DNV·GL

INSPECTION OF A SHIP RECYCLING FACILITY IN TURKEY

Site Inspection Report Application 005

European Commission DG Environment

Report No.: 2019-0255, Rev. 1 **Document No.:** 117PDS96-4

Date: 2019-03-26



Project name: Inspection of a ship recycling facility in Turkey DNV GL AS Maritime Report title: Site Inspection Report Application 005 **Environment Advisory** Customer: European Commission DG Environment, Veritasveien 1 Customer contact: 1363 Høvik Date of issue: 2019-03-26 Norway Project No.: 10077073 Tel: Organisation unit: Environment Advisory Report No .: 2019-0255, Rev. 1 Document No.: 117PDS96-4 Applicable contract(s) governing the provision of this Report: Framework contract ENV.A.2/FRA/2015/0013 with specific request number 070201/2017/772222/ENV.B.3 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: Copyright © DNV GL 2019. 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. Keywords: DNV GL Distribution: Ship recycling, ship recycling facility plan, ☐ INTERNAL use only. Internal DNV GL document. hazardous waste, waste management, ☐ CONFIDENTIAL. Distribution within DNV GL according to health, safety, monitoring. applicable contract. * $\hfill \square$ SECRET. Authorized access only. *Specify distribution:

Rev. No.	Date	Reason for Issue	Prepared by	Verified by	Approved by
0	2019-02-28	First issue	eifre	hust	tsv
1	2019-03-26	Updated procedures received from	eifre	hust	tsv
		applicant			

Table of contents

1	EXECUTIVE SUMMARY	1
	INTRODUCTION	
3	OBJECTIVE	2
4	SCOPE OF WORK	2
5	METHODOLOGY AND ACTIVITIES	4
6	RESULTS OF THE ASSESSMENT	6
7	PHOTOS FROM THE INSPECTION	43

1 EXECUTIVE SUMMARY

The objective of this report is to document the results of the site inspection at Isiksan Gemi Sokum Pazarlama Ve Tic. Ltd. Sti., 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 14th and 15th of January 2019. Further to this, a draft inspection report was sent to the facility which provided observations and request 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 that several improvements are made.

The facility has demonstrated that it is approved by its authorities, has a suitable organisation with a proven track record 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 organisation chart depicts a well-structured, fit-for purpose management organisation, with clear reporting lines, roles and responsibilities.

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. DNV GL verified whether 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 and found that many good, daily key practices were not described in the SRFP or in the QMS documents. Hence, it was found that the SRFP needs to be updated.

Identification and removal of Hazardous waste listed in the Inventory of Hazardous Materials (IHM) is handled by the Ship Recycling Association of Turkey (SRAT). Its procedures for removal of hazardous materials have been continuously updated and found good.

Based on available documentation, it is expected that the waste management facilities which receive the waste will be operated in accordance with human health and environmental protection standards that are broadly equivalent to relevant international and Union standards.

The additional documentation received in response to the draft report clarified several issues so that compliance could be confirmed. This is specified throughout this report. Some issues remained where compliance could only be partially confirmed after the site inspection and additional documentation.

In response to the final report the applicant clarified the remaining issues and compliance could be confirmed as specified throughout this report.

After the site inspection and assessment of additional documentation the evaluators find that the facility will operate in compliance with the requirements for inclusion in the European list of ship recycling facilities.

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 Isiksan Gemi Sokum Pazarlama Ve Tic. Ltd. Sti., 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 005.

3 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 Articles 13, 15 and 16 and clarified in the 2016 Technical guidance note¹.

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 assessment methodology is divided into three main elements and a number of second and third level sub-elements. 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.

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.

1. Management

- Facility business model and quality statement
- Policy
- Management, ownership and organisation
- Quality assurance systems and certificates
- 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)
 - Completion instruction
 - Project close-out with de-briefing, lessons learned, suggestions for improvement

5 METHODOLOGY AND ACTIVITIES

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

- Lifting equipment, fall barriers, safe for entry, safe for hot-work etc.
- Questioning (brief) of foremen / supervisors on key procedures

Closing meeting

- 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 14th and 15th of January 2019 at Isiksan Gemi Sokum Pazarlama Ve Tic. Ltd. Sti., located in Aliaga (Izmir region, Turkey). Isiksan has operated in Aliağa from 2000 at Parcel 22. The main representatives from the facility during the inspection were

The evaluators from DNV GL were and and and and accompanied by from the EU Commission. and and from the Ministry of Transport and Infrastructure and from the Ministry of Labour and Social Security represented Turkish authorities during the inspections. The delegation visited the Ship Recycling Association of Turkey (SRAT) in the afternoon on the 15th of January.

The facility had 103 employees at the time of the site inspection. 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 ship recycling facilities. Adjacent to the facility and 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 table below summarises the results of the site inspection with respect to article 13, 15 and 16 of the SRR requirements for inclusion of a ship recycling facility in the European List.

