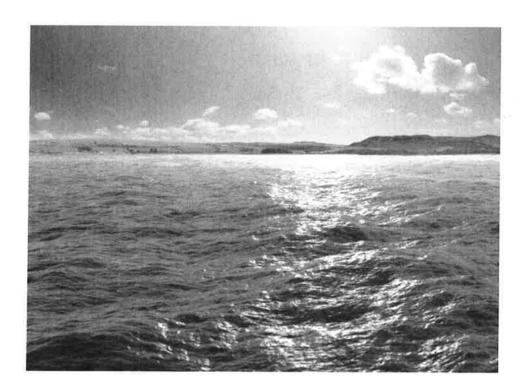
### DNV·GL

## Site Inspection Report Application 16

**European Commission Directorate-General Environment** 

**Report No.:** 2018-0743, Rev. 0 **Document No.:** 117PB5Z1-4

Date: 2018-07-13



Inspection of a ship recycling facility in Turkey DNV GL AS Maritime Project name: **Environment Advisory** Report title: Site Inspection Report Application 16 European Commission Directorate-General Veritasveien 1 Customer: 1363 Høvik Environment Customer contact: Norway Tel: 2018-07-13 Date of issue: 10077087 Project No.: Organisation unit: **Environment Advisory** Report No.: 2018-0743, Rev. 0 117PB5Z1-4 Document No.: Applicable contract governing the provision of this Report: 070201/2016/747764 /ENV.B3 Objective: The objective of the on-site inspection is to verify compliance of the Facility with the requirements set out in the Ship Recycling Regulation. Prepared by: Verified by: Approved by: Principal Consultant Head of Section Principal Consultant Chief Naval Arcitect Copyright © DNV GL 0001. All rights reserved. Unless otherwise agreed in writing: (i) This publication or parts thereof may not be copied, reproduced or transmitted in any form, or by any means, whether digitally or otherwise; (ii) The content of this publication shall be kept confidential by the customer; (iii) No third party may rely on its contents; and (iv) DNV GL undertakes no duty of care toward any third party. Reference to part of this publication which may lead to misinterpretation is prohibited. DNV GL and the Horizon Graphic are trademarks of DNV GL AS. DNV GL Distribution:  $\ensuremath{\boxtimes}$  OPEN. Unrestricted distribution, internal and external. Ship recycling, site inspection, EU Ship ☐ INTERNAL use only. Internal DNV GL document. Recycling Regulation CONFIDENTIAL. Distribution within DNV GL according to applicable contract\* ☐ SECRET. Authorized access only. \*Specify distribution: 2013-07-13 First issue

DNV GL - Report No. 2018-0743, Rev. 0 - www.dnvgl.com

Page i

#### Table of contents

1	EXECUTIVE SUMMARY	1
2	INTRODUCTION	2
3	OBJECTIVE	2
4	SCOPE OF WORK	2
5	METHODOLOGY AND ACTIVITIES	4
6	RESULTS OF THE ASSESSMENT	6

#### 1 EXECUTIVE SUMMARY

The objective of this report is to outline the results of the site inspection at LEYAL DEMTAŞ GEMI SOKÜM SANAYİ VE TICARET AŞ, located in Aliaga (Izmir region, Turkey), following the facility's application for inclusion in the European List of ship recycling facilities. The on-site inspection took place on 7<sup>th</sup> and 8<sup>th</sup> of June 2018. Further to this, a draft inspection report was sent to the facility which provided observations and requests for further clarifications. The facility responded to the draft report with additional information and documentation. The inspection report takes account of the on-site inspection as well as of the subsequent response by the facility to the draft inspection report.

Based on the site inspection, it was concluded that the facility is capable in practice of recycling ships in accordance with the requirements of Regulation (EU) No 1257/2013 ('the Ship Recycling Regulation', the 'SRR'), provided several improvements are made.

The following observations were made and are valid for the whole area of the ship recycling facility.

During the site inspection, the facility demonstrated that it is approved by its authorities, has a suitable organisation with a proven track record, has sufficient procedures with regards to health, safety and the environment and has appropriate facilities in terms of drainage, cranes, paved areas, warehouses etc. to carry out ship recycling according to the requirements of the Ship Recycling Regulation.

The governing document for the site inspection, defining the baseline of the facility's performance, is the Ship Recycling Facility Plan (SRFP). A paramount task of the inspection was to verify that the SRFP is a living, logic and systematic document accurately reflecting the operational practices on the ground. Conversely, DNV GL verified whether all procedures and practices observed on the ground were included and explained in the SRFP. DNV GL has evaluated the SRFP's reliability, clarity and implementation on the ground. The SRFP is structured according to a QMS / ISO standard, with proper content and clarity and having page numbering, revision ID and date on each page. However, it was found that the Ship Recycling Facility Plan needs to be updated.

The instructions are systematic, efficient and easy to read. Most of the detailed procedures were found in three appendices, which all had a table of contents with page numbering. The organisation chart depicts a well-structured, fit-for purpose management organisation, with clear reporting lines, roles and responsibilities.

During the site inspection, the evaluators also specified areas where compliance could not be confirmed.

- Updating the SRFP to reflect that the Ship Recycling Association of Turkey (SRAT) handles all
  hazardous waste, and that SRAT must prepare procedures for handling persistent organic
  pollutants such as PFOS, brominated flame retardants (PBB, PBDE, HBCDD), short chained
  chlorinated paraffins (SCCP) and polychlorinated napthalenes (PCN).
- Procedures for cleaning and cutting in the area between the water line and drainage line must be more detailed and accompanied with photographic evidence.
- 3. The importance of the facility to conduct several types of monitoring programmes, both on employees and the environment. The facility had initiated additional monitoring as a response to the comments in the desk assessment report, but some further improvements were still required after the site inspection.
- 4. More details regarding downstream waste management is required.

Based on additional information and documentation received as a response to the draft report, the evaluators can confirm compliance of the above specified items. The evaluators find that the facility will operate in compliance with the requirements for inclusion in the European List of ship recycling facilities as specified in this report.

#### 2 INTRODUCTION

The European Commission DG Environment (hereafter referred to as The Commission) has contracted DNV GL to conduct a site inspection of the recycling facility LEYAL DEMTAŞ GEMI SÖKÜM SANAYÎ VE TİCARET A.Ş., located in Aliaga (Izmir region, Turkey), hereafter referred to as the facility. An application for inclusion in the European List of ship recycling facilities has been registered for this facility under application number 016.

#### 3 OBJECTIVE

The objective of the site inspection is to verify compliance of the facility with the requirements set out in the Ship Recycling Regulation (EU) No 1257/2013 and clarified in the 2016 Technical guidance note<sup>1</sup>.

Hereunder the objectives of DNV GL's methodology is to:

- Verify the facility's capability to comply with the regulations and requirements listed in the assessment scope.
- Assure that documented recycling processes, work procedures, quality controls and document handling are managed and implemented as specified in the regulations and requirements.
- Ensure that the facility has sufficient knowledge and understanding of the regulations and requirements for recycling facilities.
- Assure consistent evaluation of facilities on equal terms.

#### 4 SCOPE OF WORK

The scope of the assessment is, according to contract:

- Ship recycling regulation (EU) No 1257/2013
- Technical guidance note under Regulation (EU) No 1257/2013 on ship recycling

This inspection also considered article 13(1) of the Ship Recycling Regulation: "In order to be included in the European List, a ship recycling facility shall comply with the following requirements, in accordance with the relevant Hong Kong Convention provisions and taking into account the relevant guidelines of the IMO, the ILO, the Basel Convention and of the Stockholm Convention on Persistent Organic Pollutants".

The scope for the methodology is divided into three main elements and several second and third level subelements. These practical steps ensure that all article 13, 15 and 16 SRR requirements, for inclusion of a ship recycling facility in the European List, are checked.

#### 1. Management

- Facility business model and quality statement
- Policy
- Management, ownership and organisation
- Quality assurance systems and certificates

<sup>1</sup> C/2016/1900, Communication from the Commission — Requirements and procedure for inclusion of facilities located in third countries in the European List of ship recycling facilities — Technical guidance note under Regulation (EU) No 1257/2013 on ship recycling.

Human resources (availability, skills and experience, training, stability, etc.)

#### 2. Safety, security and the environment

- Safety & health (PPE, hazardous materials, fire safety, medical services, etc.)
- Security
- Environment (spills, emissions, etc.)
- Emergency preparedness and response (fire, medical, environmental, etc.)
- Regional conditions (acts of nature, political, etc.)

#### 3. Vessel demolition

- Applied rules, regulations and internal standards
- Recycling control, inspection and supervision regime
- Non-conformities and corrective actions
- Document control
- Facilities (methods, capacities, condition of equipment, logistics, etc.)
- Maintenance
- Recycling planning and execution
- Methodology, criteria and performance regarding:
  - Project start-up, commercial process, etc.
  - Ship Recycling Facility Plan (SRFP)
  - Contract review, verification and acceptance criteria owner / cash-buyer / facility
  - Pre-planning
  - Vessel preparation (IHM, Ship Recycling Plan, flag state clearance, pre-cleaning, etc.)
  - Vessel arrival and securing
  - Demolition management (methodology, "safe for entry", "safe for hot work", working at heights, lifting, supervision and reporting)
  - Waste disposal (sorting, sub-contractors, end users, etc.)
  - Completion instruction
  - Project close-out with de-briefing, lessons learned and suggestions for improvement

#### 5 METHODOLOGY AND ACTIVITIES

The methodology followed the framework of DNV GL's facility assessment protocols and reporting formats, calibrated with the requirements and criteria of the Ship Recycling Regulation as clarified in the 2016 Technical guidance note.

#### Activities:

- Preparations, schedule, travel arrangements, fact-finding, etc.
- Issue objective, scope and schedule to facility in advance
- Site assessment (2 days; 3 assessors)
- Reporting
- Issue of draft report
- Implement comments to the draft report
- Final report

The on-site assessment was performed according to a schedule advised to the Facility in advance, incorporating:

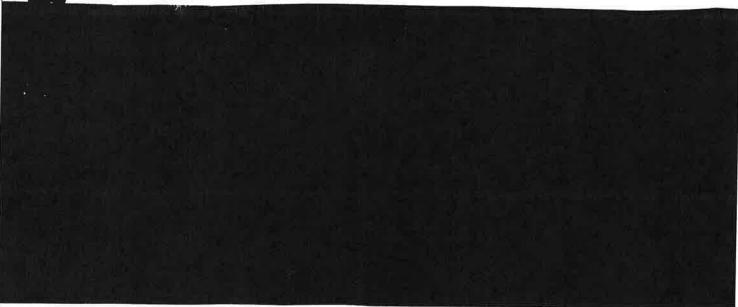
- · Opening meeting, including:
  - Introductions, present objective, scope and methodology and agree on schedule
  - Review of facility history, current activities and future ambitions
- Interviews with key responsible personnel in all relevant disciplines, including:
  - Ownership and management
  - Contracts
  - Planning, preparations, vessel arrival and securing
  - Quality assurance and quality management systems
  - Human resources
  - Health, safety, security and environment
  - Vessel dismantling management
  - Quality control and document control
  - Project management
- Document review, including:
  - Spot checks and evaluation of consistency, content, validation and language.
  - Traceability
- · Facility site inspection, including:
  - Inspection of facility, all workstations and worker facilities
  - Inspection of a vessel, for access and escape-ways

- Spot-checks of worker certificates, permits and crane certificates
- Lifting equipment, fall barriers, safe for entry, safe for hot-work, etc.
- Questioning (brief) of foremen / supervisors on key procedures
- Closing meeting: including:
  - Reiterate the objective of the inspection and present preliminary results in way of initial observations and findings
  - Facility may respond to the initial results, and agree to rectify non-conformities including deadlines and corresponding responsible persons
  - Acknowledgements and departure

#### **6 RESULTS OF THE ASSESSMENT**

The assessment of the facility was carried out on the 7<sup>th</sup> and 8<sup>th</sup> of June 2018 at *LEYAL DEMTAŞ GEMI SOKÜM SANAYİ VE TICARET AŞ*, located in Aliaga (Izmir region, Turkey), Gemi Söküm Tesisleri, Parcel 25 Aliaga.

