	Rani Siromani (own)	2	Bharati Shipyard	2000	2 * 2189 (45 T)	More than 9.0
	Tamralipta (own)		Wartsila 9L20	2000	2 * 2160	11
	Ocean Envy^^ (Hired)	6	Hakodate Dock	2005	2 * 2000 (40 T)	
	Ocean Monarch^^ (Hired)		Cosco Shipyard	2007	2 * 2400 (40 T)	
	Ocean Crown^^ (Hired)		Kangawa Dockyard	2004	2 * 1950 (40 T)	
	ALBATROSS 3		2X Yanmar, 8N2V/-EN	2006	3600	12
	IH Blue Whale^^^		Celtug service shipyard	2009	2 * 1400 (30 T)	
	Ocean Symphony^^		Jiangsu Zhenjiang shipyard	2006	2 * 1973 (40 T)	
3	Pilot Launches	-	-	-		
4	Mooring Launches	4	Moonlight Services	2022	165 BHP	8.0
5	Pontoons	-	-	-	-	-
6	Barges	-	-	-	-	-
7	Survey Vessel / Boats	-	-	-	-	-
8	Special Purpose Launches	-	-	-	-	-
9	Fire Float (Hired)	6	-	-	-	-
10	Floating Cranes	-	-	-	-	-
11	Any Others	-	-	-	-	-

	^^ Fire Float Tugs, ^^^Oil Spill Response Vessel

B.8 Equipment servicing details

Sr. No.	Equipment Name	Model No.	Servicing date	Next Servicing date
1.				
2.				
3.				
4.				

Equipment mentioned in section B.2 and B.7 are checked periodically (weekly and monthly) by marine division.

ANNEXURE C
REFERENCE

1. Data and documents provided by SMP and SMP website.

2. MoPSW template for Crisis Management Plan

3. Bureau of Indian Standards (BIS) 'Hazard identification and risk analysis – Code of practice, IS 15656:2006'.

4. BSI, 'Crisis Management Guidance and Good practice, BIS 11200:2014'.

ABBREVIATIONS

BARC	Bhabha Atomic Research Center
CEC	Chief Emergency Controller
CERT	Computer Emergency Response Team
CMO	Chief Medical Officer
CMP	Crisis Management Plan
CIC	Chief Incident Controller
CISF	Central Industry Security Force
CMG	Crisis Management Group
CWC	Cyclone Warning Centers
DMP	Disaster Management Plan
EAP	Emergency Action Plan
EOC	Emergency Operation Centre
ERDMP	Emergency Response Disaster Management Plan
HDC	Haldia Dock Complex
IDRN	Indian Disaster Resource Network
INCOIS	Indian National Centre for Ocean Information Services
IMD	India Meteorological Department
IMO	International Maritime Organization
IRT	Incident Response Team
MMD	Mercantile Marine Department
MoEF	Ministry of Environment & Forest
MSDS	Materials Safety Data Sheet
NDMA	National Disaster Management Authority
NOSDCP	National Oil Spill Disaster Contingency Plan
OSCP	Oil Spill Contingency Plan
OSRO	Oil Spill Response Organization
PAS	Public Address System
PNGRB	Petroleum and Natural Gas Regulatory Board
RMC	Regional Meteorological Centre
SIC	Site Incident Controller
SMP	Syama Prasad Mookerjee Port
VTMS	Vessel Traffic Management System
WBPCB	West Bengal Pollution Control Board