DNV GL wishes to thank the management and key personnel at Isiksan for the friendly reception and good co-operation during the assessment, ensuring that the inspection could be carried out in an effective manner. Facilities for the assessment itself were excellent and the fullest degree of access to all aspects of the facility's areas and management was offered.

	ction results		Compliant?
	(a) it is authorised	by its competent authorities to conduct ship recycling operation	
Technical guidance note 2.2.1, MEPC 210(63) Section 3.2.2	Authorisation	Thoroughly checked during the document review; many of the certificates are available online.	The desk assessment showed compliance with this point.
Article 13-1	(b) it is designed,	constructed and operated in a safe and environmentally sound manner	
Technical guidance note 2.2.1	Measures and infrastructure	The facility uses the slipway landing method employing a combination of afloat and landing dismantling. All secondary cutting takes place on concrete flooring with drainage. Dismantled materials from the vessel to shore are transported by crane without contact with the intertidal zone. During the site-inspection it was observed that the pump of the drainage system was not working and that several procedures and instructions were not part of the SRFP. The applicant forwarded additional documentation in response to the draft report and the evaluators can, based on the additional documentation, confirm that the facility is designed, constructed and operated in a safe and environmentally sound manner. This is further described in various section below in this table.	Compliance was partially confirmed during the site inspection. Compliance could be confirmed in response to the draft report.
Article 13-1	(c) it operates from	m built structures	
Technical guidance note 2.2.4	Operates from built structures	The operation is from built structures, with cranes, trucks, and forklifts on concrete flooring. The maximum width of a ship to be recycled is limited by the width of the facility at the waterfront which is 75m per the SRFP. The facility operates by the landing method, with a concrete cutting zone with drain. The SRFP states that no cutting is performed between the concrete floor drain and the sea, the vessels are pulled beyond the drain before cutting of double bottom. However, during the site inspection a submersible rig was under demolition, the method being cutting down the topsides and the braces down to the pontoons, subsequently cutting down the pontoons until light enough to be pulled above the drain channel for final cutting by slice and pull. The pulls are done by chains hooked to excavators, not by winch.	Compliance was confirmed during the site inspection.
		Topside blocks and sections are hooked up by crane before final cutting and lifted and	

		transported to the impermeable floor of the secondary cutting zone.	
		Hence, the facility operates with the principle of using the vessels' hulls as built structure during primary cutting.	
preventing,	reducing, minimisii	management and monitoring systems, procedures and techniques which have the p ng and to the extent practicable eliminating health risks to the workers concerned a ling facility, and adverse effects on the environment caused by ship recycling	
Technical guidance note 2.1.4 (a), (b) MEPC210(63) Section 3.4.1 / BC TG 6.2	General	The employees are trained in various subjects related to health hazards, from SRAT. Procedures for environmental monitoring are contained within section 3.4.1 SRFP. The applicant had initiated new measures in response to the desk assessment and forwarded an updated environmental monitoring program.	Compliance was confirmed during the site inspection.
	Soil	The applicant started to monitor soil in 2016 and has presented analysis results of soil samples during the desk assessment, in documents received upfront of the site inspection and after the site inspection. The soil samples did originally not cover all Annex I and II materials, but this was included in the 2019 analysis. The analysis was not finalised at the time of the inspection and the laboratory result was forwarded in response to the draft report. The samples had been analysed at accredited laboratories (Çevre Laboratuvari and ALS Czech Republic) with adequate detection limits. The sample was analysed for substances in Annex I and II to the EU SRR. Additionally, the analysis included copper, zinc, PAH, the brominated flame retardant TBBPA, additional perfluorinated compounds such as (but not limited to) PFOA, 6:2 FTS and 8:2 FTS. The latter three perfluorinated compounds have been used in amongst other firefighting foams. These substances were present in the sample but in low concentrations within acceptable limits. Most parameters are within acceptable limits, however the concentration of Chromium (VI), PCB and PAH are quite high compared to natural background levels, but far from the hazardous waste limit. It is likely that the soil is contaminated from previous activity. The applicant has initiated various countermeasures as described in the environmental monitoring program and developed various procedures to avoid further contamination. The applicant has monitored the soil since 2016 and the concentration of the analysed	Compliance could not be confirmed during the site inspection. Compliance was confirmed in response to the draft report

	parameters shows a declining trend. It is recommended that more samples are collected and analysed to ensure representative and statistically sound sampling.	
Sediment	The applicant has initiated new measures in response to the desk assessment and taken a sample of sediment. The sample was analysed at accredited laboratories (Çevre Laboratuvari and ALS Czech Republic) with adequate detection limits.	Compliance could no be confirmed during the site inspection.
	The sample was analysed for substances in Annex I and II to the EU SRR. Additionally, the analysis included copper, zinc, PAH, the brominated flame retardant TBBPA, additional perfluorinated compounds such as (but not limited to) PFOA, 6:2 FTS and 8:2 FTS. The latter three perfluorinated compounds have been used in amongst other firefighting foams. These substances were present in the samples but in low concentrations within acceptable limits.	Compliance was confirmed in response to the draf report.
	Most parameters are within acceptable limits; however, the concentration of Chromium Copper and Zinc are quite high compared to natural background levels, but far from the hazardous waste limit. It is likely that the sediment is contaminated from previous activity.	
	The applicant has initiated various countermeasures as described in the environmental monitoring program and developed various procedures to avoid further contamination. It is recommended that more samples are collected and analysed to ensure representative and statistically sound sampling.	
Water	Sea water samples are reportedly taken by the Provincial Department of Environment authorities every 6 months. An example report was provided. This is the same type of measurement as for other Turkish facilities: suspended solids, heavy metals, ammonia, dissolved oxygen, pH, turbidity, oil, phenols, organic matter are mentioned but flame retardants, PCB, PFOS and other relevant POPs are not analysed. It appears that this sample is not taken of water from the facility that is discharged to sea, and it is neither taken right outside the facility.	Compliance was confirmed during the site inspection.
	Additional sampling results from January 2019 was forwarded by the applicant. The new sample had been analysed for suspended solids, heavy metals, ammonia, dissolved	