The facility is located in the outskirts of the city of Aliaga (population of around 100,000), approximately 6 km from the city centre. Overall the surrounding area belongs to one of Turkey's largest industrial provinces with major bulk and container ports, power generation plants, oil terminal, LNG gas terminal, refinery and petrochemical complex, along with approximately 20 SRFs. Adjacent to the facility, both to the east and the west are similar facilities. Access road connecting with the road transportation network is accessible to the south of the facility. The facility had 48 employees at the time of the site inspection. Leyal Demtaş is a separate legal entity, but a fully owned subsidiary of Leyal, sharing the same top management. The SRFPs and the procedures at the yards are almost identical.



The management and organisation was seen to cover all disciplines at the facility. The management's CVs show a strong organisation, both in terms of education and experience. The evaluators' impression was that of a tight team, working closely together, assuring each other's responsibilities and work.

Table 1 below summarises the results of the site inspection with respect to article 13, 15 and 16 SRR requirements for inclusion of a ship recycling facility in the European List.



Table 1 Site Inspection Results

Thoroughly checked during the document review; many of the certificates are available online.

Article 13-1 (b) it is designed, constructed and operated in a safe and environmentally sound manner

Measures and infrastructure

**guidance note** 

MEPC 210(63) Section 3.2.2

showed compliance with

The desk assessment

Compliant?

necessary to check again

this point. It was not

confirmed during the site showed compliance with The desk assessment this point. This was during the site inspection. inspection. environment. The facility uses the slipway landing method employing a combination flooring with drainage. Dismantled materials from the ship to shore are transported of afloat and landing dismantling. All secondary cutting takes place on concrete by crane, in appropriate containers for smaller parts, without contact with the Both measures and infrastructure are in place to prevent leakages to the

Detailed analysis can be found in the following sections of this report.

intertidal zone.

Article 13-1 (c) it operates from built structures

Operates from built structures **guidance note** 

concrete flooring. The maximum width of a ship to be recycled is limited by the width The operation is from built structures, with cranes, winches, trucks, and forklifts on of the facility which is 63m.

showed compliance with

this point. This was

The desk assessment

confirmed during the site inspection

DNV GL - Report No. 2018-0743, Rev. 0 - www.dnvgl.com



2	
Page	
_	

		The facility explained that it may set-up a barge at Leyal Demtas, similar to the set-up at Leyal, due to the benefits for operations (accessible to mobile cranes and vehicles and de facto serves the purpose of a quay, from which alongside recycling is possible).	
		In response to the draft report the yard replied: "The current vessel under recycling at the yard will be used as a 'platform' for accessing the next vessel. The reason the current vessel does not utilize the previous vessel as a 'platform' is because that the previous vessel recycled was a special case (Spanish Navy Aircraft Carrier), which due to its compartmentalization did not offer a suitable 'platform' setup".	
Article 13(1) minimising a facility, and	Article 13(1) (d) it establishes manag minimising and to the extent practic facility, and adverse effects on the e	Article 13(1) (d) it establishes management and monitoring systems, procedures and techniques which have the purpose of preventing, reducing, minimising and to the extent practicable eliminating health risks to the workers concerned and to the population in the vicinity of the ship recycling facility, and adverse effects on the environment caused by ship recycling	oreventing, reducing, lity of the ship recycling
Technical guidance note 2.1.4 (a), (b) MEPC210(63)	General	The employees are trained in various subjects related to health hazards, by SRAT.	Compliance was confirmed during the site inspection
BCTG 6.2	Noise	The facility monitors noise from the surrounding areas and worker health. The facility is located in a heavy industrial area well away from populated centres, thus noise to domestic neighbours is of no concern. The noise measurements, presented to the evaluators on site, were within the national requirements for surrounding and for workers. As the measured level is below 85dB, hearing protection is not required by law.	Compliance was confirmed during the site inspection.
	Air	The air quality monitoring includes surrounding breathable dust measurements, personal dust measurements and VOC measurements. Sampling results were presented on site for on board vessel and on-site. All results were within the national requirements.	Compliance was confirmed during the site inspection.
	Water	Water from the drainage channels are collected in storage tanks and transported to SRAT for temporary storage prior to disposal at Izaydaz or cement factories. These facilities separate the oil from the water, use the oil as fuel additive and dispose of the waste water per national legislation. Please refer to Article 15(5) below for further details.	Compliance was confirmed during the site inspection.
	Soil	The facility had conducted soil sampling as a response to the comments in the	Compliance partly

confirmed during the site confirmed during the site information received in inspection. Additional response to the draft Compliance partly report confirms compliance. Based on the reply and the attached documents from EGE test and ALS the evaluators The facility had conducted sediments sampling as a response to the comments in the and II, PAH, copper and zinc. The sampling must be representative, statistically sound Soil quality - Sampling - Part 101: Framework for the preparation and application of a and in accordance with a recognised international standard, e.g ISO 18400-101:2017, assessment report, which is appreciated and an encouraging sign for the continued Paraments to be included in the analysis include substances in Annex I (except ODS) assessment report, which is appreciated and an encouraging sign for the continued have reason to expect that the monitoring of soil will be conducted in accordance with a recognised international standard and analysed for relevant parameters. improvement of the yard in response to the desk assessment, but some improvements are required. sampling plan. Sediment

DNV GL – Report No. 2018-0743, Rev. 🛭 – www.dnvgl.com

wer that the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of transfer	inspection. Additional large pard in response to the desk assessment.  Paraments to be included in the analysis include substances in Annex I (except ODS) information received in and II, PAH, copper and zinc. The sampling must be representative, statistically sound response to the draft and in accordance with a recognised international standard e.g. ISO 5667-19:2004, report confirms  Water quality -Sampling - Part 19: Guidance on sampling of marine sediments.	Based on the reply and the attached documents from EGE test and ALS the evaluators have reason to expect that the monitoring of soil will be conducted in accordance with a recognised international standard and analysed for relevant parameters.	The yard conducts regular medical monitoring of its employees. When asked for a specific cutter's medical monitoring; these were readily available and presented on inspection.	Periodical health checks are required by national law for all employees including management, due to the classification of the work place as "very hazardous".  Periodical tests are conducted when a new employee starts, followed up annually. It includes x-ray of lungs, hemogram, lead in the blood (every 3 months), liver and kidney tests etc. All workers are vaccinated against tetanus. The periodical check also includes psychological aspects. The original periodical file is stored in the personal file and a copy is stored in the medical file.	The facility is certified according to OHSAS 18001:2007.	confirmed during the site bocumentation viewed on site showed that the facility had taken measures to identify inspection. hazards and risks to safety and health generated by the use of different operations,
			Technical guidance note 2.1.4 (b),		2.1.4 Technical guidance note	2.1.4 (b), MEPC 210(63) 3.1.1 (5)

Management of Hazardous Materials" [several subparts of this section will be revised Management of Hazardous Materials" [several subparts of this section will be revised In response to the draft report the yard replied: "The next revision of the SRFP will materials. The main Sections to be revised accordingly, will be "2.6 Ship Recycling accordingly providing specific information]. The SRFP will also include the updated Methodology" [where at page 60 this exact statement is already included], "4.2 include explicit wording regarding the fact that only SRAT removes hazardous accordingly providing specific information], and "4.3 Environmentally Sound

reason to expect that drinking water will be regularly tested for relevant parameters. Based on the reply and the attached documents from EGE test the evaluators have

# Article 13 (1) (e) it prepares a ship recycling facility plan

guidance note

fulfilling content, clarity and unambiguity. The SRFP is structured according to a QMS  $\prime$ The SRFP is overall well above the evaluator's experience of average standard, with ISO standard, with proper page numbering and revision ID and date on each page.

Based on the reply from

report, the evaluators have reason to expect

the yard on the draft

procedures were found in the appendices, which all three had a table of contents with page numbering, hence easy to find references. The organisation chart depicts a wellstructured, fit-for purpose management organisation, with clear reporting lines, roles The instructions are systematic, efficient and easy to read. Most of the detail and responsibilities.

of the SRFP have/will be that adequate updating

completed.

Content-wise, the SRFP must be updated to reflect that only SRAT removes hazardous PFOS, brominated flame retardants, short chained chlorinated paraffins (SCCP) and materials. Subsequently SRAT procedures need to be updated with procedures for polychlorinated napthalenes (PCN).

report, which is appreciated and an encouraging sign for the continued improvement The facility had updated the SRFP as a response to the comments in the assessment of the yard in response to the desk assessment. The latest SRFP is dated May 2018 and was available on-site to the evaluators.

اع
6
==
ᆵ
O
<b>₽</b> 1
ㅗㅣ
ъ.
a
2
₽
10
~
F
=
.0
-

a)
ō
æ
Δ.

(4)		organisation, with clear reporting lines, roles and responsibilities. The evaluators had, after the site inspection, impression that in practice, power of authority works as depicted in the organisational chart.	confirmed during the site inspection.
MEPC 210(63) Section 3.1.1 (4)	Roles and responsibilities	The roles and responsibilities of the key personnel at the ship recycling facility was clear and concise and demonstrated on site. The facility does not operate with designated project managers for each vessel. The facility's management oversees all vessels, while each ship is followed up by two Managers of Ship Recycling, where one is responsible for safety and one for environment.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.1.1 (5)	ISO 9001/ISO 14000/OSHAS 18000	The facility is ISO 9001, ISO 14001 and OHSAS 18001 certified.	It is not a requirement to
MEPC 210(63) Section 3.1.1 (5), (7) and (8).	Quality Management System	The facility is ISO 9001 certified. The Manager Secretariat is responsible for maintaining the quality management system. The overall responsibility for quality lies within the senior management.  The system was presented on site to the evaluators, and proved to be good.	It is not a requirement to have a QMS system, but considering MEPC 210(63) Section 3.1.1 (5), (7) and (8), this is comparable to a QMS. Compliance was confirmed during the site
MEPC 210(63) Section 3.1.1 (6)	Policy	The facility has an environmental, health and safety policy, available to all employees.	inspection. Compliance was confirmed during the site
	Working hours and annual leave	The employees work 45 hours a week. Working hours are from 0830-1700 Monday-Saturday with lunchbreak from 12-13. By Turkish labour law, all employees who have worked for at least one year including the probation period are entitled to paid annual leave; and leave periods, which is determined according to employee's length of service:  - 1 to 5 years (included) 14 working days - 5 to 15 years - 5 to 15 years (included) or longer 26 working days Interviews with employees on-site confirmed a practice per Turkish labour law.	Compliance was confirmed during the site inspection.

www.dnvgl.com
Rev. 0 -
2018-0743,
Report No.
DNV GL -

MEPC 210(63) Section 3.1.1 (7)	Instructions and procedures	There is no quality department, however the facility has an organized system for keeping and maintaining procedures and ISO compliance, handled by the Manager Secretariat. Instructions and procedures are distributed and understood by all personnel, formal training, morning tool-box talks and mentoring of new personnel. Decision to update procedures are taken by management. Formal management meetings where lessons learned are discussed are held monthly. The environmental officer or safety officer is responsible for implementation on-site.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.1.4	Project management progress reporting	The facility has a reporting regime. The facility must submit a request to the Harbour Master when the double bottom of the dismantled vessel remains. Upon verification, the Harbour Master grants permission for completion of dismantling. Upon actual completion, the facility confirms to the Harbour Master that the final part of the keel has been dismantled. Subsequently, the Port Authority issues "Statement of Completion of Dismantling", and the facility provides the "Statement of Completion" to Customs. Reports to the vessel's Flag State and former owner are only provided upon specific request. The facility maintains reports related to work accidents and occupational hazards. A completion report is compiled after each finalised project.	Compliance was confirmed during the site inspection.
		It was clear to the evaluators that the facility can establish and adapt a reporting system fit to any requirement.	
Article 13 (1)	Article 13 (1) (f): it prevents adverse particular in intertidal zones;	ie effects on human health and the environment, including the demonstration of the control of any leakage, in	ol of any leakage, in
Technical guidance note 2.2, 2.2.1, p8: footnote (26), 2.2.2 (f), MEPC 2.0(63) Section	Intertidal zone	The tidal range is between 25-45 centimetres in Aliaga (cross-checked by DNV GL). Work procedures were implemented for activities within the intertidal zone. Dismantled materials were transported by crane from the ship to shore using appropriate containers.	Compliance was confirmed during the site inspection and the facility has confirmed that the SRFP will be
3.4.4.3/Bt 1G: 9.4.4.3/Bt 1G: p33.7able 5, p44: 4.1 / ILO SHG: p65: 7.2.4.4		The evaluators could verify that oil booms are deployed between both ship sides and shore, however they do not surround the entire ship. The oil booms were found to be open to the sea in each end, hence not functioning optimally. The evaluators are under the impression that the oil booms could be tightened closer to shore and to the ship side. It is acknowledged that spare oil booms, capable of surrounding the entire ship, are easily accessible at the facility and that it could be deployed rapidly if needed.	updated accordingly.

