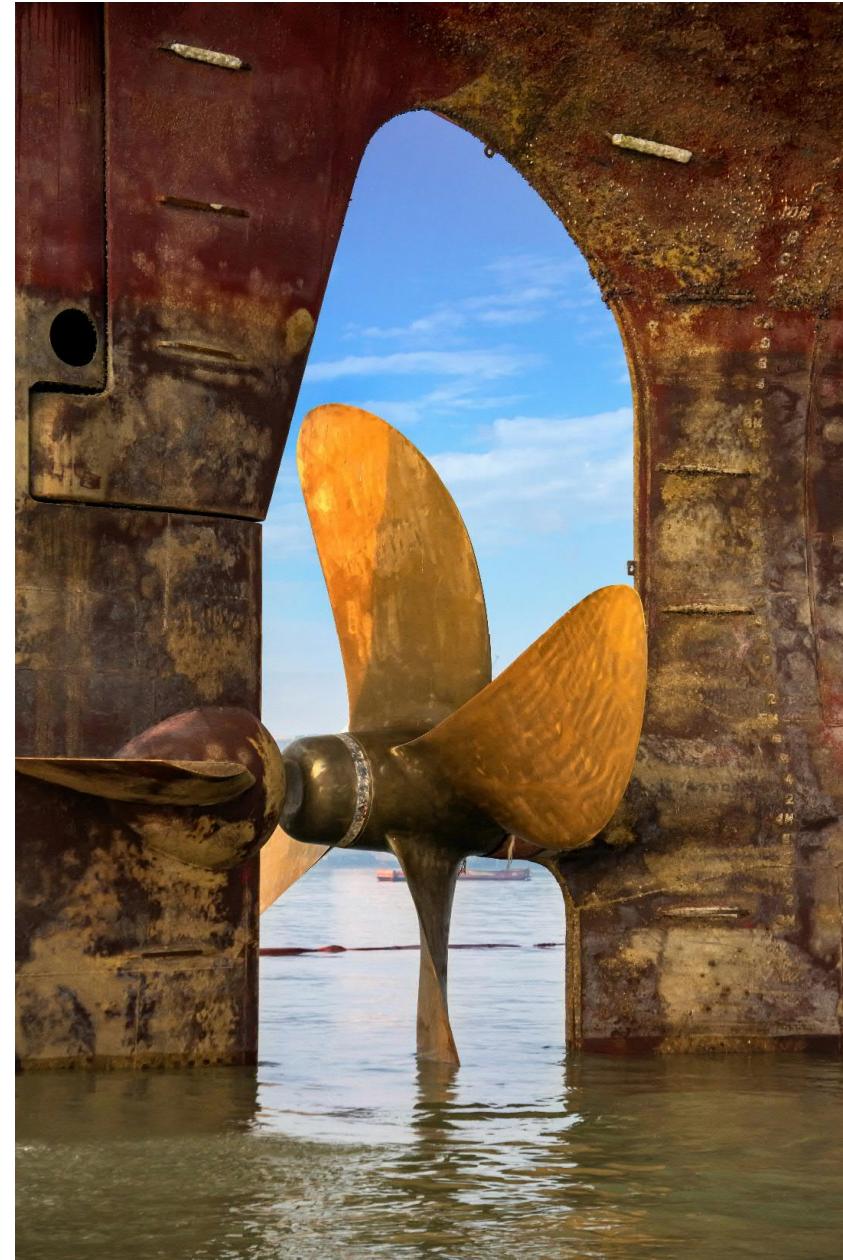


# PHP - The Change Maker's Journey to HKC Certification at Bangladesh

Mohammed Zahirul Islam  
Managing Director – PHP SBRIL  
Vice President – BSBRA  
Board Member – SBSRB



# Bangladesh Ship Recycling – Rising of the New Era



# Bangladesh Ship Recycling Industry – Importance of the Industry

- Much needed activity for sustained growth of Bangladesh economy.
- Huge demand of Iron and Steel in local market due to dependency on scrap metal, as lack of iron ore in the country
- 39% supply from Ship Recycling Industry to steel production in Bangladesh for the year 2010 (Study by University of Chittagong and University of Tokyo)
- Direct employment around – 50,000 people
- Indirect employment – more than 1,000,000 people

# Bangladesh Ship Recycling Industry – Challenges

- International Regulations: HKC, Basel Convention,
- EU SRR and possible interpretation by the commission.
- EU Waste Shipment Regulations
- NGO Pressures: Ship Breaking Platform, BELA, YPSA and many more...
- Impractical enforcement of rules and regulations
- Multiple enforcement agency and multiple national rules / regulations
- Ambiguity of rules and regulations
- Lack of competent manpower
- Lack of competent service providers

# Bangladesh Ship Recycling Industry – Latest Development

## Administrative Reforms:

- Bangladesh Ship Recycling Act, 2018

Published in the GOB's official gazette on 12 February 2018.

### Salient features of the Act:

- Establishment of Ship Recycling Zone – Restrict the activities within a specific area
- Establishment of Ship Recycling Board
- Responsibility and Power to SR Board
- Establishment of one stop service
- Establishment of TSDF
- Roadmap for early ratification to Hongkong Convention

# Bangladesh Ship Recycling Industry – Latest Development

1. SENSREC Phase I (2015 -2017)
2. SENSREC Phase 2 (April 2018-October 2020)
3. SENSREC Phase 3 –MOU Signed between IMO & ERD (Expected to Start in 2023)

## Objectives

- To enhance national capacities for safe & environmentally sound recycling of ships
- To support GOB to comply with the requirements of the HKC (GOB be in a position to accede to the HKC )

## Expected outcomes:

- To provide technical assistance to the GOB for the establishment of a TSDF
  - Layout Plan, Business Model, Engineering Design, Corporate Plan
  - Guidelines for Waste Collection, Transportation, Waste Fee Charges
- To provide further technical assistance to help the GOB accede to the HKC

## Bangladesh Ship Recycling Industry – Latest Development

- Treatment, Storage, Disposal Facility (TSDF) – Project In Pipeline
- Common Incineration Facility – Project In Pipeline

Expected to complete the project in next 2 – 4 years time and all process is delayed to due to pandemic

- No. of Registered Ship Recycling Facility – 113 (As per BSBRA records)
- No. of Ship Recycling Facility in Operation – 40 (As per BSBRA records)

## Bangladesh Ship Recycling Industry – Latest Development

Training of Workers by BSBRA Training Institute:

(Training Institute Approved by MOI, Operated and maintained by BSBRA)

No. of Workers Trained – 12,370 Nos. (up to Sept. 2022)

Training provided at Institute is Free of Cost (From 2022) to all workers and BSBRA bearing all expenses.