		oxygen, pH, turbidity, oil, phenols, organic matter, PAH, PBDE, PFOS, PCB and dioxin furan. The sample was tested by an accredited lab (Çevre Laboratuvari) with adequate detection limits.	
		Runoff from the site is collected in a drainage system and water in the drainage channels are collected in storage tanks, transported to SRAT for temporary storage prior to disposal at Izaydaş or cement factories. These facilities separate the oil from the water and 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.	
	Air	The air quality monitoring includes dust level in the work place, personnel dust, chemical levels in the workplace, thermal comfort and vibration. Sampling results were presented on-site. The measurements and report are compiled by an accredited company. All results were within the national requirements, except for dust where countermeasures are required.	Compliance was partly confirmed during the site inspection. Compliance was
		The applicant has described countermeasures in the environmental monitoring program under 5.4.3. The countermeasures are relevant, and it is described that the effectiveness will be evaluated. Additionally, the applicant describes in 'Final report yard comments' that they will buy a small excavator dedicated to housekeeping. The cutting area will reportedly be washed weekly.	confirmed in response to the draft report.
	Noise	The facility monitors noise from the surrounding areas and for worker health. The facility is located in a heavy industry area well away from populated centres, thus noise to domestic neighbours is of no concern. The noise measurements were presented to the evaluators on site. The noise measurement and report are compiled by an accredited company. Noise was measured for two individuals at the yard. The measurements concluded that ear protection is required for workers in the cutting areas.	Compliance was confirmed during the site inspection.
Technical guidance note 2.1.4 (b),	Health	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 site to the evaluators.	Compliance was confirmed during the site inspection.

		The periodical health check is required by national law for all employees including management, due to the classification of the work place as "very hazardous". A health check is conducted when a new employee starts and then followed up annually. It includes x-ray of lungs, hemogram, lead in the blood, liver and kidney test. On-site workers have additional blood test every 3 months as required by Turkish law.	
2.1.4 Technical guidance note 2.1.4 (b), MEPC 210(63) 3.1.1 (5)	Management system	The facility is ISO 9001:2015, ISO 14001:2015, ISO: 30000 and OHSAS 18001:2007 certified by Lloyds Register.	It is not a requirement to have ISO certificates.
ILO SHG p21-23, p138:18.1, 18.3, p139:18.5	Workers facilities	Worker facilities included a canteen with kitchen, wardrobe and shower facilities. All were found in good condition. A signboard was mounted in the canteen, with extensive information afforded to the workers. A brand new, advanced potable water sanitation plant was recently installed, with both chemical- and triple-filter treatment. They had however no experience with tank cleaning or testing schedules. The evaluators advised that they checked with the public health services and implemented a cleaning and testing regime based on stagnant warm water i.e. including bacterial growth and maybe legionella. In response to the draft report the applicant forwarded test results of drinking water analysis, performed by an accredited laboratory (7. Potable water Analysis 1Q.pdf). In addition, the applicant had updated the procedures `TB.19 OHS Working Schedule' to include drinking water tests and regular chlorination in Section C and the `PL.11 Annual Periodic Controls and Maintenance Plan'.	Compliance was confirmed during the site inspection.
Article 13 (1 Technical	.) (e) it prepares a	ship recycling facility plan	
guidance note 2.1.2	SRFP	The SRFP was discussed during the site inspection in accordance with the comments from the desk top assessment. Due to the complexity, many second and third level references, inconsistent content between the references and the SRFP, and diverging repeats rendering the SRFP very confusing. It was advised to compile a new SRFP, with the objective of being a useful document of instructions used by the yard itself. Structured	Compliance could not be confirmed during the site inspection. Compliance was

MEPC 210(63) Section 3.1.1 (1)	Ownership	The facility is privately owned as part of the Dikkan Group, a corporation with over 900 employees, dealing in the raw material industry. Hence, the company's economy is deemed to be solid.	Compliance was confirmed during the site inspection.
		In response to the final report, the applicant forwarded a new SRFP with detailed instructions for bouncing on page 35 and 36. Moreover, the applicant forwarded updated and more detailed procedures on page 55 and 56 of the SRFP for operations in the intertidal zone, which are found good.	
		Finally, Section 3.4.3.5 'Paints and Coatings' addresses paints removed beyond the drain line. 3.4.4 Prevention Of Adverse Impacts To The Environment was improved, but still lacked detail on how slag and paint chips are contained when cutting in the intertidal zone. Lifting of main machinery from the vessel across the tidal zone, and cleanliness inspections forms were also missing.	
		Furthermore, in section 3.4.4.1 <i>Spill prevention, control and countermeasures</i> the first point gave the impression that no cutting was carried out in the intertidal zone, i.e. below the drain line. But it was not the case, so the evaluators suggested writing more in detail the criteria for deciding the primary cutting day by day, how to pre-hang the pieces, how to avoid stresses in the final cuts, how to let the pieces fall in on the hull, etc. And as mentioned, bouncing. The facility was requested to write down exactly what they do to avoid bouncing.	
		such that instructions are easy to find, to the point content of practical nature. During the site inspection, the evaluators found many good, daily key practices that were not described in the SRFP or in the QMS documents. The evaluators advised the facility to write what they actually do, and don't write what they do not do. In response to the draft report the applicant forwarded a completely revised SRFP, with basic and clear instructions with key annexes. A good improvement. However, Part 3.2.5 'Methodology' still lacked detailed instruction on cutting plan and how to safeguard cutters against bouncing.	partially confirmed in response to the draft report. Compliance was confirmed in response to the final report.