Personnel from the Ministry of Transport explained that the usage of oil booms was in accordance with national legislation, based upon risk assessment and in agreement with the Harbor Master considering the weather conditions.

The evaluators initially questioned the adequacy of the oil booms, and the facility forwarded explanations as a response to discussions during the site inspection. Oil booms reportedly cover an adequate length of the waterline, considering the areas where dismantling activities take place (during the site inspection oil booms was employed on the forward most part where the actual dismantling activities took place). In case of a pollution incident the facility can promptly deploy oil booms around the full length of the vessel utilising its own motor boat (both observed onsite). In case of a pollution incident, and in addition to the yard's own emergency response resources, both SRAT and the local port emergency response units and crews are readily available and on-call to respond.

The facility has procedure, personnel and equipment for emergency response to acute oil pollution, with additional assistance from SRAT/ local port emergency response units. During the site inspection at SRAT, the evaluators observed an oil filter curtain boom. The procedures and equipment combined, demonstrate control of leakage, but the facility must ensure that the oil booms deployed are closed (not open to the sea).

In response to the draft report the facility replied: "Yard confirms that appropriate measures have already be taken, as necessary, to address the above observation and ensure compliance with the directions of the finding".

It is recommended that the facility updates the SRFP to reflect what they do in practice, as it is written on page 60 that "oil booms will be placed around the vessel".

In response to the draft report the facility replied: "The next revision of the SRFP will include an analytical description of the practices related with the use and deployment of oil booms and the relevant text at page 60 will be revised. The updated information to be included will be in line with the relevant information provided by the yard to DNV GL with our email dated 20 June 2018 under the heading 'Request for clarifications and documents after the site visit', which is partly reflected in the above paragraph

Article 13 (1) (g) (i); the containment of all hazardous materials present on board during the entire ship recycling process so as to prevent any release of those materials into the environment; and in addition, the handling of hazardous materials, and of waste generated during the ship recycling

within this section".

process, only on impermeable floors with effective drainage systems; Technical

Cutting areas

guidance note 2.2.2, MEPC

p78ff: 5.3, p67: figure 6 210(63) Section 3.3.4.3 / BC TG:

Dismantling of a vessel is explained in the SRFP and in the Ship Recycling Plan, which is Compliance was partly specific for each vessel.

confirmed during the site

the response to the draft

report confirms compliance.

information received in

inspection. Additional

drainage. There are two underground storage tanks (9.6  $\mbox{m}^3$  and 4.7  $\mbox{m}^3)$  and one over Ref SRFP page 98-102, cutting takes place on a concrete impermeable floor with ground tank ( $50m^3$ ) to collect the water, which is pumped out periodically and transported to SRAT. All above was observed on site.

A crane that lifted the sections cut from the vessel, onto secondary cutting areas was observed on-site. Secondary cutting was observed on-site to be in open air, on impermeable flooring, with drainage.



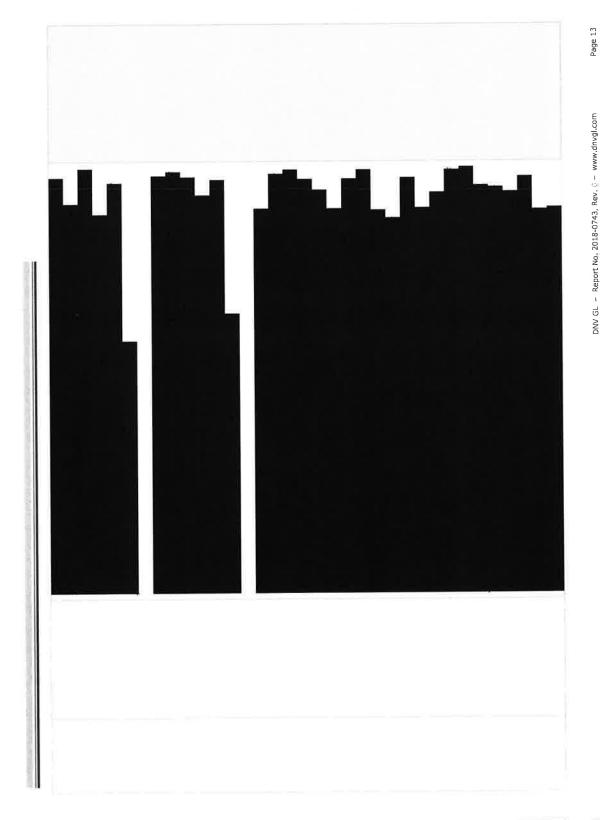
A vessel arriving for dismantling at the facility reportedly holds as little bunker as possible due to customs regulations. The facility must discard remaining bunkers on-board on ship arrival as waste, hence a clear incentive is in place to limit bunkers to a minimum. In addition, the facility wants to limit remaining bunkers onboard due to the potential fire/explosion and environmental pollution hazard.

The yard must submit a request to the Harbour Master when the double bottom of the dismantled vessel remains. The bilge and double bottom tanks are reportedly cleaned (SRFP page 59). Upon verification, the Harbour Master grants permission for completion of dismantling (SRFP page 62).

This was not observed on-site, because the facility had currently started cutting the forward part of the vessel at the time of the inspection, but the procedures were confirmed by interviewing several employees and by the representative of the Ministry of transport. A portable tank, reportedly containing water and detergents used for cleaning, was observed on site.



DNV GL - Report No. 2018-0743, Rev. 0 - www.dnvgl.com





The slope of the beach beyond the intertidal zone, i.e. from calm water high tide to soil is palpably gentle enough for moderate waves of Hs 1 - 1.5 m to wash onto the soil. As the sea was calm at the time of the inspection, the evaluators cannot confirm that the soil beyond the intertidal zone is out of reach at any sea state. In the same

moo.
۷g.
ė.
www
1
C):
Rev
43,
-07
2018-C
20
No.
Ħ
Repo
1
ี 6
≥
6

		context, the facility stated that they could not use surrounding oil booms due to the frequent high waves in the bay.  In response to the draft report the facility replied: "This is a consideration to be made only if the yard decides to significantly extend the impermeable floor and drainage channel towards the shoreline. The current arrangement is fully protected even in the case of multi-year storm events".  Even though the vessels no longer are beached at full power, at any speed above dead ahead there will be a bow wave. 20,000 tons' mass travelling at 4-5 knots (2-2.5 m/s) equals 40,000 Jo fenergy that has to be absorbed by the surroundings. There will not be a "tsunami" flooding the area, but that the soil remains unaffected seems unlikely. As this was not witnessed, the evaluators are unable to confirm that there is no bow wave washing the soil beyond the intertidal zone, when landing.  In response to the draft report the facility replied: "This subject has been extensively discussed with DG Environment in previous instances, including during the EC workshop at Aliaga in May 2016 and in relevant email correspondence with DG Environment on 26 March 2018. During this latter communication, we also provided the minimal impact of the slow-speed landing procedure as implemented at Leyal. Same video is also included herewith as supporting evidence.  * The vessel is a 10,000 ton lightweight PCC with an arrival displacement of approximately 15,000 tons.  Blocks removed on the hard-backed soil can be lifted by crane directly onto the impermeable floor with drainage for further processing.  Based on the reply from the yard on the draft report, with additional documentation, the evaluators have received sufficient information to confirm compliance.
Technical guidance note 2.2.2, MEPC210(63)	Drainage	The concrete is engineered to a drain channel. The drain channel is connected to a pump and a storage tank.

COM
lgvu
www.d
ı

Section p34: 3.4.4.1			confirmed during the site inspection.
Technical guidance note 2.1.4, 2.2.2, 2.2.3, 2.2.5, 3.5,	Waste storage	The facility stores steel and non-ferrous materials on site, on concreted flooring with drainage. Other waste materials are transported directly to waste management facilities.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.4.2.5 / BC TG 3.1, 3.3, 3.4.3, 4.1, 5.1, 5.2(Zone D), 5.3(Zone D),		Steel plates and a small container with wood were observed at the hard-packed soil during the site inspection. Wood (unless CCA-impregnated) and steel are not considered hazardous materials.	
: Table 11 Technical Technical guidance note 2.1.4, 2.2.2, 2.2.5, 3.6, MEPC 210(63) Section 3.4.3/ BC TG 3.1, 3.3, 3.4.3, 4.1, 5.1, 5.2 (Zone D), 5.3	Hazardous waste storage	Hazardous waste is transported directly to SRAT for temporary storage prior to transportation and disposal at a waste management facility. The hazardous waste storage areas at SRAT was inspected Friday the 8th of June. The storage area was observed to be roofed on concrete flooring with drainage.	Compliance was confirmed during the site inspection.
Table 11 Article 13 (1) management	Table 11 Article 13 (1) (g) (ii): that all waste ge management facilities, including was	Table 11 Article 13 (1) (g) (ii): that all waste generated from the ship recycling activity and their quantities are documented and are only transferred to waste management facilities, including waste recycling facilities, authorised to deal with their treatment without endangering human health and in an	inly transferred to waste man health and in an
EnVironment Technical guidance note 2.1.4, 2.2.2, 2.2.3, 2.2.5, 3.5, MEPC 210(63) Section 3.4.2, 3.4.3/ BC TG	Technical Waste management squirance note 21.4, 2.2.2, 2.2.3, 2.2.5, 3.5, MEPC 210(63) Section 3.4.2, p48ff:	As much as the evaluators could verify and cross-check, waste is only transferred to waste management facilities authorised to deal with the specific waste type.  Transportation of hazardous waste is by licensed trucks to licensed disposal facilities. All vehicles are equipped with mobile tracking device by satellite, available to the Ministry of Environment (Çevre ve Şehircilik Bakanlığı). The waste transfer form is electronically completed on the webpages of the Ministry of Environment.	Compliance was confirmed during the site inspection.
41, psort 4.2, Technical guidance note 2.14, 2.2.5, 2.23, 2.2.5, 3.6, MEPC 210(63) Section 3.4.2, 3.4.3/ BC TG p11, p45ff; 7. / 4.2	Waste disposal	SRAT is responsible for waste disposal. The traceability of waste is ensured through satellite based tracking system of the waste.  Please refer to Article 15(5) below:	Compliance was partly confirmed during the site inspection. Additional information received in response to the draft report confirms compliance.

