# Annual Report 2022 Port State Inspections



# **INDIAN REGISTER OF SHIPPING**

# FOREWORD:

Port State Controls provides an additional layer of supervision, promotes safety and discourages substandard vessels. Indian Register of Shipping (IRS) has always been supporting such inspections and aspires to maintain a high standard of performance under MOUs of various PSC.

We present IRCLASS annual report towards performance for year 2022 under Port state control.

The report provides insight on statistics of PSC inspection/detentions and focus areas for future, with the intent to build awareness among all stake holders so that, situation is cautiously monitored & continually improved.

PSC inspections under various MoUs found increased in the year 2022 as compared to previous two years; however, the detention percentage for year 2022 is reduced in comparison of years 2021 and 2020.

While detentions under USCG & Abuja MoU remains zero for last three years, detentions under IOMoU have reduced to zero in year 2022. Further Riyadh MoU also showed reduction of detention count in 2022 (1 no.) as compared to year 2021 (2 nos.).

Detentions under Mediterranean MoU remained same (one number each) in 2022 and 2021. Number of detentions under Tokyo MoUs are four and Black Sea MoUs are three in 2022; as compared to 2 each in 2021. Paris MoU remained maximum (13 nos.) of detentions in year 2022.

Overall compliance level to concentrated inspection campaigns on STCW conducted jointly by Paris & Tokyo MoUs and Hours of Work and Rest conducted in year 2022 yielded satisfactory results, as detainable deficiencies were not noted.

# PORT STATE CONTROL (PSC) PERFORMANCE UNDER VARIOUS MOUS:

BLOCK	PERFORMANCE	THREE YEAR'S	PERFORMANCE
YEARS	CATEGORY	AVERAGE DETENTION	CATEGORY
	UNDER TOKYO	RATIO UNDER USCG	UNDER PARIS
	MOU		MOU
2018-2020	HIGH	0.00%	MEDIUM
2019-2021	"Zero RO related		
	detentions" with overall	0.00%	MEDIUM
	Satisfactory results		
2020-2022	"Zero RO related		
	detentions" with overall	0.00%	MEDIUM
	Satisfactory results		

# Performance of IRS under Tokyo, Paris MOUs and under USCG is provided below:

#### **DETENTIONS IN YEAR 2022:**

PSC MOUs/ Authorities	Number of Inspections	Total Number of Detentions	Ratio of Total No. of Detentions/ No. of inspection	Attributed to RO Responsibility
PARIS	102	13	0.11	2
ΤΟΚΥΟ	89	4	0.04	0
BLACK SEA	128	3	0.02	0
MEDITERRANEAN	69	1	0.01	0
RIYADH	58	1	0.01	0
INDIAN OCEAN	28	0	0.00	0
USCG	14	0	0.00	0
ABUJA	14	0	0.00	0
TOTAL	502	22	0.04	2

A total of 22 detentions under various PSC MoUs were recorded as detailed below:

Maximum number of detentions were recorded under Paris MOU. Two of the detentions under Paris MoU has been attributed to RO responsibility. Out of 22 detentions, one detention under Tokyo MoU is pertaining to only DOC issued to the company.

#### **DETENTIONS CATEGORY WISE:**

	CERTIFICATION STATUS OF DETAINED SHIPS				
Class & Statutory Certificates by IRS	Only Class or Class & spe. Statutory Certificates by IRS	Only DOC issued to the company	Total no. of Detentions		
14	7	1	22		

ISM CERTIFICATION STATUS OF DETAINED SHIPS			
ISM by IRS ISM by other RO/Flag Total no. of Detentions			
10	12	22	

	Republic of Vanuatu	Gabon	Barbados	Rep. of Palau	Antigua & Barbuda	India	St. Kitts & Nevis	Belize	TOTAL
12	3	1	1	1	1	1	1	1	22

General Cargo Ships	Bulk Carrier	Oil Tanker	TOTAL
14	5	3	22

DETENTIONS AGE WISE						TOTAL
>25yrs	20 to 25yrs	15 to 20yrs	10 to 15yrs	5 to 10yrs	0 to 5yrs	
10	7	2	3	0	0	22

Out of total 22 no. of detentions; 7 no. of the detained ships were issued with only certificates of class and/or class and single statutory certificate by IRS; while remaining 14 nos. were issued both Class & Statutory Certificate by IRS. In one of detention case under Tokyo MoU only company DOC was issued by IRS, while Class and statutory certification of the vessel is by another RO.

Ships registered under Rep. of Panama were detained maximum in number in year 2022 (12 nos. out of 22 cases), followed by ships registered in Republic of Vanuatu.

General Cargo ships were the maximum to be detained (14 nos. out of 22) based on the ship type followed by Bulk Carriers and oil tankers. Maximum number of detentions are for ships of higher age group (10 nos. out of 22 cases for age group 25 years and above).

# DETAILS OF PSC DETAINABLE DEFICIENCIES:

Total 118 detainable deficiencies were recorded in year 2022 as follows:

Category	Deficiency
ISM	Safety management audit by the administration is required before departure of the ship. Deficiency(s) marked ISM is (are) objective evidence of a serious failure, or lack
	of effectiveness of implementation of the ISM code. (14 nos.)
	Emergency preparedness - The SMS as implemented does not ensure that the
	vessel can effectively respond to hazards and emergency situations, as by eviden
	number of by deficiencies identified during PSC
	The SMS implemented on board does not ensure the personnel involved have an
	adequate understanding of relevant environment policy as evidenced by number o deficiencies identified during PSC.
	Crew unable to demonstrate correct operation with bilge water transfer operation
	system.
	No records of life boats were manoeuvred in water. Drill not carried within 24 hour
	on DD.MM. YYYY when more than 25% of crew were changed.
	Some crew members indicated in the muster list to lower the rescue boat did no
	know their duties. During rescue boat drill, crew failed to demonstrate their duties
	All crew member with assigned emergency duties in fire drill, failed to demonstrate
	that they are familiar with their duties. Several non-conformities were discovered
	Master left the bridge and participated directly during fire attack, Chief Enginee
	left the engine room and participated directly during fire attack, the people
	indicated in the muster list with duties did not participate, the crew did not used
	safety gloves during drill and touched the door without gloves, Chief Mate on scene
	(commander) did not communicate to the bridge by VHF, the fireman wore the
	outfit incorrectly. This showed lack of training & lack of command.
	Copious oil leakage from two cylinders of DGs. This deficiency shows a non-effective
	implementation of the ISM code in the areas where ISM related deficiency were found during the PSC inspection.
	During fire drill crew demonstrate lack of training.
	During fire drill lack of communication occurred - air leakage on fireman breathing equipment and emergency generator fuel quick close valve was not closed remotely.
	Fire drill failed because crew can't extinguish the fire in emergency generator room Entrance Emergency doors are blocked by port generator (several tons equipment)
	Crew did not operate quick closing valve.
	Fire drill failed: 1) assigned person didn't close quick closing valve in emergence
	generator room; 2) assigned person didn't close ventilation/insulation of local; 3
	Master present on scenario to coordinate drill (not in accordance with muster list)
	4) lack of communication (not in working language) between FF attack team and
	other crew members such as to generate excessive confusion and failure of the drill
	Abandon ship drill showed lack of knowledge of all crew. Mustering of crew no carried out (and consequently all the equipment necessary for abandon ship were

	not taken from assigned person). Crew went directly to lifeboat (PS) for lowering
	operations.
	All crew member with assigned emergency duties in case of abandon ship didn'
	demonstrate satisfactory operation indicating that they are familiar with their
	duties. The Master left the bridge to abandon the ship and directly try to launch the
	life raft, the crew indicated in the muster list were not involved to operate the
	equipment during drill. The Master, Chief Engineer and Chief Mate have been the
	only crew to launch the life rafts. Nobody carried the Radar transponders and EPIR
	to the muster station during the abandon ship. This showed lack of control, lack o
	communication & lack of training.
Propulsion	Leaks in DG - Oily water mixture below generators (2 nos.)
and auxiliary machinery	M/E double skin pipe system out of order. Poor connection/partly not connected leakage alarm not properly working, insulation dirty/ oily.
	Fuel injector upper o-ring of one ME cylinder damaged and F.O leaked, resulting in M/E stop and hazardous situation when ship was on her way to pilot station.
	Propulsion main engine found with cooling water leakage on two cylinders and with
	several lub. oil leakages, turbocharger insulation missing on exhaust ducts, bridge
	air control not operational, main engine failed to manoeuvre ahead/astern, losin
	the air pressure very quickly, one air compressor found under maintenance.
	Temporary repairs on discharge lines of ballast/general service pumps PS and STB
	D/G No.2 inoperative.
	Found at engine room one steam line broken.
	Steam boiler leak of water (gas pipe boiler).
	Several gauges, pressure gauges for generator engine and thermometers for mai
	engine missing for several unit. Pressure gauges for F.W cooling pump one gaug
	missing and one gauge unreadable.
	Ballast pump has a hole in the body and mechanical seal leaking.
	Ballast pump in the engine room leaking lots of water through its body and seal.
	M/E:J.C.W pump No. 2 leakage, L.S.F.O transfer pump leakage, Fire and G/S pum
	leakage, Ballast pump No.1 leakage.
	In both generator in engine room missing protection guard (near pulleys and bell
	to prevent occupational accidents, injuries and diseases.
	Anchor chain on forecastle area found in very bad conditions of maintenance
	(heavily damaged).
	Several oil leakages from purifiers, ME supply & circulating pumps. Furthermor
	bilge wells to be cleaned.
	An additional diesel gen. found installed on boat deck STB side and connected t
	the ship's electrical power source. An "Out of Service" label posted on thi
	installation has been found but no documentary evidence found on board that th
	installation was previously authorized by the flag State or "taken out of service".
Fire safety	The main fire pump in ER found inoperative. (2 nos.)
	Forecastle workshop is used as paint store.
	3 self-closing fire doors fitted with unauthorized hold-back hooks (galley, officer'
	mess room, bridge). Furthermore 3 self-closing fire doors not properly closing
	(accommodation, engine room entrance, engine room escape).
	Fire doors on emergency generator can't be closed because they are left open an
	obstructed by port generator which is not in use.