New Office Building of BSBRA and Training Institute

# Bangladesh Ship Recycling Industry – Latest Development



Healthcare Facilities for Workers (Hospital–Developed & Maintained by BSBRA)

## Bangladesh Ship Recycling Industry – Eagerly Awaiting

Bangladesh Ratification to Hongkong International Convention for the safe and environmentally sound recycling of ship, 2009

PHP Ship Breaking and Recycling Industries Limited  
The Change Makers of Sustainable Ship Recycling in the world

The Change Maker's Journey for  
Certification to Statement of Compliance to  
Hong Kong International Convention for the  
Safe and Environmentally Sound Recycling of Ships, 2009

**PHP** Family

From ClassNK, Japan



# Proposed Development Plan – January 2014



With aim to have 100% activities on Impermeable Floor – 46000 Sq. Mtr.

## Proposed and Actual Investment

Phases	Proposed Investment (In USD) Planned in 2014	Actual Investment (In USD)
Phase 1 (Up to Dec. 2016)	3,000,000	4,000,000
Phase 2 (2018 – 2020)	4,000,000	3,700,000
Phase 3 (2021 – 2024)	7,000,000	3,450,000
Total Investment (In USD)	14,000,000	1,150,000 (up to Dec. 2022)

Planned in 2023		
Phase 4 (2025 – 2028)	10,000,000	
Total Investment (In USD)	10,000,000	

# Certification

## Statement of Compliance to Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ship, 2009

**NIPPON KAIJI KYOKAI**



**STATEMENT OF COMPLIANCE  
FOR  
FIRMS ENGAGED IN SHIP RECYCLING**

No. : KC20SRF-002

THIS IS TO CERTIFY THAT

**PHP SHIP BREAKING AND RECYCLING  
INDUSTRIES LIMITED**  
VILLAGE & P.O.: SITALPUR, P.S.: SITAKUNDA, DIST.: CHATTOGRAM, BANGLADESH

has been confirmed as a firm engaged in ship recycling that the operations and procedure that are in place at the facility in accordance with IMO Resolution MEPC. 210(63) "2012 GUIDELINES FOR SAFE AND ENVIRONMENTALLY SOUND SHIP RECYCLING".

Any reductions of the above operations or procedure may render this statement of compliance invalid.  
This statement is valid until 14 January 2025 subject to continued compliance with the related GUIDELINES and periodical audits.

Issued at Tokyo on 15 January 2020

NIPPON KAIJI KYOKAI

  
(H. Takano)  
Director

**ClassNK**

This Report is issued subject to the condition that it is understood and agreed that neither the Society nor any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by this Society or its Surveyors or in any entry in the Record or other publication of the Society or for any error of judgment, default or negligence in its Officers, Surveyors or Agents.

**SUPPLEMENT TO:  
STATEMENT OF COMPLIANCE  
FOR  
FIRMS ENGAGED IN SHIP RECYCLING**

NO.: KC20SRF-002-2

**Notes:**

1 This supplement shall be permanently attached to the Statement of Compliance. The Statement of Compliance shall be available at the Ship Recycling Facility at all times.  
2 All procedures, plans and other documents produced by the Ship Recycling Facility and required under the terms to which the Statement of Compliance has been issued shall be available in the working language of the Ship Recycling Facility and in English.  
3 Statement of Compliance subject to the limitations defined by this supplement.

**1 GENERAL TERMS**

**1.1 Ship Recycling Facility Certified**

Name of Ship Recycling Facility : PHP SHIP BREAKING AND RECYCLING INDUSTRIES LIMITED  
VILLAGE & P.O.: SITALPUR, P.S.: SITAKUNDA, DIST.: CHATTOGRAM, BANGLADESH  
Primary Contact Person : MOHAMMED ZAHIRUL ISLAM CHOWDHURY  
Phone Number : +880-31-2511037  
E-mail Address : zahir@phpfamily.com  
Name, Address, and Contact Information of Ownership Company : PHP SHIP BREAKING AND RECYCLING INDUSTRIES LIMITED  
PHP HOUSE # 31, AGRABAD COMMERCIAL AREA, CHATTOGRAM - 4100 BANGLADESH  
Working Language(s) : BENGALI / ENGLISH

**1.2 SHIP RECYCLING FACILITY PLAN**

The examined SHIP RECYCLING FACILITY PLAN for PHP SHIP BREAKING AND RECYCLING INDUSTRIES LIMITED is attached.

**1.3 Map and location of Ship Recycling operations**

A map of the boundary of the Ship Recycling Facility and the location of Ship Recycling operations within it, is attached.