$\infty$
$\vdash$
a)
ō
ď.
4

Technical guidance note 2.1.3, MEPC 210(63) Section 3.3.5/ BC TG p3, p5/6, p47, p56, p63/64/65/66/6	Technical Emergency guidance note preparedness plan 210(63) Section 3.3.5/ BC TG p3, p5/6, p47, p56,	The facility has an emergency preparedness plan. Emergency numbers are 112 for medical/ambulance and 110 for fire. Contact information (including telephone showed c numbers) for the appropriate contact personnel is listed at the facility. The EPRP confirmed workers on the facility.	ng facility; The desk assessment showed compliance with this point. This was confirmed during the site inspection.
7, p70, p81, p83, p87, p89/ ILO SHG p32: 4.6, p 49: 7.1.8, p 128:16.		It is possible for fire-fighting equipment and vehicles and ambulances to rapidly access the ships. There are enough ambulances to guarantee that one/several could be deployed if necessary. SRAT has one ambulance and doctor/nurse available close to the yard. Ambulances are also available from the hospital in Aliaga.	
		Please also refer to the medical services and facilities and fire station section below.	
Technical guidance not 2.2.4, MEPC 210(63) Section 3.2.1	Emergency access routes	The facility normally uses one or two gangways for regular access. The evaluators could observe two gangways for one of the ship currently being dismantled and one gangway for the other. Secondary (emergency) access is in way of basket and crane, or ladders. The facility has an emergency rescue boat.	The desk assessment showed compliance with this point. This was confirmed during the site
		Evacuation routes from the vessels to the gates were seen to be very good. Mustering station- and evacuation route signs were observed posted.	inspection.
		Occasionally a pilot ladder is used for evacuation – and sometimes the pilot ladder hangs in free air, for example from the stern It is recommended that all workers are trained in using the pilot ladder in that unsupported situation as it is not always straight forward.	
MEPC 210(63) Section 3.2.1	Access and logistics within facility,	The facility was found tidy, with clear, wide and swept access ways. The access ways between and within workshops and storage areas were found clear and safe.	Compliance was confirmed during the site
		Clear access routes for firefighting and ambulances were observed on-site. No issues were observed regarding traffic culture.	inspection.
Technical guidelines 2.1.4 (b). MEPC	Medical services and	The facility had a first aid room with a simple treatment bench, however not clean, inadequately furnished, no paper roll and with a dirty and uninviting sink. The	Additional information

r table available to compliance. disinfection fluid, surroundings were the evaluators s mitigated. s breathing masks,	commendation of ns regarding all of	ith doctor and sity of Aliaga, close State hospital and distance of the uipped with a trauma	edical	: 30.06.2012 / Compliance was noccupational confirmed during the site inspection.	nts and is familiar wice a week. This as use of masks and correct filters and
evaluators observed, on site, two first aid kits. One in the emergency room, and one adjacent to a pulling winch. However, there was no chair, bench or table available to facilitate first aid treatment. The kits lacked basic content such as disinfection fluid, there was no list of content / replenishment instructions and the surroundings were dirty. The facility advised that the kits were not used where upon the evaluators recommended that they either were removed or the shortcomings mitigated. Cleaning of emergency equipment in the emergency room, such as breathing masks, should be improved.	In response to the draft report the yard replied: "Following the recommendation of the auditors during the onsite audit the yard took corrective actions regarding all of the above listed observations (see Exhibit 6)".	The facility has access to a well-equipped first aid room at SRAT with doctor and nurse. Hospitals and private medical services are available in the city of Aliaga, close by. The EPRP includes the phone numbers to two hospitals: Aliaga State hospital and Menemen State Hospital (page 223). Google Earth checks confirm distance of the hospitals to be 8 and 30km respectively. The Aliaga hospital is equipped with a trauma unit.	Izmir has even more advanced hospitals (severe burn unit) and medical helicopters/flights are available if required.	Turkish Occupational Health and Safety Law (No. 6331, published: 30.06.2012 / Official Gazette No. 28726) reguires every company to contract an occupational health and safety expert based on the company's hazardous class. Depending on the number of workers on site, the minimum time that the OHS Expert should spend at a company is defined in the respective regulations.	The facility is well experienced with regulatory health requirements and is familiar with unannounced inspections as an OHS Expert arrives at least twice a week. This OHS Expert talks directly to workers about non-conformities such as use of masks and provides suggesting improvements and guiding the facility to the correct filters and mask for its operation.
facilities				Regulatory requirements health	
210(63) Section 3.2.1, 3.3.5, ILO SHG, Section 3.6				Technical guidelines 2.1.4 (b), MEPC.210(63), Section 3.3.4.11	

20	
<u>a</u>	
ge	
ш,	

	requirements safety	Official Gazette No. 28726), requires every company to contract an occupational health and safety expert based on the company to contract an occupational health and safety expert based on the company's hazardous class. Depending on the number of workers on site, the minimum time that the OHS Expert should spend at a company is defined in the respective regulations. The facility is well experienced with periodically inspected by the OHS Expert. OHS Expert attends the monthly health and discussed and corrective actions determined.	Compliance was confirmed during the site inspection.
MEPC,210(63), Section 3.1.1	Regulatory requirements fire	Drills are conducted twice a year with the fire team at SRAT. According to national legislation, once a year is sufficient.	Compliance was
		The facility has trained 5 workers in basic fire-fighting. The facility does not have its own fire brigade. Yildiz Yangin provided training and issue certificates at the end. Upon request, valid certificates were presented. Aliaga has a fire station.	confirmed during the site inspection.
Article 13 (: use;	l) (i) it provides for work	Article 13 (1) (i) it provides for worker safety and training, including ensuring the use of personal protective equipment for operations rowing.	porations rounding
Technical guidance note 2.3.1	Safety inspectors on site	Safety officer was well known by the workers on site,	Compliance was
Technical guidance note	Condition of safety	Safety equipment was seen to be of good change.	confirmed during the site inspection.
2.3.2	equipment	messy kept (emergency room). The yard stated they would improve. The flashlights provided in the room were old and had hardly any effect. The evaluators recommend to purchase proper modern LED lights, assuring both lighting and battery longevity.	Compliance was confirmed during the site inspection.
		In response to the draft report the facility replied: "Following the recommendation of the auditors during the onsite audit the yard took corrective actions regarding the above observations (see Exhibit 7)".	
Technical guidance note 2.3.3, MEPC	Safety induction and training, employees	The facility has implemented induction basic safety training for employees. Induction re-training is reportedly performed as needed in case of characters.	Compliance was
			confirmed during the site

ř	77
1	1
2	ב

210(63) Section 3.1.2/3.2.2		Each new hire is reportedly subject to a background check, a physical check and a health check. Records of training and follow-up tests are recorded in the company system. The training programme is developed by the facility management, SRAT and	
Technical guidance note	Safety induction and training,	third parties. Sub-contractors are not used.	N/A
210(63) Section 3 1 2 / 3 2 . 2	subcontractors	on the incorporation and on-site. The	Compliance was
Technical guidance note 2.3.3, MEPC	Safety induction, visitors	The evaluators received a safety induction uprront of the inspection and the facility provided PPE to visitors including hard-hats, steel toe shoes, high-visibility jackets, protective glasses and gloves.	confirmed during the site inspection.
3.1.2/3.2.2 Technical guidance note 2.3.3, MEPC	Risk Assessment	The yard has developed Risk Assessment Facility Wide, Risk Assessment for Environment and Risk Assessment for Specific Ships.	Compliance was confirmed during the site inspection.
210(63) Section 3.1.2/3.2.2		Col. CDAT negonnel handles hazardous waste and the personnel is trained. Examples	
MEPC 210(63) Section 3.1.2	Hazardous waste handling training	only share personners were forwarded to the evaluators as part of the SRAT reply of various certificates were forwarded to the evaluators as part of the site inspection.	showed compilance with this point. This was confirmed during the site
			inspection.
MEPC 210(63) Section 3.3.5	Ship access control	Access to ships is primarily by means of large, stable gangways. The facility utilises a "Persons on board" system consisting of a shore-side magnet board where the particular his tag when boarding the vessel.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.5	Prevention of falling from heights		compliance was confirmed during the site inspection.
		The self-inflating lifejacket for use above water is not periodically checked. These needs to be periodically checked in order to ensure that the device is working and will inflate in contact with water. The yard needs to set up a system in accordance with manufacturer instructions.	
		In response to the draft report the facility replied: "Following the recommendation of the auditors during the onsite audit the yard took corrective actions regarding the	

		above abservations (see Exhibit 7)".	
		Non-self-inflating lifejackets were also available.	
MEPC 210(63) Section 3.3.4.1.8	Safety signage on site	Overall safety signage was seen to be good to very good.	Compliance was confirmed during the site
MEPC 210(b3) Section 3.3.4.1.8	Safety signage on vessel	Due to safety restrictions, the evaluators did not inspect the ships under demolition. They explained that they use a rope system in different colours to guide access to specific areas on board for emergency evacuation.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.6	Lifting equipment and instructions	The facility had an adequate lifting safety regime, with instructions, testing of equipment and expiry dates.	Compliance was confirmed during the site
MEPC 210(63) Section 3.3.4.6	Crane operators' certification	Found in order.	inspection. The desk assessment showed compliance with this point. It was not necessary to check again during the site
Directive 2006/42/EC	Lifting equipment, authorization	A yearly working plan for the cranes for 2018 was presented on site. Periodic checks are conducted every 3 months by a third party, Perkon. They have a responsible person at the facility who checks the equipment and contact Perkon as required for additional maintenance, in addition to the periodically tests. The responsible person fills in a form when he performs checks, these were presented on site.	inspection. Compliance was confirmed during the site inspection.
		Several documents showed maintenance at different intervals for different heavy equipment. The forms were signed with information about the next service interval. However, information about a specific service could not be found. Hence it is not understood how the yard keeps record of what has been done at each service. Apparently, all equipment follow the same maintenance checklist for each service, apparently with no consideration to manufacturer service intervals / instruction handbooks for example for trucks and cranes. The material presented was not clearly understood by the evaluators.	

	Compliance was confirmed during the site inspection.	Compliance was confirmed during the site inspection.	Compliance was confirmed during the site inspection.	Compliance was confirmed during the site inspection.	Compliance was confirmed during the site inspection.	Compliance confirmed in response to the draft report.	
In response to the draft report the facility replied: "Based on the auditors' finding during the onsite audit, the yard has amended the maintenance scheme of the lifting equipment and vehicles by including requirements from operation & maintenance manuals, service bulletin (wherever issued), best practices and yard experience, separately for each equipment and vehicle class".	Found in order.	A new employee will be an assistant cutter for 5 years, before becoming a cutter. Onboard the ship there are always two cutters in pair.	Final cut done by experience and hooked on to a crane. They normally cut approximately 6-12 ton pieces. They are not sketching anything. The cuts are verbally explained by the safety/environment officer to the cutters. Every morning 8-8.30 there is a training session/toolbox meeting with various topics, including cutting precautions. They do not really consider that the piece may swing, but the personnel has long experience. The crane operator reportedly has 25 years' experience.	The cutters use torches, and they are trained before they can use them.		Specific procedures apply and were shown on site to the evaluators. A new winch with foundation had recently been installed. It was questioned, during the site visit, whether the pulling winches, capable of 165 tons pull, and their foundations had been subject to load calculations. It was advised that the company Perkon had done so, however the yard could not provide any documentation.	In response to the draft report the facility replied: "The engineering study and relevant technical specifications related to the pulling winch which was in the process of being installed (not yet operational) during the onsite audit was conducted by acting as a service provider for Perkon. The eventual testing/certification
	Training of forklift operator	Certification/training of cutters	Cutting procedures	Steel cutting machines	Other machinery	Winches, mooring gear.	
	MEPC 210(63) Section 3.1.2	MEPC 210(63) Section 3.1.2	MEPC 210(63) 3.4.3	MEPC 210(63) Section 3.3.4.3 / ILO SHG:	ILO SHG: p108ff:13.	ILO SHG: p67:7.2.4.4, p108ff:13.	

of the winch prior to operation will be done by Perkon. However, given your comments during the onsite audit and above, and prior to any operation, we have contracted

to also check and approve the project. The engineering study by

Formatted: Highlight Formatted: Highlight

It was also questioned whether the winches were equipped with load breakers, or if they slowed down and stopped only due to exhaustion. The yard advised they had load breakers however the evaluators ask that the yard confirms, to be sure the question was understood.

In response to the draft report the facility replied: "Following the recommendation of the auditors during the onsite audit the yard installed load breaker using an external electrician and it is deployed on the electric panel".