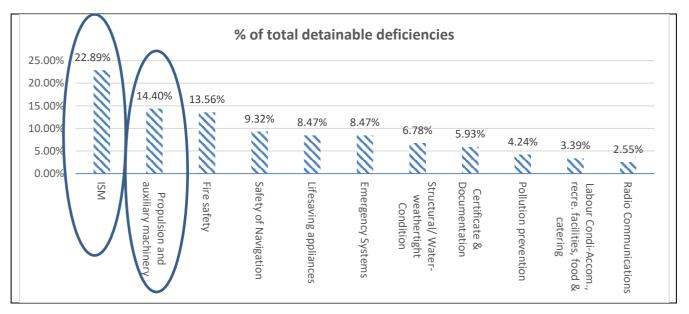
	Upper deck fire door & B deck fire door not closing properly.
	Fire alarm station - Two lines (poop deck, E/R 2nd DK) shows alarm.
	Fire zone (Eng. workshop) showing fault. Fire detectors in engine workshop and
	steering gear rooms have hanging wires.
	Fire panel found working but showing fault on one of the Zone.
	Main Engine & Generators (1, 2 and 3) insulations missing and oil leakage/ high risk
	of fire.
	Smoke detector in "Ref. compressor room" inoperative due to a plastic cover.
	Visual and audible signal not been initiated when turned off the main power supply
	of fire control panel on bridge.
	Fireman outfit SCBA set not ready for use with air cylinder partly discharged.
	One fire hose in forecastle found holed/broken. Plenty water leakage noticed.
	Steering-room full of dirty rags and inflammable materials.
	Presence of oil in ER bilges and underneath main engine
Safety of	Several large-scale charts for the intended voyage are missing. Voyage charts are
Navigation	not properly updated. (2 nos.)
Havigation	Stern light and Masthead lights are not fitted with screens to restrict the arc of the
	horizon that they can be seen.
	The ship is overloaded.
	Gyro compass not working.
	Electronic charts (ECDIS) not updated since few weeks.
	Nautical publications (List of lights, radio signals, tide tables) found in old edition.
	No sailing direction for the current area of operation or intended voyage carried or
	board in either paper or electronic format.
	There is no evidence on board that effective passage plans are compiled or made available for Watch keepers.
	Voyage plan is missing.
	The ship was loaded with whole FAFA beans in bulk having more quantity as compared to ship's grain manual permitted quantity. Grain bulkheads as required
Lifecoving	have not been placed and there are large free surfaces found. Limit switches for port side life boat not working. (2 nos.)
Lifesaving appliances	
appliances	STBD side life boat engine not starting.
	Rescue boat engine not started immediately and not working properly.
	The life raft is not accepted due to the absence/access to the hoisting link and the
	inconsistency found with the layout of the Life raft container and the launching
	instructions.
	Life rafts secured to brackets that are over 2 m above the deck. The location is no
	possible for two persons to access and manually lift the raft against an opposing
	list. The location directly beneath the bridge wing may result in the raft being
	trapped if released by float free.
	Several defects on the RB davit: cable guide on the top sheave is seized, electric
	winch inoperative, electric box found flooded with water.
	Embarkation ladder missing for the rescue boat and the starboard side life raft.
	One emergency fire pump found in bad condition and pressure not adequate.
	Lifesaving appliances provided for 18 persons, according to Cargo Ship Safety
	Equipment Certificate, while 19 crew persons have been found on board.
	Emergency light for rescue boat found out of order & structure highly corroded.

Emergency	Emergency light for life-raft & life-boat station STBD/port side and emergency
Systems	escape in engine room not working.
-	Quick closing fuel valve system not ready for use. Air leakage present.
	IMO signs not properly posted for muster station & in emergency fire pump room.
	Water ingress alarm system didn't work properly. During test found sensors of two
	C/H and pump room (FRW) always in alarm status.
	Several quick closing valves on fuel oil tanks inoperative. Control air operating pipes
	full of water.
	Emergency generator not possible to start due to depleted batteries.
	Suitable means for the calibration of the atmosphere testing instrument not found
	on board.
	The drill haven't taken place within 24 hrs of the ship leaving port, more than 25%
	of the crew have not participated in last on abandon drill on board.
	Atmosphere testing instrument sensor without readings from LEL sensor.
Structural/	Closing devices/ water weight doors/ speed log - damaged.
Water-	Beams, frames & floors damaged. Comings STBD, hatch cover # 4 frame corroded.
weather	Entrance doors and entrance to hatch do not close watertight.
tight	Bolts missing on all six manhole covers on the main deck.
Condition	One of the C/H hatch cover is loose and can't be closed.
	One of the C/H no. 2 aft ventilation PS & CO2 room ventilation can't be closed
	properly. One of the C/H no. 2 aft ventilation SB found sealed with silicone. 2
	mushroom vents on the structure between two cargo holds found seized.
	Several WBT vent heads are not closing (sealing), obstructed by the wire mesh,
	missing the rubber and are damaged.
	Ventilation (working spaces) from cargo holds corroded through.
Pollution	Bilge and sludge quantities on board not in accordance with ship's residues declaration of the ship.
prevention	Maximum through put of oil filtering equipment 5m3/h; discharged 15.9m3 from
	09:00 to 12:10 on 29.01.2022; discharged 10.6m3 from 9:30 to 11:30 on 31.05.2022
	Garbage been discharged in territorial waters many times as per records (Total 12
	times).
	Sulphur content sampled from M.E F.O supply P/P & boiler P/P exceed 0.5% M/M -
	2.36% & 2.37%
	Ballast water not been exchanged from 21.01.2022 to 02.08.2022 and discharged
	violation in port many times.
Certificate &	Intermediate survey carried out beyond the established 12 months window
Documentat	IBWM Certificate shows D-1 certification and as per IOPP Certificate survey date the
ion	ship should already be complying with D-2 as IBW Convention was already in force.
	Flag state reported withdrawal of the certificate to the vessel for bad performance.
	Condition evaluation report of last special survey on February 2022 missing.
	The ISPP Certification shows that the ship is certified to carry 18 persons only, while
	19 crew members found on board.
	International Oil Pollution Prevention Certificate issued for a period exceed five
	years.
	4 <sup>th</sup> Engineer take part in E/R watching whose license expired.

Accommodation,	Lack of provisions, food etc. Many crews complained about the lack of food.
recreational facilities, food &	Food is not suitable in respect of quantity, nutritional value, quality and variety. There are not fresh fruits and vegetables on board.
catering	Sanitary water rusted and dirty.
	Ventilation for the crew accommodation was found out of order.
Radio	NAVTEX messages not received since March 2022 as device was switched off.
Communications	During inspection emergency source of electrical power for communication equipment was in-operative.
	Emergency batteries for GMDSS equipment in bad condition.

# DETAINABLE DEFICIENCIES IN YEAR 2022

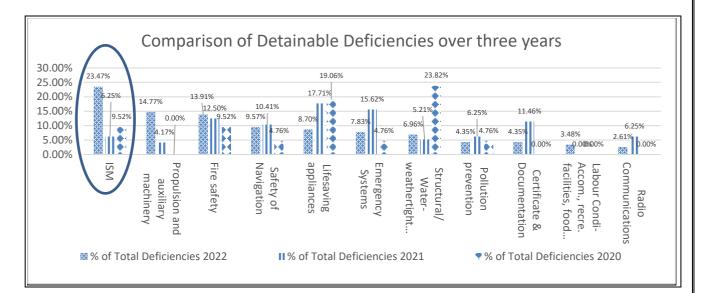
Categories	No of detainable deficiencies	%of total detainable deficiencies	
ISM	27	22.89%	
Propulsion and auxiliary machinery	17	14.40%	
Fire safety	16	13.56%	
Safety of Navigation	11	9.32%	
Lifesaving appliances	10	8.47%	
Emergency Systems	10	8.47%	
Structural/ Water-weathertight Condition	8	6.78%	
Certificate & Documentation	7	5.93%	
Pollution prevention	5	4.24%	
Labour Condi-Accom., recre. facilities, food & catering	4	3.39%	
Radio Communications	3	2.55%	
Grand Total	118	100.00%	



# **COMPARISON OF DETENTIONS & DETAINABLE DEFICIENCIES OVER LAST 3 YEARS**

Year	2022	2021	2020
Number of detentions	22 🛉	15	9
Number of detentions attributed to "RO Responsibility"	2	1	0
Number of detainable deficiencies	118 🛉	96	21
Ratio of Number of Detainable Deficiencies over Number of Detentions.	5.4 (118/22)	6.4 (96/15)	3(27/9)

There is rise in total number of detentions and RO related detentions for year 2022 compared to previous two years.



Considerable rise in detainable deficiencies is pertaining to ineffective implementation of ISM onboard is a serious concern. Further to above detainable deficiencies related to propulsion and auxiliary machinery & fire safety, structural/water weather tight conditions, labour conditions are found increased in year 2022 as compared to previous year.

MoU/ Years	2022	2021	2020	
	(Detention/Inspection)	(Detention/Inspection)	(Detention/Inspection)	
Paris	0.13	0.12	0.03	
	(13/102)	(7/58)	(2/52)	
Tokyo	0.04	0.04	0.06	
	(4/89)	(2/44)	(2/31)	
Black Sea	0.02	0.03	0.11	
	(3/128) 🔸	(2/66)	(5/47)	
Riyadh	0.02	0.06	0.00	
	(1/58) 🔻	(2/34)	(0/12)	
Indian Ocean	0.00	0.03	0.00	
	(0/28) 🕈	(1/23)	(0/36)	
Mediterranean	0.01	0.03	0.00	
	(1/69) 🕈	(1/28)	(0/37)	
USCG	0.00	0.00	0.00	
	(0/14)	(0/10)	(0/5)	

RATIO OF "TOTAL NO.	OF DETENTIONS OVER NO	OF INSPECTIONS'	" MOU WISE OVER LAST 3 YEARS:
INATIO OF TOTAL NO.			

# RATIO OF "RO RELATED DETENTIONS OVER TOTAL NUMBER OF INSPECTIONS" - LAST 3 YEARS RECORDS:

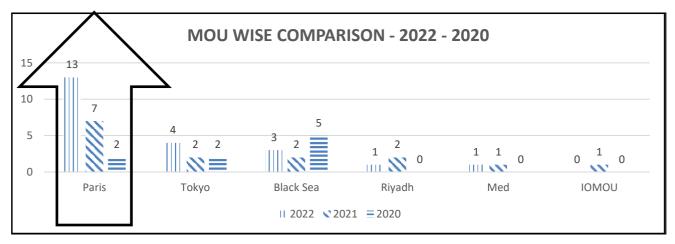
Year	2022	2021	2020
RO related detention/Total No. of Inspection	0.003 (2/502)	0.004 (1/280)	0.00 (0/238)

# RATIO OF "RO RELATED DETENTIONS OVER TOTAL NUMBER OF DETENTIONS" - LAST 3 YEARS RECORDS:

Year	2022	2021	2020
RO related detention/Total No. of Detentions	0.090 (2/22)	0.066 (1/15)	0.00 (0/0)

Even though the "Ratio of RO related detentions over total number of inspections" remained same in years 2021 and 2022; the "Ratio of RO related detentions over total number of detentions" per year found increased over last three years.

# MoU wise Number of Detentions over Last 3 Years



There is considerable increase in number of detentions under Paris MoU in year 2022 as compared to previous two years. Slight rise is observed in number of detentions under Tokyo & Black Sea MoUs, while Mediterranean MoU is recorded with same number of detention in 2022 & 2021 years.