FORMS AND FORMATS
1. FIRST REPORT OF MARINE CASUALTY/INCIDENT

FIRST REPORT OF MARINE CASUALTY/ INCIDENT	
To be completed and faxed/ e-mailed to DG Commcentre at the earliest but within 24 hrs. positively dgcommcentre-dgs@nic.in Tel: +91 22 2261 0606, 2261 4646, Fax: +91 22 2261 3636.	
SHIP/ OWNERS/CREW DATA	
Name of ship & call-sign	
IMO no.	
Flag	
Official no.	
Registration no. (MSV/ SV)	
Year built/rebuilt/conversion	
Classification Society, if applicable	
Type of ship	
GRT	
Summer deadweight	
Loaded/ light condition	
Draft F & A in metres	
Freeboard in metres	
Cargo type & quantity **(serious/ very serious casualty)**	
Bunkers: (HFO/ DO/ LO) in metric tonnes	
Name & full style of owners	
Name & full style of Hull & Machinery Underwriters	
Name & full style of P & I Club (IG or Non IG Group)	
Whether owned/ leased/ chartered	
Recruitment agents full style & RPS Licence no.	
Master's name & Nationality	
Total crew with nationality (Attach crew list)	
In service/last voyage/ laid up	
SHIPPING CASUALTY DATA	
Last port/ departure date, Next port/ ETA	
Place of casualty: Indian Coast/ EEZ/ Overseas	
Date & time of Casualty	
Location (Latitude Longitude), from nearest landmark	
Port/Sea/ Ocean name	
Nature of casualty/ incident & brief details*	
If SAR / Salvage services required, if applicable	
Extent of oil pollution, if applicable	
Weather conditions prevailing (sea, swell, wind, temp, ice etc)	
Tidal current prevailing (LT,HT,drift rate, +ve/-ve surges etc)	
DETAILS OF SEAFARERS/ PASSENGERS/	
SUPERNUMERARIES/ INVOLVED	
No. of deaths/ injuries	
Name/ Nationality of persons involved**	
Date of birth and age	
Rank & date of joining	
P & I/ other insurance cover for persons applicable	
CDC/ Passport no.	
COC no. & date of issue (if applicable)	
Type of CBA/ Articles of agreement)	
Name & full style of next of kin**	
Name of appointed Investigation Officer (if applicable)	
Name & designation of person reporting casualty	
COC no. & date of issue (if applicable)	
Type of CBA/ Articles of agreement)	
Name & full style of next of kin**	
Name of appointed Investigation Officer (if applicable)	
Name & designation of person reporting casualty	
Note: * Additional sheet may be used for detailed information	
**** If Indian persons involved, full details of persons & next of Kin to be furnished.**	

1. Incident Report Form for Grounding of a Vessel within Port Limit

Vessel and Incident details

1.	Name and Type of the Vessel	
2.	Master of the Vessel	
3.	Name of the Agent	
4.	Incident Date & Time	
5.	Vessel Length and Draft	
6.	Pilot on Board, if any	
7.	Location of the incident	
8.	Current location of the vessel	
9.	Port Launches Order (time)	

Other details

1.	Time of Grounding	
2.	Cause of Grounding	
3.	Extent of Grounding	
4.	Weather Conditions	
5.	Direction of Vessels head	
6.	Movement of other vessels stopped	
7.	Pollution type (oil/chemical)	
8.	Location and Extent (impact on environment) of Pollution	
9.	Fire/Explosion	
10.	Evacuation of Passengers (if any)	
11.	Plans to refloat vessel	
12.	Additional actions taken by port	
13.	Divers required	
14.	Salvage company informed	
15.	Remarks	

2. Incident Report form for Sinking/Capsize of a Vessel within Port Limit

Vessel and Incident details

1.	Name and Type of the Vessel	
2.	Master of the Vessel	
3.	Name of the Agent	
4.	Incident Date & Time	
5.	Vessel Length and Draft	
6.	Pilot on Board, if any	
7.	Location of the incident	
8.	Current location of the vessel	
9.	Port Launches Order (time)	

Other details

1.	Time of Sinking/Capsize	
2.	Cause of Sinking/Capsize	
3.	Extent of Sinking/Capsize	
4.	Weather Conditions	
5.	Direction of Vessels head	
6.	Movement of other vessels stopped	
7.	Pollution type (oil/chemical)	
8.	Location and Extent (impact on environment) of Pollution	
9.	Fire/Explosion	
10.	Evacuation of Passengers (if any)	
11.	Plans to refloat vessel	
12.	Additional actions taken by port	
13.	Divers required	
14.	Salvage company informed	
15.	Remarks	

3. Incident Report form for Collision between two Vessels within Port Limit

Vessels and Incident details

1.	Name and Type of the Vessels	Vessel 1: Vessel 2:
2.	Master of the Vessel	
3.	Name of the Agent	
4.	Incident Date & Time	
5.	Vessel Length and Draft	
6.	Pilot Onboard, if any	
7.	Location of the incident	
8.	Current location of the vessel	
9.	Port Launches Order (time)	

