Report

of the

Central Technical Team

Constituted by

Ministry of Environment & Forests

On the inspection of

Ship “Platinum-II”

Anchored at

Bhavnagar Anchorage Point

23 October, 2009
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1. In the context of a complaint filed by Shri Gopal Krishna of Indian Platform on Ship Breaking and Media Reports on allowing anchoring of an alleged ship containing toxic and radioactive material at Alang Gujarat for breaking, Ministry of Environment & Forests, Government of India, New Delhi constituted a Central Team vide Office Memorandum No. 29-3/2009-HSMD, dated 16.10.2009 (Annex I) comprising Technical Officials from Ministry of Steel, Central Pollution Control Board (CPCB) and Atomic Energy & Regulatory Board (AERB) to conduct a joint inspection and submit its inspection report of the Ship ‘Platinum-II’ anchored at Bhavnagar Anchorage Point.

2. The term of reference of the Team are as follows:

a) The team shall look into various issues raised by Mr. Gopal Krishna in his emails addressed to MoEF, including the issue raised by him that the ship is a warship.

b) The team shall make the qualitative and quantitative assessment of all the hazardous materials/wastes contained in the ship, including Polychlorinated Biphenyls (PCBs), Asbestos and Radioactive substances.

c) The team shall submit its report to MoEF by 23.10.2009.

3. The Central Team that carried out the physical inspection in pursuance of the aforesaid Office Memorandum comprised of the following Officials from the aforesaid three organizations:

i) Shri A.C.R. Das, Industrial Adviser, Ministry of Steel, New Delhi

ii) Shri B. R. Naidu, Zonal Officer, West Zone Office, CPCB, Vadodara

iii) Shri P. D. Bharne, Environmental Engineer, West Zone Office, CPCB, Vadodara

iv) Shri S. A. Hussain, Head-Radiological Safety Division, AERB, Niyamak Bhavan, Anushaktinagar, Mumbai

v) Shri R. K Singh, Scientific Officer, Radiological Safety Division, AERB, Niyamak Bhavan, Anushaktinagar, Mumbai.

4. The logistic supports for the said inspection were arranged by Gujarat Pollution Control Board (GPCB) in co-operation with Gujarat Maritime Board (GMB). Officials of GPCB (Shri N.M.Dabhani, Env Engineer, GPCB, Gandhinagar, Shri G.V.Patel, Regional Officer, GPCB, Bhavnagar, Other Officials of GPCB and Shri Atul Sharma, EE (Env ), GMB, Gandhinagar and Shri M. M. Parmar, Radiological Safety Officer, GMB, Alang also accompanied the team.

5. In pursuance of the aforesaid OM to conduct the inspection on 19.10.2009, the team comprising aforesaid officials attempted to visit the Ship ‘Platinum-II’ on 19.10.2009 afternoon. The sailing was carried out in Tug “Jay Somnath” provided by GMB. However, because of very adverse tidal condition, it was realized after going halfway that the team...
could have not reached the Ship before Dusk when inspection would have been difficult. Therefore, the team returned from halfway and it visited the Ship the next day i.e on 20.10.2009 using the aforesaid Tug. The sailing on 20.10.09 started early morning at around 5 am from Ghogha Port near Bhavnagar and returned at the port at around 6 pm.

6. The Team had two rounds of discussions with officials of GPCB and GMB on 19.10.2009 and 20.10.2009 and collected relevant documents from GPCB in connection with terms of reference of the aforesaid OM. GMB, on the other hand insisted for a written request for the documents which was submitted to them by Shri A C R Das through GPCB. However, they failed to submit the documents at Bhavnagar and subsequently, the documents were sent by fax to Shri Das on 22.10 2009.

7. The Team had the benefit of the Report of the Committee of Technical Experts on Ship Breaking Activities and the Order dated 6 September, 2007 of Honorable Supreme Court of India in connection with Writ Petition No 657 of 1995 which have been quoted by the said complainant in his complaint mentioned above. The Team also kept in view the Inspection Reports of GPCB dated 8.10.2008 (Annex: II) and 10.10.2009 (Annex: III).

8. All the above inputs have been taken into consideration by the Team while finalizing the inspection report.

9. The report is submitted for the consideration of Ministry of Environment & Forest (MoEF). The Team is greatly honoured by the confidence placed in it by MoEF and has made every possible effort to fulfill the task assigned to it.