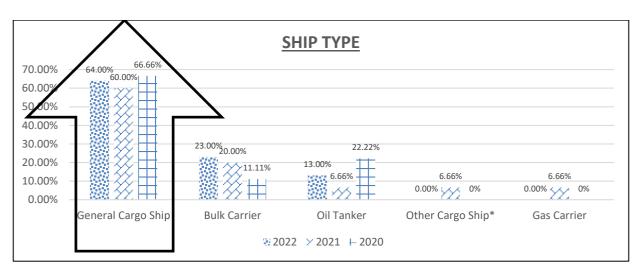
Number of detentions under Riyadh & Indian Ocean MoU are found reduced in year 2022 as compared to previous two year, while USCG continues to show zero detention for three continuous years.

# COMPARISON OF SHIP TYPE WISE DETENTION PERCENTAGE OVER LAST 3YEARS:

Ship Type/ Years	2022	2021	2020
General Cargo Ship	64.00%	60.00%	66.66%
Bulk Carrier	23.00%	20.00%	11.11%
Oil Tanker	13.00%	6.66%	22.22%
Other Cargo Ship*	0.00%	6.66%	0.00%
Gas Carrier	0.00%	6.66%	0.00%

\*Other Cargo Ship: Offshore Supply Ship, Tug, Diving support Ship, Container ship

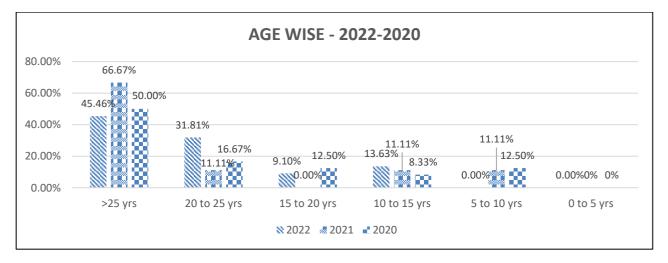
#### **Detention Percentage Ship Type Wise:**



Detention percentage for General cargo ships remained maximum. Detention of these ships were mostly under Paris & Black Sea MoUs.

# COMPARISON OF AGE WISE DETENTION PERCENTAGE OVER LAST 3 YEARS:

Age/Years	2022	2021	2020
>25 yrs	45.46%	66.67%	50.00%
20 to 25 yrs	31.81%	11.11%	16.67%
15 to 20 yrs	9.10%	0.00%	12.50%
10 to 15 yrs	13.63%	11.11%	8.33%
5 to 10 yrs	0.00%	11.11%	12.50%
0 to 5 yrs	0.00%	0.00%	0.00%



Detention percentage for ships of higher age group i.e.25 years and above remained maximum in last 3 years. Also the detentions for age group 20 to 25 years of vessel age are found increased considerably in year 2022.

#### SHIPS DETAINED MORE THAN ONCE:

Ship Type/ Years	2022	2021	2020
Ships Detained Twice in 12 Months	5	1	0
Ships Detained Twice in 24 Months	1	0	2

# OVERVIEW OF ALL DEFICIENCY CATEGORIES:

Based on deficiencies recorded during all PSC inspections in 2022 a list is provided in Annexure to this report. These deficiencies have been categorized under various headings for ease of reference.

Following table compares six categories under which maximum number of PSC deficiencies were recorded over last 3 Years.

Year	Categories under which maximum number of PSC deficiencies were recorded (Listed in descending order from left to right based on number of deficiencies)					
2022	Fire Safety & Detection System	Safety of navigation		Lifesaving appliances	0	Pollution Prevention
2021	Fire Safety & Detection System	Safety of navigation	Life Saving appliances and associated equipment	Operational defects and general maintenance	Certificates and Documentation	Emergency systems
2020	Safety of navigation	Life Saving appliances and associated equipment	Fire Safety & Detection System	Propulsion and Auxiliary machinery	Certificates and Documentation	MLC - Working and Living Conditions

# CAUSES ATTRIBUTING TO THE DETENTIONS:

Following is summarized from detention cases:

- 1. Thirteen ships detained under Paris MoU. Black Sea & Mediterranean MoU were of higher age (>20 years) and General Cargo & Bulk Carrier category. Ship type and age were prominent reasons for targeting of the ships for PSC inspection. Detentions were on the account of maintenance issues, lack of emergency preparedness, poor upkeep of shipboard documents & ineffective ISM implementation onboard. For three of these ships, only class certificates were issued by IRS (Statutory and MMSA undertaken by other RO) and for one ship MMSA was undertaken by other RO, limiting the scope of verifying the compliances with statutory requirements by IRS for which deficiencies were noted by PSC.
- Three ships registered under Panama Flag were detained twice in the year 2022 under Paris MoU.
   Existence of repeated deficiencies in these ships included lack of maintenance, poor housekeeping, non-compliance with MLC requirements, unsafe working practices, shortcoming

in upkeep of documentations & records, inadequate emergency preparedness. For two of these ships; where ISM & Statutory certification was undertaken by another ROs, PSC had also pointed out safety management system failure repeatedly. Ships required care to ensure effective SMS implementation & statutory compliance on board. One of ship was taken into class just one month before first detention; while during the second detention, nature of deficiencies implied lack of attention to maintain & improve vessel's condition in between surveys.

- 3. In one case, vessel was using freshly bunkered fuel oil. Even though BDN mentioned sulphur content of the fuel were in the range as permitted by Marpol Annex VI; during PSC inspection test conducted showed that actual results of Sulphur percentage were higher. This was one of the reasons for detention of vessel.
- 4. Fourteen detainable deficiencies indicated safety management system onboard were not effectively implemented, while few other detainable deficiencies were also listed under ISM failure pertaining to improper demonstration of shipboard emergency drills, lack of familiarization with operation of lifesaving appliances & MARPOL equipment, non-compliance with safe manning requirements etc. Number of detentions attributed to ISM failure and requiring the ships to undergo additional ISM audit implied that; company's safety management procedures, corrective/preventive actions, supervision & monitoring of ship from company representative during ship's visits, internal audits were not effectively implemented. Also, the compliance to reporting requirements, follow up actions and seeking guidance from flag administration/Class/RO were not followed as required.
- 5. Lack of machinery maintenance (leakages/defective equipment), poor upkeep of structural areas & water-weather tight conditions (temporary repairs or unattended damages) were observed commonly during some PSC detention cases. Reasons being poor scheduled maintenance, nonavailability of required resources, lapses in reporting to company along with lack of prompt & thorough repairs. Focus on above from ship's crew and company representative could have prevented these detentions.
- 6. In one of the detention cases recorded under TOKYO MoU, only company DOC was issued by IRS. All the Class and Statutory surveys including audits/inspection (ISM/ISPS/MLC) of the vessel are undertaken by another RO. Prominent reason for detention was lack of control & monitoring of the essential shipboard certification and crew documents. Also the compliance to emergency preparedness (mandatory drills) as required by SOLAS regulation Ch.III/19 found not conducted on board after major crew change.

7. Two detention cases attributed to RO responsibilities for detainable deficiencies within close proximity of surveys were of concern.

#### **IMPROVEMENT OF FLEET QUALITY:**

- A) Based on casual factors for existence of deficiencies, efforts considered required by the ship as well as the Company in following areas:
  - Ships of higher age group considered required more attention in terms of planned maintenance of the ship's structures/deck fittings, machineries and equipment. More efforts considered required from the Company to ensure these ships are maintained between surveys.
  - 2. Regular inspections of the ship and its equipment and machineries as per SMS procedure are to be undertaken so that deficiency if any is identified early and timely corrective action is taken with an aim to ensure ship is maintained in compliance with class & statutory requirements all the time.
  - 3. Upkeep of shipboard & crew certificates/documents including records requires attention.
  - 4. Compliance to MLC requirements such as crew employment agreements, rest hours, crew wages, upkeep of accommodation areas requires more focus.
  - Effective pre-arrival inspections prior arrival port and taking appropriate action including prompt reporting to Flag Administration, Classification Society and to the Port State need to be done diligently.
  - 6. Conducting mandatory drills to ensure effective crew familiarization/training requires focus. It is essential that crew is conversant with SMS procedures, statutory/regulatory requirements, shipboard operations and use of safety and pollution prevention equipment. Crew awareness and familiarity of their duties during shipboard emergencies are to be enhanced by ensuring various drills and exercises required by SMS procedures are held frequently. Effectiveness of these drills are to be verified by Master or his nominated representative.
  - 7. Regular supervision/monitoring of ships by company including verifying effectiveness of implementation of SMS on board will help reduce non-compliance to requirements. Inspection by Superintendent and internal safety audit are to be effective so that deficiencies including non-conformities are identified and corrective action taken in time. The need for root cause analysis for non-conformities and lapses and ensuring effective corrective and preventive actions can not be overemphasized in order to prevent reoccurrence of similar deficiencies.

- B) Following areas considered requiring attention during surveys/audits and improvement action implemented internally:
  - 1. Changes to internal procedure to restrict maximum age of vessel which can be considered for classification.
  - 2. Identification of high-risk vessels and implementation of additional measures in consultation with the Company and the Flag.
  - Modification of internal procedure to include stringent actions to ensure vessels which are detained are monitored subsequently and subjected to additional examination between surveys in consultation with the Company including considering withdrawal of vessel from class for repeated failures.
  - During company DOC audit, additional care is required to verify PSC performance of the vessels under the company and the measures implemented for prevention of lapses including its effectiveness in subsequent period.
  - 5. Based on analysis and taking into account result of PSC inspection in close proximity of surveys/Audits held especially the cases of RO related detention, Advisory/training provided to surveyors/auditors so that due diligence is given in the conduct of surveys/audits with focus on bringing out lapses in implementation of safety management system.
  - 6. Advisory provided to the Company based on analysis of each detention so that detentions are prevented. Comprehensive checklist based on deficiency database is made available for use by Company /shipstaff for detailed & effective self-inspection of the ship.
  - 7. Fleet Monitoring Program is reviewed on regular basis for improving identification of the vessels requiring attention. Additionally based on performance and history of events noted on vessel, it is identified proactively under the program; thus, reducing the chances of PSC inspection with significant deficiencies or detention.
  - 8. Compliance to requirements based on Concentrated Inspection Campaigns (CIC) declared by various PSC MoUs are being verified proactively.

#### CONCLUSION

It is the desire of Indian Register of Shipping to work constructively with companies and Flag Administration so that monitoring is done, actions taken proactively with the aim to maintain the ships in compliance with Class and Statutory requirements at all times. To help achieve this, the role of effective implementation of safety management system cannot be over emphasized. IRS believe that sincere efforts in this direction will help achieve high performance of ships during PSC inspections.

