SYAMA PRASAD MOOKERJEE PORT – KOLKATA DOCK SYSTEM

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 Kolkata Dock System (KDS) 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.

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REPORT REVISION RECORD

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1	Final report issued	19.01.2024
2	Final report issued	23.04.2024

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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 - Kolkata Dock System (SMP – KDS) 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. KDS'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 ports 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. Gaseous release
    d. Corrosive cargo release

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 and bridges, Dry docks, 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 KDS 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 eastern coast of West Bengal. KDS is located on the East Bank of Hugli River & HDC is on the West Bank. SMP comprises of two dock systems one at Kolkata and other at Haldia. Kolkata dock consists of three sub-components i.e., Kidderpore Dock (KPD), Netaji Subhash Dock (NSD) and Budge-Budge Oil jetties. The Kolkata port is about 145 km from the Sagar Island and 223 km from Sand head. River anchorages of KDS are located at Garden reach and Diamond harbor.

Port is well connected to nearby places by road, rail and air routes. National Highway (NH) 117 is about 1.5 km from KDS and connects to NH 6 (Delhi – Kolkata Road).

Port is also well connected to South Eastern & Eastern railway network. Nearest railway station to KDS is Majherhat.

1.2.1.1 Kidderpore Dock (KPD)

The KPD comprises of two Dock basins – separated by a bascule bridge. KPD – I has 12 berths, KPD – II has 8 berths (**Figure 1.1)** and KPD has 3 Dry Docks. The entrance to the Dock Systems is through Lock Gates, having outer & inner lock Gates.

1.2.1.2 Kidderpore Port Layout

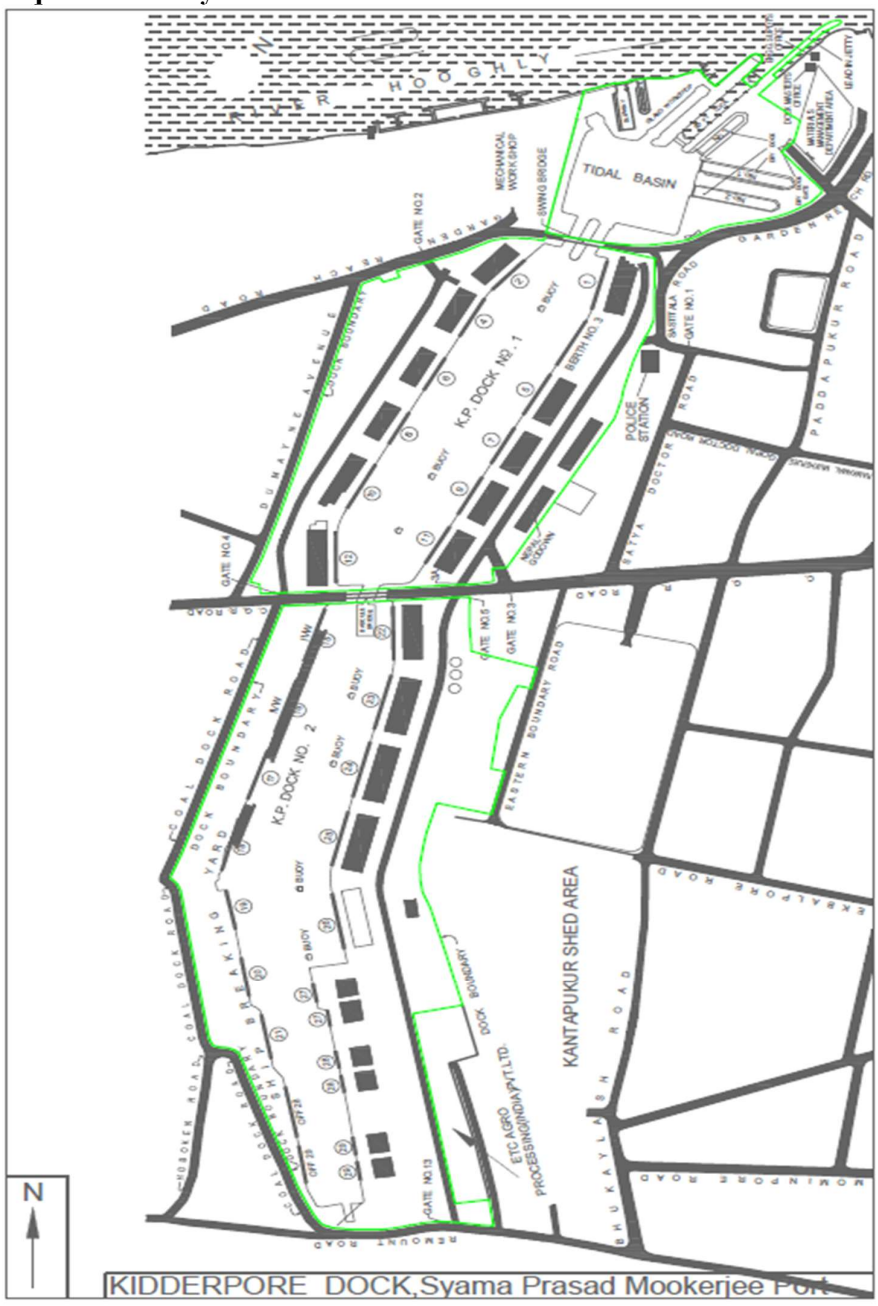

Figure 1.1: KPD Layout

1.2.1.3 Berth wise specification and Storage Shed details

Sr. No	Name of Berth	Type of Berth	Actual depth (m)	Quay length (m)	Maximum length of vessel that can be accommodated	Shed	
						Covered (sqm)	Open (sqm)
1	1	General Cargo	8	133	475	3345	2565
2	3	General Cargo	8.7	128	515	-	3887
3	5/7	General Cargo	8.7	229	515	6689	4218/4374
4	9	General Cargo	8.7	108	515	3345	3812
5	11	Passenger & Coastal	8.5	151	515	3344	1604
6	2	Coastal	8	142	465		2693
7	4	General Cargo	8.5	136	515	3344	9098
8	6	General Cargo	8.2	118	515	3345	11849
9	8	General Cargo	8.5	128	515	3344	4647
10	10	General Cargo	8.5	161	515	3345	5693
11	12	Coastal	8.6	143	475	3344	5699
12	22	General Cargo	8.7	151	500	8919	Nil
13	23	General Cargo	8.7	147	515	-	Nil
14	24	General	8.7	152	515	6919	Nil

		Cargo					
15	25	General Cargo	8.5	169	515	8919	Nil
16	26	General Cargo	8.4	185	515	9033	2616
17	27	General Cargo	8.2	195	515	3623	3680
18	28	General Cargo	8.4	195	515	3523	3726
19	29	General Cargo	8.4	185	515	3623	3440

Table 1.1: Berth wise specification

1.2.2.1 Netaji Subhash Dock (NSD)

The NSD comprises of dock basin with a single lock entrance and has 10 berths and 2 dry docks (**Figure 1.2**).

1.2.2.2 Netaji Subhash Dock Port Layout

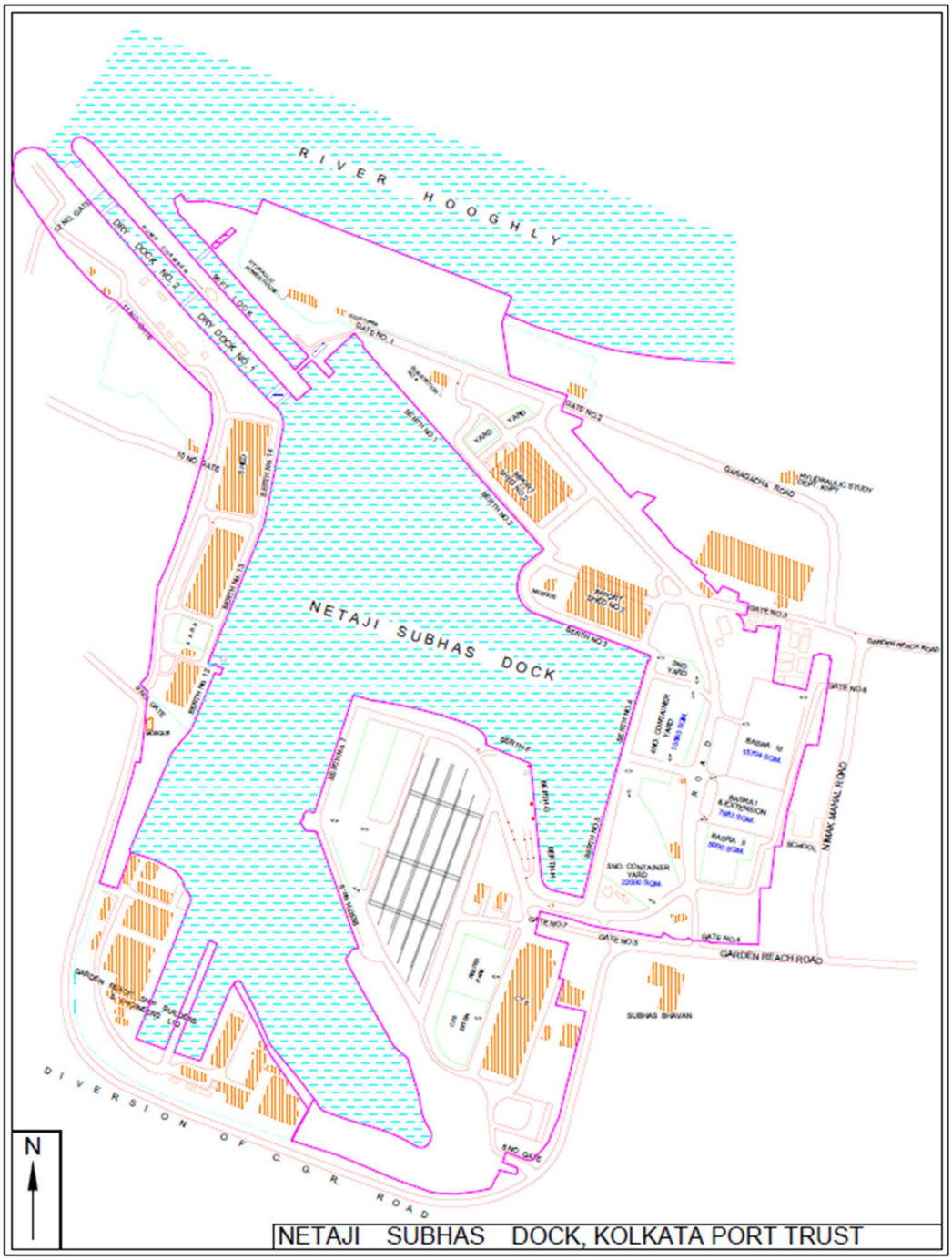

Figure 1.2: NSD Layout

1.2.2.3 Berth wise specification and Storage Shed details

Sr. No	Name of Berth	Type of Berth	Actual depth (m)	Quay length (m)	Maximum length of vessel that can be accommodated	Shed	
						Covered (sqm)	Open (sqm)
1	1	General Cargo + Heavy Lift	8.2	200	565	-	6000
2	2	General Cargo	8.2	187	565	11757	3831
3	3	Container	8.7	183	565	11758	3600
4	4	Container	8.6	181	565	11758	3400
5	5	Container	8.6	182	565	-	11000
6	7	Container	8.7	192	550	9000	50000
7	8	Container	8	225	507	-	-
8	12	Liquid	8	152	500	1872	-
9	13	General Cargo	8.4	174	565	10093	1278
10	14	General Cargo	7.2	174	540	15235	2555

Table 1.2: Berth wise specification

1.2.3.1 Budge-Budge Oil Jetties

Budge-Budge is located about 25 km downstream of Kolkata. There are 6 jetties of different sizes with associated storage facilities as shown in **Figure 1.3**.