Other details

1.	Time of Collision	
2.	Cause of Collision	
3.	Extent of Collision (condition of vessels)	
4.	Weather Conditions	
5.	Direction of Vessels head	
6.	Movement of other vessels stopped	
7.	Pollution type (oil/chemical)	
8.	Location and Extent (impact on environment) of Pollution	
9.	Fire/Explosion	
10.	Evacuation of Passengers (if any)	
11.	Plans to move the vessel	
12.	Additional actions taken by port	
13.	Remarks	

4. Incident Report form for Fire Onboard a vessel within Port Limit

Vessels and Incident details

1.	Name and Type of the Vessels	
2.	Master of the Vessel	
3.	Name of the Agent	
4.	Incident Date & Time	
5.	Vessel Length and Draft	
6.	Pilot Onboard, if any	
7.	Location of the incident	
8.	Current location of the vessel	
9.	Number of Passengers Onboard	
10.	Fire Fighting facilities on vessel	
11.	Location of Fire	
12.	Substance burning	
13.	Details of dangerous goods on board, if any	
14.	Port Launches Order (time)	

Other details

1.	Cause of Fire	
2.	Extent of Fire (condition of vessel)	
3.	Weather Conditions	
4.	Direction of Vessels head	
5.	Movement of other vessels stopped	
6.	Actions taken, by Master of vessel	
7.	Master consulted with the Port/Fire Officer	
8.	Evacuation of Passengers (if any)	
9.	Plans to move the vessel	
10.	Additional actions taken, by port	• Protection of Port property • Precautions against re-ignition • Security
11.	Remarks	

5. Incident Report form for Fire onboard a tanker within Port Limit

Vessels and Incident details

1.	Name and Type of the Vessels	
2.	Master of the Vessel	
3.	Name of the Agent	
4.	Incident Date & Time	
5.	Vessel Length and Draft	
6.	Pilot Onboard, if any	
7.	Location of the incident	
8.	Current location of the vessel	
9.	Number of Passengers Onboard	
10.	Fire Fighting facilities on vessel	
11.	Location of Fire	
12.	Substance burning	
13.	Details of cargo on board	Type Quantity
14.	Port Launches Order (time)	

Other details

1.	Cause of Fire	
2.	Extent of Fire/Explosion (condition of vessel) or Likelihood of Explosion	
3.	Weather Conditions	
4.	Cargo Operations ceased	
5.	Hoses/Metals arms disconnected	
6.	Movement of other vessels stopped or area cleared	
7.	Actions taken, by Master of vessel	
8.	Master consulted with the Port/Fire Officer	
9.	Evacuation of Passengers (if any)	
10.	Plans to move the vessel or other vessels	
11.	Additional actions taken, by port	• Protection of Port property • Precautions against re-ignition • Security
12.	Remarks	

2. CYBER SECURITY INCIDENT REPORTING PROCEDURE

Incident Reporting Procedures:

Any organization or corporate using computer systems and networks may be confronted with security breaches or computer security incidents.

By reporting such computer security incidents to CERT-O/CERT-IN, the system administrators and users will receive technical assistance in resolving these incidents. This will also help the CERT-O/CERT-IN to correlate the incidents thus reported and analyses them; draw inferences; disseminate up-to-date information and develop effective security guidelines to prevent occurrence of the incidents in future.

2.1 Reporting of an Incident:

System administrators can report an adverse activity or unwanted behavior, which they may feel as an incident to CERT-O/CERT-IN. They may use the following channels to report the incident.

Contact information of CERT-IN

Email: incident@cert-in.org.in

Helpdesk: +91-1800-11-4949 (Toll Free), Fax: +91-1800-11-6969 (Toll Free)

Contact information of CERT-O

Email:

Helpdesk: +91 (Toll Free), Fax: +91- (Toll Free)

2.2 Contents of Incident Report:

The following information (as much as possible) may be given while reporting the incident.

- Time of occurrence of the incident
- Information regarding affected system / network
- Symptoms observed
- Relevant technical information such as security systems deployed, actions taken to mitigate the damage etc.

For details refer the incident reporting form given below.

2.3 Verification:

CERT-O/CERT-IN will verify the authenticity of the report.

2.4 Triage:

CERT-O/CERT-IN will then analyses the information provided by the reporting authority and identify the existence of an incident. In case it is found that an incident has occurred, a tracking number will be assigned to the incident. Accordingly, the report will be acknowledged and the reporting authority will be informed of the assigned tracking number. CERT-O will designate a team as needed.