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ACKNOWLEDGEMENTS

1. The Team acknowledges the painstaking efforts and support provided by the officials of GPCB. The support provided by GMB in making arrangements and providing logistic support for the visit of the Team to Ship “Platinum-II” is also acknowledged.

2. The Team would like to specifically acknowledge the help and support extended by following officials of GPCB and GMB in successfully organizing the physical inspection of the ship Platinum-II even on the gazetted holidays:

   i) Shri N.M. Dabhani, Environment Engineer, GPCB, Gandhinagar,
   ii) Shri G.V. Patel, Regional Officer, GPCB, Bhavnagar,
   iii) Shri J M Mahida, DEE, GPCB, Gandhinagar
   iv) Shri D L Bhatt, EE, Bhavnagar, Bhavnagar
   v) Shri K N Vaghamshi, DEE, GPCB, Bhavnagar
   vi) Shri B R Kumdalia, SSA, GPCB, Bhavnagar
   vii) Shri M J Makwana, JSA, GPCH, Bhavnagar
   viii) Shri Atul Sharma, EE (Env.), GMB, Gandhinagar
   ix) Shri M. M. Parmar, Radiological Safety Officer, GMB, Alang.

3. The Team also places on record its appreciation of the cooperation by the Captain of Tug- Barracuda-I for giving permission and organizing the inspection on board Platinum-II with the help of manpower deputed by him.

3. Last but not the least, the Team extends its thanks and gratitude to the Captain /master of Tug Jay Somnath of GMB for taking the Team and other members to the Ship and bringing them back safely. The painstaking efforts of the Masters of the Tug to facilitate safe climbing and safe descending of the Team Members even in adverse tidal conditions was praiseworthy and is greatly appreciated.

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INTRODUCTION

1. A ship is a vessel operating under its own power or otherwise in the marine environment. Depending upon its intended end use, ships are categorized as Bulk Carriers, Tankers, Passenger Ships, Cargo ships, War ships, Factory ships etc. Old ships/vessels, after they have exhausted their useful life are dismantled into their constituents at a beach/dry dock for their scraping and/or disposal for industrial or other use, viz. Steel Melting Scrap, Re-rollable scrap, and the process is commonly called Ship Breaking Process. India is one of the important players in ship breaking and Alang- Sosiya Ship Breaking yard Gulf of Cambay near Bhavnagar in Gujarat is one of the largest ship breaking yards in the world.

2. Ship breaking is considered as one of the hazardous activities mainly because of the nature of the activity which includes working at considerable height and in inter-tidal area, contractual nature of the work carried out by casual labourers having no pre-placement training and handling of hazardous waste materials like Asbestos, Poly-, presence of inflammable oils & other liquids, toxic gases & vapours, risk of fire/explosion etc. Therefore, utmost care and concern is needed in the process of ship breaking to avoid loss of life and property. Keeping these and other consideration in view, the said Committee of Technical Experts have has defined/classified Ships of Special Concern, which call for special care for dismantling, disposal and recycling. Ships which have been categorized as ships of special concern include Warships, Large Passenger Vessel, Nuclear Powered Ships, Deep draft ships, IMDG vessels with hazardous residues in tank and Floating Production Services and Offshore Platforms. Accordingly, the said Committee and Hon'ble Supreme Court have prescribed Recommended Process for each activities viz. Anchoring, Beaching, Dismantling, Disposal and Recycling which inter-alia include submission of specified documents by the recyclers to the authorities. For example, the recommended process for anchoring requires submission of the following documents:

   a) Name of the ship
   b) IMO Identification No.
   c) Flag
   d) Call Sign
   e) Name of the Ship and his nationality
   f) List of the crew
   g) GRT/NRT/LDT of the ship with supporting documents
   h) Assessment of hazardous wastes/hazardous substances: In the structure of the ship, and on board as far as practicable by reference to the ship’s drawings, technical specifications, ship’s stores, manifest, in consultation with the ship builder; equipment manufacturers and others as appropriate. In the case of ships of special concern, in addition to identification and making all areas containing hazardous wastes/hazardous substances, quantification of such wastes/substances would also be
necessary.