**2 CAPABILITY OF SHIP RECYCLING FACILITY**

**2.1 Size of ships**

The Ship Recycling Facility is confirmed to accept a ship for recycling subject to the following size limitations:

	Maximum Size	Other Limitations
Length	N/A	Nil
Breadth	100m	Nil
Draft	N/A	Nil
Lightweight	100,000MT	Nil

**15<sup>th</sup> January - 2020**

**2.2 Safe and Environmentally Sound Management of Hazardous Materials**

The Ship Recycling Facility is confirmed to accept a ship for recycling that contains Hazardous Materials as specified in the following table subject to the conditions noted below:

Hazardous Material(*4)	Management of Hazardous Materials			Confirmation/Limitations
	Removal Y/N (*2)	Storage Y/N	Process (*3) Y/N (*3)	
Asbestos	Y	Y	N	
Ozone-depleting substances	Y	Y	N	
Polychlorinated biphenyls (PCB)	Y	Y	N	
Anti-fouling compounds and systems	Y	Y	N	
Cadmium and Cadmium Compounds	Y	Y	N	
Hexavalent Chromium and Hexavalent Chromium Compounds	Y	Y	N	
Lead and Lead Compounds	Y	Y	N	
Mercury and Mercury Compounds	Y	Y	N	
Polybrominated Biphenyl (PBBs)	Y	Y	N	
Polybrominated Diphenyl Ethers (PBDEs)	Y	Y	N	
Polychlorinated Naphthalenes (more than 3 chlorine atoms)	Y	Y	N	
Radioactive substances	Y	Y	N	
Certain Shortchain Chlorinated Paraffins (Alkanes, C10-C13, chloro)	Y	Y	N	
Hazardous liquids, residues and sediments	Y	Y	N	
Paints and coatings that are highly flammable and/or lead to toxic release	Y	Y	N	
Other Hazardous Materials not listed above and that are not a part of the ship structure (specify)	Y	Y	N	Nil

Notes: -1 Process means the processing of Hazardous Materials in the Ship Recycling Facility, such as:  
a. incineration of Hazardous Materials;  
b. reclamation of Hazardous Materials; and  
c. treatment of oily residues.  
-2 If Yes (Y), indicate in the Ship Recycling Facility Plan the responsible personnel authorized to carry out the removal, with the certificate number or other relevant information.  
-3 If No (N), describe in the Ship Recycling Plan where the Hazardous Materials are to be processed/disposed.  
-4 These Hazardous Materials are specified in Appendices 1 and 2 and regulation 20 of the Convention.

# Certification

## ISO 9001 / ISO 14001 / ISO 45001 / ISO 50001 and ISO 30000

### Bureau Veritas Certification

#### PHP SHIP BREAKING AND RECYCLING INDUSTRIES LIMITED

YARD: SITALPUR-4314, SITAKUNDA, CHATTOGRAM, BANGLADESH.

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organization has been audited and found to be in accordance with the requirements of the Management System Standards detailed below.

##### Standards

#### ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018

##### Scope of certification

"SHIP RECYCLING ACTIVITIES, HANDLING OF HAZARDOUS AND NON HAZARDOUS MATERIALS AND SALE OF RECYCLABLE MATERIALS SUCH AS STEEL, EQUIPMENTS, MACHINERIES AND SALE OF OTHER MATERIALS AND DISPOSAL OF WASTE OBTAINED FROM SHIP"

Original cycle start date for ISO 9001 & ISO 14001: **14 January 2016**

Original cycle start date for ISO 45001: **15 September 2018**

Expiry date of previous cycle: **14 September 2021**

Recertification Audit date: **26 August 2021**

Recertification cycle start date: **13 September 2021**

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **14 September 2024**

Certificate No. IND.21.3866/IM/U

Version: 1 Revision date: **13 September 2021**

Signed on behalf of BVCH SAS UK Branch  
Jagdheesh N. MANIAN  
Head – CERTIFICATION, South Asia  
Commodities, Industry & Facilities Division

Certification body address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom.

Local office: Bureau Veritas (Bangladesh) Pvt. Ltd.  
Symphony (5th Floor), Plot- SE/F/9, Road-142  
South Avenue, Gulshan-1, Dhaka-1212, Bangladesh.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.  
To check this certificate validity please call + 88 (02) 8836765.



#### Bureau Veritas Certification

#### PHP Ship Breaking and Recycling Industries Limited

#### PHP Family

SITALPUR – 4314, SITAKUNDA, CHATTOGRAM, BANGLADESH.

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organization has been audited and found to be in accordance with the requirements of the Management System Standard detailed below.

##### Standard

#### ISO 50001:2018

##### Scope of certification

Ship Recycling Activities, Handling of Hazardous and Non-Hazardous Materials and Sale of Recyclable Materials such as Steel, Equipments, Machineries and Sale of other Materials and disposal of waste obtained from Ship.

Original cycle start date: **21 November 2022**

Expiry date of previous cycle: **Not Applicable**

Certification Audit date: **13 October 2022**

Certification cycle start date: **21 November 2022**

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **20 November 2025**

Certificate No. IND.22.20407/EN/U Version: 1 Issue date: **21 November 2022**



Signed on behalf of BVCH SAS UK Branch  
Jagdheesh N. MANIAN  
Director – CERTIFICATION, South Asia  
Commodities, Industry & Facilities Division



Certification body address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom.

Local office: Bureau Veritas (Bangladesh) Pvt. Ltd.  
Symphony (5th Floor), Plot- SE/F/9, Road-142  
South Avenue, Gulshan-1, Dhaka-1212, Bangladesh.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.  
To check this certificate validity please call + 88 (02) 8836765.



#### Bureau Veritas Certification

#### PHP SHIP BREAKING AND RECYCLING INDUSTRIES LIMITED

YARD: SITALPUR - 4314, SITAKUNDA, CHATTOGRAM, BANGLADESH.

Bureau Veritas (India) Pvt. Ltd. (Certification Business) certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the Management System Standard detailed below

##### Standard

#### ISO 30000:2009

##### Scope of certification

"SHIP RECYCLING ACTIVITIES, HANDLING OF HAZARDOUS AND NON HAZARDOUS MATERIALS AND SALE OF RECYCLABLE MATERIALS SUCH AS STEEL, EQUIPMENTS, MACHINERIES AND SALE OF OTHER MATERIALS AND DISPOSAL OF WASTE OBTAINED FROM SHIP"

Original cycle start date: **17 November 2021**

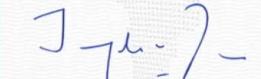
Expiry date of previous cycle: **Not Applicable**

Certification Audit date: **02 October 2021**

Certification cycle start date: **17 November 2021**

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **16 November 2024**

Certificate No. IND.21.0338/BA-SB Version: 1 Revision date: **17 November 2021**



Certification Authority  
Jagdheesh N. MANIAN  
Head – CERTIFICATION, South Asia  
Commodities, Industry & Facilities Division

Local office: Bureau Veritas (Bangladesh) Pvt. Ltd.  
Symphony (5th Floor), Plot- SE/F/9, Road-142  
South Avenue, Gulshan-1, Dhaka-1212, Bangladesh.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.  
To check this certificate validity please call + 88 (02) 8836765.