1.2.3.2 Layout

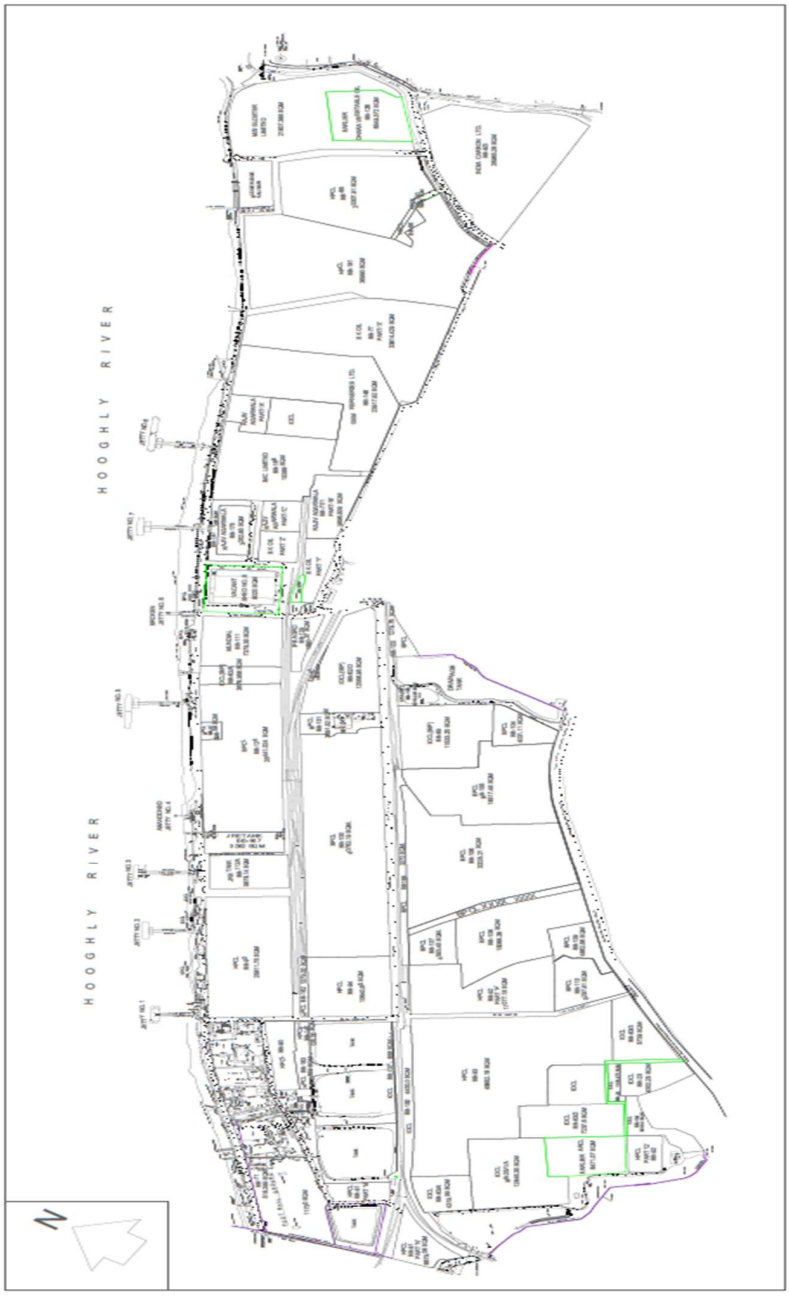

Figure 1.3: Layout of Budge-Budge Oil Jetties

1.2.3.3 Jetty Facilities

Jetty No.	Length (m)*	Commodity handled
1	189	POL, Vegetable Oil & other liquid
2	102	
3	163	
5	189	
7	189	
8	189	

** Length mentioned in this Table refers to the maximum length of the vessel that can be berthed at these jetties*

Table 1.3: Jetty Facilities

1.2.4.1 Navigational Facilities

SMP maintains two approach channels from sea one via Eastern channel for vessels visiting to KDS and the other via Western channel / EDEN for vessels visiting to HDC as shown in **Figure 1.4**.

The pilotage distance to KDS is 223 km comprising 148 km of river and 75 km of sea pilotage. The pilotage distance to Haldia is 115 Kms comprising 30 kms. of river and 85 kms of sea pilotage. Remote pilotage assistance is provided through VTMS during the sea passage of the vessels in both the channels.

The channels are well marked with nearly 125 light vessels / lighted buoys and 500 shore marks. The Centre Pilot Control Station is located on Sagar Island. In addition to the pilot station, SMP maintains a pilot vessel at around Sagar in foul weather. The pilot transfer is undertaken for the pilot station / pilot vessel through dedicated pilot launches. The pilots for KDS vessels board at middle point south of Sagar. For the outward passage the same process is used in a reverse order.

Being a riverine port with numerous sand bars (shoals), the advantage of rise of tide is utilized to obtain the maximum draft for shipping. The length of vessel is restricted to 172m at Kolkata due to lock gate dimensions. Due to the nature of river and the shifting of sand taking place regularly inside the channels regular hydrographic surveys are done to confirm the depth and width of the channel.

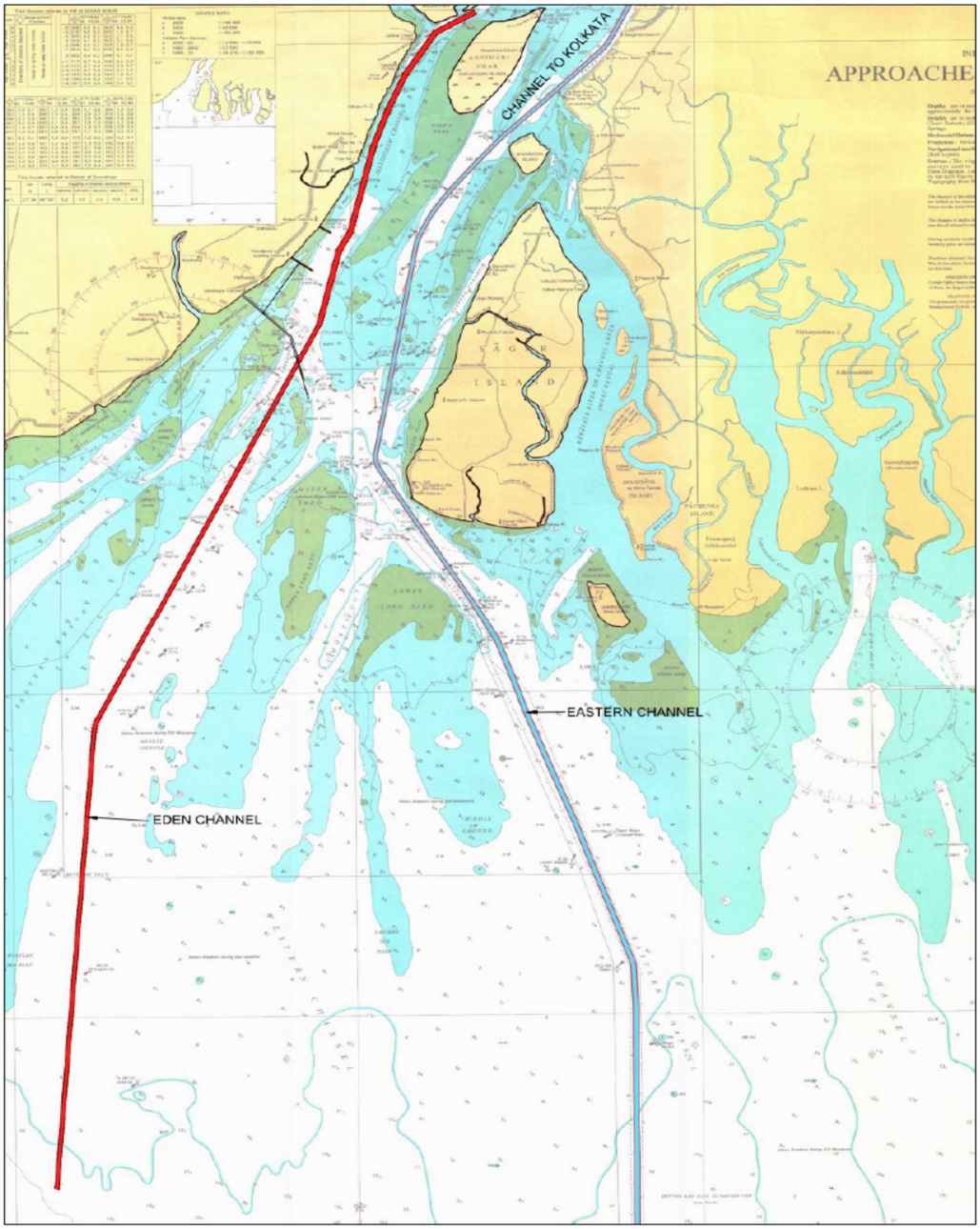

Figure 1.4: Navigational Channel layout

1.2.4.2 Road and Rail connectivity:

Kolkata Port has a synergistic linkage with the city of Kolkata with an array of road, railway and inland waterway network connecting all parts of the country. The Port is well connected with national and state highways, railways and national waterways. KDS is connected with NH-6, NH-2 and NH-34 through city roads. NH-41 connects Haldia with NH-6 and rest of the country. KDS is connected to Eastern Railway through Sealdah and Budge Budge Sections. HDC is connected to the South Eastern Railway

via Panskura. Kolkata Port is connected to National Waterway No.1 (Ganga), National Waterway No.2 (Brahmaputra) and Waterways through Sundarban.

Figure 1.5: RAIL CONNECTIVITY MAP FROM KOLKATA PORT

Figure 1.6: ROAD CONNECTIVITY OF KOLKATA PORT IN THE CITY OF KOLKATA

Figure 1.7: ROAD CONNECTIVITY TO REST OF INDIA

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, ships personnel & crew, stakeholders, contractors & visitors;
e. Limit damages to port & contractor assets, vessel 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 NDRF, fire service, police service, medical service including ambulance, government as well as non-governmental agencies;
- 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 a crisis and how it works in practice;
e) details of levels of response across the organization (i.e., who is to be contacted) and showing the sequence of actions;
f) the structure and role of the CMG and what is expected of it;
g) where the CMG will meet (with alternative locations) and what resources are required;
h) 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 to loss of containment of hazardous cargo handled and general category fires (Class A & C fires). In addition, fire on vessel can occur in the river and 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. It can also be caused during bunkering and cargo transfer operation.

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/light vessels, Lock gate;
- Collision/Allision with bridge – Hooghly Bridge (Vidyasagar Setu); Howrah Bridge (Rabindra Setu);
- 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 ooccupational hazards and can be due to following reasons:

- Slip, Trip, Falls;
- Working at heights;
- Confined space working;
- Hot work;
- Electrical shocks;
- Toxic inhalation
- Failure to comply with standard safety rules and provisions of Dock Workers (Safety, Health & Welfare) Regulations, 1990 etc.
- Overboard,
- Drowning.

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 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,

- Mock Drills and Trainings,
- 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; and

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 Director-Marine/Dy. DMD I/II.