#### ANNEX 1

#### LIST OF PSC DEFICIENCIES IN YEAR 2022

# Fire safety

- PSCO observed 02 degraded fire suits worn out impacting their fire-fighting capabilities. As per the vessels fire control plan they are required to carry 04 suits, vessel currently has 02 operational.
- PSCO observed excessive leakage of water from the Fire and G.S Pump filter casing. Crew tightened casing and leakage stopped.
- Fire control plan does not include the fire party VHF.
- Fire main isolation valves are not marked.
- CO2 room CO2 bottles Transit pins in place in all bottles rendering system in-operational.
- Remote fire damper controls Redundant damper control still connected within damper activation cabinet
- Containers of rescue boat fuel stored in steering flat. Removed to paint store.
- Oil accumulation in A/E and purifier area Fire risk
- Fire-fighter's outfits are damaged.
- Work in progress on high voltage switchboard (4000V) without risk assessment and / or electrical consignment. Insulation mat missing in front of several switchboards.
- Wires insulation damaged, need to be replaced.
- Visual/ audible signal not initiated when turned off the main power supply of fire control panel on bridge.
- Fire doors on emergency generator cannot be closed because they are left open and obstructed by port generator which is not in use.
- The torch of fire man outfit at fire control station is not working
- External accommodation doors Locked internally preventing external access in the case of emergency (e.g., fire).
- CO2 Gas detector not on board.
- Self-closing fire doors engine room/control room not closing properly.
- Fire panel found working but showing fault on one zone.
- Fire detectors in Eng. workshop & steering gear room has hanging wires.
- Quick closing fuel valve system not ready for use- System not under working air pressure due to air leakage.
- Fire insulation not in place (Electrical penetration above engine room access).
- Several fire doors found lashed /damaged in the vessel.
- Fire detector in one officer's cabin faulty.
- Fire line Isolation valve is not marked.
- Fire control plan incomplete information.
- Upper deck fire door not closing properly.
- Fire detection and alarm system some sensors show smoke detector fault.
- Fire nozzle of fire hose are missing in engine room.
- Main fire line pipe on several places corroded due to rust on connection around accommodation.
- Several fire hose box corroded around accommodation. Fire nozzle seized/one fire hose missing.
- Several self-closing fire doors at engine room were held back with ropes in open position.
- The diesel generators were found installed in enclosed containers without having provisions for fire detection.
- Many Christmas tree lights on main mast found to be broken and damaged (unsafe).
- Fire detection panel found to be having continuous alarm on DC mode.
- Fixed fire-fighting cargo hold detection system found with alarm.

- The portable fire extinguishers were found not maintained properly to ensure readiness for operation.
- Four power generating units found installed inside portable containers. Marine approvals not sighted. Also the fire-fighting systems for the machinery space has not been clearly defined in any statutory document.
- Fire hoses found leaking while testing (not properly maintained).
- Fire lines found with temporary repairs near isolation valve area. Many portions of fire line on main deck found to be corroded and wasted.
- Galley vent exhaust mesh found to be broken and with oily mixture.
- Two CO2 nozzles in emergency generator room found choked- Not as required.
- Forecastle workshop is used as paint store.
- Some self-closing fire doors fitted with unauthorized hold-back (gallery, officer's messroom, bridge). Some self-closing fire doors not properly closing (accommodation, engine room entrance, engine room escape).
- The smoke detector in "Ref compressor room" found inoperative due to a plastic cover.
- The main pipe on the fire pump in ER found inoperative.
- One fire hose in forecastle found holed/broken. Plenty water leakage noticed.
- One fire hose found holed on forecastle area.
- Main Fire line found to have excessive water leakages at midship & port side.
- The fire hose used for emergency fire -pump test found holed. Spare hoses available and fixed during inspection (tested positive).
- One funnel's damper didn't close properly. Furthermore, all ventilation damper (mushroom type) in aft part found without label of room/local reference and indication of "open/close".
- The emergency exit from the emergency fire pump room & from the forecastle found not properly marked.
- Testing device for heat fire detectors improperly working.
- The heat detector test kit was not available on board during the PSC inspection.
- One fire hose- Aft- Found holed.
- Fire doors in super structure closing device not adjusted.
- Fire alarm station Two lines (Poop deck & E/R one DK) shows alarm.
- Fire hydrant gasket is painted (Engine Room).
- Fire line cut of valve stopper not operative.
- Fire hose in steering gear room is missing.
- Steering-room full of dirty rags and inflammable materials.
- Access to CO2 room obstructed and not ready for use.
- Fire-fighting pipe systems and appliances shall be maintained ready for use. At present full of rust.
- High amount of oil in bilges-Fire risk.
- Fire door for crew mess room found retained in open position by wire.
- Tester for heat detectors is missing.
- IMO sign of smoke detectors missing.
- The breathing apparatus set low pressure audible alarm is not working.
- Water leakage on forward deck fire hydrant.
- E/R some fire valves handles in poor condition.
- Bridge/call point observed that one call point at bridge console faulty "not working".
- Engine room/purifier room observed that H.O. fuel transfer pump leaking from its glands- Fire risk
- Every Fire screen door inspected was found to be held open by a hook or magnet.
- Various latches on fire screen doors jammed or stuck and not engaging in frame, especially in Eng. room boundary.
- Fire line on main deck at some parts was not in quite good condition. Maintenance is required.
  - Fireman outfit SCBA set not ready for use with air cylinder partly discharged.

- One fire Extinguisher inside accommodation on one deck- not fixed properly.
- Fire doors were found in open position in Fire Resisting Division (Galley).
- Fire detection system faulty False alarm not attended.
- Electric wires throughout the vessel found to be open and not isolated properly. Example Sat C and GPS wire penetration not secured properly on accommodation. On deck many naked wires were found. (unsafe).
- No heat detectors testing kit on board.
- Fire detection and alarm system were not certified.
- Engine room port and starboard blower vent flaps found seized. (not as required).
- Fire detection and alarm system is faulty.
- Fire detection and alarm panel is showing fault alarm.
- Fire-fighting nozzle missing.
- Reported the fire pump working low pressure.
- Ventilations not clean and no filters on deck upper.
- One ventilation flap was missing the rubber gasket.
- Fire extinguishers not checked monthly.
- An oily mixture were observed in the machinery space bilge- Fire risk.
- Some D.O were accumulated in the save all tray in the emergency generator room- Fire risk.
- Torch lights are not type approved.
- Oil is accumulated under AUX Eng. room Fire risk.
- Several fire doors in superstructure not closing.
- Two escape doors from the engine room not closing properly.

# Safety of Navigation

- ALDIS lamp glass cracked.
- Lots of ECDIS ENC found expanded.
- Nautical publications missing.
- Navigation bridge window glass damaged.
- Some Nautical Publications found not up to date.
- Some Admiralty publications of old edition.
- Nautical publications expired.
- Last notice to mariners not updated.
- Wrong information on last passage plan. Master instructed to fill passage plan with correct information.
- The voyage plan does not include environmental considerations for the intended passage as required by SOLAS V reg 34/2.4.
- The ship is about 8 cm overloaded.
- Stability instrument not approved on behalf of flag.
- Lightship condition for last departure does not match with the date specified in stability booklet.
- Screen for navigation lights painted white.
- NUC with a blind sector more than 6 degrees.
- Some navigational lights (including spares) not working.
- Some BA charts for previous and intended voyages missing.
- Nautical publications (List of lights, radio signals, tide tables) found in old edition.
- Voyage plan for last voyage is missing.
- Gyro compass not working.
- Voyage in Europe organised without consideration to several regional legislations (IHM, MRV).
- Fwd mast navigation light and stbd navigation lights some electrical fuses missing.
- Navigation light portside upper light not working.

- Electronic charts (ECDIS) not updated for last few weeks.
- VDR is showing alarm.
- Password of BNWAS is missing.
- Waypoints of passage plan between two ports were not clearly imprinted in navigational charts. Masters instructed to check and record properly every information such as waypoints in the charts from now on.
- Magnetic compass in navigation bridge was not quite readable.
- Weekly notice to mariners (week 5) was missing.
- Ship's working language (English) weren't established and recorded in the ship's log-book.
- Port and starboard gyro repeaters found to be in-operational and all gyro feeds to navigational equipment's found to be inaccurate.
- Magnetic Compass Air inside.
- Gyro compass inoperative. Vessel declared that it was due to accidental damage.
- Nautical chart for next approach port are missing.
- ITU list IV (List of coast stations and special service stations) Edition 2019 found on board. ITU list V (list of ship stations and maritime mobile service identity assignments) Edition 2018 found onboard.
- IAMSAR manual vol. II Edition 2019 found on board.
- Bridge front window on starboard side completely broken. Not possible view sea surface from the conning position and not possible to use the window wiper.
- No evidence that voyage or passage plan has been prepared for shifting from dry dock to repair berth.
- Magnetic compass found with a big air bubble and no spare magnetic compass available.
- Some charts not updated and ship is using a computer electronic charts without approval.
- Some sailing directions expired and/or not kept updated.
- Compass error is not determined at least once per watch. Master instructed to keep proper records.
- E- Nautical publication backup readily not available.
- Steering gear test evidence missing. (Before departure).
- Incomplete passage plan: No UKC available, No plotting position/ reporting points/ frequency of piloting position/ amendment for passage plan.
- Incomplete passage plan: manual plotting position not plotted as per passage plan instructions.
- Details such as courses steered and distances sailed, position fixings and changes to the voyage plan is missing or are incomplete.
- Magnetic compass lightning is inoperative.
- Steering gear room compass has air bubble inside.
- Air found in spare magnetic compass.
- Magnetic compass not working, air bubble inside.
- Wings navigation lights not fixed properly.
- Signalling lights on main mast foundation heavily corroded.
- Signalling lights main mast reg lights lost cover.
- Navigation lights green P/S sector poor fastening.
- Stern Nav. light (emergency 24 V) cable disconnected.
- S/B side navigation lights fastening heavily corroded & broken.
- Stern navigation light's sector not corrected and Stern anchor light glass is dirty.
- Navigation top light unlit.
- Some navigation charts not used during voyage.
- Echo sounding device not adjusted.
- ECDIS backup charts status report not updated.
- Acoustic beacon foundation heavily corroded.
- Voyage data recorder (VDR) acoustic beacon expired.
- IAMSAR old edition on board.

- Echo sounder paper indicator not working properly.
- One of two binoculars on Nav. bridge has damaged optics.
- Navigation bridge window wipers not adjusted
- ECDIS not updated for coastal warning.
- Publications (sailing directions) not updated.
- ITU publications not updated.
- COLREG not updated by latest IMO amendments.
- Passage plan found maintained negligently- No remarks for environmental protection measures, ENC charts not listed, list of charts and publication not completed, some of sailing directions for engaged and intended voyages not included.
- Coastal warning not plotted correctly on ECDIS.
- No Voyage plan prepared on voyage from last port.
- Standard magnetic compass is not clearly readable by the helmsman at the main steering position.
- A daylight signalling lamp is inoperative when connected at starboard bridge wing.
- Magnetic compass on the monkey island is full of air bubbles.
- Some navigation charts are expired.
- Passage plans for last voyage not prepared according to RES. A. 893(21).
- Standard radar (bridge master) various controls not operational.
- Stern light & Masthead lights not fitted with screens to restrict the arc of the horizon that they can be seen.
- The laptop used to access digital publications (Tide, Radio Signals, e-NP) showed a boot error on initial start-up.
- No sailing direction for the current area of operation or intended voyage carried on board in either paper or electronic format.
- There is no evidence that effective passage plans are compiled or made available for watch keepers.
- No evidence that checklists for pre-arrival, pre-departure passage planning, anchoring operations are used as specified in the company.
- Both RADAR's magnetrons are exceeded the designated working hours.
- Both RADAR's have exceeded the designed working hours of the magnetrons.
- Magnetic compass light was not working.
- Magnetic compass was barely readable from the steering gear.
- Electronic charts of ECDIS last updated few weeks before.
- SOLAS publication in an old edition.
- Plimsoll marks not clear.
- The connection between MOB and smoke signal damaged.
- Passage plan is missing information about UKC and ship's speed. Plan not signed by master.
- Position not plotted on nautical charts on last voyage.