3. Some of the wastes which require essential infrastructure and precautions, and of which the Industry, Society and the Government are concerned are Asbestos and Asbestos Containing Materials (ACMs), Poly Chlorinated By-phenyls (PCBs), Radioactive Radiation and other hazardous Residues in cargo tanks. The problems/concerns further aggravate in case of Large Vessels and accordingly the said Committee of Experts and Hon'ble Supreme Court have prescribed special procedure and Norms in respect of Large Passenger Vessels. However, it appears that the clear benchmark/definition of Large Vessels has not been provided which at time is misused in the process of according various clearances.

4. The said Committee of Experts and the Hon’ble Supreme Court of India have therefore, earmarked specific Guidelines and Norms to be followed for allowing Anchoring and Beaching permissions by the concerned State Maritime Board and also for dismantling and recycling waste.

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CHAPTER-I

Brief description and Location of the Ship “Platinum-II

1.0 General Description of the ship:

A Brief about the Ship ‘Platinum-II’ (as per GPCB Inspection Reports and other documents submitted by GPCB and GMB are given below:

- Name of the Ship: D. V. Platinum-II – Towed by Tug – Barracuda-I from Dubai (the abbreviation D.V stands for Dead Vessel).
- Name of the Tug that towed Platinum-II: Barracuda-I (IMO No. 6717019)
- Name of the Master of Tug/Nationality: Capt Arun Kumar Das, Indian
- Type of Ship: Passenger
- IMO NO of Platinum-II: 5160180
- GRT/NRT/LDT of the Ship: 26,658 MT/11,352 MT/18,503 MT
- Arrival from Last Port: Dubai (UAE)
- Name of the Shipping Agent: M/s Compass Shipping Agency, Bhavnagar


2.0 Basic Structure of the ship

The ship has nine decks as indicated in the schematic drawing (Annex: V-A) details of which are highlighted below:

01 Deck no 9: – bridge room having 6 VIP rooms with emergency DG sets, blower room and battery room (124 batteries)
02 Deck No 8: - boat deck having 22 rooms
03 Deck No 7: - Sun deck having 45 rooms, bar and swimming pool
04 Deck No 6: - Kama’ina deck having 38 rooms, Kama’ina lounge, Hoihoi show place, constitution lounge etc
05 Deck No 5: - Ohana deck having 93 rooms, Ohana buffet, Ohana lounge and swimming pool
06 Deck No.4: - Aloha Deck having 99 rooms, saloon, gift shop, dispensary,
Show excursion lobby etc.
07 Deck No.3:- Maui Deck having 58 rooms, conference center, fitness & massage centre, dining room, Gallery
08 Deck No.2: Hawai Deck having 62 cabins for crew members only
09 Deck NO.1: Kauai Deck having 40 cabins, Theatre and passenger lounge

Besides there are Engine Rooms, Oil Tanks, Ballast Tanks, Bilge Water Tanks etc. The rooms (463) are of different sizes and having single bed to four bed occupancy.

3.0. Position of the Ship:

As per the information available with documentary evidence provided by GPCB, it was noted by the team that the Ship was originally located at Anchorage Point at Bhavnagar on 10.10.2009 (second visit by GPCB) at Latitude 21° 20.165’ N and Longitude 72° 15.880’ E. However, it is understood from the Officials of the GMB that subsequently the ship was towed away from Alang Port limit, and at the time of inspection on 20.10.2009 (at 9.15 am) the position of the Ship was 21° 07’ 33” N Latitude and 72° 10’ 34” E Longitude. This location as per the Master of Tug Jay Somnath was about 42 Nautical Mile (NM) from Ghogha Port, about 6 NM from Gopinath Temple and about 15 NM from Alang Ship Breaking Yard.