MEPC 210(63) Section 3.1.1 (3), (4)	Facility organisation	The facility top management reports to a board of directors as part of the mother company. The organisation was found to be very good in way of organization, experience and resources. Basically, the organization was split with separate management for the facility operation and for the finance- and administration. The ship- and yard supervisors reported to the financial administration, affording a level of independency between the supervision and the HSEQ team. A dedicated HR function reported to the finance function. HR was responsible for worker recruitment and record keeping. Importantly, the facility had its own in-house HSE managers and a team of 4 safety officers. The organization was deemed to be ambitious and open for improvement and knowledgeable of each other's responsibilities and tasks. The power distance between the	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.1.1 (4)	Roles and responsibilities	leadership and the workers appeared to be small. Following the desk-top assessment, the facility had updated its job descriptions and responsibilities in a satisfactory manner.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.1.1 (5), (7) and (8).	Quality Management System	The facility demonstrated a comprehensive and up-to date quality management system (QMS), according to ISO 9001. The system was administered by a dedicated quality system representative, who also had other administrative responsibilities across disciplines in the operations section. The QMS was fully digitalized and locked for editing by anyone except the QMS representative. Any hard copies of QMS instructions were only issued by the QMS representative and had to be stamped by the same in order to be valid as the latest revision.	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.
		The QMS was maintained by annual management review meetings as per requirements, and in way of weekly management meetings if need for revision is identified. The facility has a system for filing suggestions and complaints, both from management and workers, anonymously. Actual forms were witnessed, filed and handled by the HR function.	Compliance was partially confirmed during the site

		The evaluators expressed during the site inspection that the instructions in the QMS were deemed somewhat overly intricate and oversized, of which the yard agreed due to the many audits and requirements from owners and authorities. It was acknowledged by the evaluators that the facility recycled mostly rigs, consequently subject to the oil and gas industry demands of quality documentation. The facility was looking into carrying out a consolidation, including adding the many useful and good key procedures seen at the facility. The evaluators asked that any revisions of the QMS is seen in context with and reflected with a revised SRFP and issued for review and verification. In response to the draft report the applicant forwarded revised annexes and QMS documents that were found in order.	inspection. Compliance was confirmed in response to the draft report.
MEPC 210(63) Section 3.1.1 (6)	Policy	The facility policy is stated in the SRFP Part 3.1.5. The site inspection proved that the facility adheres to its policy, noting the comments in this report.	Compliance was confirmed during the site inspection.
	Working hours and annual leave	The employees work 45 hours a week. Working hours are from 08.30-17.00 Monday-Saturday with lunchbreak from 12.00-13.00. 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 20 working days	Compliance was confirmed during the site inspection.
		15 years (included) or longer 26 working days Interviews with employees on-site confirmed a practice per Turkish labour law.	
	Contracts and minimum wage	The latest list of employees (for November 2018) was checked for wages and social security ID and found in order. White- and blue-collar workers had separate work-codes	Compliance was confirmed during the

		in the social security system, respectively. The facility has additional insurance for incidents/accidents, covering all workers. Third party liabilities are required by law, but the facility has extended the coverage. The applicant forwarded the relevant figures of the insurance policy upon request: Recovery Costs: up to 300.000 TRY Per Accident: 1.500.000 TRY Death: 300.000 TRY (validity extends to 1 year after incident) Death During on Duty: 1.500.000 TRY	site inspection
MEPC 210(63) Section 3.1.1 (7)	Instructions and procedures	Referring to previous comments, instructions were found confusing in the desk-top assessment but clarified in the site inspection. The facility was advised to consolidate instructions, make them clearer and with all the good procedures they do, not reflected in the instructions. This particularly applies to the primary planning and cutting, and protection of the soil zone (beach). All instructions are in Turkish, most key instructions are in English with further translation on-going. The Turkish and English versions do not match entirely. The evaluators re-iterated that mandatory instructions read "shall", while recommended actions read "should".	Compliance could not be confirmed during the site inspection. Compliance was partially confirmed in response to the draft report. Compliance was confirmed in
		A good procedure and flow diagram for vessel acceptance was witnessed, with all the necessary approvals from the Harbour master. The facility was recommended to compile a revised SRFP with cleaner instructions, including those practices they do but not instruct. In response to the draft report the applicant forwarded a completely revised SRFP, with basic and clear instructions with key annexes. Please see comments under "SRFP". In response to the final report the applicant forwarded updated procedures in SRFP V13.	response to the final report.