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 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 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 Competent Agencies for issuing of Warning/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 crisis.

Table 2.1: Competent agencies for issuing warnings

Agencies	Crisis
IMD	Earthquakes
Central Water Commission (CWC)	Floods
IMD, Regional Specialized Meteorological Centre (RSMC) – Arabian Sea	Cyclones, 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 hours 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 the 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 is 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 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 Director- Marine or in his absence DMD-I/II, 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 Centre (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 (Refer **Annexure A & B of KDS and HDC (CMP) -** for resources).

Also, refer SOP's for response actions in this plan (Chapter 4).

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, 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 **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/Bridge	
	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.

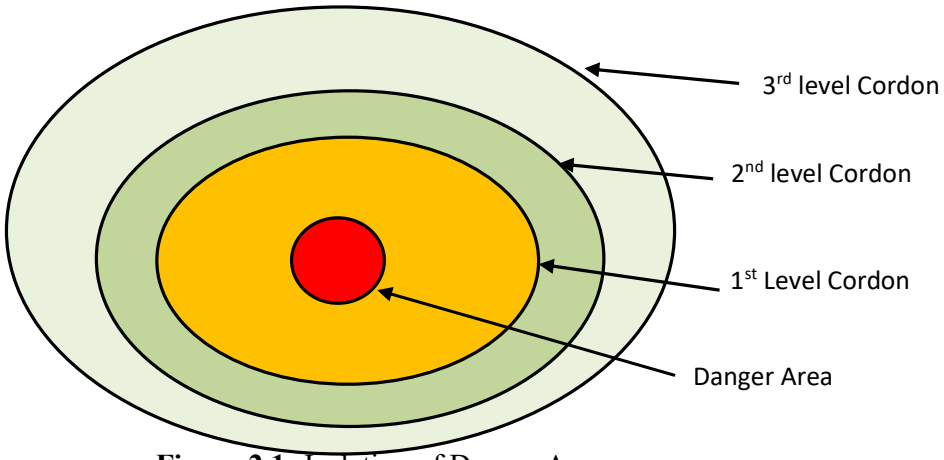

Figure 2.1: Isolation of Danger Area

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 operation

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

ii. Oil spill response operation

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

iii. Search and rescue operation

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 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 local population 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 the first 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 KDS is as follows;

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-Port Security)
2.	Fire at KDS	Assemble at Berth No 11 KPD (passenger Terminal) to proceed out from Gate as directed (Coordinated by Port Fire Service & CISF-Security)
3.	Fire at NSD	Assemble near Container Terminal Building to proceed out as directed (Coordinated by Port Fire Service. & CISF)
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 Service. and CISF-Security)

5.	Fire at General Cargo berths	Assemble at the Assembly points at KDS/ NSD (Coordinated by Port Fire Service. & CISF/ PSO)

Following areas are earmarked as assembly areas.

1. Near Berth No. 11 KPD (passenger Terminal), at KPD
2. Near Container Terminal Building, at NSD
3. Near AHM Office, Budge-Budge Petroleum Wharves
4. Premises of Subhash Bhavan, for any other contingencies in the Dock area.

b. Evacuation Shelters

In the event of an impending crisis the affected population would have to be transported to intermediate evacuation shelter. 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, the Engineering 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 centre.

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 Kolkata/South-24 Parganas District can be found from IDRN (refer below link)
(Kolkata: https://idrn.nidm.gov.in/Home/CountryWideQueryList
South-24 Parganas: https://idrn.nidm.gov.in/Home/CountryWideQueryList)

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 Crisis** 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

a. 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.
b. 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.
- 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 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 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

The operational staff of all the following stakeholders are responsible for prevention, precaution and response actions during pre-crisis situations. In this stage the incident is in developmental stage and has a potential to transform into crisis. 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. Terminal operators,
4. Stevedoring and shore handling agencies,
5. Rail carriers/operators,
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 already indicated 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**.

Vulnerability Assessment

An assessment of vulnerabilities and threats are 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. 223 km (148 km river and 75 km sea) channel are also a major hazard.

Table 2.4: Vulnerability Assessment

Threats → / Vulnerable Areas ↓	Fire Explosion on board ship/ ashore in port area	Oil/ Chemical/ Gas Pollution	Vessel accident - Collision/ Grounding	Cyclone/ Floods/ Lightning/ Tsunami/ Earthquake/ Maritime casualties	Personal Injury on board ship/ Ashore in port	Power Failure/ Strike/ Terrorist Attack/ Hijacking/ Cyber Attack
Approach Channel	xxx	xx	xx	xx	xx	x
Berths –KPD	x	x	xx	xx	x	x
Berth – NSD	x	xx	xx	xx	x	x
Oil Jetties - Budge-Budge	xx	xx	xx	xx	xx	x
Lock Gate for vessel movement	x	x	x	xx	x	xx
Coal stack yards/warehouse	x	x	-	xx	xx	x
Pipelines	xx	xx	-	xx	x	x
Mobile Trucks & equipment (Mobile harbor cranes and RTG cranes)	x	-	-	xx	xx	xx
Port railway infrastructure	x	x	-	x	x	xx
Control gates for personnel and vehicular movement	x	-	-	x	x	xx
Electric Substations	x	-	-	x	x	xx
Dry Dock	x	-	-	x	xx	x
Port tugs, crafts, dredger, launchers, pilot vessel	x	-	x	xx	x	x
Administration/office Buildings/Fire Station/Sagar pilot station	x	-	-	xx	x	xx

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

Table 2.5: Risk Ranking of the vulnerable areas

Rank	Vulnerable areas
1.	Approach Channel
2.	Oil Jetties – Budge-Budge
3.	Berth – NSD
4.	Berth – KPD
5.	Lock gate for vessel movement
6.	Pipelines
7.	Coal stackyard/warehouse
8.	Mobile Trucks & equipment (Mobile harbour cranes and RTG cranes)
9.	Administration/office Buildings/Fire station/Sagar pilot station
10.	Port railway infrastructure
11.	Port tugs, crafts, dredger, launchers, pilot vessel
12.	Electric Substations
13.	Dry Dock
14.	Control gates for personnel and vehicular movement

3. IMPLEMENTATION FRAMEWORK

3.1 Crisis Management Framework for Kolkata Dock System (KDS)

The development of a crisis management capability in KDS 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. KDS 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 the Chairman/Dy. Chairman and comprises of:

1. Director – Marine;
2. Traffic Manager;
3. Chief Engineer (Mechanical & Electrical Engineer);
4. Chief Engineer (Civil);
5. Chief Medical Officer;
6. Port Fire Officer;
7. Sr. Comdt. CISF & PSO – Security;
8. Secretary
9. FA & CAO;
10. Material Manager;
11. Chief Hydrographer Engineer.

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 Dy. Director – I/II -Marine or Mooring Master (Budge-Budge) as the head and comprises of

1. Harbour Master (River & Port);
2. Dock Master/Dy. Dock Master;
3. Assistant Port Fire Officer;
4. Safety Officer;
5. Safety and Anti-pollution officer;
6. Commandant – CISF, PSO;
7. Dy. Traffic Manager (SH & CH, Railway, Cont.);
8. Dy. Engineers (Civil, Mechanical, Electrical and Hydraulic);
9. Commander Sagar Pilot station;
10. Sr. Dy. Chief Medical Officer;
11. Terminal/berth operators- In-Charge.

Refer **Figure 3.1, 3.2 & 3.3** for CMG, On-site Emergency and Offsite Emergency Organization Charts.