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CHAPTER-II
Allegations made by the complainant and Findings of the Team

1.0 According to the Terms of Reference (i), the Team was required to look into various issues raised by the Complainant in his e-mails/letters addressed to MoEF which inter-alia includes:

a) Questioning the anchorage permission given by GMB, the complainant has stated that besides violation of the Orders of US Environmental Protection Agency on Toxic Substances Control Act, the ship Platinum-II (formerly SS Oceanic, SS Independence) has violated Indian Supreme Court Order dated 14th October, 2003 and 6th September, 2007. Creation of a new dummy entity called Platinum Investment Services Corporation based Liberia by Shri Anil Sharma to sell the ship to Shri Komal Sharma, brother of Shri Anil Sharma is a stage managed act to avoid punitive legal action by USEPA and Indian Authorities.

b) The ship under question being a Warship is a Special Category ship (and not of General Category). Therefore, as per Supreme Court Order, quantification of hazardous waste and hazardous substances such as ACMs, asbestos dust and fibre, PCB containing materials etc. should have been done and documents submitted well in advance of arrival of ship for desk review before according anchoring permission. Attaching an independent waste assessment report of the ship and categorizing it to be Toxic Ship, the complainant has raised following questions:

i) Whether quantification of the hazardous waste was submitted for desk review. Whether documents were submitted well in advance or it has been simultaneously submitted when the vessel reached at Bhavnagar and whether GMB and other agencies have verified the records. If these procedures were not complied with, on what basis GMB and others accorded anchorage permission and which agency is responsible for contempt of the court?

ii) After the issue of the Supreme Court Order, whether MoEF/CPCB has carried out review/monitor if the concerned agencies are implementing the supreme court order and how to ascertain if such irregularities exist at Alang port

iii) Whether CPCB has ever monitored asbestos fibre concentration in ambient air after the issue of the Order

iv) whether recommendations of the Committee of Technical Experts has been implemented and whether any review has been done by MoEF/CPCB.

c) US Government must be asked to take action to have the ship returned to a US port even though; USEPA stated to have said that they lacked authority to have the ship recalled.

2.0 In connection with the aforesaid complaints, the Team besides physical inspection of the ship under question examined all the relevant documents and had detailed discussions with the officials of GPCB and GMB and the findings are given below:

i) As regards illegal ownership of the ship, creation of dummy entity, illegal
movement of the ship and disputes with USEPA etc, the team could not get any valid documentary evidence to establish the allegations /remarks made by the complainant.

ii) However, it is submitted that the Ship does not have any national flag though USA flag was found painted on Chimney. The ship is of 1951 make and as per Lloyds Register (Annex: VI); its original name was Independence as registered in USA. The name has been undergone changes thereafter and its present name is Platinum-II as registered in Republic of Kiribati in September, 2009 in the name of M/s Platinum Investment Services Corporation at 80, Broad Street, Monrovia, Liberia.

iii) On boarding the vessel and after inspection, it was observed that the ship has nine decks as mentioned in Chapter 1. From the very structure, design and content of the ship, it may be concluded that the ship is Passenger Ship having more than 1000 passenger occupancy) with all the amenities. As such the Team could not find any evidence to establish that it is a Warship.

iv) It is also pertinent to mention that it is a dead vessel. In the absence of self power and even generator, the team found it extremely difficult and risky to climb (40 feet by pilot ladder) into the ship and also to carry out the inspection inside the ship which was ultimately carried out with external torch lights.

v) As regards the allegation on submission of documents etc as highlighted at para (b)(i) above, the team went through the documents provided by GPCB and noted that:

   a) GPCB and others received an Application on 3.10.2009 (Annex- VII) for Desk Review (with Estimated Time of Arrival (ETA) letter from GMB (Annex-VIII)) from agent M/s Compass Shipping Agency, Bhavnagar (Annex-IX)on behalf of ship owner M/s Platinum Investment Services Corporation at 80, Broad Street, Monrovia, Liberia on 03.10.2009

   b) On receipt of a letter dated 05.10.2009 (Annex- X) from GMB categorizing the Ship as ‘General Concern Type of Ship’, (i.e. not a ship of special concern), GPCB recommended on 06.10.2009(Annex: XI) anchoring permission. Following the above, GMB accorded anchoring permission on 06.10.2009.

   c) As per procedure laid down by the Hon’ble Supreme Court, following the anchorage permission, an Inspection for physical verification of the Ship- Platinum-II was carried out on 8.10.2009 by the Officials from GPCB, Regional Office, Department of Customs, Representative of Explosive Department, AERB certified RSO from GMB. Subsequently, another inspection was carried out on
10.10.2009 by Officials from GPCB, Head Office, Gandhinagar & Regional Office, Bhavnagar, Department of Customs and AERB certified RSO from GMB.