		The updated procedures are adequate.	
MEPC 210(63) Section 3.1.4	Project management progress reporting	Progress reporting is carried out in that every lift is documented, with weight. Otherwise progress reporting to owner can be done if requested. The top management reportedly visits the facility once or twice a year for informal progress follow-up.	Compliance was confirmed during the site inspection.
	l) (f): it prevents ac	dverse effects on human health and the environment, including the demonstration (of the control of any
Technical guidance note 2.2, 2.2.1, p8: footnote (26), 2.2.2 (f), MEPC 210(63) Section 3.4.4.3/BC TG: p13: Table 1, p33: Table 5, p44: 4.1 / ILO SHG: p65: 7.2.4.4	Intertidal zone	Protection of the intertidal zone was based on the following principles: Pre-cleaning of tanks and other polluted areas, with subsequent inspections and cleanliness approvals from the harbourmaster. Stripping of accommodation areas, down to steel Dismantling of pipes by de-flanging, emptying oil residues in containers Cleaning of machinery components Blocking of open pipes and machinery components inlet / outlet connections by rags, wooden plugs or steel flanges Lifting cut blocks directly from the vessel to the impermeable secondary cutting area, by mobile crane The mobile crane drives up to, and partly under, the rig, by way of a pontoon barge. It picks up the piece and drives back to the secondary cutting zone. The pontoon barge stems from an old offshore structure Nothing is dropped on the intertidal zone Slag and chips are removed from the intertidal zone by industrial magnet attached to the excavator	Compliance was partially confirmed during the site inspection. Compliance was partially confirmed in response to the draft report. Compliance was confirmed in response to the final report.

Drain channel below secondary cutting area

The tidal range is between 25-45 centimetres in Aliaga. The evaluators could verify that oil booms surrounded the entire rig. Spare oil booms, capable of surrounding the entire ship, are easily accessible at the facility and that it could be deployed rapidly if needed.

The facility has procedures, 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 in June 2018, the evaluators observed an oil filter curtain boom. The procedures and equipment combined, demonstrate control of leakage.

During the site inspection, the facility procedures were found good however they were not instructed in the SRFP. Procedures for prevention, control and countermeasures are provided in the SRFP in section 3.4.4, although briefly. The applicant was requested to describe in detail how they protect the tidal zone.

In response to the draft report the applicant forwarded a completely revised SRFP, with basic and clear instructions with key annexes.

In response to the final report the applicant forwarded an updated SRFP (V13) with more detailed instructions and procedures for operations in the intertidal zone. The procedures are adequate.

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 process, only on impermeable floors with effective drainage systems;

Technical
guidance note
2.2.2, MEPC
210(63) Section
3.3.4.3 / BC TG:
p78ff: 5.3, p67:
figure 6

Cutting areas

The secondary cutting area was seen to be quite clear and open, as there was not much work going on at the time of the inspection. The west perimeter of the field was seen with some accumulation of scrap, including unused, discarded shackles and slings. Some improvement could be done on the housekeeping.

Puddles in the mud were observed with oily water. The ground inside the tray around the fire water tank was very oily and partly covered in a puddle, with a pungent smell of oil. It was not clear where the oil originally came from. The areas around the fire water tank

Compliance was not confirmed during the site inspection.

Compliance could be confirmed in response to the draft report.

were in general messy, with old hoses, cables, scrap, waste and debris lying around.

The most palpable finding on the cutting areas was the amount of soil on the concrete, turning into mud in the rain, some places quite deep. Combined with the repair patches seen many places, it was not possible for the evaluators to verify the overall integrity or extent of the impermeable surface. The visible cracks in the concrete were however quite shallow.

The facility reported that they did not fully understand where the soil came from, suggesting it was carried by the wind from neighbouring areas and nature. They reportedly cleaned the grounds weekly, but the condition reverted in a matter of days.

It is recommended that the facility carries out an extra effort to clean the concrete, so it is fully exposed, and use hosing frequently. This serves as a counter measure for the dust levels found to be above the acceptable limit.

It was agreed during the inspection that the applicant will forward details of the concreted areas from the contractor. In response to the draft report the applicant forwarded a plan over the concreted areas ('12. Concrete Plan(1).pdf'). The plan shows that in the lower part of the facility 40 cm of C45 (reportedly impermeable floor with raft foundation) has been used, while 30 cm of C37 (reportedly impermeable floor with steel mesh) have been used in the middle section of the plot. At the entrance to the facility, the office building and the workers facilities, 20 cm of C20 (reportedly impermeable floor with steel mesh) covers the area.

Additionally, the applicant describes in 'Final report yard comments' that they will buy a small excavator dedicated to housekeeping. The cutting area will reportedly be washed weekly.

Based on the observations on site and the documentation received in response to the draft report, the evaluators have reason to expect that the handling of hazardous materials, and of waste generated during the ship recycling process, will only take place on impermeable floors.