## PHP SBRIL Team – Key Members



Md. Zahirul Islam  
Managing Director

Dharmesh Jani  
Consultant



Md. Khairuzzaman  
Sr. General Manager



Md. Muslim Uddin  
Sr. Dy. GM



Liton Mazumder  
MR and Dy. Manager



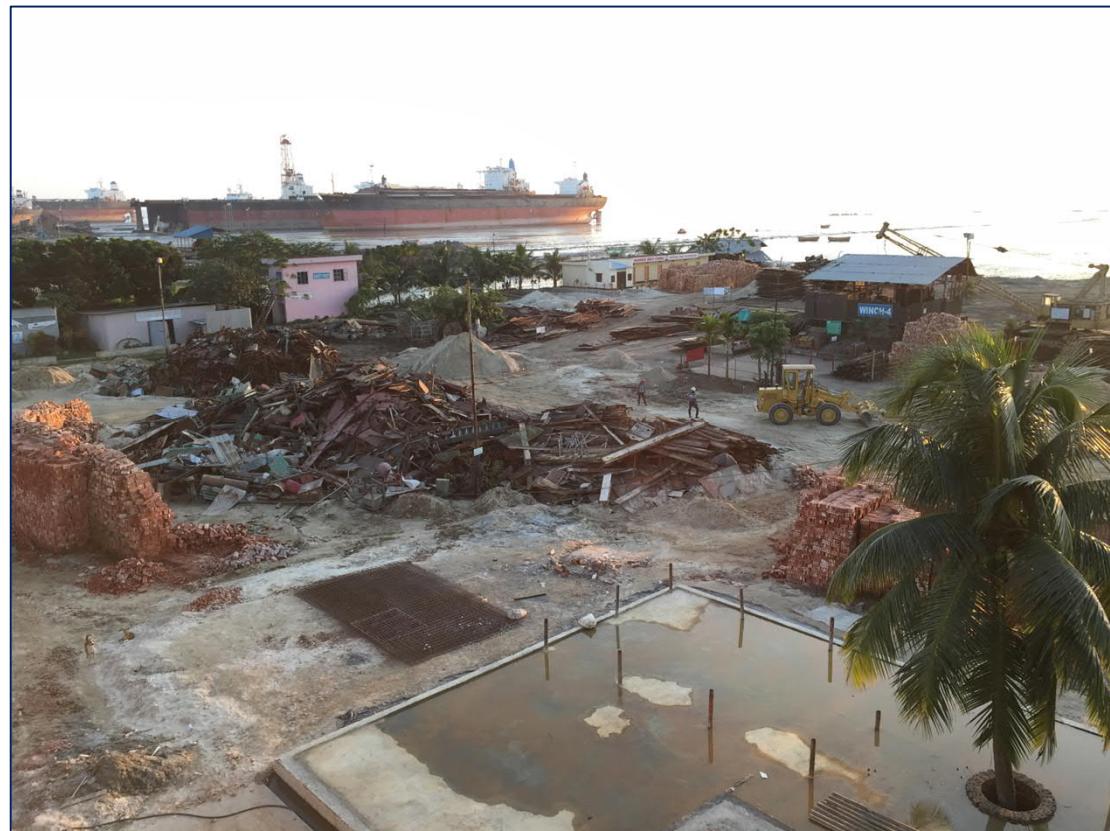
Sehal Anwar  
HSE Manager

# Facility Development Information

Feb. 01, 2014



Oct. 10, 2015



Development of Impermeable Floor

# Facility Development Information

May. 17, 2017



Development of Impermeable Floor

# Facility Development Information

Jan. 16, 2020