The winch is controlled, upfront of use. The winch is not used every day and the latest report was presented on site dated 02.06.18.

supervisor ticks off the checklist hands-on on site, but since it gets very dirty the office asked how this procedure works in practice. It was explained that sometimes the field is filed. Sometimes, reportedly the equipment check is conveyed from site to office by re-writes it on a clean sheet prior to filing it. Reportedly the dirty one sometimes also The facility explained that every 2 weeks they check the roller, chain and steel ropes. Upon request, the latest report in way of a ticked-off checklist was presented on site to the evaluators, dated 02.06.2018. The evaluators observed that the checklist had signature. As the purpose of a checklist is hands-on quality assurance, the evaluator uncertainty with the evaluators, whether the checklists were being used as intended. walkie-talkie. When the evaluators asked to bring in a "dirty" example of a checklist, for the same date as which the clean was presented, a dirty checklist for a different explained the condition of the equipment verbally to the Manager Secretariat who finger marks normally seen on field checklists. Reportedly the field supervisor had Recommend the yard to update this procedure to a functional one for all involved. observation was based on the document being spotless, with no creases or soiled been filled out by the office assistant and not by the field supervisor himself. The subsequently filled out the checklist, and handed it to the field supervisor for his equipment was presented. These several diverging explanations caused an

DNV GL - Report No. 2018-0743, Rev. @- www.dnvgl.com

И
2
n
õ
- rc
Δ

In response to the draft report the facility replied: "Taking into consideration the comments provided during the onsite audit the yard has amended the process for completing the check-list and going forward the responsible field officer completes the
document onsite by nimself prior to confind incames / Johnson 1997 or organization".
Based on the reply from the yard on the draft report, with additional documentation, the evaluators have received sufficient information to confirm compliance.
Inspection reports for ropes, hooks, slings and basket was presented to the evaluators on site. It is recommended that the facility ensures better traceability between the certificates and the various hooks and slings, since they did not have any identification on them.
In response to the draft report the facility replied: "Upon completion of the onsite audit and based on the finding of the auditors, the yard matched the various items with their respective certificates and labelled them by way of painting and marking their unique numbers".
The facility has an equipment inspection and maintenance regime, with a designated department / team; including third-party inspections.
Eye-wash solution bottles were seen posted. It is recommended that the facility checks the MDSD of the various paints and chemicals they handle on site. In many MDSD the first aid required is 15 min of continuous eye flushing. Eyewash bottles typically hold less than a liter of water, which would supply the user with flushing fluid for less than 1 minute. Hence eyewash bottles do not provide an adequate amount of flushing fluid and cannot be considered a primary means of protection.
An appropriate number of proper eyewash stations is strongly advised. Eyewash stations must be kept clean.
In response to the draft report the facility replied: "The yard has placed onsite an eyewashing station that was taken from the Pure-Car-Carrier currently under dismantling at the yard. Additionally, the yard has cleaned and upgraded the existing eye-washing

č		
-		h
_	r	

station by installing additional bottles to ensure longer rinsing time. Please see Exhibit 6".  Based on the reply from the yard on the draft report, with additional documentation, the evaluators have received sufficient information to confirm compliance.
---

		In response to the draft report the facility replied: "Based on the findings of the auditors the yard upgraded the current storage area of the pumps by building an impermeable (cement) barrier, properly containing any emissions from the storage area to the soil. Additionally, the housekeeping procedure has been properly amended".	
		Based on the reply from the yard on the draft report the evaluators have received sufficient information to confirm compliance.	
Technical guidance note 2.1.3, MEPC 2.10(3) Section 3.3.5/3.3.6 / BC TG: p63: 4.5	Fire station	Izmir fire department has a station in Aliaga and reportedly ( <a href="http://itfaiye.izmir.bel.tr/en/cars/1059/1206">http://itfaiye.izmir.bel.tr/en/cars/1059/1206</a> ) they have 117 fire trucks in various tonnages, 48 laddered fire trucks, 17 laddered vehicles, 56 meters hydraulic foam towers, 104 meters laddered vehicles with baskets, 2 fire trucks for industrial fires etc. At the Aliaga station they have among others an unmanned robotic fire engine for chemical fire response.	Compliance was confirmed during the site inspection.
ILO SHG: p49: 7.1.7	Instructions and signage	Found in order.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.3, MEPC 210(53) Section 3.1.2 ILO SHG:	Fire station manning, fire-fighters	Selected workers are trained in basic fire-fighting. The facility's fire fighters will only attempt to put out minor fires. If a fire escalates, SRAT's fire team is called. If the fire runs out of control, the local fire brigade is called for.	Compliance was confirmed during the site inspection.
LO SHG: p83:	Fire station equipment	N/A	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.6, ILO SHG: 8.8.11	Fire alarm system on shore	Local alarm buttons observed. No direct alarm to Aliaga fire station. Emergency phone number is readily posted. If an evacuation is necessary, the information will be spread using hand held radios or mobile phones. Both observed during the site inspection.	Compliance was confirmed during the site inspection.
ILO SHG: 8.8.11	Fire alarm system on vessel	The facility explained that fire alarms would be manually released on board in case of fire.	Compliance was confirmed during the site inspection.
Technical	Fire prevention	Fire prevention is monitored. The Facility follows the requirements of OHSA	Compliance was

2.3.3, MEPC 2.10(63) Section 3.3.6, ILO SHG: 8.8	measures general	requirements.	confirmed during the site inspection.
MEPC 210(63) Section 3.3.6, ILO SHG 13.4.5	Combustible materials and hot- work		Compliance was confirmed during the site
MEPC 210(63) Section 3.3.4.4, ILO SHG 8.8.1, 13.5.2,	Condition of AC/OX lines	AC/OX hoses, connections and gas manifolds, including the gas plant, were seen to be in good condition. The earth cable for the LPG tank was clipped. The earth cable is checked by a third party, the last periodically test was presented on site to the evaluators (dated 05.05.2018).	
MEPC 210(63) Section 3.3.4.4	Transporting/storing flammable gases	Not addressed. Assumed to be part of the OSHA requirements and national legislations.	
MEPC 210(63): p21: 3.3.5, p23: 3.3.6	Fire hydrants	Hydrants and hoses checked on site and found to be pressurised and in order. Seawater is available by portable pump.	Compliance was confirmed during the site
ILO SHG: p83; 8.8.10	Fire extinguishers	Extinguishers were observed throughout the facility. Periodically checked at regular intervals. It was the evaluators opinion that many fire extinguishers were parked too close to the fire hazard (gas tanks etc.) making them inaccessible in case of an actual fire development.	inspection. Compliance was confirmed during the site inspection.
		Upon request the MSDS of the firefighting foam was presented. Kolagom S 4000 3% is used on-site. Referring to the manufacturers webpage this foam concentrate is fluorine free (http://www.kolagom.com/default.asp?bolum=shop1&gorev=oku&id=5&cat=29&sid=9573922&l=lang1) Dry powder type is Ayex ABC 40. MSDS was available and presented on site	
METC 210(03): p22: 3.3.6, ILO SHG: p82: 8.8.3	Smoking areas	Yes.	Compliance was confirmed during the site
	Security management	The facility has an in-house security department, responsible for site security and security procedures. Security includes theft, unauthorized access, and to assure	inspection. Security management is

		personnel and material security from project initiation through the commodity production chain.	
	Access control to facility; security	The Security staff monitors all vessels, barges, and marine structures. as part of their responsibilities. The facility is covered 100% by CCTV, observed on site.	Access control to facility is not a requirement.
	patrols Data security	N/A	Data control is not a requirement.
ILO SHG 8.4.2	Entrances / gates, fencing	Employees had access cards. Workers enter and leave through a manned security gate covered by CCTV.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.3. 2.14, 2.3.1. MEPC 210(63) Section 3.1.2. 3.14, 3.3.4.3, 3.3.6, p3: figure 1, p84: 6.1, 6.2,	Training	The training programme is extensive and was assessed to be sufficient to allow safe operations for all tasks and functions. The facility's procedures assure that the right people get the right training, both general, project-wise and according to task. Training records are kept and maintained. Type and frequency of training is reviewed periodically and modified if necessary. All training files are stored in per employee, observed by the evaluators on site. Different training regimes apply to different positions.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.2, MEPC 2.10(63) Section 3.3.4.10	БРЕ	Use of PPE was observed to be very good. Helmets, two-piece boiler suits, shoes, eyeglasses, gloves and respiratory masks were seen worn throughout the operation. The cutters were observed using filter masks according to 4-EN 149, other workers were observed with P3 masks. P3 masks are replaced daily, filter mask as required.	Compliance was confirmed during the site inspection.
		PPE is unambiguously provided by the facility to the workers free of charge and replacement PPE such as P3 masks, filters, ear protection and gloves was witnessed readily available. Safety shoes and hard-hats are bought from a shop nearby and not stored at site.	
		The workers use two-piece boiler suits, mainly made of cotton, meeting the requirements of the national regulations for shipyards and recycling yards, but they are not fireproof. The distance from the arm and the torch to the cutter is quite far hence they say that sparks do not hit them. Also, they do not cut at chest level but at foot level.	

ſ	٣	7	
	d	U	
	c	3	
	n	0	
1	ב	L	

	either Compliance was and confirmed during the site and few inspection.		on, but Compliance was confirmed during the site inspection.	Not a requirement to have a CSR policy or statement.	ance with Article 7(5), to the ship to the ship to the desk assessment tomed showed compliance with SRAT. This point. This was confirmed during the site of in- inspection.  e inspection.
2016 to 2017 numbers cannot be directly compared, they have used different companies.	The facility has started to report and tracks near-misses, where employees can either report verbally to the Manager Secretariat or write down hazardous situations and near-miss cases, anonymously if desired. The system is not fully implemented and few reports have been received to date.	Non-conformances, such as breach of safety rules or failed dismantling operations are registered and followed up. Demonstrated and found good. A report presented showed that one employee did not use PPE while cutting. The facility explained that the cutter had received a warning and after that it had worked well.	The facility pays for health checks. None of the workers are organised by a union, but they are free to join one if they like.	Do not have any statement or policy.	owner and the administration or a recognised organisation authorised by it;  owner and the administration or a recognised organisation authorised by it;  owner and the administration or a recognised organisation authorised by it;  section 3.2.4.  The facility has extensive experience in running projects in accordance with IMO/EU  Regulation procedures with IMM Part 1,2 and 3 and a SRP. The facility is accustomed Regulation procedures with IMM Part 1,2 and 3 and a SRP. The facility is accustomed Regulation procedures with IMM Part 1,2 and 3 and a SRP. The facility secusions and operation with client requirements, involving all management. The evaluators asked to see a SRP for the vessels currently being dismantled, and this was readily available. The SRP was ship-specific, well-structured and detailed dismantling sequence descriptions. The SRP is in line with requirements in IMO Resolution MEPC.196(62) and Article 7 SRR.  The facility considers the stability information of the ship and it tanks and content. The facility wants to receive the vessel with as little bunker/fuel as possible due to
	Near-miss reporting	Non-conformance procedures	HSE Incentives	Corporate social responsibility	(a): the operator of a se administration or a respective plan
					Article 13 (2)  owner and th  MEPC 210(63) Section 3.2-4, 3.4.2.1

www.dnvgl.com
0
Rev.
2018-0743,
No.
Report
1
G
DNV

in recycling	and specify an implimat	snip recycling and specify all illioning tion is a second of the second	- i
Technical guidance note 2.2.1, MEPC 210(63) Section 3.2.2	Authorisation	Thoroughly checked during the document review; certificates available online.	Ine desk assessment showed compliance with this point. It was not necessary to check again during the site inspection.
MEPC 210(63) p8: 3.1.2, p10: 3.2.2 / BC TG: p38: 3.4.3	Sub-contractors	Do not use sub-contractors.	The desk assessment showed compliance with this point. This was confirmed during the site inspection.
ticle 15 (2)	(b): indicate whether the	Article 15 (2) (b): indicate whether the ship recycling plan will be approved by the competent authority through a tacit or explicit procedure,	plicit procedure,
MEPC.196(62) Section 5	Explicit or tacit procedure	Today the SRP is approved by tacit approval. The SRP is part of a wide set of documents, surveys and permits/licenses that are submitted to the competent authorities for obtaining permission to dismantle a ship. The SRP is neither explicitly approved nor rejected as a standalone document.	The evaluators are of the impression that the organisation easily can adapt to these new legal regimes.
		The evaluators are of the impression that the organisation easily could adapt to any new legal regimes with regards to approval of the SRP.	
rticle 16 (2) ecycling fac (3), for the	(a): the method of recyc ility operates, including a approval of the ship recy Method of recycling	Article 16 (2) (a): the method of recycling; (b) the type and size of ships that can be recycled; (c) any limitation and conditions under which the ship recycling as regards hazardous waste management; (d) details on the explicit or tacit procedure, as referred to in Article 7(3), for the approval of the ship recycling plan by the competent authority; (e) the maximum annual ship recycling output.  The desk assessment showed compliance we winches, trucks, and forklifts on concrete flooring.  Confirmed during the inspection.	as referred to in Article as referred to in Article The desk assessment showed compliance with this point. This was confirmed during the site inspection.
	Type and size of ships that can be recycled	The yard has a limitation on width of 63 meters.	This was confirmed during the site inspection.