Technical guidance note 2.2.2, MEPC210(63) Section p34: 3.4.4.1	Drainage	It was raining during the site inspection. As mentioned above, the secondary cutting zone was unusually muddy, of which large quantities were ending up in the drain channel, filling it up. In a medium rain shower during the site tour on the second day of the inspection, the channel was overflowing. The drain pump did not work at the time. The applicant had initiated measures due to the failing pump. The facility has two drainage lines, one primary and one for emergency situations. It was apparent that when the primary drain was overflowing, it was flowing in a stream to the emergency drain line. The primary drain line where again pumped into trucks from SRAT. SRAT trucks were also observed to pump out drained water directly from the emergency line. The evaluators observed that the water remained in the emergency drainage system. Although the drain water collection tanks had high capacity (4 x 55 m³), the pump was observed to be very small. The drain channel was reportedly cleaned out by excavator regularly, the entire area was reportedly cleaned weekly. The facility promised to rectify the situation, looking at the handling capacity of the entire system. The applicant was requested during the site inspection to confirm what they have done to rectify the situation, supported with photographic evidence. In response to the draft report the applicant forwarded two photos and a video of the drainage system (drainage system 1.jpg, drainage system 2.jpg, and drainage video.mp4). The drainage pump has been replaced with a pump with a capacity of 80 m³/hr, organic mud filter and an electrical control panel to avoid circuit break failures, all shown in the forwarded video and photos. Based on the additional documentation received, the replaced pump is working, and the drainage system is found adequate.	Compliance was partially confirmed during the site inspection. Compliance was confirmed in response to the draft report.
Technical guidance note 2.1.4, 2.2.2, 2.2.3, 2.2.5, 3.5, MEPC 210(63) Section 3.4.2.5 / BC TG 3.1, 3.3,	Waste storage	The facility stores materials on site to be further dismantled to separate the metal from the remaining of the product. The material is stored on concreted flooring with drainage. Other waste materials are transported directly to waste management facilities. It was observed on site that the pile of waste was covered with tarpaulin when it rained.	Compliance confirmed during the site inspection.

3.4.3, 4.1, 5.1,		The applicant removes cables from the equipment, but do not handle the cables	
5.2(Zone D),		themselves. The cables are collected in a container and forwarded to the licensed waste	
5.3(Zone D), p 92: Table 11		treatment facilities (Has Nigdeliler and Nigsa Metal). These facilities separate the metal	
		from the cable. The plastic waste is sent to Süreko for disposal.	
Technical guidance note	Hazardous waste	Hazardous waste is temporary stored on site before it is sent to SRAT for temporary	Compliance was
2.1.4, 2.2.2,	storage	storage prior to transportation and disposal at a waste management facility.	confirmed during the
2.2.3, 2.2.5, 3.6, MEPC 210(63) Section 3.4.3/ BC TG 3.1, 3.3,		The temporary storage areas on site were observed to be roofed on concrete flooring with curbs.	site inspection.
3.4.3, 4.1, 5.1, 5.2 (Zone D), 5.3		The hazardous waste storage areas at SRAT were inspected by the evaluators during a	
(Zone D), p92, Table 11		previous site inspection on (June 2018). The storage area was observed to be roofed on concrete flooring with drainage.	
Technical	Waste	As much as the evaluators could verify and cross-check, waste is only transferred to	Compliance was
		ent facilities, including waste recycling facilities, authorised to deal with their treat I in an environmentally sound manner;	ment without
guidance note 2.1.4, 2.2.2,	management	waste management facilities authorised to deal with the specific waste type.	confirmed during the
2.2.3, 2.2.5, 3.5,	management	Transportation of hazardous waste is by licensed trucks to licensed disposal facilities. All	site inspection.
MEPC 210(63) Section 3.4.2,		vehicles are equipped with mobile tracking device by satellite that are available to the	site inspection.
3.4.3/ BC TG		Ministry of Environment (Çevre ve Şehircilik Bakanlığı). The waste transfer form is	
p11, p12, p48ff: 41, p50ff: 4.2,		completed on the webpages of the Ministry of Environment.	
Technical guidance note	Waste disposal	SRAT is responsible for waste disposal. The traceability of waste is ensured through	Compliance was
2.1.4, 2.2.2,		satellite-based tracking system of the waste.	confirmed during the
2.2.3, 2.2.5, 3.6, MEPC 210(63)		Please refer to Article 15(5) below.	site inspection.
Section 3.4.2, 3.4.3/ BC TG			
p11, p45ff: 7. /			
4.2		a and maintain an amazaansy nyanaradnasa and rasnansa nlany anayras ranid assas	

Article 13 (1) (h); it establishes and maintain an emergency preparedness and response plan; ensures rapid access for emergency response equipment, such as fire-fighting equipment and vehicles, ambulances and cranes, to the ship and all areas of the ship recycling facility;