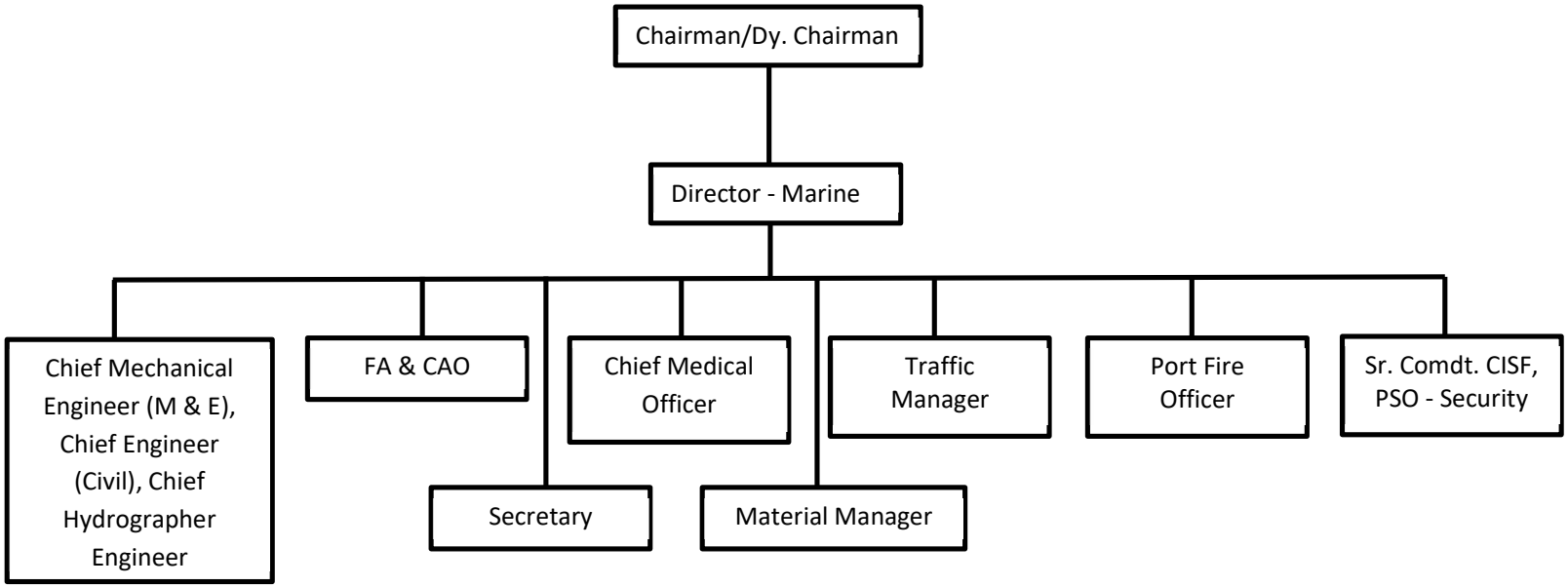

Figure 3.1: Crisis Management Group Chart

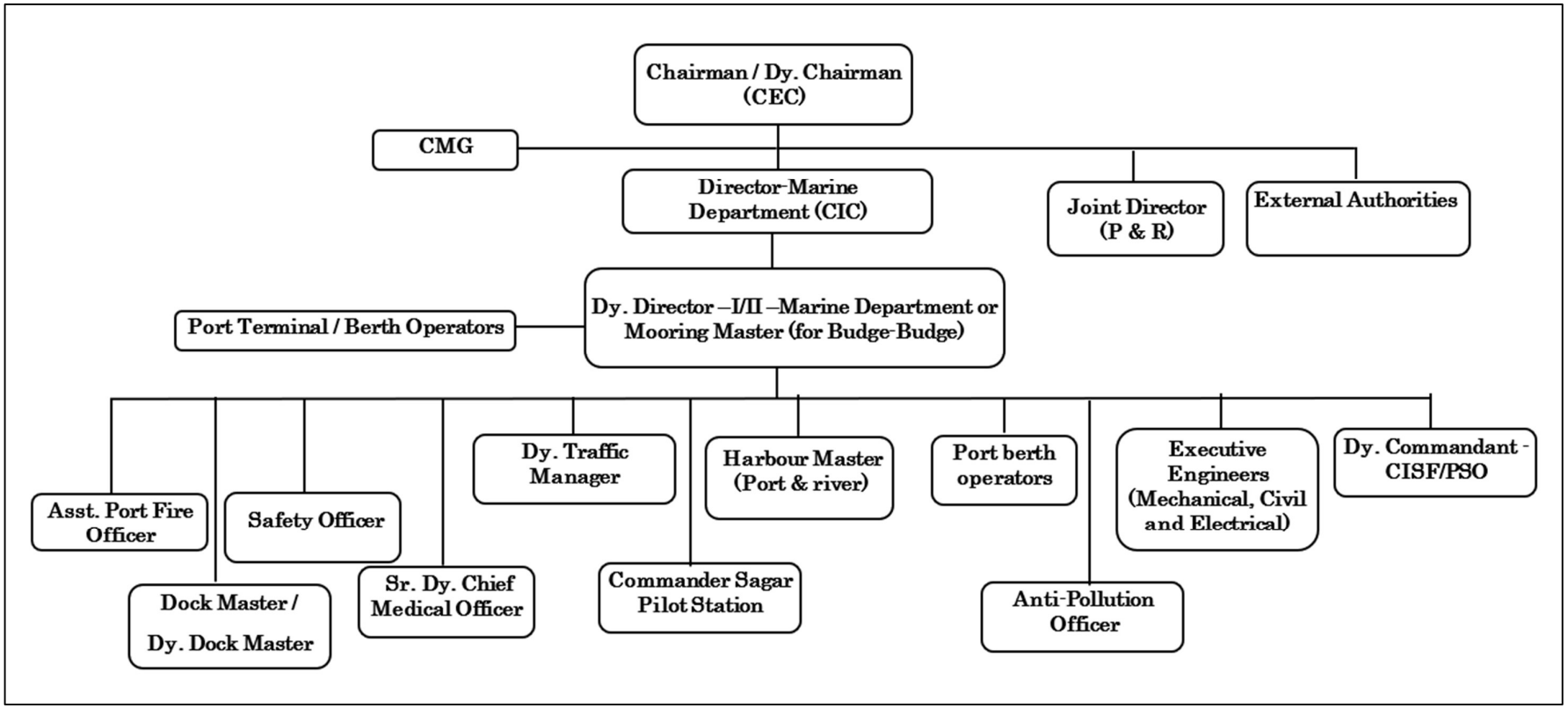

Figure 3.2: Onsite Emergency Organization Chart

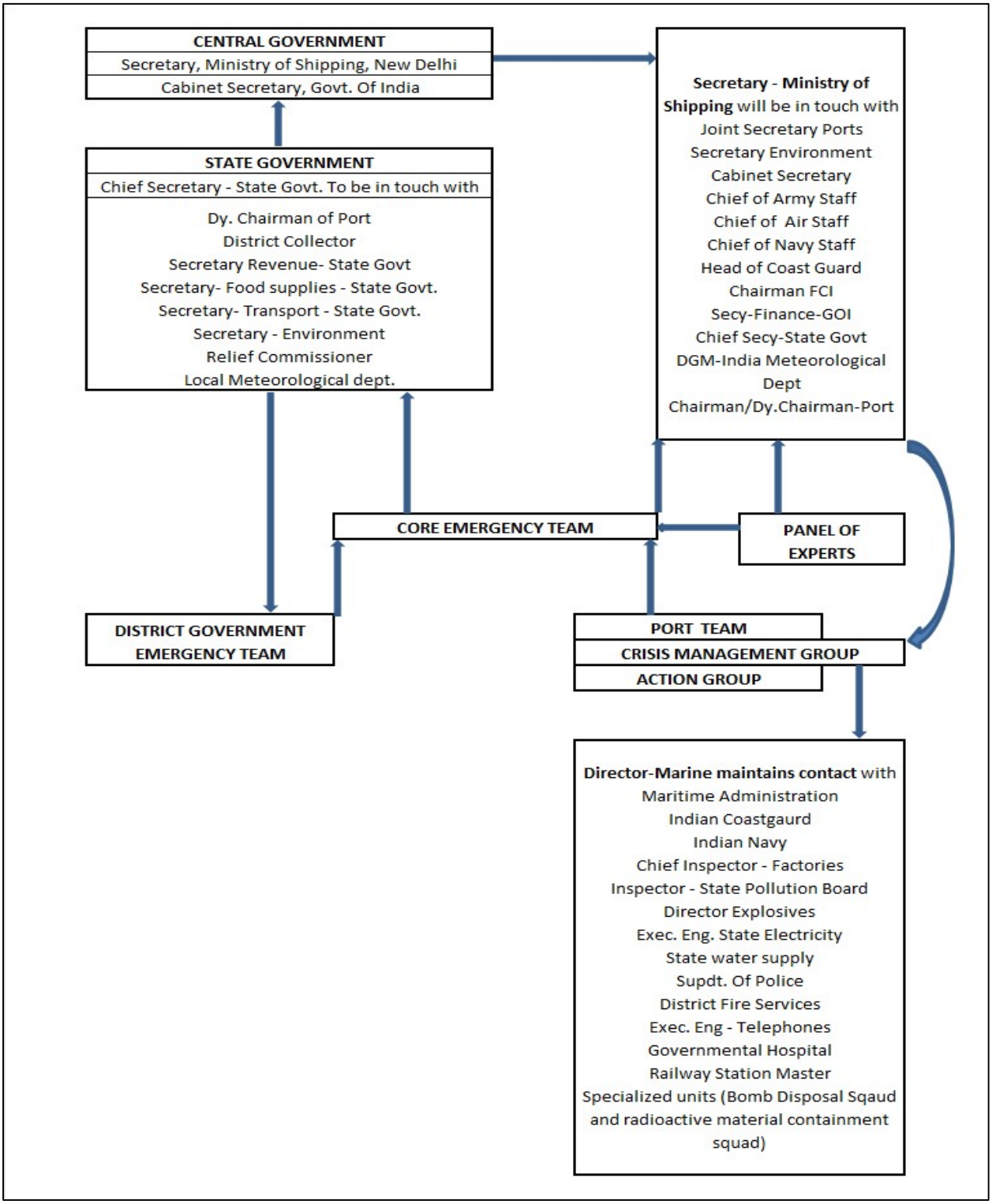

Figure 3.3: Off-Site Emergency Organization Chart-Level 2 and 3

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
Harbour authorities, Pilots, tugs and other harbour 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