d) From the above, it may be noted that the Agent on behalf of ship owner had submitted the aforesaid documents in advance i.e. on 03.10.2009. It is also noted that GPCB had a desk review before recommending for anchoring permission to GMB.

e) The Ship Owner had submitted quantification of hazardous waste materials through assessment report by Futurenet Group Inc, USA, January 2008 (Annex: XII) in respect of Asbestos Containing Material (ACM) wherein the quantity was stated at 147.3 metric tons. Along with Application for desk review, information on insulating material, Ballast water, Bilge water, No of Lead Acid Batteries, Oils (including Used Oil/Waste Oil), Probable location of presence of Radioactive Materials, gases etc. However, no quantification was submitted in respect of Radioactive Materials, Poly Chlorinated Biphenols (PCBs).

f) During the on board verification on 08.10.2009, Master of Tug-‘Barracuda-I’ gave information in specified format (Form-I) of AERB on Radioactive material (Annex: XIII). According to this Form-I, there were 653 smoke detectors containing radioactive material with total activity of 1044.8 micro Ci. Further, RSO, GMB verified correctness of information and submitted Inspection Report vide Form-II (Annex: XIV).

g) It was given to understand from GPCB/GMB that they did not require quantification of hazardous waste in respect of this Ship after having categorized it as ship of ‘general concern’ at the desk review stage.

h) From the details and documents subsequently and independently submitted by GMB (Annex: XV), some of the aforesaid facts have been verified. From these documents, it is also confirmed/reconfirmed that:

- Last port clearance was issued on 13.09.2009 at 12.30 hrs by Hamriah Port in Dubai, UAE (Annex: XV-A).
- The Agent (M/s Compass Shipping Agency) had submitted documents for desk review to GMB on 3rd October, 2009 (Annex-XV-B).
- Permission letter for anchoring was issued by GMB vide their letter No.GMB/PO/ALANG/TRAFFIC/3079 dated 6th October, 2009 (Annex; XV-C). It is further noted that the TUG BARRACUDA-I along with (Towing) D/V PLATINUM-II arrived on 7.10.2009 at 05.00 hrs.

i) As regards issues raised by the complainant on review/monitor by
MoEF/CPCB of implementation of Supreme Court Order (para (b)(ii)) and implementation of recommendations of the Committee (para b(iv)), the Central Team is of the opinion that MoEF/CPCB would be most appropriate agencies to give the reply.

j) On the issue of monitoring of asbestos concentration as highlighted vide para (b)(iii) above, it is submitted that GPCB, through Gujarat Environment Management Institute (GEMI), regularly monitored Ambient Air Quality at two locations in Alang-Sosiya Ship Breaking Yard. The monitoring carried out for the parameters- SPM, RSPM, SO₂, NOx, Cl₂, H₂S, NH₃ CO & HC with frequency twice in week and VOC, Heavy Metals with frequency once in month. However, no asbestos fibre concentration has been monitored so far.

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CHAPTER-III

Qualitative & quantitative assessment of hazardous materials/waste

1.0 As per Terms of Reference No. ii, the Team is required to assess the hazardous waste items. Accordingly, the Team made an effort to assess the quality/quantity of the waste materials based on various documents submitted by GPCB and other concerned agencies mentioned above. Some associated details have been highlighted in chapter –I above of this report. It is submitted that inbuilt Hazardous waste in the structure of the Ship or any such old ships of 1950s, are Asbestos Containing Material (ACM-in various form like insulating material, wall plate, ceiling, floor tiles etc)) and Material containing PCBs (like paints, cables, etc.). Item-wise details are provided hereunder:

Asbestos Containing Material (ACM)

- As per documents (submitted along with Application) by M/s Futurenet Group, the quantity of ACM is 147.3 MT (Refers Annex: XII).
- As per GPCB, the estimated quantity of ACM is more than 200 MT.
- During the inspection, Central Team made an assessment of ACM as per which the quantity is approximately 238 MT (Annex:XVI).

Poly Chlorinated Bi-phenyles (PCBs)

- As per GPCB report, the quantity of PCB containing materials is 20 MT.
- However, Central Team could not assess the quantity of PCB containing material, as no details of drawings are available with the ship to know the length and thickness of the cables etc. and having mostly concealed wiring.