Development of Impermeable Floor

# Facility Development Information

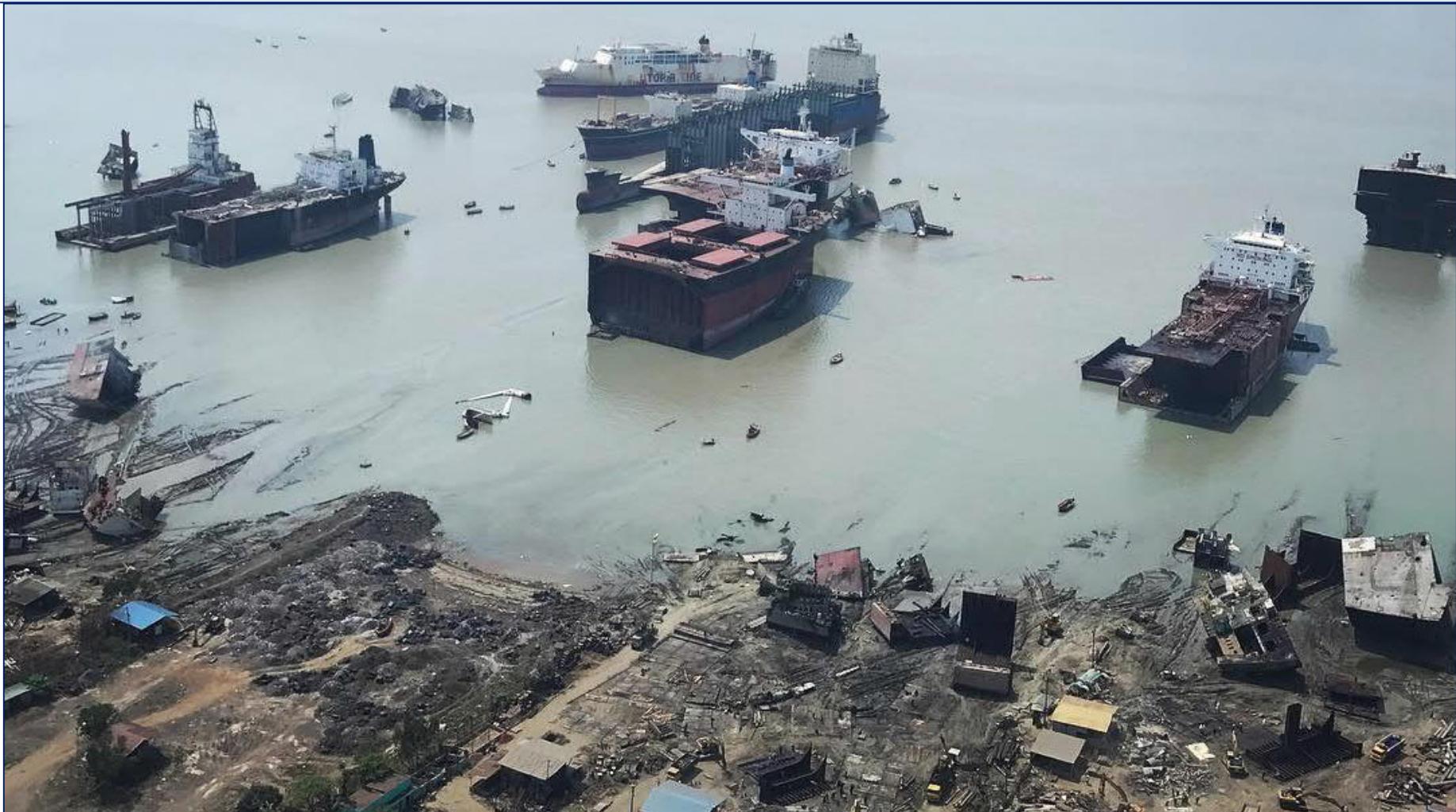
April 01, 2022



# Facility Development Information



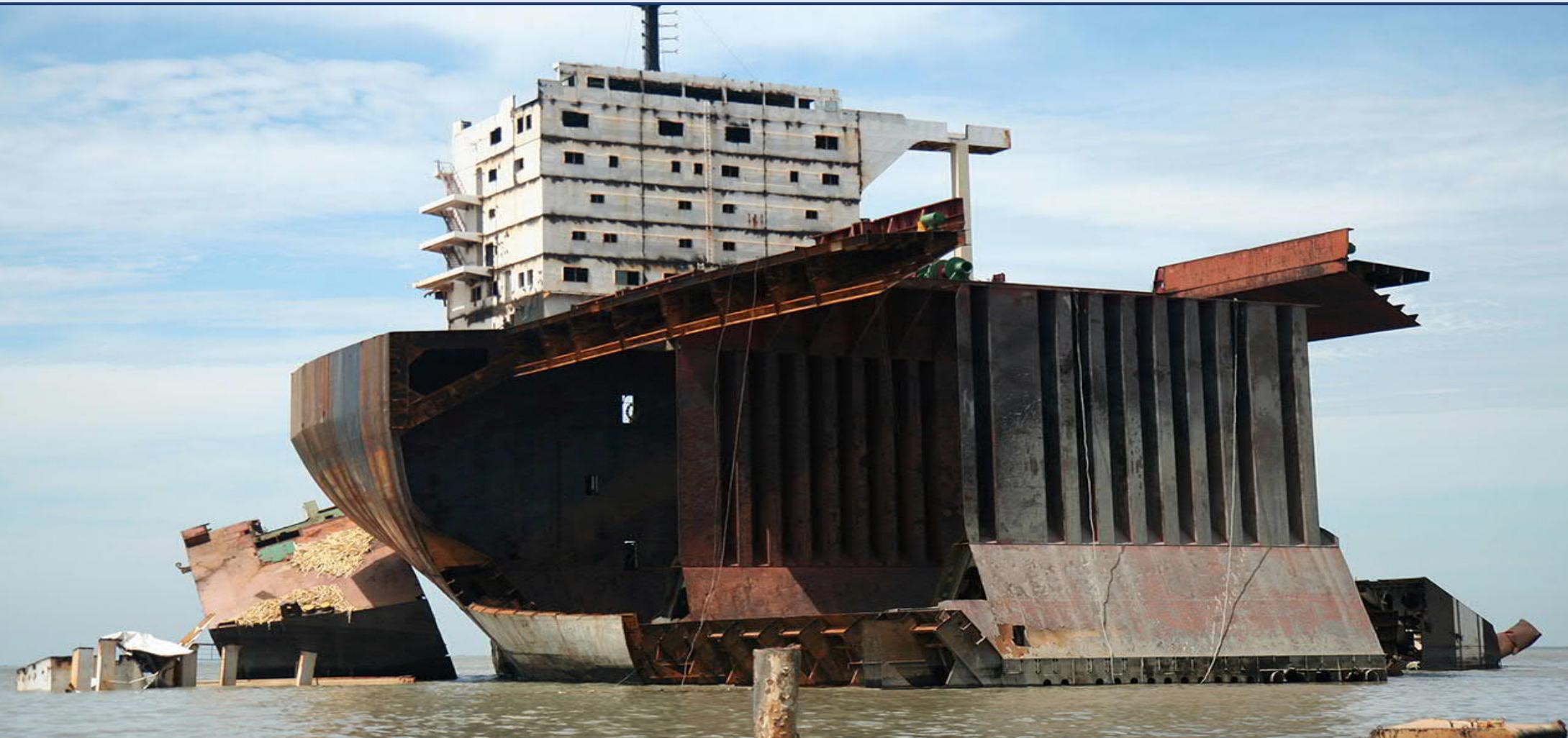
Challenges encountered for meeting HKC requirements



Traditional Cutting System in Bangladesh Ship Recycling Industry

(Image Source NGO Ship Breaking Platform)

Challenges encountered for meeting HKC requirements



Traditional Cutting System in Bangladesh Ship Recycling Industry

(Image Source NGO Ship Breaking Platform)