# Propulsion and auxiliary machinery

- Excessive oil leakage from mail fuel oil circulating pump.
- Upper main engine fuel oil heater cover leaking.
- Excessive water leakage from the seal of cooling sea water pump.
- Auxiliary engines fuel oil leakage collecting pipes disconnected from fuel oil leakage alarm.
- Steering gear found with hydraulic piping modifications and with several hydraulic oil leakages.
- Observed lube oil leaking from air compressors.
- Engine room bilges near purifier and Main Engine found oily. Oil leakage observed from main Engine.
- Delivery pipe to seawater cooling pumps power pack unit in poor condition with several temporary repairs.

- Ship found with an additional power-pack on aft deck without Flag or Class approval.
- Fuel injector upper O-ring of M/E one cylinder found damaged and F.O leaking.
- RPM gauge for one D.G. to be replaced.
- M/E double skin pipe system out of order. Poor connection/partly not connected, leakage alarm not properly working, insulation dirty/oily.
- Some open electrical connections were observed in the A/E panel.
- Electrical box port side cover corroded.
- There is oily under for auxiliary engines also there are oily on main engine and generator.
- Found leakage of oil at steering gear pipe line.
- M/E exhaust manifolds-heat insulations are partly missing.
- On main engine fuel oil leakage collection pipes to alarm vessel found clogged.
- Hydraulic oil found leaking in steering gear areas.
- Excessive leakage of gas oil detected in fuel leakage alarm devices on A/E's.
- Electric panel of the unit of the air condition damaged.
- Several thermometers and others gauges on DGs not working or unreadable.
- ME did not stop after L.O. low pressure alarm. ME LO-Std-By pump did not start.
- An additional DG found installed on board and connected to the ship's electrical power source. An "Out of Service" label posted on this installation has been found but no documentary evidence found on board that the installation was previously authorized by the flag State or "taken out of service".
- The main engine was completely standing still, but the engine tachometer still showed 300 rpm.
- Main engine cylinder head unit leaking fuel oil.
- Fuel oil leakage tank full due to drain line blocked for two aux engs.
- Exhaust gas manifold not protected by isolation.
- Exhaust thermometer for one of the D/G not as required.
- Several pressure gauges for generator engine and thermometers for main engine missing. Pressure gauges for F.W cooling pump one gauge missing and one gauge unreadable.
- M/E: J.C.W pump, L.S.F.O transfer pump, Fire and G/S pump & Ballast pump having leakage.
- Minor oil leakage from steering gear.
- Engine room bilge pump suction and discharge pipes leaking, found patched with tapes as temporary repair.
- Propulsion main engine found with cooling water leakage on one cylinder and with several lub. oil leakages.
- ME Double skin pipe return pipe having minor leakage.
- ME heavily leaking with cooling water.
- Diesel generators No. 2 & 3 leaking oil.
- D. G. Control panel manometer not adjusted.
- Steam boiler leaking of water (gas pipe boiler).
- S.W. Valves of main engine cooling system leaking.
- DG's exhaust line leaking of flue gases, control panel partly unreadable.
- ER some pressure gauges not readable.
- Accommodation ladder port side -stringer near upper platform through corroded.
- M/E Gas exhaust pipe found stains of gas leakage on lagging.
- Auxiliary engines F.O. leakage strains on fuel filters area, pipes, body.
- Auxiliary boiler casing installation not properly fitted.
- A/E No.2, No.3 nozzle cooling oil pressure gauges missing.
- Waste oil service tank level glass defective.
- ME local post operational instruction is missing in place.
- Several local instrument in engine room broken and not readable. (Manometers for turbocharger broken, many gauges and thermometer unreadable).

- Leaks in DG Oily water mixture below generators.
- D/G No. 2 inoperative.
- Tank of auxiliary engines for leakage of fuel alarm open.
- Auxiliary engines leaking oil and water.
- Main Engine Main oil pressure gauge inoperative.
- Thermometers and gauges in Engine Room painted and not readable.
- Main engine bilge wells full of oily water.
- Main Engine & Generators insulation missing and oil leakage- High risk of fire.
- LT cooler SW overboard line STBD side found pitted.
- Ballast pump has a hole in the body and mechanical seal leaking.
- Ballast pump in the engine room leaking water through its body and seal.
- Line between FW cooler and Oil cooler is patched with rubber.
- No.2 D/G has oil leakage.
- Sludge transfer pump suction line (gauge) copper pipe broken.
- Main engine is found with H.O. fuel leaks from serval locations.
- Aux. engine found with oil leaks from serval locations.
- Engine room observed with several pressure gauges damaged.
- Quick Closing valves for Main Engines not functioning.
- LO and DO sight glass closing devices inoperative. The flange between Diesel Oil Settling tank and the glass is leaking.
- Found at engine room one steam line broken.
- D.G No. 3 found leaking oil and need to be repaired.
- D.G No.1 abnormal Leaking fresh water.
- Temperature gauge of the sea chest strainer is not working.
- Most of the pressure gauges in the E/R are malfunctioned.
- Hot well tank for steam Not in safe condition.
- Leaking oil at main engine casing.
- Uncertified/unexempted deck generator on board were in use at the boarding time.

# Life-saving appliances

- Rescue boat engine Insufficient cooling water flow.
- Rescue boat embarkation light Switch housing damaged.
- Starboard lifeboat rudder not possible to go hard starboard. Turning seized by paint.
- Lifebuoys provisions not as required.
- MOB wire ropes not as required.
- Limit switches for port side life boat not working.
- Freefall navigation light not working.
- Port lifeboat engine do not start, battery found empty.
- Emergency light for FWD inflatable life raft not working.
- Rescue boat unsafe lashing/stowage.
- Lifeboat launch poster is in poor condition.
- Electrical cable connection for one of the life boat charger defective.
- Rescue boat crane electric remote control fuse not in good order, lack of maintenance.
- Free fall lifeboat rubber seal door not properly maintained.
- Fast rescue boat not properly maintained.
- Fast rescue boat lifting sling wire not properly maintained and stowed.
- Some lifebuoys on main deck not properly marked with ship name.

- The rope of life raft found not properly tied.
- Free fall life boat found not operating by secondary means of starting i.e. not operating on second battery.
- Rescue boat outboard motor found in-operational and vessel has ordered the same as per available records.
- One number Rescue quoit found fully damaged. Radar reflector broken, spare reflector does not have erection stand.
- The zodiac boat available onboard for transferring the personnel and mooring lines found not certified and not mentioned in the LSA plan.
- Rescue boat found not starting immediately & not working properly.
- The rescue boat wooden bottom found damaged & not coated in the point of contact.
- STB life raft found not properly stowed and secured.
- Life rafts cannot be readily transferred for launching on either side of the ship.
- One out of the two available life-rafts is stowed on the ship's poop deck while it shall be positioned on the ship's side (port side).
- Limit switch for boat davit inoperative.
- MOB lifebuoys have a weight less than 4 kg.
- One lifebuoy in forecastle found partially obstructed by a mooring rope.
- A life jacket on the bridge found damaged and in poor condition.
- Emergency light for rescue boat was found out of order and structure was found highly corroded.
- Embarkation ladder missing for the rescue boat and the starboard side liferaft.
- The LSA training manual in the messroom is not specific to the ship equipment. Another training manual not up to date in Master's cabin.
- LSA training manual incomplete: missing instructions for emergency repair of the lifesaving appliances.
- GMDSS Radio log book safety/distress/traffic messages records missing. Master instructed to keep proper records from now on.
- The record of received safety messages missing or are incomplete. The daily ship's position is not recorded.
- Life boat's grabline partly not connected, float's partly missing, davit swivel hook corroded, not maintained.
- Both L/B Retro reflective tapes to be applied as per IMO resolution.
- Water found in life boat P/S canopy light.
- Lifeboats P/S, SB/S retro reflective material partly missing.
- STBD side life boat engine not starting.
- Life boat STBD side exhaust pipe flap not found in working condition.
- Lifeboat (Side) Retroreflective tape in poor condition.
- Lifeboat, STB side grabline torn.
- Insufficient fuel quantity in rescue boat fuel tank.
- Rescue boats release cylinder one section low pressure.
- Life-raft connection painter and weak link not as required.
- Port side derrick for life raft in poor condition.
- Parts of life saving appliances for lifeboat showed expired on annual survey report
- There are no metal shackles on the starting painter line of two inflatable life rafts.
- STBD/S Lifeboat boarding ladder not attached to the hull of lifeboat.
- HRU for EPIRB expired.
- Life Buoy grab line partly worn out.
- Holding bracket of self-igniting light of MOB is missing at boat deck.
- One of Lifebuoys light cover cracked.
- Embarkation ladder some steps cracked, rope poor.

- Lifeboat rudder support found rusty.
- Life boats (p/s) Engine cooler coils are painted, to be cleaned, insufficient cooler capacity.
- Low Pressure in hydraulic system of rescue boat davit.
- Emergency embarkation lights (boat deck, p/s) for lighting of the embarkation places and over the sides are not rotted, need maintenance.
- Freefall lifeboat steering not fully operational. Emergency steering tested and found fully operational.
- Rescue boat lifting not working properly.
- Life boat embarkation door sealing gasket found worn out and broken at places.
- Rescue boat engine failed to start when tested.
- Life rafts secured to brackets that are over 2m above the deck. The location is not possible for two persons to access and manually lift the raft against an opposing list. The location directly beneath the bridge wing may result in the raft being trapped if released by float free.
- Rescue boat davit accumulator indicating zero pressure.
- Light inoperative and support broken, forward side.
- Starboard Bridge Wing MOB buoy lashed with painted string. No quick release fitted.
- One Lifejacket in Engine room not in place.
- Life raft's painter line were not secured to the weak link.
- One MOB lifebuoy is cracked & some other lifebuoys are missing at the location.
- Lifeboat embarkation station corroded.
- LSA & FFA need to be cleaned and well maintained.
- Lifebuoy on funnel deck missing light.

#### MLC

- There is evidence that almost all crew members receive payment only for basic wage, missing evidence of payment of overtime and paid annual leave.
- Some seafarers on board not being paid as per stated and agreed rate in SEA.
- Working and living area needs improvement.
- First Aid Kit missing.
- Bridge deck flush inoperative.
- Poor cleanliness at Galley.
- Medicines and medical equipment missing.
- First aid kit in galley is missing.
- The oxygen cylinder in the ships hospital is empty.
- Accommodation A/C needs some maintenance.
- Ventilation insufficient in cabin.
- Observed that galley vegetable room dirty.
- Medicines found short as per MS medicines, medical stores and appliances rules 1994.
- Vessel's central A/C is out of order. Accommodation temperature is not acceptable.
- Crew mess furniture is in very poor condition To be replaced.
- Mess room in poor condition. Chair to be changed.
- Mess room dirty, lack of cleanliness.
- Galley needs to be cleaned.
- Poor hygiene and housekeeping observed in the living accommodation including galley and provision stores.
- Some rest and work hours records are not properly filled in (e.g. engineer, oiler, a/b).
- Food hygiene very poor.
- Mess room needs some cleanliness/food hygiene.