It is worth mentioning that none of the aforesaid hazardous waste were found in the Ship on board in loose form or as a cargo by the Central Team.

It is to be noted that because of structure/type & nature of ACM/PCBs in the Ship Platinum-II or for that matter in any other Ship, it is a difficult task to exactly estimate the quantities of ACM, PCBs containing materials. However, it is worthwhile to mention that ACM and material containing PCBs in this ship must be lesser in quantity compared to that in earlier dismantled Ship ‘Blue Lady’, another passenger Ship, as that was much bigger than the Platinum-II.

It was given to understand that ACM, PCBs and other hazardous wastes are to be disposed of as per procedures laid down by the Committee of Technical Experts/Hon'ble Supreme Court of India.

Used Lead Batteries
126 nos. Used Lead Acid Batteries which were used in the Ship were by the Team found during the inspection.

**Radioactive Material**

- During the inspection of Central Team, no radioactive material except in Smoke Detectors and few Exist Sign Boards (with very small amount of radioactive material) were found.
- As per established procedure, these radioactive materials will be disposed of at authorized radioactive waste management facility (BARC, Trombay).

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CHAPTER-IV
Conclusions and Recommendations

The Central Team having physically inspected the ship "Platinum-II" and upon examination of all available /relevant documents and after having detailed due diligence, concludes that:
1. The Platinum II is a passenger ship with all the amenities and not a warship as alleged.
2. Though it was a ship of USA origin it got last registered at Republic of Kiribati in September 2009 and last port was Dubai.
3. Allegations on issues related to USEPA is not known and must have been verified as per normal procedure followed for such purposes at the Republic of Kiribati before registration in the name of M/s Platinum Investment Services Corporation.
4. The importer of the ship through his agent had submitted the required papers including ACM assessment report to GPCB as well as GMB on 3rd October and anchoring was permitted only on 7th October 2009.
5. After anchoring the ship was inspected by GPCB / GMB / Customs as required.
6. All hazardous waste like ACM and PCB, and radioactive material were found to be present in the ship in its structure as is prevalent in any ship of this type and size of 1950s and No hazardous waste were found in the ship in loose form or as a cargo.
7. The team could make an assessment of the ACM but found it difficult to quantitatively assess quantity of PCBs.
8. The Platinum II is much smaller vessel when compared with earlier dismantled Blue Lady ship at Alang wherein the quantities of hazardous wastes were proportionately higher.
9. Sailing in the high sea on/around the Amavashya day is too risky. Further, there is lack of safety precautions while boarding the tug to ship and vice-versa where there may be risk of human lives while undertaking such boarding in such locations and sailing through such routes. GMB had warned the team of various risks and had taken undertaking for all for any eventualities. The Team actually faced great difficulties in carrying out the inspection, particularly such dead vessel that to much inside sea far away from anchorage point. The problems are further aggravated when the ships are too big/high and the inspection team consists of untrained experts not conversant with climbing the top of the ship in monkey ladder.
Keeping the above conclusions in view and difficulties faced in carrying out the inspection and also in assessing exact quantities, the Team recommends that:

1. The category “Larger” passenger ship requires to be qualified in terms of either dimension or capacity or GRT, NRT etc. to avoid any scope for confusion on “general concern” or “special concern” ship.

2. Similarly, the ship owner or his agent should submit the required documents in advance to GPCB / GMB / Customs before arrival of the ship. However, the word advance may be qualified in terms of days or weeks.

3. As it is difficult to assess or estimate the ACM / PCBs etc. on board, especially for dead ships, GPCB and GMB or other similar State Agencies may quantify the same at the time of dismantle and maintain a stock so that real data base can be generated to develop an empirical factor with the size of the deck / ship or number of rooms etc.

4. MoEF may constitute a standing monitoring committee on ship breaking, if not done already, to monitor/review the implementation of Recommendations of the Technical Expert Committee on at-least half-yearly basis.

5. Trained experts viz. from Navy etc may be deputed for such inspection and or helicopter may be provided to inspectors, if at all, dead vessels are to be allowed. Secondly, any inspector deputed for high sea inspection including those from SMB, SPCB, Customs etc may be provided with proper safety and also extra insurance cover.

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