# Challenges encountered for meeting HKC requirements



Change of Cutting System – Maintaining Ship Bottom as Impermeable Floor

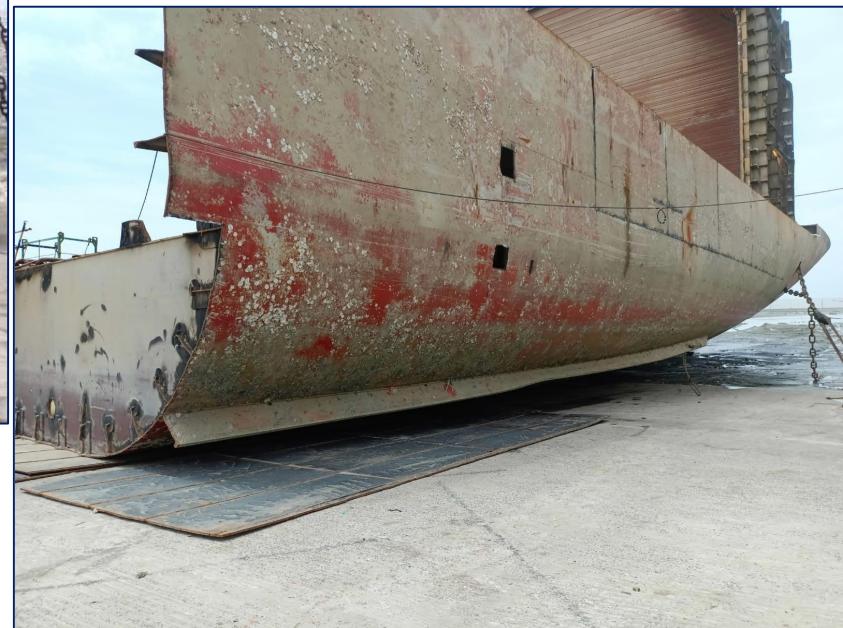
# Facility Development Information

Ship of Adjoining Facility



Change of Cutting System – Maintaining Ship Bottom as Impermeable Floor

# Challenges encountered for meeting HKC requirements



Pulling of Ship on Impermeable Floor

Challenged encountered for meeting HKC requirements



Handling Oily Block at Intertidal Zone

Jan 1, 2023 1:06:30 PM

Challenges encountered for meeting HKC requirements



Handling Boiler at Intertidal Zone

Jan 2, 2023 3:17:43 PM

# Challenges encountered for meeting HKC requirements



Transferring and Use of Equipment on Ship for Material Handling

Challenges encountered for meeting HKC requirements



Handling of Main Engine Related Parts

# Challenges encountered for meeting HKC requirements



Non-availability of TSDF and Downstream Waste Management

## Challenges encountered for meeting HKC requirements



2020/1/16 13:07

Non-availability of Authorized Recycler (Recyclable Waste)

## Challenges encountered for meeting HKC requirements



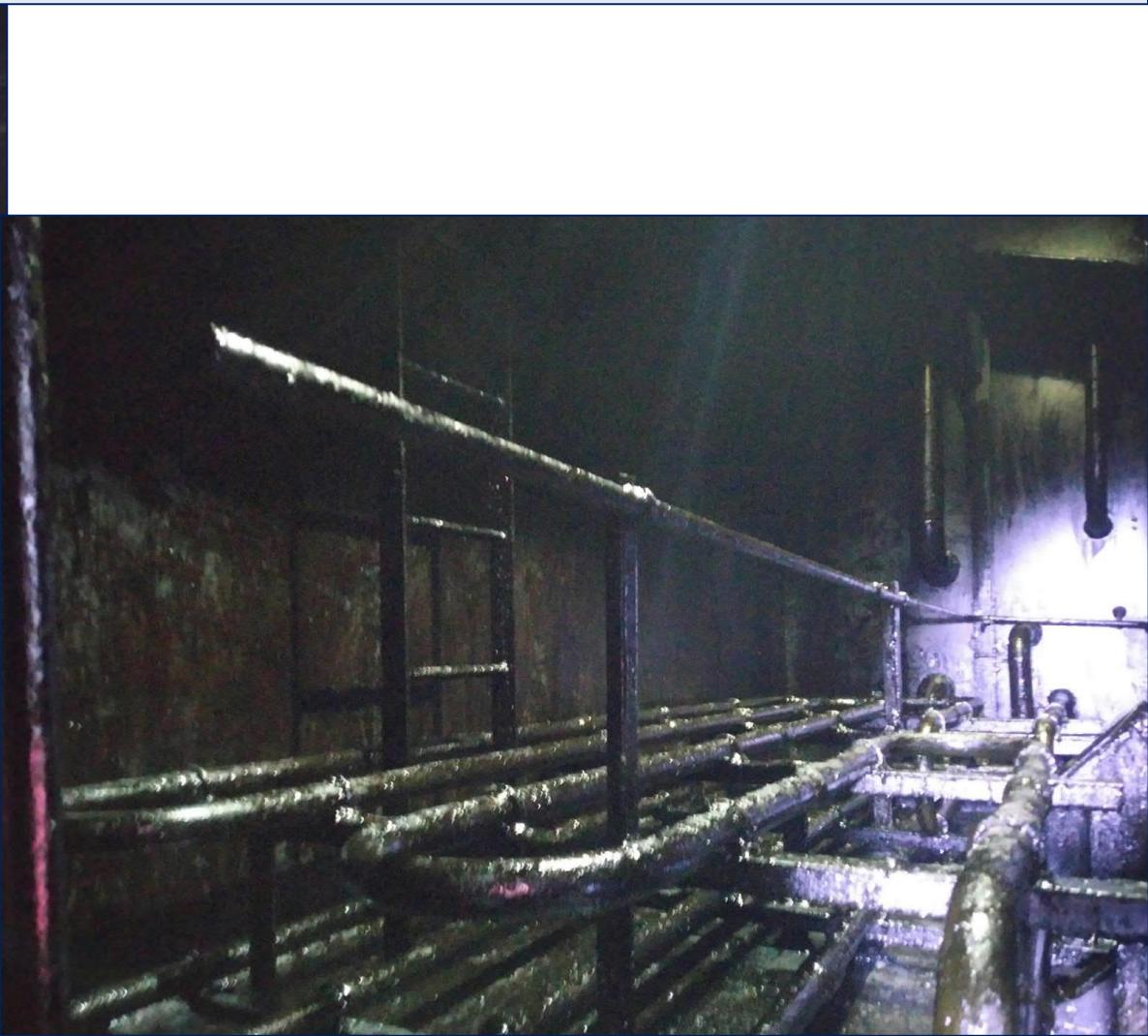
Controlling / Managing the waste generated / dumped by Other SRF