M
a)
8
Δ

	Any limitation and conditions	Offshore structures are not described in the Ship Recycling Facility Plan; hence the evaluators cannot confirm the method for recycling offshore structures.	This was confirmed during the site
		In response to the draft report the facility replied: "The facility is capable of recycling both semi-submersible and jackup platforms. The SRFP will be amended accordingly to explicitly include offshore structures"	inspection.
	Maximum annual ship recycling output	The maximum annual ship recycling output achieved is 50 350.37 ldt in 2013.	The desk assessment showed compliance with this point. It was not necessary to check again during the site
Article 15 (2) (	at it wi	inspection. Il only accept a ship flying the flag of a Member State for recycling in accordance with this Remilation:	inspection.
	Confirmation	Confirmation from the facility that it will only accept a ship flying the flag of a Member State for recycling in accordance with this Regulation.	The desk assessment showed compliance with this point. It was not necessary to check again during the site
Article 15 (2) (a safe-for-entry of	Article 15 (2) (d): provide evidence th safe-for-entry criteria throughout the	Article 15 (2) (d): provide evidence that the ship recycling facility is capable of establishing, maintaining and monitoring of the safe-for-hot work and safe-for-entry criteria throughout the ship recycling process;	ne safe-for-hot work and
MEPC 210(63) Section 3.3.4.2 / ILO SHG: p110:13.4	Safe- for- hot work certificate, warning signs and labels	Section 3.4.2 is adequate. The safe for hot-work procedure including competent persons, testing, marking and recording was seen to be fulfilling and in good order,	The desk assessment showed compliance with this point. This was
HKC: p26: R19(2), BC TG: p47: 4.2.1	Confined spaces	The safe for entry procedure including competent persons, testing, marking, permits and recording was seen to be fulfilling and in good order.	confirmed during the site inspection.
		Calibration of equipment is performed on a regular basis, either in-house or by the manufacturer. For the gasometers calibrated in-house it is recommended that they additionally are calibrated by a third-party and it includes a bump test.	
Article 15 (2) (e HKC: p43: 1.5,	Article 15 (2) (e): attach a map of the HKC: p43: 1.5, Map of facility	e boundary of the ship recycling facility and the location of ship recycling operations within it;  Multiple drawings were witnessed by the evaluators, proven to correspond to the	hin it; The dock accomment

www.dnvgl.com
1
0
2
ď
2018-0743,
Š.
Report
- 1
Б
DNV

			confirmed during the site inspection
(f) for each h (i) whether t	nazardous material referr the ship recycling facility	(f) for each hazardous material referred to in Annex I and additional hazardous material which might be part of the structure of a ship, specify:  (i) whether the ship recycling facility is authorised to carry out the removal of the hazardous material. Where it is so authorised, the relevant	e of a ship, specify: sed, the relevant
personnel au MEPC 210(63) Section 3.1.3, 3.1.4	whorised to carry out the Workers' certificates/licences	personnel authorised to carry out the removal shall be identified and evidence of their competence shall be provided.  Section 3.1.3, certificates/licences 3.1.4	The desk assessment showed compliance with this point. It was not necessary to check again during the site inspection.
ii) which ware reatment mane in the applied of	<ul><li>(ii) which waste management process treatment method, the name and add the annlied process will be carried out</li></ul>	(ii) which waste management process will be applied within or outside the ship recycling facility such as incineration, landfilling or another waste treatment facility if different from that of the ship recycling facility, and provide evidence that the annied process will be carried out without endangering human health and in an environmentally sound manner;	lling or another waste and provide evidence that
MEPC.210(63), Section 3.1.1		The facility operates in accordance with the Turkish Environment Law (No. 2872, published on 11.08.1983 / Official Gazette No. 18132) and its respective regulations. Due to given special conditions, ship recycling facilities in Turkey are exempted from some of the requirements such as preparing an Environmental Impact Assessment, but SRF is licenced by Ministry of Environment and all wastes are handled by SRAT which is authorized by the Ministry of Environment for temporary storage of waste.	The desk assessment showed compliance with this point. This was confirmed during the site inspection.
Technical guidance note 2.1.4, MEPC210(63) Section 3.4.1, Appendix 1, BC TG Executive (pt), 4.3, 2.1, 2.5, 3.2, 3.42, 3.42, 3.4.2, 4.2.5, 6.2, 4.1, 7.7, 7.1.2.5, 6.2, 7.1.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.5, 7.2.	Environmental management	The environment officer has the overall responsibility; however, all removal and management of hazardous waste is conducted by SRAT.	The desk assessment showed compliance with this point. This was confirmed during the site inspection.
r.t, 7.3, Technical	Management of	The facility does not manage any hazardous waste. This is only conducted by SRAT.	Compliance was

confirmed during the site inspection.	The desk assessment showed compliance with this point. This was confirmed during the site inspection.		The desk assessment showed compliance with this point. This was confirmed during the site inspection.
	The facility does not manage any hazardous waste. This is only conducted by SRAT. The application file states that asbestos-containing waste is packed in 2 nylon bags with 200 microns thickness. Asbestos-containing waste is reportedly delivered to Süreko for landfilling. Süreko has a valid license (cross-checked at Ministry of Environment's website.  http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetIzinLisansSorgula.aspx) and is licensed to handle asbestos-containing waste in D5 - Industrial landfill. The evaluators have reason to expect that asbestos-containing materials, delivered to Süreko, will be handled in accordance with human health and environmental protection standards that are broadly equivalent to relevant international and Union standards.	The site inspection included a site visit to the Süreko facility, but the landfill could not be observed due to road works on-site.	The facility does not manage any hazardous waste. This is only conducted by SRAT. SRAT- workers are trained in the removal of PCB-containing materials, PPE is required including respiratory protection and thermal protection. PCB containing waste above 50 mg/kg is delivered to Izaydas for incineration. Information regarding Izaydas has been provided. It is described that wastes are incinerated at a temperature range between 1000° C and 1200° C in a Rotary Kiln. Izaydas has a valid license (cross-checked at Ministry of Environment's website http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetIzinLisansSorgula.aspx) and is licensed to handle PCB containing waste. Hence, the evaluators have reason to expect that Izaydas will be operated in accordance with human health and environmental protection standards that are broadly equivalent to relevant international and Union standards.
hazardous waste	Management of asbestos		Management of PCB's
guidance note 2.2.5, MEPC210(63) Section 3.4.2, BC TG: p45.4.2, ILO SHG: p4: 2.3.2	Technical guidance note guidance note 2.2.3, MEPC210(63) Section 3.4.3.1, 11.0 SHG p90: 9.2.3		MEPC210(63) Section 3.4.3.2

Section 3.4.3.3 Ozone-depleting Substances (ODS) Defore Detwe destruction Detwe dest	Ozone depleting substances are removed by licensed experts, and temporarily stored before sent to disposal at Izaydas, and reportedly incinerated at a temperature range between 1000° C and 1200° C in a Rotary Kiln. Rotary Kiln is one of the accepted destruction technologies listed for ODS and Halon in Annex VII in the EU Regulation EC 1005/2009. Izaydas has a valid license (cross-checked at Ministry of Environment's website http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetizinssSorgula.aspx) and is licensed to handle ODS. Hence, the evaluators have reason to expect that Izaydas will be operated in accordance with human health and environmental protection standards that are broadly equivalent to relevant international and Union standards. SRAT confirmed that insulation foam in cooling chambers that contain ozone depleting substances used as blowing agents, are sent to Süreko for landfill. Süreko holds a license to handle foam with ODS and HBCDD (EAL code 170603), however the preferred method is destruction by incineration.  In response to the draft report the facility replied: "The yard has contacted SRAT about this issue and it is decided to send the insulation foam from cooling chambers that contain ozone depleting substances as blowing agents to Izaydas which uses incineration as a destruction method. This is stated within the revised procedure P-17 (ODS) of SRAT".  The facility does not manage any hazardous waste. This is only conducted by SRAT. Paints and coatings are sent to Süreko where it is transformed to residual derived fuel for the cement factories. This is considered broadly equivalent to Union standards.	showed partly compliance with this point. Additional information received during the site inspection and in response to the draft report, confirms compliance.  Compliance was confirmed during the site inspection.
		<u>-</u>

33	
g	
Pa	

as confirmed during the site n inspection. ent to broadly	SRAT. Additional information received in response to tain the draft report confirms r to recompliance, but minor updates are required.	5 may be ), after ıt	S has	ired: he mg/kg Dmg/kg nt stions on trions tfor hting
SRAT has procedures for operationally generated waste. All liquid waste such as sludge, bilge, remaining bunker, drained water etc. are collected and mixed in temporarily tanks at the SRAT facility prior to further handling. The liquid is sent to Izaydas or the cement factories to be used as fuel additive. This is considered broadly equivalent to Union standards.	The facility does not manage any hazardous waste. This is only conducted by SRAT.  SRAT procedure must be updated, as currently firefighting foam that may contain  PFOS is reused. SRAT does not perform any sampling of firefighting foam prior to reuse.	Fire-fighting foams that were placed on the market before 27 December 2006 may be used until 27 June 2011 in the European Union (Regulation (EU) No 757/2010), after that it needs to be replaced. Hence, re-using firefighting foam with PFOS is not considered broadly equivalent to Union Standards.	In reply to the draft report the facility replied: "The revised procedure for PFOS has been provided by SRAT and is presented in Exhibit 8".	The evaluators find the new procedure adequate but minor updates are required:  It is not correct that threshold levels do not exist for PFOS. The threshold level for PFOS in firefighting foam is for example 10 mg/kg (0.001% by weight). The hazardous waste threshold level is 50mg/kg (ref Basel Convention, Regulation (EC) 850/2004 "on persistent organic pollutants", Directive 2006/122/EC "relating to restrictions on the marketing and use of certain dangerous substances and preparations (perfluorooctane sulfonates)).  For material containing PFOS below 50mg/kg, including firefighting foam, the waste management method is considered broadly equivalent if the waste is used in RDF process at Süreko or sent for incineration at Izaydas.  For material containing PFOS above 50mg/kg, including firefighting foam, the waste management method is considered broadly equivalent only if sent for incineration at Izaydas.
operationally generated wastes	Perfluorooctane sulfonic acid (PFOS)			
Section 3.4.3.5				

39
Page

MEPC210(63) Section 3.4.3.6	Heavy metals (lead, mercury, cadmium and hexavalent chromium)	The facility does not manage any hazardous waste. This is only conducted by SRAT.  The metals are separated for metal recovery. For example, lead batteries are recycled and lead reused. Fluorescent tubes and other mercury containing waste are sent to Süreko. Süreko collect mercury gases in special tubes while the glass materials are sent to landfill. The equipment was observed during the site visit to Süreko. Electronic and electrical equipment is sent to Süreko and cables are sent to various licensed companies.	Compliance was confirmed during the site inspection.
MEPC210(63) Section 3.4.3.7	Other hazardous materials in Annex II	The facility does not manage any hazardous waste. This is only conducted by SRAT, SRAT described during the site visit that electronic and electrical equipment is sent to Süreko and cables are sent to various licensed companies that separate metal and insulation. The insulation is sent to the cement factories to be used as fuel.	Additional information received in response to the draft report confirms compliance, but minor updates are required.
		Süreko is licensed to handle EAL code 160215, 170204 and 200121. The treatment methods described during the site visit, crossed checked with Süreko during the site visit, and information from Süreko webpages are considered broadly equivalent to Union standards.	
		SRAT must update procedures for the brominated flame retardants PBB, PBDE (electronic and electrical waste including cables) polychlorinated naphthalene and short-chained chlorinated paraffin. The downstream waste method must be provided in the reply.	
		In reply to the draft report the facility replied: "The yard contacted SRAT about this issue and the updated procedures are provided in Exhibits 9, 10 and 11".	
		The evaluators find the new procedure adequate but minor updates are required:  Production of PBB and PBDE was not limited to the USA, and production did not cease until 2004 in the USA, and some years later in other countries. Hence PBB and PBDE are likely onboard vessels dismantled today and for many years still.  PBB and PBDE have not been used in firefighting foams.	