Technical guidance note 2.1.3, MEPC 210(63) Section 3.3.5/ BC TG p3, p5/6, p47, p56, p63/64/65/66/67, p70, p81, p83, p87, p89/ ILO SHG p32: 4.6, p49: 7.1.8, p 128:16.	Emergency preparedness plan	The facility presented a new EPRP during the site inspection, revised according to comments from the desk-top assessment. In addition, short and to-the point, useful instructions were found in folders on-site. Posters with information on the response teams with names, number and photos were observed posted on site. Drills were carried out at minimum 6 times a year, including fire drills and oil spill drill. The schedule for drills for 2019 was witnessed. The drills were reportedly also planned according to near miss reports, suggestions and experience. All workers were reportedly trained in oil spill response, the necessary spill equipment was seen on site. There were still shortcomings in the EPRP however, for example how to respond to a person who has fallen from height, a person seen unconscious in a confined space, and man overboard. It was also recommended that the site plan was updated with the actual locations of all safety and response equipment, in legible text. The evaluators recommended that the facility further consolidates the EPRP, including it in the SRFP and re-submitting it for review and verification. In response to the draft report the applicant forwarded a revised EPRP, with improved instructions.	Compliance was partially confirmed during the site inspection. Compliance was confirmed in response to the draft report.
Technical guidance not 2.2.4, MEPC 210(63) Section 3.2.1	Emergency access routes	Evacuation routes and assembly station were seen in place on site, with good access for emergency vehicles.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.2.1	Access and logistics within facility,	Access and logistics were found good, except for the need for some housekeeping and riddance of old waste and scrap.	Compliance was confirmed during the site inspection.
Technical guidelines 2.1.4 (b), MEPC	Medical services	3 times a week a doctor visits the yard available for consultancy, normally 4 hours each visit. Doctor schedule is announced on the announcement board, employees can book an	Compliance was confirmed during the

210(63) Section 3.2.1, 3.3.5, ILO SHG, Section 3.6	and facilities	appointment or visit at own convenience. The consultancies are carried out in a small infirmary at the facility.	site inspection.
		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). Map 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.	
Technical guidelines 2.1.4 (b), MEPC.210(63), Section 3.3.4.11	Regulatory requirements health	Turkish Occupational Health and Safety Law (No. 6331, published: 30.06.2012 / Official Gazette No. 28726) requires every company to contract an occupational health and safety expert and a company doctor based on the company's hazardous class. Depending on the number of workers on site, the minimum time that the doctor should spend at a company is defined in the respective regulations (at least 15 minutes per worker per month for very hazardous establishments).	Compliance was confirmed during the site inspection.
MEPC.210(63), Section 3.1.1	Regulatory requirements safety	Turkish Occupational Health and Safety Law (No. 6331, published: 30.06.2012 / Official Gazette No. 28726), requires 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 (at least 40 minutes per worker per month for very hazardous establishments). The facility is well experienced with regulatory safety requirements and their documents, and on-site implementations are periodically inspected by the OHS Expert. OHS Expert attends the monthly health and safety committee meetings, in which any accidents, incidents or, near misses, are discussed and corrective actions determined.	Compliance was confirmed during the site inspection.
MEPC.210(63), Section 3.1.1	Regulatory requirements fire	It was reported that mock fire drills were held once a year, according to national legislation. The drills were however held with the SRAT fire team, which are not professional firemen and smoke divers, the fire truck has a water canon but is not a full	Compliance was confirmed during the

		fire truck as such. For a full fire, the local fire brigades are nearby.	site inspection.
requiring si		worker safety and training, including ensuring the use of personal protective equip	oment for operations
Technical guidance note 2.3.1	Safety inspectors on site	The facility had 4 designated safety inspectors on site, with overlapping competence on both the environmental- and safety disciplines. The safety inspectors were managed by the HSE-, environment and QA representatives in team. Safety upkeep was also supported by the company OSGB (ortak sağlık ve güvenlik birimi (OSGB) which translated reads joint health and safety unit), who reportedly visits the facility daily, for 2 or 3 hours. OSGB also assists in developing the training programs. The safety inspectors were clearly identifiable with red overalls, helmets and high-visibility jackets. Additionally, several workers are trained as supervisors.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.2	Condition of safety equipment	Safety equipment was in general found in good to very good condition, although some equipment in the emergency response room could be cleaner and some other improvements could be made. First aid kits were seen in 3 locations, near the assembly area in an emergency cabinet with EPRP plan, in the emergency room and on the rescue basket, seemingly brand new. The evaluators recommended that a table and a chair were provided in way of the first aid stations, to be able to treat small cuts and bruises having somewhere to sit. In response to the draft report the applicant forwarded a photo documenting that table and chair is provided by the first aid stations (1.tables.jpg). All fire extinguishers were seen in good condition, with valid dates. The evaluators noted that the extinguishers for the hose storage reels were mounted on the reels themselves, i.e. directly on the source of an eventual fire. It was argued that there were extinguishers also elsewhere. The evaluators recommended that either they should be moved out of the danger zone or removed all over due to the risk that someone may attempt to use them if a hose bursts and catches fire, entering the fire. In response to the draft report the applicant replied that the portable fire extinguishers have been located away from	Compliance was partially confirmed during the site inspection. Compliance was confirmed in response to the draft report.

torch reels, supported by photographic evidence (2. fire extinguishers.jpg).

The emergency basket on shore was provided with a soft bag stretcher, it was noted that the basket was not long enough to accommodate a patient fully lying down in the stretcher. In response to the draft report the applicant replied that the mentioned basket by the evaluators is used for emergency equipment store/emergency station onboard. An additional basket is reportedly available. The reply is supported with photographic evidence (3. patient carrying.jpg and 3. patient carrying 2.jpg) showing that a stretcher can fit inside the emergency basket.

A rescue boat was stored near the shore, reportedly ready for action in 4 minutes, to be lifted into the sea by the dismantling crane. It was however questioned how long launching would take if action was required. For example, if a man falls overboard and need immediate rescue but the crane is busy in the middle of a heavy lift, the evaluators question if the launching time would still be 4 minutes. The boat was seen in good to fair condition but could be better kept. They reportedly started the engine every second day. The facility was looking at hiring a certified coxswain.