## Challenges encountered for meeting HKC requirements



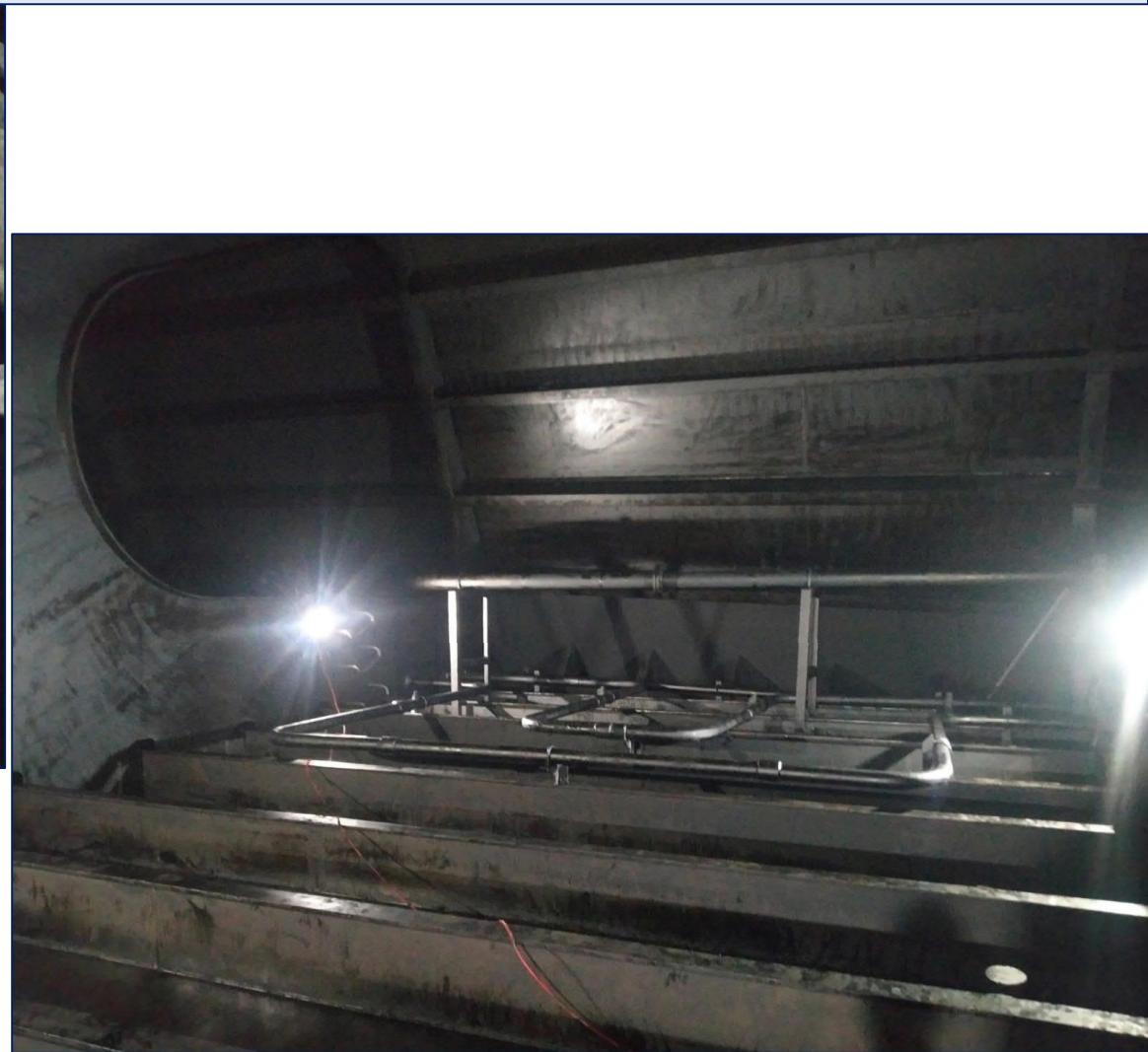
Controlling / Managing the waste generated / dumped by Other SRF

Challenges encountered for meeting HKC requirements



Decontamination of Bunker Storage Tanks

Challenges encountered for meeting HKC requirements



Decontamination of Bunker Storage Tanks

Challenges encountered for meeting HKC requirements



Decontamination of Bunker Storage Tanks

# Tank Cleaning Process

58/116



# Tank Cleaning Process

60/116



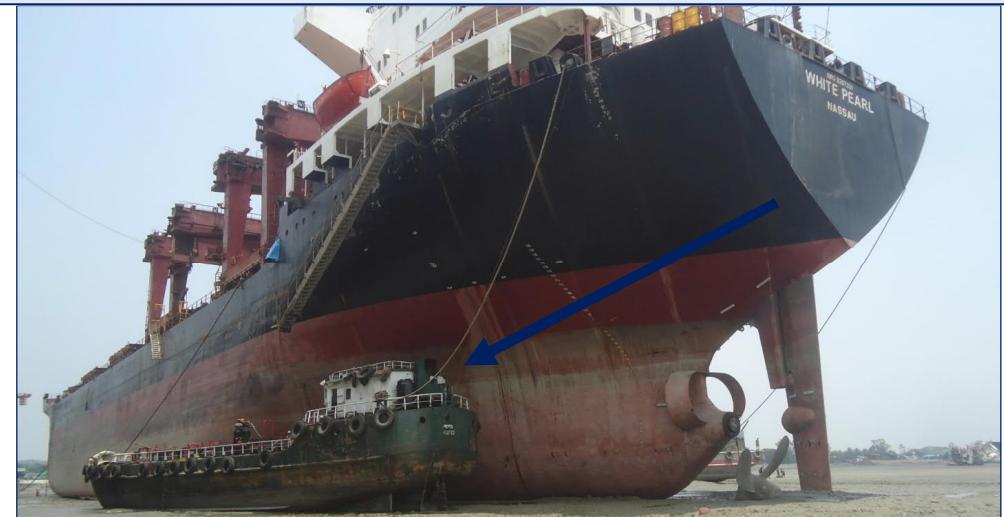
## Challenges encountered for meeting HKC requirements