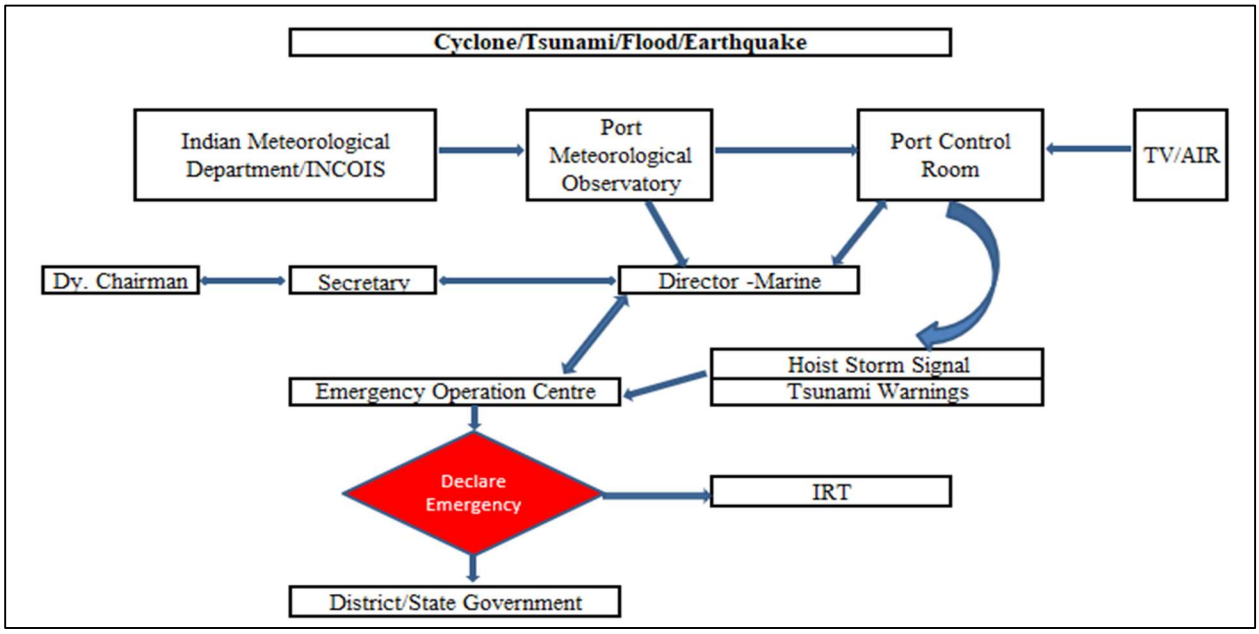

Figure 3.1: Cyclone /Tsunami/Flood/Earthquake

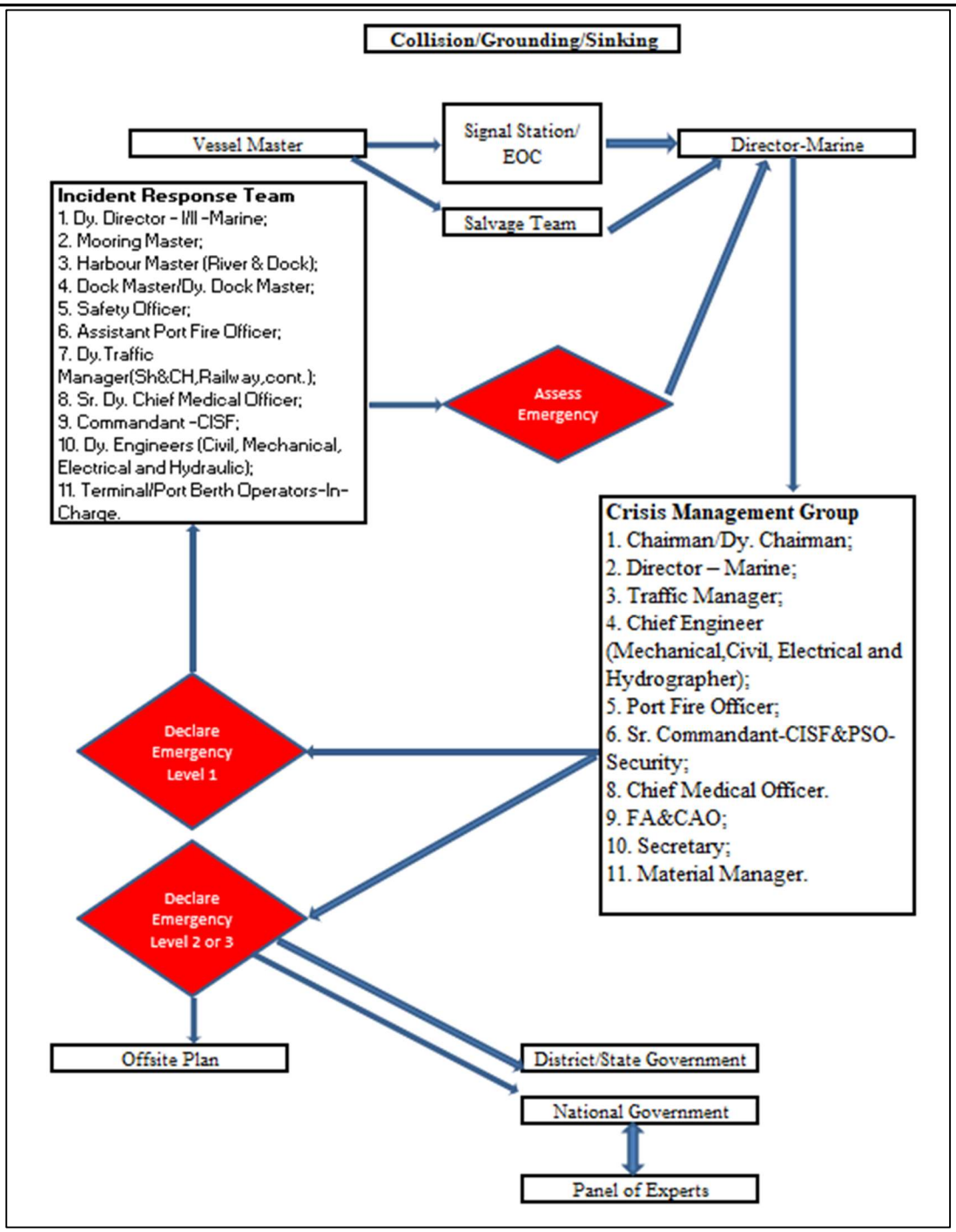

Figure 3.2: Collision/Grounding/Sinking

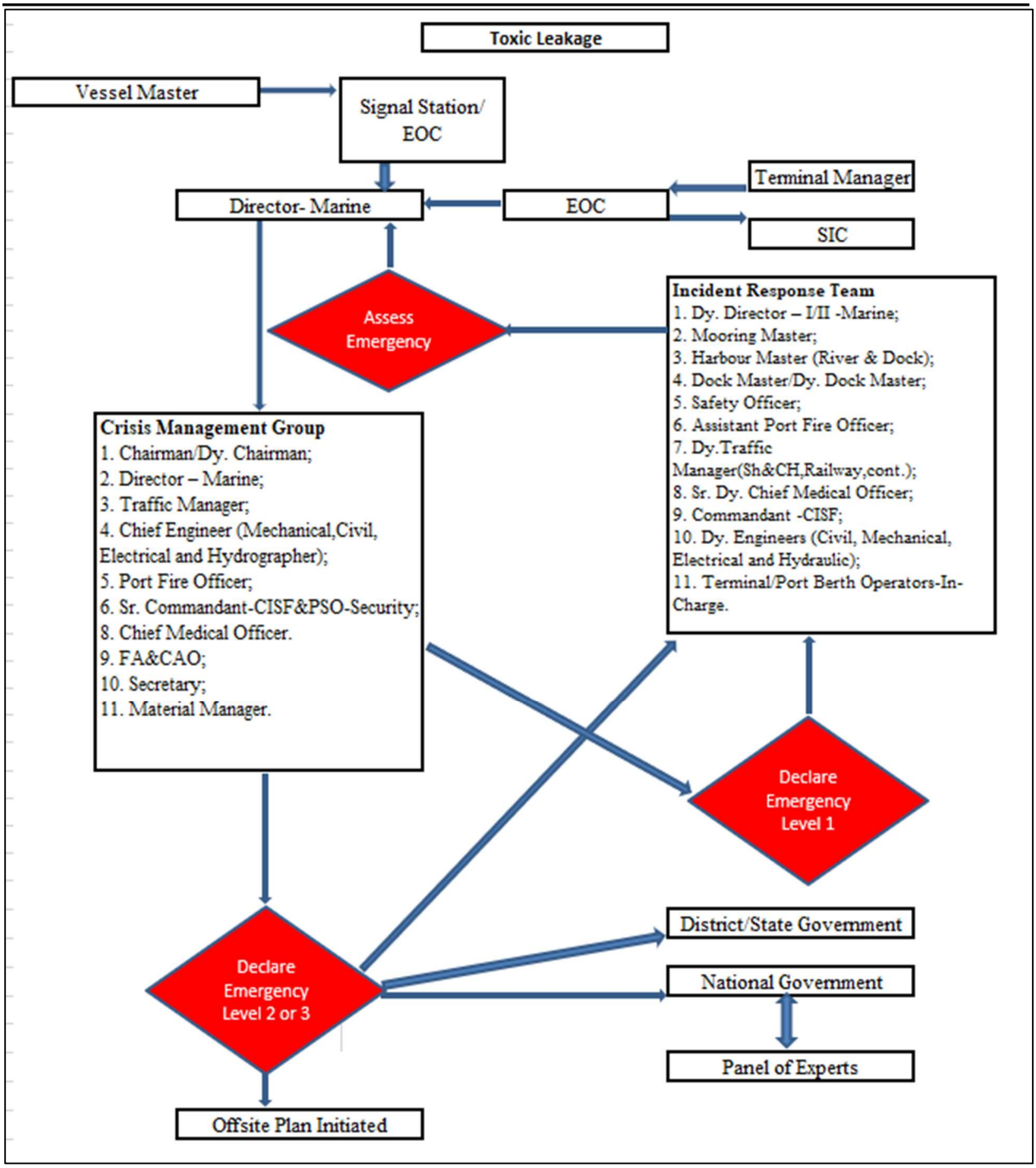

Figure 3.3: Toxic

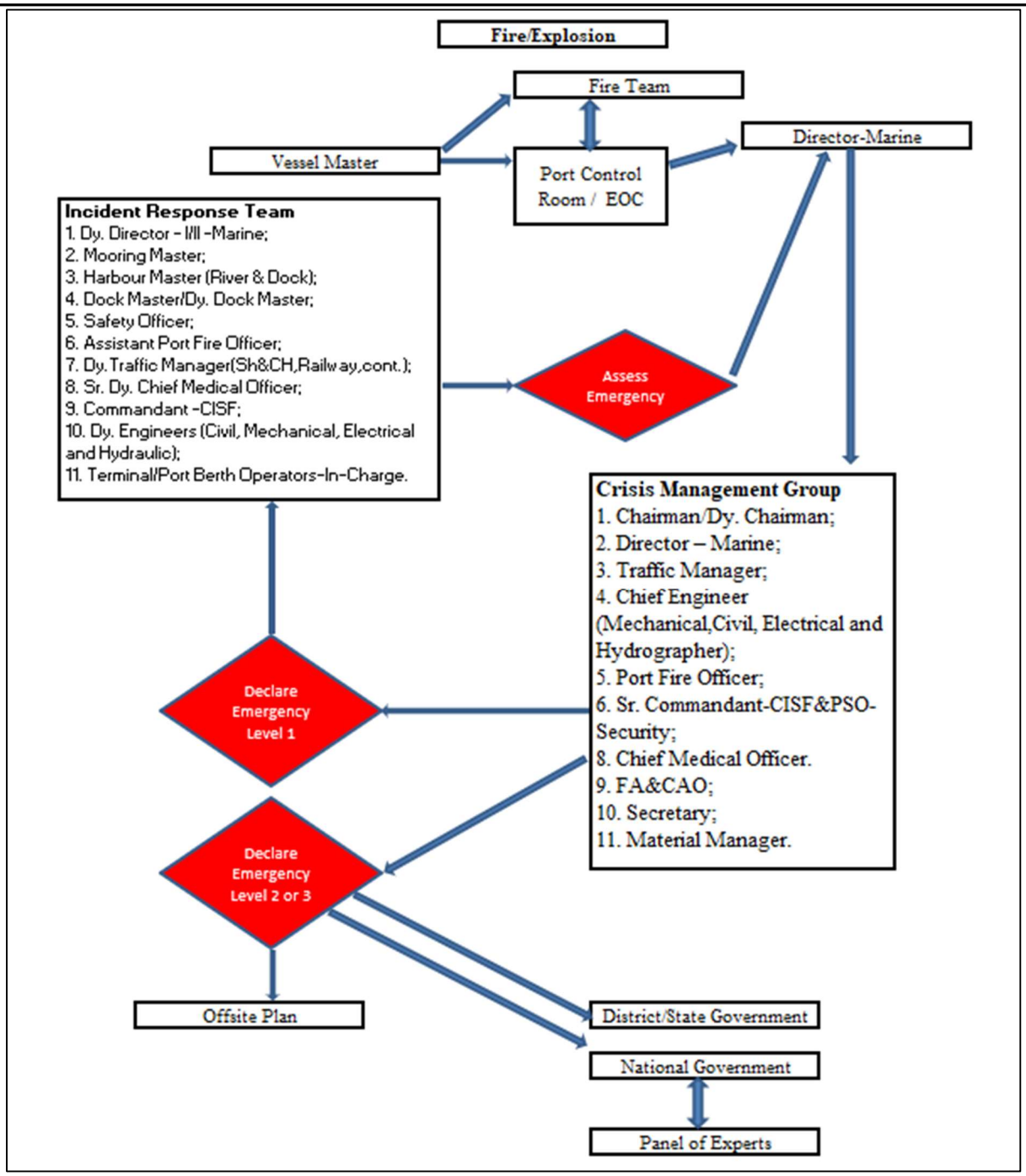

Figure 3.4: Fire/Explosion

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 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

Social media will be handled by the responsible person in consultation with the Charmain/Dy. Chairman.

3.5 Futuristic scope of further improvement

1. Since the initial response in any crisis should be timely and speedy, the Crisis Management Plan should be **up-to-date,**
2. Effective **coordination** is essential with the district and sub-district levels for rescue/relief operations and to ensure proper receipt and provision of relief.
3. **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**,
4. **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 situation 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.

5. **Periodic Trainings** will be provided by external agencies e.g. BARC, NDMA, NDRF, CBRN, Civil defense.

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 /Port Security (Budge-Budge).

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 vessel board 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 (Director/Dy. Director Marine)
On obtaining information, the CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. He will also activate the DMP/OSCP as 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 EOC and carry out review and authorize IRT for fire-fighting operation by port fire-fighting team. Authorize 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/Mooring Master.

7. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
8. In case spillage of the radio-active material co-ordinate with AERB for expert advice.
9. Authorize use of Ambulance for evacuation along with medical staff to identified hospital/dispensary.
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 (Dy. Director Marine I/II, Harbour Master (River & Port), Dock Master/Pilots)

The Site Incident Controller will take charge of the scene of the incident. Depending upon the scale of the emergency, he or she 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, in-case the incident is at Budge-Budge.
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 Services (Asst. Port Fire Officer)

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. Inform SIC of the arrangement of any additional equipment as required.
3. Assist CISF in evacuation to the assembly points.

Role of Mooring Master

1. Act as per the instruction of SIC/CIC.
2. Assess the level of crisis, nature, location, severity, casualties and resource equipment.
3. Authorize any immediate action required by on site staff and contract agencies.

Role of Security and Evacuation Services (Commandant- CISF /Port Security (Budge-Budge))

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. Control the entry of unauthorized/authorized persons and vehicles.
5. Facilitate the evacuation and rescue of the foreign nationals.

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 Fire-fighting team to fight fire in electrical substations and other electrical machinery.
4. Carry out urgent civil works.
5. Lock Machinery rooms.

Role of Medical Services (Sr. Dy. Chief Medical Officer)

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 Manager (Environment) - Environment Pollution Control Services

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 Terminal/ Berth Operator

The Terminal/berth operator will follow below procedure for 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.