- There was no safe access between shore and ship.
- Toilets in hospital and seafarers do not flush properly.
- A deck port side toilet and washroom -Toilet not flushing.
- Cold rooms (Meat and fish rooms) Not maintained properly.
- Sink from galley leaking. Poor hygiene in handling room.
- No heating available in accommodation.
- Sanitary facility in ship's hospital not hygienic.
- Main deck around accommodation dirty.
- Refer room alarm found inoperative in both refrigerators.
- Sanitary facilities in several spaces in accommodation found not as required and very dirty: 1) curtains missing in cabin 2) Cabin found with door handle of toilet broken. 3) In general, all sanitary facilities poor.
- One out of the two available crew shower is out of order.
- The shower head was found broken in one cabin.
- The common sanitary facilities found not in hygienic conditions: Floor found partly damaged and not clean.
- Several lights in accommodation found damaged and unsafe.
- Artificial bed light in one cabin starboard side is out of order.
- Sanitary facility in hospital accommodation found in very poor conditions: Bathtub, washbasin and floor found very dirty and non-hygienic. Furthermore, toilet flush found out of order.
- Hospital found in not hygienic conditions.
- Galley's exhaust duct found very dirty of oil.
- Sofa covers in the mess room and crew cabins are dirty and not hygienic
- Food is not suitable in respect of quantity, nutritional value, quality and variety. There are not fresh fruits and vegetables on board.
- Found one refrigerator inside store room & another refrigerator inside steering gear room. Found several food boxes on the floor of steering gear.
- Ventilation for the crew accommodation was found out of order.
- Excessive presence of ice in meat cold room. Found insulation of pipes in front of ingress of meat cold room in very poor conditions and unsafe.
- Crew laundry found in very poor condition (very dirty); not hygienic for crew.
- Accommodation air condition faulty.
- Common lavatory dirty and toilets flushing water system malfunctioning.
- Hydraulic oil pipes from forward mooring winches corroded.
- Provisions not properly showed and segregated, poor cleanness condition.
- Accommodation light wires not fastened.
- Lack of provisions, food etc. Many crew complained about the lack of food.
- Sanitary water rusted and dirty.
- Temperature thermometers unreadable in galley.
- Main switch board read panel not protected.
- Missing records for accommodation inspection under the authority of the master.
- Mess room light covers damaged.
- Crew and officer's laundry found dirty and with unsecured appliances.
- Galley sink tap found broken. A deck public toilet sinks found leaking onto floor from damaged plumbing.
- Galley found dirty under appliances.
- Fresh water tank filling pipes at port and stbd of aft mooring deck lockers found improperly secured.
- Extra domestic Fridge Freezers in Galley and on Bridge Wings not monitored for temperature.
- Various medicines in first aid box found expired.
- The medical store certificate expired.

- Crew cabins and toilets with lightning supports damaged (covers missing).
- In the hospital and engine control room was found expired medicines.
- platform not protected by rails.
- Accommodation ventilation system not working.
- Some mooring ropes poor condition.
- Medicines found in the medical dispensary / hospital not correctly stored with date expired medicines and new supplied medicines in loose boxes and not correctly stored.

#### **Pollution prevention**

- Oil filtering equipment not as required.
- Oily water separator 15 PPM sensor blocked.
- Excessive amount of oil and oily bilges found in bilge tank.
- Bilge wells were found almost full. To be properly transferred to bilge tanks and delivered to port facilities. Receipts to be submitted to PSC office before departure.
- Over flow boxes were not marked as required.
- Operations with oily water not stated on Oil Record Book.
- Records in ORB are not as per MEPC .1 (circ.736/Rev.2).
- SOPEP not fully completed.
- No evidence of the record manual collection of sludge 11.4 entries in the oil record book.
- Bilge and sludge quantities on board not in accordance with ship's residues declaration of the ship.
- The list of authorities or persons to be contacted in the event of an oil pollution incident is not updated.
- The list of national operational contact point is not updated.
- The oil record book is not properly filled. Master instructed to properly filled from now on.
- Entry date in oil record book not as per MARPOL guideline and master not signed in each completed pages for last 2 months.
- During inspection it was found that on ORB were recorded with wrong quantity of sludge discharged. Further, the quantity of bilge and sludge reported on the receipt are not correct.
- ORB is not filled in accordance with MEPC.1/Circ.736/Rev.2 instructions. Sulphur percentage content missing on bunker received readings. Master instructed accordingly.
- Several records in the oil record book do not show the correct naming of the tanks and stating in addition incorrect capacities.
- Sludge pump leaking oil.
- As per the IOPP certificate, Form A, the ship is provided with oil residues sludge tank for retention of oil residues onboard & dirty oil tank below the main deck. However, a portable dirty oil tank was found placed on the main deck
- The familiarization of SOPEP need to be up to date.
- Annex 2 for SOPEP needs to be updated.
- Evaporation by heating in two incinerator waste oil settling tanks to reduce the sludge volume not been stated in IOPP supplement R 3.2.3.
- Bunkering not been recorded in O.R.B as required.
- Maximum through put of oil filtering equipment and actual discharge qty not in line.
- Quantity of sludge recorded mistakenly many times in O.R.B.
- Bunker station cleanliness required.
- The oily water separator 15 PPM alarm defective.
- Water evaporated from incinerator setting tank recorded in ORB, however not mentioned under "Other acceptable means stated on item 3.2.3 of IOPP Cert.

- Oil mixture observed in machinery space bilge.
- Holding tank approved in ISPP certificate not marked on the drawings on board.
- Chemical tablets cartridge missing.
- STP tank top side found with hole and one copper pipe entering through. Ship's staff not aware of the purpose of connection
- Sewage treatment plant high level alarm could not be demonstrated.
- Operating procedure for sewage treatment plant not available.
- Sewage discharge connection corroded.
- E-waste information (onboard) missing in garbage management plan.
- Garbage kept open in the E/R boiler platform.
- Garbage record book not filled as required
- Garbage reception vessel's name not recorded in G.R.B when discharged garbage to another ship at anchorage.
- Garbage been discharged in China territorial waters 12 times.
- Garbage Management plan does not include on board handling specific information for category (e-waste).
- Garbage found lying on the main deck and not segregated.
- Some garbage drums found damaged (plastic, e-waste, operational waste), furthermore several empty cans found in engine room.
- In the garbage management, plan is not indicated the collective capacity of cook oil.
- No evidence found onboard of crew training records for garbage management plan.
- No storage capacity available for each category in garbage management plan.
- Garbage main storage area Covers of receptacles on open poop deck no ensuring tightness.
- Food waste found not stored in sealed air tight containers in safe and hygienic manner.
- Garbage Management plan require labels of receptacles but no any labels found on drums.
- Garbage on board is not classified properly.
- Sulphur content of F.O on board exceed 0.5% M/M-sulphur content sampled from M/E F. O. supply P/P boiler P/P was 2.36% & 2.37% by third party lab.
- Ballast water capacity recorded in BWMC and in BWMP not matching.
- Training record of Chief officer for BWMP not filled in.
- Ballast water not been exchanged for some period. Discharged violation in port many times.
- Different capacities of BW Tank in BWMP and BWM Certificate.
- The vessel is not complying with the D2- discharge standard, no BWMS installed on board.
- BW management plan vessel particulars not updated (ship name, flag, etc).
- Ballast from one port was discharged in another without proper exchange. Ship has D-1 system.
- Ballast water treatment new system requires improvement in handover for engineers on board ship.
- Some of ballast tanks level sensors air pipes supporting brackets found damaged by corrosion.
- Ballast Water Exchange not done in ballast voyages. Last exchange done long time ago. Master instructed to do it in the first opportunity and limit time two months.

# **Structural Condition**

- Vessel suffered collision at anchorage. Forecastle deck bow, side shell, FPT etc. got substantial damage. Repair to be carried out as per RO recommendation.
- Some bars for the stairs into ballast tank severally corroded.
- Both accommodation ladders in poor condition. At time of boarding a shore gangway is used. A portable ladder which is severally damaged is used on the railing to come down on the deck of the vessel.
- Decks walkways, gratings supports, stairs in dangerous corroded broken condition.

- No asbestos removal kit on board. Asbestos not marked. No flag state exemption was issued.
- Main deck (tanks top) corroded in several areas. Deck pipelines (steam, fuel, air) not properly maintained.
- Ship's hull forward stbd side rusty (ship name not readable due to rust round).
- Several area on main deck around accommodation and forecastle corroded due to rust.
- Main deck port and STBD front of accommodation are corroded.
- Wheelhouse door wing port side corroded and not closing properly.
- STBD anchor was not secured with a double lining.
- Winches corroded, needs some maintenance.
- Gangway main frame through corroded.
- No access is provided to close the funnel flaps.
- Winches & capstans / Forecastle winches safety pins missing.
- Corroded and rusty pipes around deck.
- Ventilation (working spaces) from cargo holds corroded through.
- Ventilation (working spaces) of ballast tank poor condition.
- Railing both sides found in poor condition- More maintenance is required.
- Bridge design layout and field of vision is not as per IMO MSC circular 982.
- The vessel was found with many containers used for structure. However, the structural drawings available onboard were found illegible to verify the authenticity.
- Bulkhead on the poop of the super structure on the main deck holed due to the rust and corrosion.
- There is some corrosion on the floor of corridors and on bridge deck.
- Main deck, fwd mooring deck, steam line and valves, manifolds, handrails found corroded in several areas.
- The ship has touched the berth during mooring operation.
- Deck bunker system valves Indicator position partly missing.
- Ship structure access removed. No evidence for approval by administrator.
- Ship electrical cables not secured properly, some of brackets damaged by corrosion.
- Many of securing clamps of pipes (Cargo, fire pipe) found heavily corroded (Renewal found in progress).
- Safety way to tanker BOW on cargo deck area found not arranged properly.
- Forecastle Water breaker plating found dented/corroded substantially.
- Numerous hatch cover rubber packing channel plating found damaged / rusted substantially in places.
- Observed some area on main deck corroded.
- Gangway marking of SWL plate found not complying with the requirements of MSC.1/CIRC.1331.
- Railings / gangway / walkway and means for safe passage / Stbd accommodation centre plate support / testing tripod found wasted substantially.
- Beams, frames & floor damaged.
- Water tight doors need some maintenance from rust.
- Lack of maintenance of ship frames. Frames corroded.
- Beams & frames corroded, lack of maintenance.
- Hull corroded. Need painting and maintenance.
- Hull corroded, lack of maintenance.
- Save all tray on aft main deck found corroded & missing drain plug.
- Decks corroded. Needs maintenance.
- Deck corroded Lack of maintenance due to run.
- The freeboard and load line marks are not painted correctly.
- Draft marks (fwd- mid- aft) stbd side not fully readable due to rust around.