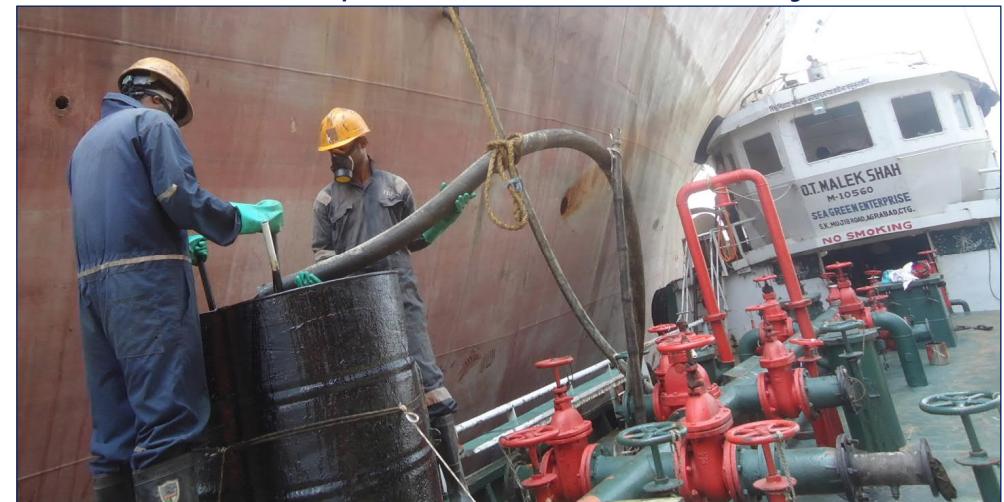
Oily Piece Cleaning Mechanism after receipt of Oil Block received from Ship

# Challenges encountered for meeting HKC requirements

Traditional way of Bunker Delivery



Present practice of Bunker Delivery



Bunker Delivery through Lighter Vessel (Small Tanker)

# Challenged encountered for meeting HKC requirements



Jan 28, 2020 3:48:48 PM



Jan 8, 2020 10:03:40



January 16, 2020 10:50 AM

## Paint Chips removal from Cutting Line



January 6, 2020 10:44 AM



January 12, 2020 10:39 AM



January 23, 2020 9:24 AM

## Challenges encountered for meeting HKC requirements



Jan. 16, 2020

The only facility of its kind in the world

Non-availability of Asbestos Handling Equipment in the country

# Challenges encountered for meeting HKC requirements



Lack of Competent Manpower

# Challenger encountered for meeting HKC requirements

Oct. 13, 2019



Bringing Competent Trainer from different Part of the world (USA)

## Challenger encountered for meeting HKC requirements



Bringing Competent Trainer from different Part of the world (Germany and India)

# Challenged encountered for meeting HKC requirements

## Competent Team

### Certificate

DNV-GL

#### Fully Approved HazMat Expert

Reg. No.: 144345784

This is to certify that

Mr. Dharmesh Jani

Has successfully completed the seminar "Approved HazMat Expert" and the witnessing audit for the final approval. The participant has demonstrated the competence to prepare an "Inventory of Hazardous Materials" (IHM) with reference to following:

- Hong Kong International Convention for the Safe and Sound Recycling of Ships 2009
- EU Ship Recycling Regulation (EC 1257/2013)

Seminar "Approved HazMat Expert" Place, Date, Signature: Bhavnagar, 2016-08-11 Gerhard Aulbert  
DNV GL Representative

Successful witnessing Place, Date, Signature: Hamburg, 2022-07-19 Khalid Mahmood  
DNV GL Representative

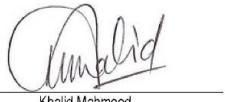
This certificate is valid until: 2025-08-09

Issued at Hamburg, 2022-07-19

This certificate is subject to a revalidation every three years.

First Revalidation Place, Date, Signature: \_\_\_\_\_  
DNV GL Representative

Second Revalidation Place, Date, Signature: \_\_\_\_\_  
DNV GL Representative



Khalid Mahmood

Doc. 032-03

The only  
Ship Recycling Facility  
in South East Asia  
having team of  
Fully Approved  
HazMat Expert

(Certificate  
Valid up to  
Sept. 08, 2025)

### Certificate

DNV-GL

#### Fully Approved HazMat Expert

Reg. No.: 144345779

This is to certify that

Mr. Liton Mazumder

Has successfully completed the seminar "Approved HazMat Expert" and the witnessing audit for the final approval. The participant has demonstrated the competence to prepare an "Inventory of Hazardous Materials" (IHM) with reference to following:

- Hong Kong International Convention for the Safe and Sound Recycling of Ships 2009
- EU Ship Recycling Regulation (EC 1257/2013)

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First Revalidation Place, Date, Signature: \_\_\_\_\_  
DNV GL Representative

Second Revalidation Place, Date, Signature: \_\_\_\_\_  
DNV GL Representative



Khalid Mahmood

Doc. 032-03

# ClassNK Visit for Review of Assessment activities – Sept.30, 2019



2019/9/30 10:43

# ClassNK Visit for Facility Assessment – Nov. 27 & 28, 2019



# ClassNK Visit for Facility Assessment – Nov. 27 & 28, 2019



## PHP Team Visit to ClassNK – Tokyo (Japan) – July 25, 2022



Visit by Team from Japanese Shipowners' Association and ClassNK at  
PHP SBRIL on April 19, 2019



# Thank you



**HONG KONG CONVENTION COMPLIANT**  
**PHP Ship Breaking &**  
**Recycling Industries Ltd.**

First Green Ship Recycling Facility in Bangladesh