Role of SD & DS

The SD & DS will act as per the instruction of CIC/SIC and will be responsible to

- Take actions on the ongoing dredging activities, if any in the river.

Role of Hydrographer -survey vessel/survey launch

The Hydrographer will act as per the instruction of CIC/SIC and will be responsible to

- Assist SIC/CIC.

- Assist in providing the location of the incident and condition of the channel.
- Carry out the Hydrographic survey, if required on the instruction of CIC.

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.

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 /Port Security (Budge-Budge).

Role of Master of Vessel

1. Should raise vessels emergency alarm/siren and activate vessel board emergency action plan.
2. Stop cargo transfer operation (as per SOP).
3. Inform terminal operator, loading manager and vessel owner.
4. If flammable, 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. Notify Maritime Administration as pe the instruction of CIC/SIC.
7. Liaise with Coastguard as per the instruction of CIC/SIC.
8. Organize tugs, mooring boats and Pilots for combating the fire and rescue. Hire additional crafts as necessary.
9. Start a log of the incident, recording the time of the report.
10. Listening watch to be maintained on VHF channel-16.
11. Ensure that the incident area is isolated.
12. The action team must be guided with the direction of wind.

Role of Chief Incident Controller (Director/Dy. Director Marine)
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 preliminary 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/Mooring Master.
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 (Dy. Director Marine I/II, Harbour Master (River & Port), Dock Master/Pilots)

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 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 vapour cloud.
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 action.
12. Coordinate with terminal in-charge to take actions, in-case the incident is at Budge-Budge.
13. Arrange for the medical aids.

Role of Mooring Master

4. Act as per the instruction of SIC/CIC.
5. Assess the level of crisis, nature, location, severity, casualties and resource equipment.
6. Authorize any immediate action required by on site staff and contract agencies.

Role of Terminal/Berth operator

1. Activate EAP and inform Port of any spill.
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. Submit consolidated list of dangerous goods. 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 Fire Services (Asst. Port Fire Officer)

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. 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 vapour/ 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. Assist CISF in evacuation to the assembly points and report to the EOC.
8. Inform SIC of the arrangement of any additional equipment as required.

Role of Security and Evacuation Services (Commandant- CISF /Port Security (Budge-Budge))

The CISF/Port Security 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 Safety Services (Safety Officer)

The Safety officer will follow the below procedure for the safety of personnel, environment and asset

1. Mobilize and dispatch sufficient number of vehicles to the site of emergency.
2. Assist in evacuation of the personnel to the assembly point.

Role of Engineering Services (Civil, Mechanical & Electrical)

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.
4. Lock machinery rooms.

Role of Medical Services (Sr. Dy. Chief Medical Officer)

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 Manager (Environment) - Environment Pollution Control Services

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 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 SD & DS

The SD & DS will act as per the instruction of CIC/SIC and will be responsible to

- Take actions on the ongoing dredging activities, if any in the river.

Role of Hydrographer -survey vessel/survey launch

The Hydrographer will act as per the instruction of CIC/SIC and will be responsible to

- Assist SIC/CIC.
- Assist in providing the location of the incident and condition of the channel.
- Carry out the Hydrographic survey, if required on the instruction of CIC.

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. CISF control room /Port Security (Budge-Budge)

Role of Master of Vessel

1. Should raise vessels emergency alarm/siren and activate vessel board emergency action plan.
2. Stop cargo transfer operation (as per SOP).
3. Inform port, 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 under water 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 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. In case of collision with bridge (Howrah, Hooghly Bridge), obtain preliminary information of damage to bridge and vessel.
3. Local IWT, WBWTD vessel to be alerted.
4. Listening watch to be maintained on VHF channel-16.
5. Ensure that the incident area is isolated.
6. The action team must be guided with the direction of wind.
7. Notify the other Authorities and stakeholders within Port as per instructions.
8. Liaise with Master of the Vessel/Pilot.
9. Berth operator, Vessel in the vicinity and Port should be informed of any incident on the vessel.
10. As per the instructions, liaise with the Salvage Association, CISF- Security, Mutual Aid Partners, District Authorities, Police Authority, Hospitals and Stevedores/Shipping agents.
11. Notify Maritime Administration as per the instruction of CIC/SIC.
12. Liaise with Coastguard as per the instruction of CIC/SIC.
13. Plot exact location of the incident in coordination with the hydrographic surveyor.
14. Organize tugs, mooring boats and Pilots for towing and combating the fire and rescue. Hire additional crafts as necessary.
15. Start a log of the incident, recording the time of the report.

Role of Chief Incident Controller (Director/Dy. Director Marine)

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. In case of vessel collision with bridge, preventive road traffic closure measures need to be implemented in consultation with police to avoid casualties due to failure of bridge. Simultaneous action to rescue vehicles and personnel fallen in water need to be taken.
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/Mooring Master.
8. Ensure the evacuation and rescue of the foreign nationals working in port area / on board ship in consultation with SIC & CISF.
9. Ensure Salvage association is informed.
10. Be in constant touch with District and Local Administration for rescue and relief operation.
11. Terminate the response and debrief before allowing normal operation.

Role of Site Incident Controller (Dy. Director Marine I/II, Harbour Master (River & Port), Dock Master/Pilots)

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. Assess the damage to the vessel and cargo in consultation with pilot, master and salvors, besides taking action to assess the extent of damage to the bridge structure.
6. In case of fire on board the vessel after collision or contact, he will extend all necessary help to the Master of the vessel.
7. Ascertain leak source. Take decision as per Oil Spill Contingency Plan (OSCP) in case of Oil/HNS spill.
8. Obtain information regarding stability and hull stress of the vessel.
9. 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.
10. In case of grounding, make arrangements through Harbour Master/Dock Master/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.
11. 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.
12. Inform MoEF and WBPCB approved parties for safe disposal and providing reception facilities for Oil/Sludge. Also, inform Salvage association.
13. Instruct the Fire Team to keep the water tenders in a state of readiness & activate if required.

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

Role of Mooring Master

1. Act as per the instruction of SIC/CIC.
2. Assess the level of crisis, nature, location, severity, casualties and resource equipment.
3. Authorize any immediate action required by on site staff and contract agencies.

Role of Fire Services (Asst. Port Fire Officer)

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 Security and Evacuation Services (Commandant- CISF /Port Security (Budge-Budge))

The CISF/Port Security 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 Safety Services (Safety Officer)

The Safety officer 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.

Role of Engineering Services (Civil, Mechanical & Electrical)

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.
5. Lock machinery rooms.

Role of Medical Services (Sr. Dy. Chief Medical Officer)
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 Manager (Environment) Environment Pollution Control Services
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 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 Terminal/ Berth Operator
The Terminal/berth operator will follow below procedure for 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.

Role of SD & DS
The SD & DS will act as per the instruction of CIC/SIC and will be responsible to

- Take actions on the ongoing dredging activities, if any in the river.

Role of Hydrographer -survey vessel/survey launch
The Hydrographer will act as per the instruction of CIC/SIC and will be responsible to

- Assist SIC/CIC.
- Assist in providing the location of the incident and condition of the channel.
- Carry out the Hydrographic survey, if required on the instruction of CIC.

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

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

Initial Action:

1. Communication with the competent agencies and Maritime Administration should be maintained,
2. Continuous weather monitoring should be done,
3. 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, if any.
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) & informs 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.
7. 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)

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 Civil 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 Harbour Master/Dock Master/ Asst. Mooring Master 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 Chief Hydrographer who in turn will apprise the CIC and the SIC of the actual and predicted tides.

Role of Chief Incident Controller (Director/Dy. Director Marine)

The CIC will assess the scale of the incident and will activate the Crisis Management Plan when considered appropriate. He will also activate the DMP/OSCP as 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/Mooring Master.
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, DMD 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 (Dy. Director Marine I/II, Harbour Master (River & Port), Dock Master/Pilots)

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 and Asst. Mooring Master 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 aids.
14. Ensure that the operations are brought back to normal after the termination of the emergency procedure.

Role of Mooring Master

1. Act as per the instruction of SIC/CIC.
2. Assess the level of crisis, nature, location, severity, casualties and resource equipment.
3. Authorize any immediate action required by on site staff and contract agencies.

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 Harbor Master and will secure them suitably with additional moorings.

Role of Terminal/Berth operator

1. Activate EAP 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. Submit consolidated list of dangerous goods in port and Vessels in port. 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 (Civil, Mechanical & Electrical)

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. Mitre gates of KPD, bascule bridge & swing bridge to be secured after shipping is over.
3. Carry out urgent civil works. Sufficient number of payloaders may be kept ready at strategic locations.
4. 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.
5. 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.
6. Ensure all the drains and obstructions in the creeks/ culverts are cleaned for easy discharge of sludge water.
7. 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.
8. Isolate equipment during crisis, if necessary.
9. Lock Machinery rooms.
10. Deploy engineers to direct or guide earth moving equipment and cranes to remove debris.

Role of Dy. Traffic Manager

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. Submits 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 Medical Services (Sr. Dy. Chief Medical Officer)

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 Security and Evacuation Services (Commandant- CISF /Port Security (Budge-Budge))

The CISF/Port Security 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. PSO Patrol 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: Safety Services (Safety Officer)
The Safety officer will follow the below procedure for the safety of personnel, environment and asset

1. Ensure workers within perimeter of dangerous cargo 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.

Role of 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 DMD) 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 Services (Asst. Port Fire Officer)
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.
4. Liaise with State Fire brigade for any assistance.

Role of Manager (Environment) Environment Pollution Control Services
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 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.

Role of SD & DS
The SD & DS will act as per the instruction of CIC/SIC and will be responsible to

- Take actions on the ongoing dredging activities, if any in the river.

Role of Hydrographer -survey vessel/survey launch

The Hydrographer will act as per the instruction of CIC/SIC and will be responsible to

- Assist SIC/CIC.
- Assist in providing the location of the incident and condition of the channel.
- Carry out the Hydrographic survey, if required on the instruction of CIC.

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**

The role of Engineering services will be as follows:

- Switch on emergency generator power supply and ensure emergency power supply is available at 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.
- Lock machinery rooms.

❖ **Strike**

Role of Security and Evacuation Services (Commandant- CISF /Port Security (Budge-Budge))

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 security 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 KDS is being provided by CISF/P.S.O/Kolkata Police- River traffic

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 the external support arrives.
- When additional security (State ATF/Army/BSF/NDRF/Kolkata River Traffic Police) arrives, 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.