- Rails for all hatch/hatch cover coaming corroded due to rust around.
- Hydraulic pipes of cargo hatchways corroded.
- Many gooseneck vents and ballast tank vent heads on deck found to be corroded and wasted.
- Load Lines and draught marks not clearly painted/visible.
- Plimsol mark not properly marked.
- Plimsoll mark and draft need to be marked.
- Hatch covers corroded, need some maintenance and paint.
- Hatch cover control box is in poor condition.
- Hatch coaming corroded lack of maintenance.
- Hatch covers rusty and corroded.
- Steel pipe on monkey island deck for radio antennas corroded through.
- AIS Antenna steel fixed pipe heavy corroded.
- Observed signs of water leakage and heavy corrosion in deck void spaces from deck scupper drains on both sides of the vessel.

# Working Conditions including Deck machinery

- Gangway guard net partly damaged.
- Accommodation net for gangway missing.
- Gangway railing need some maintenance.
- Light switches found damaged in engine workshop and in lobby from galley to provision stores. Light cover found damaged in engine workshop.
- Accommodation ladder starboard side with upper platform corroded.
- Two lights not operational in fore castle.
- The vessel is not found adequately illuminated at various locations as these locations were found dark.
- Chemical store safety gloves is missing.
- Oxygen and acetylene cylinders at aft mooring deck lockers found improperly secured.
- Insulation on steam pipes for sludge tank, partly damaged.
- FWD some mooring ropes deteriorated.
- One of stern mooring ropes poor condition with broken stands.
- There are no rat guards on mooring lines.
- Several external lights found inoperative.
- In both generator in engine room missing protection guard (near pulleys and bell) to prevent occupational accidents, injuries and diseases.
- Insufficient risk assessment for repairs and installations of new equipment (refit) due to missing IHM.
- During inspection some of them not use the appropriate PPE (helmets, safety shoes etc).
- Guard net of gangway fixed wrongly.
- Accommodation ladder, Lower platform not adjusted.
- Anchor chain on forecastle area found in very bad conditions of maintenance (heavily damaged).
- Forecastle area Mooring area (winches and capstans) The indication of snap back zones are missing.
- Accommodation ladder not arranged properly, safety net not arranged under all length of ladder, lower No PPE found in forecastle store near to stowed paints, chemicals etc.
- Gangway not having safe passage.
- PSCO observed degraded lagging on the steam inlet pipe on the Bunker Tank.

- Absence of maximum load readings, persons allowance and other safety measures established on the port embarkation gangway
- No current COSHH MSDS found in locations where paints and chemicals are stored.
- Port and stbd accommodation ladders variously have damaged/detached steps. All steps to be checked and fully repaired/attached to ladder side beams.
- Accommodation light wires not fastened.
- Port and STBD Accommodation ladders with variously damaged steps.
- Gangway net and side ropes not correctly rigged. One damaged stanchion.
- Pilot Ladder cannot be rigged in accordance to IMO guidelines at time of inspection. Not secured to Deck and passing over open section between weather deck and coaming catwalk.
- Many portions of furnishing of bridge, accommodation areas found to be broken and damaged.
- Found stores such as provision stores, LSA store, FFA store, deck store, engine room stores etc not properly secured and in untidy conditions (dirty).
- Passage in ECR platform, passage to emergency generator room and passage to liferafts on deck found blocked with big boxes of spares.
- Gangway without the protection net.
- Under one electrical switchboard in ER non-conducting mat is missing.
- Same lamp around accommodation inoperative.
- Engine room floor plates to be secured.
- Insufficient cleanliness in the engine room.
- Fluorescent tube light in the ship's hospital is not working.
- Some drums on deck are not secured.
- One pair of gloves in chemical store in the steering gear room is missing.
- The hand wash in sink in the engine room found extremely dirty.
- Ropes and wires/ mooring ropes in unproperly condition.
- Cleanliness around main deck & accommodation walk way poor.
- Some crew members were working without proper PPE.
- STBD anchor were not secured with a double lashing.
- Port anchor were not firmly secured to the ships hull.
- Poor hygiene and housekeeping in the machinery space.
- Fitness of Duty very poor crew into rest hours.
- Engine control room chairs broken.

# **Certificate & Documentation:**

- Name of company in C.S.R not corresponding with to DOC.
- One of the CSR is missing on board.
- CSR is with wrong entries.
- Continuous synopsis records needs to be updated.
- One of the original CSR not on board -photocopy only.
- Some CSR not found on board.
- In some CSR Form no. 3 not filled up.
- DOC not updated from company.
- IOPP supplement certificate mention as LO storage tank which is actually LO sludge tank.
- Cargo Ship Safety Equipment Cert FORM-E has incorrect entries.
- IOPP record issued by RO found without ink signature or digital signature.

- Record of equipment for cargo ship safety equipment (Form E) wrongly states that beside free fall life boat vessel is equipped with port side davit launched life boat.
- The vessel was found fitted with Helideck but the class notation has not been issued. It remains to be verified whether the helideck onboard is approved and surveyed at regular intervals.
- The class has issued the MODU safety certificate to the vessel however, the survey reports for the compliance of MODU requirements was not sighted.
- Condition evaluation report of last special survey carried out on February 2022 missing.
- The vessel was found having a standby support vessel "XXXXX" with invalid trading license.
- LSA and FSA plans found not approved by the flag or on behalf of the flag.
- The thickness measurement reports for the last renewal survey was not sighted onboard.
- Master instructed to not undertake navigation outside A1+ A2 areas according safety radio certificate from now on.
- Master instructed not to undertake navigation outside special areas as per MARPOL Annex I according IOPP certificate and exemption certificate from now on.
- Intermediate survey carried out beyond the established 12 months' time window
- Drill carried out on May 2022 are not recorded as work hours in the rest and work hour records.
- Loading/unloading/stowage information to enable master to arrange for the loading and ballasting of ship found only with RO approval (missing evidence that it's operated-on behalf of the administration).
- Retention capacity for sludge shown on IOPP Supplement- Form A and Oil Record Book are not the same-OWS 15 ppm calibration certificate missing.
- IBWM Certificate shows D-1 certification and as per IOPP Certificate survey date. Ship should already be complying with D-2 and at that time the IBW Convention was already in force.
- Ballast water performance Standard D-2 not met. IOPP Certificate issued based on a survey on XX.XX. XXXX when the Ballast Water Convention was already in force.
- SOC for MLC certificate was issued by the flag state administration, while that flag state administration has ratified the MLC convention.
- Chief mate was found in rest time dated XX.XX.XXXX at the time of abandon drill.
- Records of seafarers' daily hours of work/rest not matching with ship activity.
- There is no written procedure of verifying electronic certificates (ISPS).
- Flag state reported withdrawal of the certificate to the vessel for bad performances.
- Old copy of muster list found posted in the crew mess room.
- Records of five yearly load testing of rescue boat davit and various cranes not sighted.
- Date of departure not recorded in official record book for October 2020.
- Record of rest and workings hours log from November 2020 to February 2021 not found onboard.
- The form used to record hours of work and rest does not correctly recorded in weekly hours for crew joining mid-month, highlighting breaches.
- The vessel is equipped with eight-point mooring system but the wire certificates were not sighted. Hospital not shown in correct location in FS Plan.
- Bow chain stoppers five yearly test is not presented.
- Medical chest certificate issuance by flag approval authority could not be verified.
- Material safety data sheets found missing in engine room, in steering gear space.
- Life-saving appliances provided for 18 persons, according to Cargo Ship Safety Equipment Certificate, while 19 crew persons have been found on board.
- Certificate for personal transfer basket not sighted.
- 15 PPM bilge separator instruction manual missing.
- Working language not recorded in engine log book.

#### **Emergency Systems**

- Second means of access to emergency fire pump secured on inside -Not as required.
- Few emergency lights not working outside accommodation area.
- IMO signs green series not properly posted at muster station and in emergency fire pump room.
- Fire line isolation valves not closing.
- Emergency lighting for mustering and abandonment not tested during latest abandon ship drill.
- Emergency fire control plan is not updated.
- Explosion proof VHF for firefighting equipment missing.
- Emergency fire pump not been tested during latest fire drill.
- Several emergency lights on deck not working.
- During emergency steering test procedure was not followed.
- The muster list does not specify substitutes for key persons who may become disabled and does not specify which officers are assigned to ensure that lifesaving and fire appliances are maintained in good condition and are ready for immediate use.
- ECR EEBD air pressure low. Indicator in red mark. (Not as required).
- Emergency air compressor found to be defective and non operational.
- Portable emergency fire pump and fire hydrants were found leaking.
- Water ingress alarm system didn't work properly and not used as required.
- There is no record that the free fall life boat was launched, simulated launching and manoeuvred in the water.
- There are no railings in the wheelhouse deck around the muster station
- There are not enough compliment onboard to handle the emergency situations like fire-fighting, launching of life rafts, etc.
- Personal multi-gas detector inoperative 2 PSC.
- Minor leakages at some fire hydrant valves at the main deck observed during testing emergency fire pump.
- Emergency Escape Breathing Device EEBD no 9 at engine room found empty.
- Quick closing valves inoperative (control air to operate the valves is 4 bar).
- Several IMO symbols deteriorated (around outside accommodation).
- Emergency generator not possible to start due to depleted batteries.
- Emergency light for life raft, life boat station stbd/portside and emergency escape in engine room not working.
- Quick closing valve mechanism (wire & handle) for dual oil tank discharge valve for emergency not properly maintained.
- Emergency light port side of upper deck found inoperative.
- Emergency fire pump not developing sufficient pressure with two fire hoses in use.
- Many emergency lights on deck and accommodation found damaged and not working.
- Emergency Gen. quick fuel shutdown v/v not closing properly to stop the supply of fuel.
- Some emergency lights close to ST & PS lifeboats found inoperative.
- EG. fuel tank quick closing valve not properly working.
- Emergency fire pump failed to supply water with pressure (priming system not working properly).
- Emergency fire pump having leakages.
- STBD side forward life raft sea level light found inoperative.
- From the mooring bollards missing the SWL.
- Two Emergency lights on weather deck unlit.
- Emergency generator 440v insulation switch found not working.
- Emergency lighting in the vicinity of freefall, bridge and poop deck fireman outfit suits locker found inoperative.

- The secondary independent means of starting system for emergency diesel generator found not working in 15 minutes.
- The head set phone device is missing at Steering room.
- Emergency light on upper deck One lamp inoperative.
- One emergency fire pump found in bad condition and discharge pressure not adequate.
- Steering gear compass giving false reading.