Section 3,4.2.2	Additional sampling and analysis	SRAT performs initial sampling and additional sampling as required. SRAT is well experienced in this.	Compliance was
MEPC210(63) Section 3.4.2.3	Identification, marking and labellin	The facility does not have specific procedures for identification, marking and labelling, B but they do this as required in practice.	
Technical guidance note 2.2.5 (a), MEPC210(63) Section 3.4.2	Transport of waste	Transportation of hazardous waste is by licensed trucks to licensed disposal facilities. All vehicles are equipped with mobile tracking device by satellite that are available to the Ministry of Environment (Çevre ve Şehircilik Bakanlığı). The waste transfer form is completed on the webpages of the Ministry of Environment	confirmed during the site inspection. Compliance was confirmed during the site inspection.
Technical guidance note 2.2.5 (c)	Applied process	Please refer to Article 15 (5) below.	
rticle 15 (	Article 15 (2) (g) confirm that the co	ompany adopted a ship recycling facility plan, taking into account the relevant IMO guidelines; Please refer to Article 13 (1) (e) above in this table	lines;
rticle (2) (	n): provide the information	Article (2) (h): provide the information necessary to identify the ship recycling facility. Please refer to Article 13 (1) (a) above in this table	
ticle 15 (5 ay only be aste will b ternationa	i): For the purposes of Ar assumed to be in place, e operated in accordance I and Union standards.	Article 15 (5): For the purposes of Article 13, with regard to the waste recovery or disposal operation concerned, environmentally sound management may only be assumed to be in place provided the ship recycling company can demonstrate that the waste management facility which receives the international and Union standards.	tally sound management ty which receives the
guidance note	Waste management	SRAT forwarded a document decrribing its	lie constant
2.2.5 (c)	raciities	management in more detail as a response to the desk assessment of application 15 and 16. The comments made for application 15 and 16 is also valid for the remaining Turkish yards that have applied to the EU list.	The desk assessment did not show full compliance with this. Updated information and
		<b>p0</b>	descriptions provided upfront of the site inspections confirmed that this complies, but
		The new documentation received upfront of the site inspection ((draft) Response to EU for SRAT.pdf) and clarifications during the site visit confirm that downstream	procedures for specific substances must be updated in the SRAT

waste management is broadly equivalent to Union standards, but some improvements remain as mentioned above/below. The response and SRATs' availability during the site visits is appreciated and an encouraging sign for the continued improvement of SRAT in response to the desk assessment.

Waste are only transferred to licensed facilities, cross checked by the evaluators on <a href="http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetIzinLisansSorgula.aspx">http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetIzinLisansSorgula.aspx</a>. This information is now moved to the integrated portal "EÇBS" (Integrated Environment Information System), which can be access through e-government website (licences "Çevre İzin Lisans Uygulaması").

Turkish waste regulations are broadly equivalent with Union Standards with identical waste codes (EAL). Transport of waste is conducted by licensed trucks with mobile tracking device by satellite that are available to the Ministry of Environment (Çevre ve Şehircilik Bakanlığı). The waste transfer form is completed electronically on the webpages of the Ministry of Environment.

Hazardous waste is transferred among others to Izaydas, Süreko and cement factories. In the cement factories waste are used as fuel, considered broadly equivalent with Union Standards. Emissions from waste management facilities such as Izaydas, Süreko and the cement factories are monitored (recording devices placed on the chimney) recorded and checked online by the Ministry of Environment (emissions the chimney) recorded and checked online by the Ministry of Environment (emissions information "Sera gazlari izleme, raporlama ve doğrulama"). These data are currently information "Sera gazlari izleme, raporlama ve doğrulama"). These data are currently into available to the general public. Per the website of Çimentaş Izmir (cement not available to the gubstances are monitored in the exhaust gas: Dust, TOC, CO, factory), the following substances are monitored in the exhaust gas: Dust, TOC, CO, factory), the following substances are monitored in the exhaust gas: Dust, TOC, CO, factory), the following substances are monitored in the exhaust gas: Dust, TOC, CO, factory).

the threshold levels. In the document "(draft) Response to EU for SRAT.pdf" Uzaylar Geri Dönüşüm is listed in the document "(draft) Response to EU for SRAT.pdf" Uzaylar Gerck, this facility has for various non-hazardous waste. As far as the evaluators could check, this facility has not been in operation since January 2018. In case the evaluators have misunderstood, an explanation would be appreciated.

In response to the draft report the facility replied: "The yard contacted SRAT about the above issue and Uzaylar's license is valid until 2022. In addition to that, within 2018, SRAT has commenced using Alcev for the same class of waste (See Exhibit 12)".

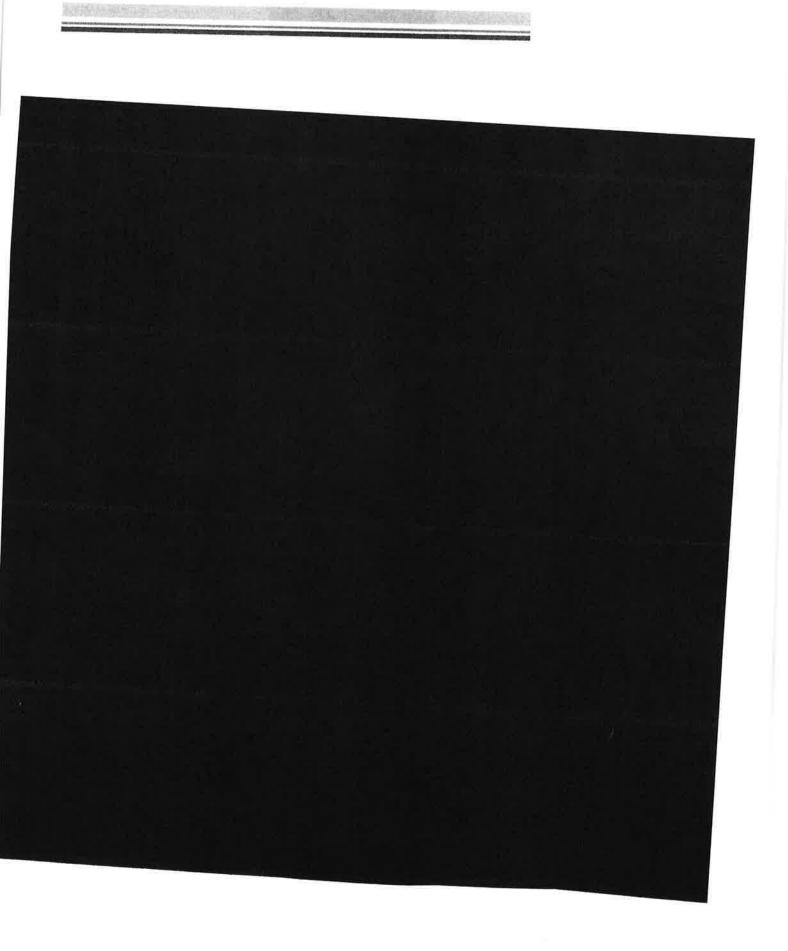
procedures.

Additional information, including new SRAT procedures, received in response to the draft report confirms compliance, but minor updates are required as mentioned above under the specific substances.

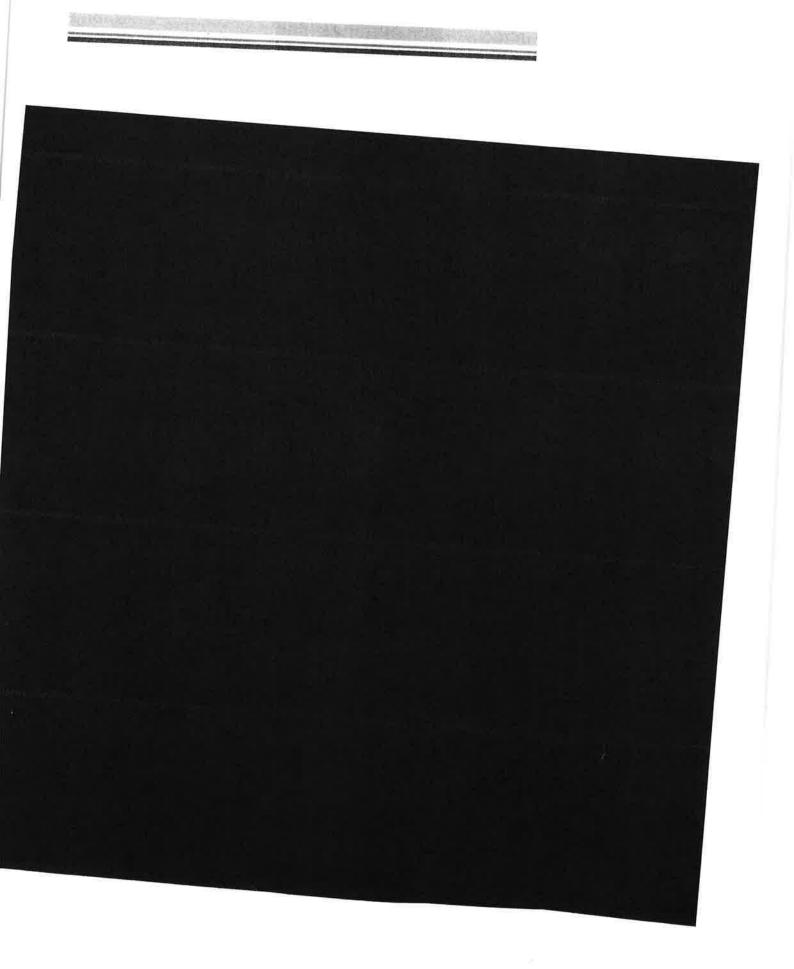
Licenses for both facilities are attached to additional received documentation.