❖ **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 NUMBERS

Designation	Telephone (033)	Mobile
Chairman	2230-5370	62923-11236
Dy. Chairman (KDS)	2230-9164	81005-24486
Dy. Chairman (HDC)	03224-263209	99482-98304
Secretary	2230-634/3451 7101-2370/2371	98362-98639
Director Marine and General Manager (Marine), HDC	2230-3214/ 03224-263303	98362-98699
Dy. Director - Marine	71012016	98362-98699
Dy. Director II - Marine	22315146	94322-44737
Chief Engineer & In-Charge, Environment Cell	22300413	9836298695
Chief Medical Officer	24014503	98362-98634
Mooring Master (Asst. Mooring Master)	9836298673 033-71003404	9830253963
Traffic Manager	24392926	94340-64873
Financial Adviser & Chief Accounts Officer	2231-2022/ 2230-3451 7101-2014	81276-93333
Chief Hydraulic Engineer (I/C)	24093031	96747-20102
Chief Mechanical Engineer	24093037	94340-52489
LA & IRO/Sr. PO	22306234	98362-98665
Material Manager	2459-4126 7100-3304	96747-20053
Harbour Master (Port)	22391730	96741-55636
Harbour Master (River)	22391730	98744-37766
Dy. Harbour Master (Port) -Vacant	24391730	
Dy. Harbour Master (River) -Vacant	24391853	
Security Adviser	2439-2055/7100-3819	98362-98647
Sr. Commandant - CISF (KDS)	03224-24390566	98362-98616
Sr. Commandant – CISF (HDC)	03224-24397359	95602-97274
Asst. Commandant, HDC	03224-252229	94340-63389
OSD Environment	22300413	9674720054
Manager, Marine Operation (vacant), HDC		
Dy. Manager, Marine Operation, HDC	03224-252401	8989429782

SATM	2470-1871/71002811	89021-75968
Sr. Traffic Manager (Docks)	7100-3367	94340-65098
Sr. Dy. Traffic Manager -II	7100-3372 7100-3235	98362-98689
Sr. Asst. Secretary (Public Relations)	2220-6645/3451 7101-2214	96741-55648
Sr. Dy. Traffic Manager (Docks)	7100-3367	94340-65098
Dy. Traffic Manager (CT)	7100-3270	98362-98689
Port Fire Officer	2439-5881 7100-3475	9674155645
L.A. & I.R.O /Sr. PO	2220-6234/3451 71012355	98362-98665
Safety Officer	7101-2284	96747-93009
Dy. CMO II	2401-4094 7100-3821	90510-77464
Advisor (Environment)	033-24397079	98362-98692
Hospital Enquiry	2401-4577 2401-8735	
Centenary Hospital Front desk-	7100-3637/7100-3678	
Centenary Hospital Casualty	7100-3632	
Dy CMO	7100-3657	98302-47076
Safety & APO	7101-2396	
Executive Engineer		90388-88036
Dy. CMO	7100-3657	98302-47076
Executive Engineer (Mechanical)		87597-86070
Executive Engineer (Mechanical)		94382-73774
Dy. Commandant CISF (Forward Control)		85477-49936
Asstt. Commandant CISF (Base Control)		89897-66885 99788-56611
Insp/Exe Crime & Intelligence		89027-16483
Control room of CISF Unit KoPT Kolkata	24391360/ 24390480	96744-66428
For Kolkata /Howrah & Districts (a)Asst. Supdt PSO (b) Security Officer	7100-3344	96747-20081
Control room (KoPT Security Wing)	2439 5841 7100-3347/ 3346	96741-55660

PSO Control Room	7100-3291	9674155660
Port Fire Control Room	7100-3351	9674155652

Company Name	Designation	Mobile No	Email Id
BPCL	Chief Installation Manager	9982754999	paikarasm@bharatpetroleum.in
HPCL	GM Installation	9840774918	kaushik@hpcl.in
IOC	DGM(I/C) Terminal	9831504668	bc@indianoil.in
IOC (Lub Div)	GM Plant	9830918018	beckrd@indianoil.in
Rajiv Agarwal	GM	9831022279	rajiv_agarwal1963@yahoo.co.in
S K Oil Terminals (P) Ltd	GM	9830021201	Tkmukherjee.skoilterminal2@gmail.com
JRE Tank Terminals Pvt Ltd	GM	9674947990	gururajan@imc.net.in
Hindustan Storage & Distribution Co. Ltd	Operation Manager	7980859815	mihir@hindustanstorage.in
Mundial Export Import Finance Pvt	Operation Manager	07002100690	Tm-mubb@imc.net.in
IFB Agro Industries	Manager	9836479852	Swapanmitra1952@gmail.com
Mother Diary Fruit & Vegetable	SR. Executive	9830211286	Sujit.dey@motherdairy.com
Gem Refineries (1997) Pvt Ltd	Terminal Manager	8961002239	gemrefineries1997_p@yahoo.in

Name	Official Address	Contact Number
Department of Home, Govt. of West Bengal		
Secretary (Home)	Writers Buildings Kolkata – 700 001	033-22 535072
Principal Secretary,	Disaster Management and Civil Defence, Nabanna, 2nd Floor, 325 Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah-711102.	033-2214-3674
	Commissioner of Police Kolkata, Lalbazar Kolkata – 700 001.	033-2214-5060/ PBX No.033 2214-5000
West Bengal Police		
	Supdt. Of Police South 24 Parganas, Bhabani Bhavan, Alipore Kolkata – 700 027.	033- 479-3333/ PBX No. 033 2479-1311-15
	Add. DG & IG of Police (Admn.) West Bengal Writers Buildings Kolkata – 700 001.	033-2235-7411
Port Police		
	Watgunge Police Control Room	033 2459-3298/2408-2100/ 2459-8819
	Watgunge Women Police Control Room	033 2489-2100
	West Port Police Control Room	033 2439-3617/2409-6100/ 2439-2454
	Garden Reach Police Control Room	033 2469-6569/2408-1100/ 2489-3272
	Hare Street Police Control Room	033 2211-8760/2215-0100/ 2211-8761
	Metiabruz Police Control Room	033 2469-5317 / 2409-9179
	Cyber Police Station	033 2214-3000/2250-5120
	Lalbazar Police Control Room	033 2214-3024 / 2214-3230 / 2214-1310
	Traffic Police Control Room	033 2214-3644 / 2242-7248
	North Divn. Police Control Room	033 2360-6405 /2360-6417
	Port Divn. Police Control Room	033 2409-3109
Kolkata Municipal Corporation		
	5, S.N.Banerjee Road Kolkata – 700 013	033 2286 1212/1313/1414 Whatsapp no: 8335988888 033 2286 1000(28 lines)

SSKM Medical College & Hospital		033 2223 6026/6242/ 1615/9735/ 6180/ 9692/ 9822
Kolkata Medical College & Hospital		033 2212 3853
NRS Medical College & Hospital		033 2286 0140; 988303 1301; 90073 66597; 98320 25916
RG KAR Medical College & Hospital		033 2555-7656/7675/7676 033 2555-7656, Extn: 2516/1021/2515
Calcutta National Medical College & Hospital		033-2289-7122/23 (Extn:104)
Vidyasagar Hospital	Vidyasagar State General Hospital, 4, Brahma Samaj Road, Behala, Kolkata – 700034.	Emergency - (033) 2397-1591, Superintendent-(033) 2397-0581, Facility Manager's office- 9007355352 email: sghvidyasagar@gmail.com
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	032-24 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
Navy Office		
	Chief Staff Officer to NOIC Staff Officer (Operation) to NOIC Officer of the day, INS, Netaji Subhas,	033-2242- 0430/ 0432/0503/0441

	Hastings, Kolkata – 700 022	
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
Specialised Agency		
Bomb Detection & Disposal Squad	Bhabani Bhaban, 31 Belvedere Road, Alipore, Kolkata -700 027	(033) 24506100 / 24506174 email: occomp.cid-wb@gov.in
Shipping Corporation of India		
	Regional General Manager Shipping House 13, Strand Road Kolkata – 700 001	033 2254 3415
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
District Relief Department Office of the District Magistrate		

SDO	South 24Pgs Alipore 2479-1681 South 24Pgs, Diamond Harbour.	0317 4255222
Custom Commissioner	SHRI ASHUTOSH AWASTHI Chief Commissioner of Customs, Kolkata	2242-1173 email: ccu-cuskoa@nic.in
Immigration	Ms. Nidhi Rani, IPS, FRRO Kolkata.	033-22900549, email: frrokol@nic.in
Port Health Organization	Prof. Dr. Ranjan Das, Port Health Officer Port Health Organisation, Kolkata	033- 2223 0904, 033- 2223 0414 email: phokolkata@rediffmail.com
Irrigation Department	Pravat Kumar Mishra, Principal Secretary, Irrigation & waterways Dept, Govt. of West Bengal, Jalsampad Bhavan, 9th Floor, Salt Lake City, Kolkata 700 091	033-23215616, 033-23581315 / 17, email: iwd.prsecy@gmail.com

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
MMD Haldia	Mercantile Marine Department, Chiranjibpur (Opp. BSNL Office Building), East Medinipur, Haldia-721604 West Bengal.	03224 - 252323 / 252968 email: mmdhaldia@gmail.com

Name of Agency and Contact Details	
WBWMPL	M/s West Bengal Waste Management Limited, Jindal Towers, Block-A, 4th Floor, 21/1A/3, Darga Road, Kolkata- 700017. (email: *bobbykurien@ramky.com*)
Used + Waste Oil Receiver	a) M/s. Bristol Petroleum Pvt. Ltd., 26/5/D-E, A M Ghosh Road, Budge Budge, 24 Pgs (S), WB, Pin:700137. (Email: bristolpetroleum74@gmail.com). b) M/s Falak Industrials Fuels Pvt. Ltd. 1, Chandni Chowk Street, Block C, 2nd floor, Room -20, Kolkata-700072. (Email : parali1904@gmail.com). c) M/s R.S. Oil Industries, Junglepur, Jalan Industrial Complex, Vill.Baniyara, P.O. Begri, Domjur, Dist. Howrah, Pin.711 411. (Email: rsoilind90@gmail.com) . *d)* M/s. Lubrina Recycling Pvt. Ltd., Vill: Joychandipur , P.O. Bakrahat, P.S. Bishnupur, Dist. 24-Parganas(S), WB., Pin– 743377. (email: disposal@lubrinare.com)

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,	033-25875032 wb02-ndrf@nic.in	033-25875032	09474061104, 09474116775	033-25875032

	(West Bengal) Pin - 741246				

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

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		

ANNEXURE B
EMERGENCY EQUIPMENT LIST

B.1Floating Crafts

DETAILS OF FLOATING CRAFTS						
Sl. No.	**Type of Floating Craft**	**Nos.**	**Make**	**Year**	**Capacity (In BP/BHP)**	**Speed (In Knots)**
1.	**Dredger***					
(a)	D.C.I. (Dr. XII)	5	IHC Holland	1990	650-1342 BHP	9.0
(b)	D.C.I. (Dr. XIV)		IHC Holland	1991		9.0
(c)	D.C.I. (Dr. XXI)		IHC Holland	2013		11.0
(d)	River Pearl IV		IHC Holland	1956		8.0
(e)	Marine Hopper (Grab Dredger) (WB-1746)		Goa	2019	325 X 2 =650 BHP	8.85
2.	**Tugs**					
(a)	Golap¥	3	M/s Richard Limited, U.K.	1967	2x475 BHP	7.0
(b)	Kalikata¥		M/s Bharati Shipyard Private Limited, Mumbai	1992	2x474 BHP	
(c)	Gobindapur¥		P. Das & Company	1993	2x470 BHP	
(d)	Gladiator – VI*	3	Reach Asia, Kolkata	2019	2x470 BHP	11.2
(e)	Gladiator – IX* (WB-1864)			2022	2x600 BHP	11.2
(f)	Gladiator – III*			2015	2x600 BHP	12.0
3.	**Pilot Launches**					
(a)	Gopal¥	5	M/s Alcock Ashdown (Gujarat) Limited, Bhavnagar	1994	2x445 BHP	10.0
(b)	Rupsa¥		M/s Corporated Consultancy & Engg Enterprise Pvt. Ltd Kolkata.	1997	2x940 BHP	12.0
(c)	Hugli¥					
(d)	M. L. Sidho¥		M/s Corporated Consultancy & Engg Enterprise Pvt. Ltd.	1993	2x195 BHP	8.0