# ISM

- The SMS as implemented does not ensure that the vessel can effectively respond to hazards and emergency situations as evident by deficiencies.
- Deficiencies are objective evidence that the safety management system as implemented on board does not ensure adequate maintenance of ship and equipment.
- Fire drill failed because crew cannot extinguish the fire in emergency generator room. Entrance Emergency doors are blocked by port generator. Crew did not operate quick closing valve.
- During fire drill lack of communication occurred air leakage on fireman breathing equipment and emergency generator fuel quick close valve was not closed remotely.
- The SMS implemented on board does not ensure the personnel involved have an adequate understanding of relevant environment policy as evidenced by deficiencies.
- Duty Engineer unable to demonstrate correct starting of the emergency generator.
- The muster list not specify which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use.
- Missing information regarding FFE & LSA responsible person for maintenance.
- There is no record that the free fall life boat was launched, simulated launching and manoeuvred in the water.
- The familiarization of cargo securing manual need to be up to date. (new master)
- Emergency muster list is not updated.
- Drill not carried within 24 hours when more than 25% of crew were changed.
- Several crew members are not familiar to operate hooks of davit launch rescue boat and life raft.
- As per the exemption letter, the vessel is required to have life rafts for 600 persons on each side whereas the life rafts for only 450 persons are provided on each side.
- There is no proof that rescue boat was manoeuvred in water in last 3 months.
- Vessel's lifeboat capacity is 22 persons, however vessel found with 23 crew onboard (Insufficient capacity)
- During fire drill in emergency generator crew did not follow the procedure (quick closing valve was not closed).
- Some crew members indicated in the muster list to lower the rescue boat did not know their duties. During rescue boat drill, crew failed to demonstrate their duties.
- Muster list found without assigned persons for :1) closing of the watertight doors, fire doors, valves, scuppers, side scuttles, skylights, potholes and other similar openings in the ship; 2) assigned persons for launching life rafts. 3) All crew member with assigned emergency duties in fire drill, failed to demonstrate that they are familiar with their duties.
- Several non-conformities were discovered: Master left the bridge and participated directly during fire attack, Chief Engineer left the engine room and participated directly during fire attack, the people indicated in the muster list with duties did not participate, the crew did not used safety gloves during drill and touched the door without gloves, Chief Mate on scene (commander) did not communicate to the bridge by VHF, the fireman wore the outfit incorrectly. This showed lack of training & lack of command.

- Fire drill failed: 1) assigned person didn't close quick closing valve in em'cy DG room (drill's scenario); 2) assigned person didn't close ventilation/insulation of the local; 3) master present on scenario to coordinate the drill (not in accordance with muster list); 4) lack of communication (not in working language) between FF attack team and other crewmembers such as to generate excessive confusion and failure of the drill.
- During fire drill crew demonstrate lack of training.
- Fire drill to be improved. Not all FF members wear breathing apparatus in the correct way. Communication between FF team and C/O unclear regarding an injured person.
- Abandon ship drill showed lack of knowledge of all crew. Mustering of crew not carried out (and consequently all the equipment necessary for abandon ship were not taken from assigned person). Crew went directly to lifeboat (PS) for lowering operations.
- All crew member with assigned emergency duties in case of abandon ship didn't demonstrate satisfactory operation indicating that they are familiar with their duties. The Master left the bridge to abandon the ship and directly try to launch the life raft, the crew indicated in the muster list were not involved to operate the equipment during drill. The Master, Chief Engineer and Chief Mate have been the only crew to launch the life rafts. Nobody carried the Radar transponders and EPIRB to the muster station during the abandon ship. This showed lack of control, lack of communication & lack of training.
- Abandon ship drill showed lack of knowledge of all crewmembers, Mustering of crew not carried out (and consequently all the equipment necessary for abandon ship were not taken by assigned persons). Crew went directly to lifeboat (PS) for lowering operations not in accordance with muster list.
- Copious oil leakage from one DG. This deficiency shows a non-effective implementation of the ISM code.
- Training drill for M.O.B with launching and manoeuvring rescue boat into water not corresponds to reality, Vessel was underway full speed.
- Cargo holds smoke detection system Crew familiarization incomplete.
- Fire drill was conducted in the galley. Lack of training of the crew regarding the use of SCBA. No reporting from scene commander to Master at the bridge. Training as to be done as soon as possible to improve quality of fire drill, especially wearing of SCBA.
- Deficiencies marked ISM are objective evidence of a failure, or lack of effectiveness, of the implementation of the ISM Code The ship will be eligible for reinspection after 3 months from the final date of the report.
- Corrective action taken on the ISM system by the Company is required within 3 months. Safety
  management audit by the administration is required before departure of the ship. Deficiencies marked
  ISM are objective evidence of a serious failure or lack of effectiveness of implementation of the ISM
  code.
- Person in-charge of the survival crafts have not been defined.
- The ship staff were found not familiarized with the procedures for lowering the rescue boat and they could not demonstrate the rescue boat lowering operation.
- Safety management audit by the Administration is required before departure of the ship. Deficiencies marked ISM are objective evidence of a serious failure, or lack of effectiveness of implementation of the ISM code.
- The International Sewage Pollution Prevention Certification found on board provides that the ship is certified to carry 18 persons only, while 19 crew members found on board.
- Crew unable to demonstrate correct operation with bilge water transfer operation system.
- Additional internal audit by company required as deficiencies marked under ISM are objective evidence of a serious failure or lack of effectiveness of implementation of the ISM Code.
- Observed that ISM-PMS are not implemented as required.

- Not all crew was familiarized with garbage management plan. Missing indication of garbage station in main deck
- Established shipboard procedure not followed in monthly safety meeting, monthly SMS review.
- Abandon Ship Drill, Fire Drill and Security Drill carried out during Cargo Operations while in Port.
- Contingency manual found not included with contact details of DGCOMM centre, MRCC.
- Minimum spares required not maintained as established by the company.

# Water/Weather tight conditions

- Number of hatch cover wheel found wasted.
- Skylight hatch cover for ER, not closing. Other hatch covers on deck severally corroded. Some hatch covers cleats not closing or stuck.
- Closing devices/ water-weight doors/ speed log damaged.
- Bilge Tank sounding pipe self-closing devices not properly working.
- All hatch covers secured in open position by chains and not by stoppers.
- Aft part starboard side (fresh water tank) bent and holed above waterline line.
- Hull in forward found with 2 holes above waterline line.
- Several closing devices for WBT manhole covers at port and starboard side on deck missing.
- Watertight doors not as required.
- Bolts missing on all six manhole covers on the main deck.
- Entrance doors and entrance to hatch do not close watertight.
- Minor oil leakages from hatch covers pistons fwd cargo hold no. 4.
- Some rubber cleats for hatch covers STBD damaged.
- Sounding pipe during inspection was open.
- Access to accommodation in starboard side holed.
- All scuppers in open position.
- Multiple hatch cover steel drain line non return valves found missing.
- Cargo hatch hydraulic piping found corroded.
- Few doors on main deck found not able to close weathertight.
- AFT Stbd store door cannot be closed.
- Hatch covers open/close chain tunnel corroded through.
- Watertight door rubber needs to be replaced.
- Ventilators & air pipes corroded.
- Ventilators rusted.
- One fire flap rubber packing were painted and one emergency exit found with no rubber packing.

# **Radio Communications**

- Earthing arrangements from the MF/HF antenna installation defective.
- NAVTEX messages not received for few months because device was switched off.
- One of battery of VHF 2 needs to be charged.
- VHF IMO symbol is missing.
- MF Weekly DSC test to shore stations No evidence of Acknowledgement.
- Annual test of manual EPIRB contains wrong information about HRU expiry date.
- MF/HF equipment was not working properly.
- Shore based maintenance contract could not be verified for flag approvals.
- SVDR unit box foundation base & VHF antenna base in monkey-island found to be broken and damaged.
- During inspection emergency source of electrical power was found in-operative.
- There is no records to the satisfaction of the Administration and as required by the Radio Regulations that monthly inspections have been carried out on GMDSS equipment.

- All officers unable to demonstrate GMDSS Operation from AC to DC mode.
- NAVTEX not correctly printing the marine safety information/not readable.
- NAVTEX information from last voyage partly missing.
- NAVTEX printer head not adjusted.
- Emergency batteries for GMDSS equipment in bad condition.
- IAMSAR volume #3 old edition (2019).
- GMDSS log book- section A, B, D are not completed as required.
- Distress, urgency and safety traffic not stated on Radio log book.
- Capacity test of GMDSS battery not done as per regulation.

# **Certificate & Documentation - Crew Certificates**

- Missing application for endorsement by Flag State.
- One of the rating not scheduled to disembark in port even after being 11 months on board.
- Flag endorsement for second engineer expired.
- SEA for CH. Cook signed for 12 months. Not signed by seafarer.
- One Officer found with expired certificate.
- Electrical officer doesn't have certificate of competence.
- SEA's of 2 officers 2 oilers & 2 engineers not properly filled in.
- One watch keeping engine Certificate of Proficiency missing.
- SEA for one raring found expired during inspection.
- All STCW certificates found expired for ETO.
- Original flag endorsement of some crew is not available on board.
- GOC Oil tanker training flag endorsement certificates are not available on board.
- One engineer's flag endorsement not available on board.
- Masters flag endorsement for GMDSS is missing.

#### ISPS

- Total 6 crews (more than 25% of the ship's personnel) have been changed but Ship security drill not been conducted within one week of the change.
- Several accesses to restricted areas found not sealed as required.
- SSAS testing procedures unsafely located close to the SSAS button.
- Vessel operating under ISPS level 2 and found many restricted doors kept unlocked (not as required).
- The pilot ladder found unrolled in the water. Master instructed to hold a security briefing with the crew involved immediately.
- During boarding the vessel observed that ID cards not checked for visitors.
- Access control to ship not as required: No visitors' badge was given to PSCOs. Further, pilot ladder left lowered at sea unattended.
- Several accesses to the restricted area found open.
- During the inspection, main access on board was not guarded.
- Insufficient security on entrance, no visitor's cards& visitors Id cards not checked.
- Access control to ship The vessel is not equipped with safe access.
- No one of the crew asked the PSCO to register in the visitors log book or ask the ID.
- Inspector was not asked to show ID while boarding.
- There is no proof that ISPS exercise was performed in last 18 months.

#### Cargo operations including equipment

- Cargo ballast Gas detect system defective.
- Cargo hose handling crane slewing limit switch defective.
- Cargo hatches Position of gas sampling points incorrectly marked.
- Oxygen sensor is malfunctioning and showing alarm.
- Atmosphere testing instrument sensor without readings from LEL sensor.
- The ship is loaded with whole fafa beans in bulk. The beans fall within the grain code. Grain bulkheads are to be placed. Grain bulkheads have not been placed and there are large free surfaces found.
- No evidence found onboard of periodical inspection of cargo securing devices.
- Cargo securing manual results approved by previous RO instead of current RO.
- A suitable means for the calibration of the atmosphere testing instrument not found on board.

# Alarms

- Boiler water salinity indicator defective.
- Machinery control alarm unit cabinet reflector lights and sound in E/R workshop not as required.
- ER alarm system found with insulation alarm displayed.
- Stern general alarm bells out of order.
- Fire alarm control panel showing fault alarm.
- Bilge alarm sensors removed and sent for repair to be installed.