2.5 Incident Response:

The designated team will assist the concerned system administrator in following broad aspects of incident handling:

- Identification: to determine whether an incident has occurred, if so analyzing the nature of such incident, identification and protection of evidence and reporting of the same.
- Containment: to limit the scope of the incident quickly and minimize the damage.
- Eradication: to remove the cause of the incident.
- Recovery: taking steps to restore normal operation.

CERT-O/CERT-IN will provide support to the system administrators in identification, containment, eradication, and recovery during the incident handling in the form of advice, CERT-O/CERT-IN will not physically deploy or send any member for attending the incident response activity at the site of occurrence. The priority of assisting in responding to the incidents will be decided by CERT-O/CERT-IN keeping in view the severity of incident and availability of resources.

2.6 Incident Reporting Form:

Form to Report Incidents to CERT – IN / CERT – O				
For Official Use only: **Incident Tracking Number: CERT-IN/O-XXXXX**				
1. Contact Information for this incident:				
Name:		Organization:	Title:	
Phone / Fax No:		Mobile:	Email:	
Address:				
2. Sector: (Please tick the appropriate choices)				
• Government • Financial • Power	• Transportation • Manufacturing • Health	• Telecommunications • Academia • petroleum	• Info Tech • Other	
3. Physical location of affected Computer / Network and name of ISP.				
4. Date and Time incident occurred:				
Date:		Time:		
5. Is the affected system / network critical to the organization's mission? (Yes / No). Details				
6. Information of Affected System:				
IP Address:	Computer/ Host Name:	Operating System (incl. Ver. / release No.)	Last patched/ updated	Hardware Vendor / Model
7. Type of Incident:				

• Phishing
  ○ Network scanning / Probing
  ○ Break-in / root compromise
  ○ Virus / Malicious Code
		• Spam
		• Bot / Botnet
		• Email Spoofing
		• Denial of Service (DoS)
			• Website intrusion
			• Social engineering
			• Technical vulnerability
			• IP spoofing	

• Website defacement • System Misuse		• Distributed denial of	• Other	

	service (DDoS) • Use Account Compromise	

8. Description of Incident:

9. Unusual behavior / symptoms (Tick the symptoms)

• System Crashes • New user accounts / Accounting discrepancies • Failed or successful social engineering attempts • Unexplained, poor system performance • Unaccounted for changes in the DNS tables, router rules, or firewall rules • Unexplained elevation or use of privileges • Operation of a program or sniffer device to capture network traffic; • An individual last time of usage of a user account that does not correspond to the actual last time of usage for that user • A system alarm or similar indication from an intrusion detection tool • Altered home pages, which are usually the intentional target for visibility or other pages on the web server	• Anomalies • Suspicious probes • Suspicious browsing • New files • Changes in file lengths or dates • Attempts to write to system • Data modification or deletion • Denial of service • Door knob rattling • Unusual time of usage • Unusual usage patterns • Unusual log file entries • Presence of new setuid or setgid fies • Changes in system directories and files • Presence of cracking utilities • Activity during non-working hours or holidays • Other (Please specify)

10. Has this problem been explained earlier? If Yes, details.

11. Agencies notified?

• Law Enforcement	• Private Agency	• Affected Product Vendor	• Other
12. When and How was the incident detected:			
13. Additional Information: (Include any other details noticed, relevant to the Security Incident.)			
• Whether log being submitted			• Mode of submission
OPTIONAL INFORMATION			
14. IP Address of Apparent or Suspected Source:			
Source IP address:			Other information available:
15. Security Infrastructure in Place:			

	Name	OS	Version / Release	Last Patched / Updated
Name OS version / release last patched / updated				
Anti-virus				
Intrusion detection / prevention systems				
Security auditing tools				
Secure remote access / authorization tools				
Access control list				
Packet filtering / firewall				
Others				

16. How Many Host(s) are affected		
• 1 to 10	• 10 to 100	• More than 100
17. Actions taken to mitigate the intrusion / attack:		
• No action taken • System binaries checked	• Log files examined • System(s) disconnect	• Restored with a good backup • Other

	ed form network	
Please fill all mandatory fields and try to provide optional details for early resolution of the Security Incident		
Mail / Fax this form to: CERT-IN, electronics Niketan, CGO complex, New Delhi 110003, Fax: +91-11-24368546 or Email at: incident@cert-in.org.in Mail / Fax this form to: CERT-O, Fax: or Email at:		