Based on the documentation received, the evaluators believe the applied processes will be carried out without endangering human health and in an environmentally

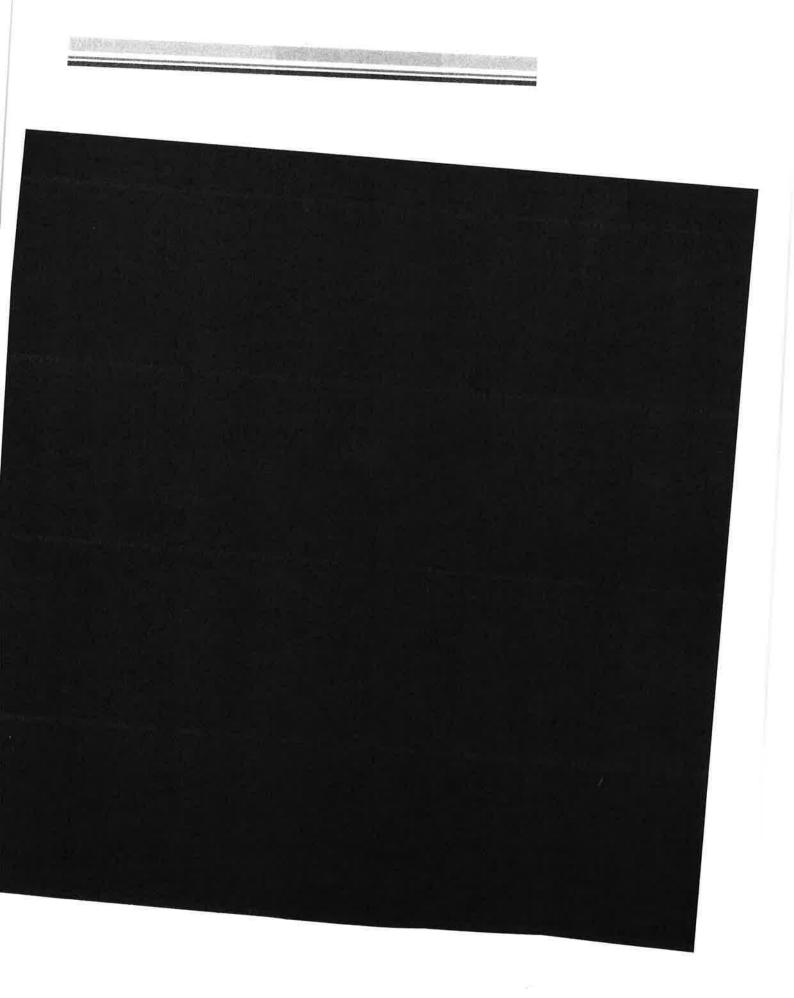




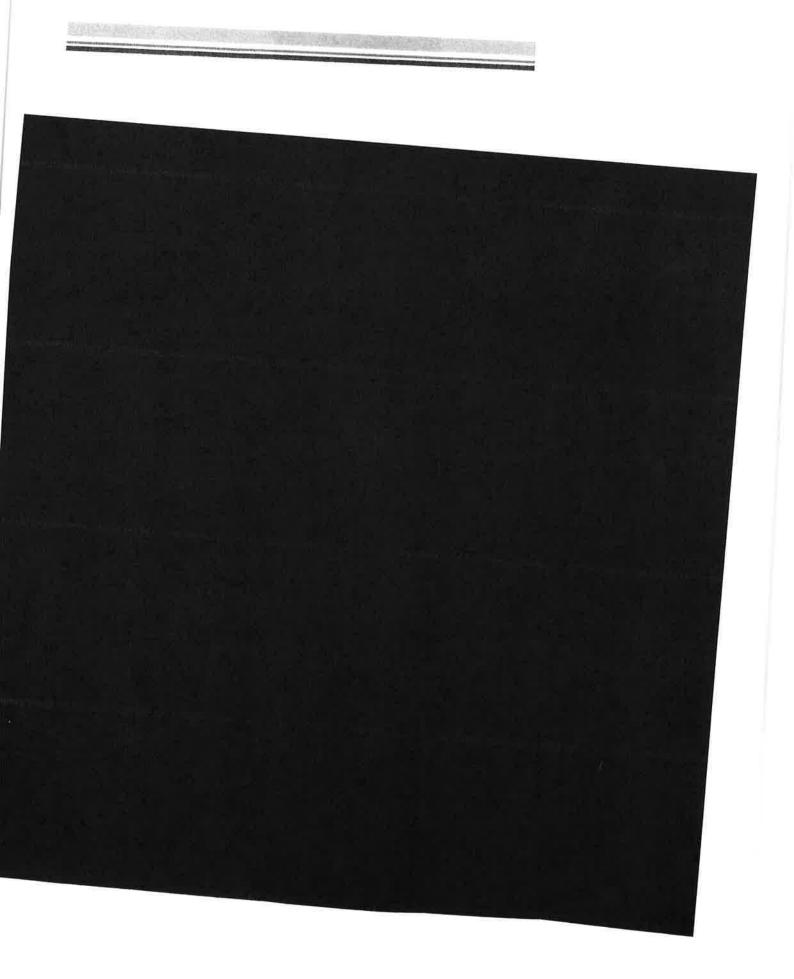




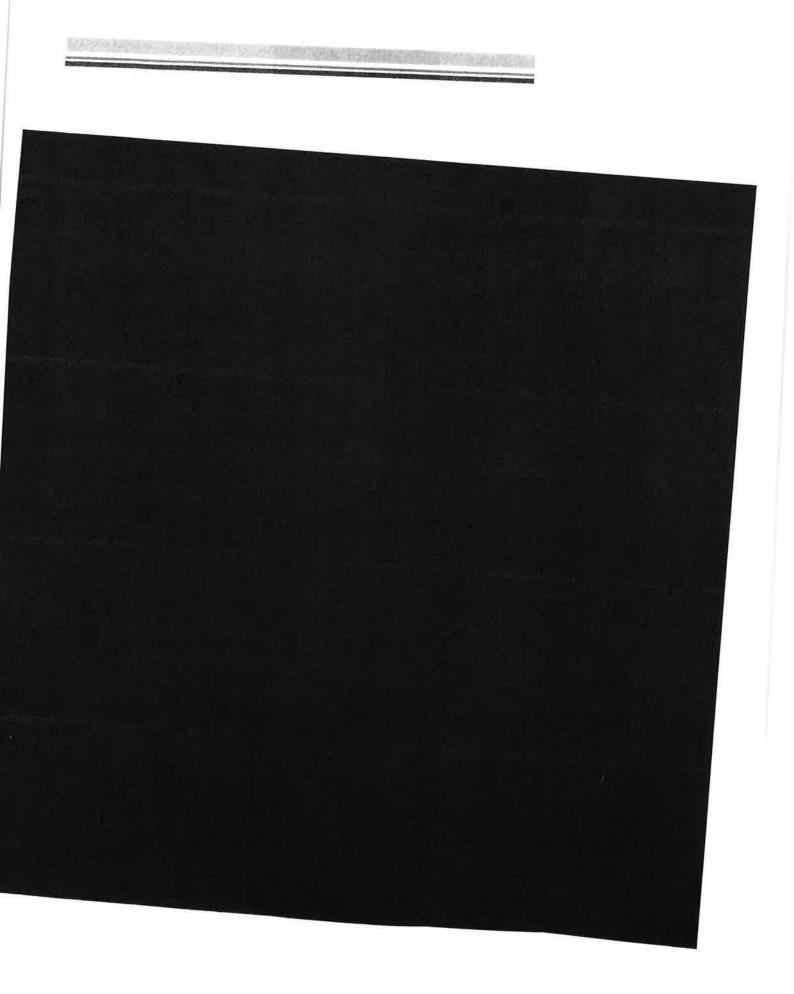




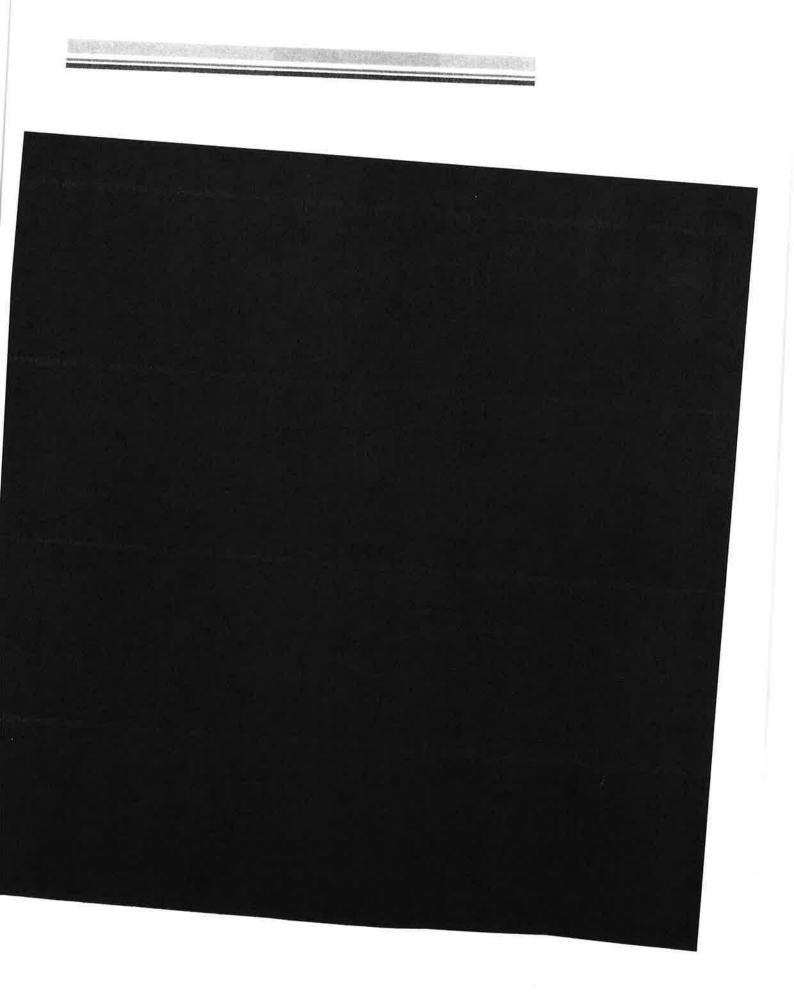


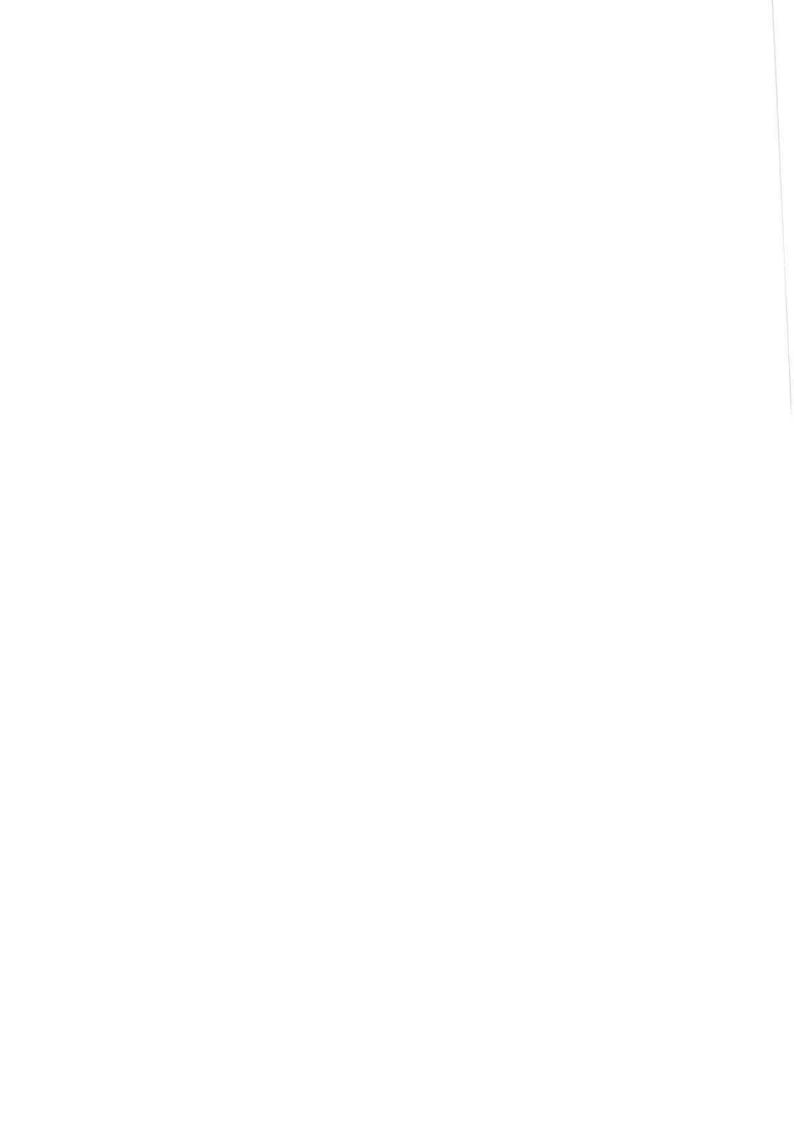












About DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organisations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil & gas and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our professionals are dedicated to helping our customers make the world safer, smarter and greener.