(e)	M. L. Mirmadan		M/s Nalanda Engineering Works, Kolkata	1993	195 BHP	5.0
(f)	Deep Blue*	1	B.N. Bose & Co, Ghusuri, Howrah	2015	2x447 KW	15.0
(g)	Aquator 2*	1	Surya Dipta Projects Pvt Ltd. Mumbai	2015	2x441 KW	15.0
4.	**Mooring Launches**	-	-	-	-	-
5.	**Pontoons**	6	Kolkata	-	5 nos.30 mtrs x 9 mtr 1 no.30 mtrs x 6 mtrs	-
6.	**Barges**	-	-	-	-	-
7.	**Survey Vessels/Boats**					
(a)	M V Sarojini (own)	1	M/s. Shalimar Works Ltd. Kolkata	2002	2x700 BHP	12.0
(b)	M.L. Kanho (own)	1	M/s. CC&EE, Kolkata	1994	2x195 BHP	8.0
(c)	River Pearl-1 (hired)	1	Katale Shipyard Private Limited, Ratnagiri	2017	2x447 BHP	12.0
8.	**Special Purpose Launches**					
(a)	WB Sone (GMB/JFD/06, Jaffrabad Port,)	1	Kolkata	2012	2x194	8.0
(b)	D.V. Rabindra Dispatch Vessel (Own)	1	M/s. Bharati Shipyard	2000	2x1320 BHP	10.0
9.	Fire Float	-	-	-	All Tugs are fitted with fire-fighting appliances	
10.	Floating Cranes	-	-	-	-	-
11.	Any Others*	-	-	-	-	-
a	Pilot Vessel “Ma Ganga”	1	M/s. Bharati Shipyard	2006	2 X 600 BHP	10 .0
Mooring Boats (hired)-2 (120 HP each); Also, there are 9 nos. hired wooden body launches.						

Note: *- Hired; ¥- Owned

B2. Fire-fighting resources

The Fire-fighting unit at KDS covers overall firefighting operations and fire prevention of Docks and outside properties of KDS, Syama Prasad Mookerjee Port, Kolkata.

The main firefighting equipment and appliances are as follows:

Sr. No.	Appliances and Equipment	Present status
1.	Fire Water Tender	2 nos. Hired
2.	Trailer Fire Pump	1 No
3.	Ejector Pump	1 no.
4.	BA set	6 nos.
5.	35 feet Extension Ladder	6 nos.
6.	Ground Water Monitor	2 nos.
7.	Ground Foam Monitor	2 nos.
8.	Water CO2 Extinguisher (9Ltr cap)	596 nos.
9.	DCP Extinguisher (5Kg Cap)	485 nos.
10.	CO2 Extinguisher (2Kg & 5 Kg Cap)	102 nos.
11.	CO2 Extinguisher (27Kg Cap)	3 nos.
12.	Foam Compound (Protein Base)	10000 Ltrs
13.	Foam Compound (AFFF)	5000 Ltrs
14.	Foam Extinguisher (45 Ltrs)	10 Nos.
15.	Fire Proximity suit	4 sets
16.	Chain Saw (Petrol driven)	2 nos.
17.	Fog Cannon	1 no.

The manpower at Port Fire service is as follows:

Sr. No.	Designation	Numbers
1.	Security Officer (Firefighting)	1
2.	Asst. Fire Officer	2
3.	Fire Supervisor	7nos. (3nos, permanent & 4nos. on contract)
4.	Leading Fireman	6
5.	Fire Engine Driver & Pump Operator	3 Permanent 4 Ex-servicemen 7 on contract
6.	Fireman	29 Permanent 13 Ex-servicemen

The mutual understanding between port fire service and local administration allows support to each other during the cases of real fire incidents inside the port and in the city of Kolkata.

B3. Oil Pollution Response equipment for Tier-I capability

Sr. no.	Equipment	Make, Type, Model	Qty.
1.	RO BOOM SPI 100 M SECTION (3 SECTIONS) WITH ACCESSORIES	DESMI, RO BOOM 1300 SPI	300m
2.	WEIR SKIMMER WITH POWER PACK AND ASSOCIATED MECHANISMS	DESMI, MINI-MAX WEIR SKIMMER	2 nos.
3.	FLEX BARGE (10 TONNES CAPACITY) AND ACCESSORIES	DESMI, PU-TANK 10 CBM	4 sets
4.	BOOM REEL FOR RO BOOM AND ASSOCIATED MECHANISMS	DESMI, HYDR. REEL FOR 300 M RB1300 - WITH ISO CORNERS	1 no.
5.	PERMANENT BOOM 25 Mt. SECTION WITH ACCESSORIES	ECS, ECS/PERMA/750,	1700m
6.	U-BOOM 200 M WITH ACCESSORIES	ECS, U001/HAL/ENV	1 set
7.	BOOM REEL FOR U BOOM AND ASSOCIATED MECHANISMS	ECS, ECS/REEL/UBOOM	1 set
8.	AIR BLOWER WITH ACCESSORIES	ECS, ENVIRO AIRBLOWER SPI	2 sets
9.	MULTI-SKIMMER WITH POWER PACK (BRUSH/DISC/DRUM) AND ASSOCIATED MECHANISMS	ECS, ECS/DBD/30TPH	2 sets
10.	SHORE CLEANING EQUIPMENT (VACUUM PUMP, OIL TRANSFER PUMP, HOPPER WITH VACUUM HEAD, OIL SPILL DISPERSANT APPLICATORBACK PACK TYPE, TEMPORARY STORAGE TANK) WITH ACCESSORIES	DESMI, RO-VAC MINI - ELECTRIC START	5 sets
11.	OIL SPILL DISPERSION APPLICATOR, PUMP, NOZZLE AND SPARY ARMS AND ITS ASSOCIATED MECHANISMS	DESMI, OIL SPILL DISPERSANT TYPE	6 sets
12.	SORBENT BOOM PACK	DESMI, RO-CLEAN SORBENT BOOM 3M x 20CM	500m
13.	SORBENT PADS	SPILL TECH, OIL ONLY MELT BLOWN PADS 15”X19” WP100H	20 packs
14.	ANTI-POLLUTION VESSEL / WORK BOAT	TUG IH BLUE WHALE / MOONLIGHT - I &II.	2 nos.
15.	U-BOOM 200 M WITH ACCESSORIES	ENVIROCARE	1 no.
16.	Oil Spill Dispersant	NIO & CG Approved / Type - III / II	3000 Ltrs. Exp. 2028

B4. IMO Level Trained Personnel

Sr. no.	IMO Level - I	IMO Level - III
1.	Director Marine	Commander
2.	Dy. Director II - Marine	Asst. M.M
3.	Chief Officer	Jr. Marine Officer
4.	Dy. Dock Master	

B5. KDS carries following contingency mock drills

Mock drills are usually carried out every Quarter, by CISF, in association with NDRF/ SDRF etc.

Sr. no.	Drill	Location
1.	Sinking of Vessel and Water Rescue	NSD
2.	CBRN Disaster	
3.	Earthquake and Building Rescue	
4.	Gas Leak at NSD Area	
5.	Sinking Of Vessel and Water Rescue	
6.	Fire Outbreak and Building Rescue	

B6. Other equipment including rescue items: -

Sr. no.	Nomenclature	Availability at PFS	Remarks
1.	Air lifting bag	NIL	
2.	Battery operated spreader and cutter	NIL	
3.	Hydraulic Rams	NIL	
4.	Fire Entry suit	NIL	
5.	Aluminium Proximity suit	4	Physical checking quarterly
6.	Chain saw	2	Physical checking quarterly
7.	Hydraulic Pump	NIL	
8.	Circular Saw	2	Physical checking quarterly
9.	Bolt Cutter	NIL	
10.	Tripod	NIL	
11.	Dragon Search Light	2	Physical checking Monthly
12.	Life Buoy	NIL	
13.	Life jacket	NIL	
14.	Inflatable Light Towers	NIL	

B.7 Equipment servicing details

Sr. No.	Equipment Name	Model No.	Servicing date	Next Servicing date
1.	Fire Water tender (2 nos)	Ashok Leyland EA 1920/48	15.10.23 16.10.23	Half Yearly (April 2024)
2.	Trailer Fire Pump (2 nos)	a. HA494/1800 ltr b. MFT 1800 D	Newly procured in November 2023	Half yearly
3.	Ejector Pump (1no)		N/A	
4.	35ft Extension Ladder (6nos)		12.12.2023	Half Yearly
5.	Ground water monitor (2nos)		Normal testing	Quarterly
6.	Ground Foam Monitor (2nos)		Normal testing	Quarterly
7.	Water CO2 Extinguisher (9ltr capacity) -596 nos.		Maintenance every quarter	New refilling in every year. Hydraulic testing in every 2nd year.
8.	DCP Fire extinguisher (5 kg capacity)- 485 nos.		Maintenance every quarter	New refilling in every year. Hydraulic testing in every 2nd year.
9.	CO2 Fire extinguisher (2kg & 5kg) – 102 nos.		Maintenance every quarter	Hydrostrech test and refilling after use on less weighs
10.	CO2 Fire extinguisher (27 kgs) – 3 nos		Maintenance every quarter	Hydrostrech test and refilling after use
11.	Foam Compound (Protein Base) 10K ltrs.		NA	
12.	Foam Compound (AFFF) 7K ltrs.		NA	

13.	Foam extinguisher (45 kgs) – 10 nos		Maintenance every quarter	
14.	Fire Proximity suit -4 sets		Physical checking	In every month
15.	Chain saw (petrol driven) – 2 nos		Testing at station level	As and when required
16.	Fog cannon – 1 no	Eicher PRO 2144XP H CBC		Yearly
17.	BA ste (6 nos)	Industrial Safety Engineers		New procurement shall be initiated soon.

REFERENCE

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

2. MoPSW template for Crisis Management Plan.

3. BSI Standard – 11200:2014, Crisis Management- Guidance and Good Practice.

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

5. Vulnerability Atlas of India, BMTPC, 3rd Edition, 2019.

6. Climate of West Bengal, IMD, 2019.

ABBREVIATIONS

BARC	Bhabha Atomic Research Center
CEC	Chief Emergency Controller
CMO	Chief Medical Officer
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
FA & CAO	Financial Advisor & Chief Account Officer
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
KDS	Kolkata Dock System
KPD	Kidderpore Dock
MARG	Mutual Aid Response Group
MMD	Mercantile Marine Department
MoEF	Ministry of Environment & Forest
MRCC	Maritime Rescue Coordination Centre
MSDS	Materials Safety Data Sheet
NDMA	National Disaster Management Authority
NOS-DCP	National Oil Spill Disaster Contingency Plan
NSD	Netaji Subhash Dock
OSCP	Oil Spill Contingency Plan
OH&S	Occupational Health and Safety
PAS	Public Address System
PFS	Port Fire Station
PSO	Port Security Officer
P&IR	Personnel and Industrial Relations
RMC	Regional Meteorological Centre
SD&DS	Superintendent, Dredging & Dispatch Service
SH&CH	Shipping and Cargo Handling
SIC	Site Incident Controller
SMP	Syama Prasad Mookerjee Port
WBPCB	West Bengal Pollution Control Board

FORMS AND FORMATS
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	

6. CYBER SECURITYINCIDENT 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.

6.1 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)

6.2 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.

6.3 Verification:

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

6.4 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.

6.5 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.

6.6 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 o Network scanning / Probing o Break-in / root compromise o 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:		