In response to the draft report the applicant replied that the rescue boat is now moored alongside the crane access pontoons during regular operations for easy access. In case of bad weather, the boat is lifted onshore to a location where it can be promptly deployed by the crane or a wheel loader/excavator. The applicant has forwarded photos documenting this in '4. rescue boat 1.jpg'and '4. Rescue boat 2.jpg'. The applicant also replied that they have two workers holding amateur seaman certificates. The certificates are attached in '5. amature seaman's cert 1.pdf' and '5. amature seaman's cert 2.pdf'. The applicant has decided that they would rather train more workers than to hire a certified coxswain.

The emergency room had only one old gas-tight flashlight, with hardly any effect. It was recommended to provide several flashlights, of modern LED type with strong beam and low battery consumption. In response to the draft report the applicant replied that they have installed high voltage, portable rechargeable LED lights in the Emergency Room,

		supported by a photo ('6. Emergency Room.jpg'). Breathing apparatus was found in place in the emergency room, with valid oxygen bottles. The equipment could be kept cleaner. Otherwise the room was equipped with fire overalls, spare hoses, spill kits, shovels, gloves, blankets and oil pads, all on labelled shelves and with inventory list.	
		No lifebuoy with casting rope was posted by the shoreline, the facility promised to provide one, mounted on a stand. The applicant was requested to confirm this. In response to the draft report the applicant replied that lifebuoys with rope have been installed around the pontoon and the rescue boat. This is supported by photos ('7. lifebuoy close up.jpg', '7. lifebuoy on gangway.jpg', '7. lifebuoy on pontoon left.jpg', '7. lifebuoy on pontoon right.jpg').	
		The card reader for off work on work was accessed by walking on a narrow shelf on the concrete wall, about 1.5 m above the ground, with no railing. Considering the morning and afternoon rush and crowding, the facility promised to provide a railing. In response to the draft report the applicant confirmed that railing had been provided supported by photos ('8. railing 1.jpg' and '8. railing 2.jpg').	
Technical guidance note 2.3.3, MEPC 210(63) Section 3.1.2/3.2.2	Safety induction and training, employees	Safety training for employees in general, including safety induction and toolbox-talk refreshment, was found in good order, with signed training records and training schedules.	Compliance was confirmed during the site inspection
Technical guidance note 2.3.3, MEPC 210(63) Section 3.1.2/3.2.2	Safety induction and training, subcontractors	Sub-contractors are not used.	N/A
Technical guidance note 2.3.3, MEPC 210(63) Section 3.1.2/3.2.2	Safety induction, visitors	The security guard at the door asked the evaluators to read and sign a safety form at the entrance, however the form was available in Turkish only. Considering the SRF can have foreign visitors, it is recommended to have the safety form available in English. No visitor cards with numbers on them were provided.	Compliance was partially confirmed during the site inspection.

		The evaluators were given brief safety instructions before walking out on the yard tour, however there was no formal safety induction upon first arrival including information of escapes routes from the office building, or drills. In reply to the draft report the applicant explained that the safety form will be translated to English by translators as it contains legal wording, hence the applicant did not feel confident to translate it in-house. Numbers have reportedly been added to visitor cards, this is supported with photo '17. Visitors Cards.jpg'. In addition, the gatekeeper has reportedly been reminded of the instructions and safety induction on arrival will be provided.	Compliance was confirmed in response to the draft report.
Technical guidance note 2.3.3, MEPC 210(63) Section 3.1.2/3.2.2	Risk Assessment	A risk assessment revised from the version in the application file, dated 3 November 2018, was witnessed. It was initiated by the previous QA representative with the assistance of external consultant. 2 worker representatives had participated, one from the field and one from the ship team. Reportedly, the applicant's external safety expert (from OSGB) had changed, hence the Risk Assessment will be revised. The assessment was seen to be comprehensive yet with a few missing risks, for example fire due to ignition of combustible materials notably from accommodation areas. Only small adjustments were deemed necessary. A ship-specific risk assessment was witnessed, however there was not much relating to the specific vessel, the assessment was overall general.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.1.2	Hazardous waste handling training	Only trained SRAT personnel handle hazardous waste. Examples of various certificates were forwarded to the evaluators as part of the SRAT reply upfront of the site inspection.	The desk assessment showed compliance with this point. This was confirmed during the site inspection.
MEPC 210(63) Section 3.3.5	Ship access control	There was a glass-enclosed Persons On Board (POB) board located on the yard pontoon barge, by the gangways to the vessel. The board had card holders for worker ID cards	Compliance was confirmed during the

		and seen in use. Next to the POB was the safe work permit of the day, and a signature sheet for all workers with written embarkation and disembarkation times, including for lunch break. The system was found very good. Located practically below the rig topsides, a fire would render the POB board in the crisis area hence inaccessible. The evaluators recommended that the POB board was moved out of any potential casualty zone, i.e. further away from the vessels.	site inspection.
MEPC 210(63) Section 3.3.4.5	Prevention of falling from heights	The topic of working at heights remained unresolved after the site inspection. The revised EPRP did not include mention of actions if a falling casualty occurs, or instructions on use of harness or standards of temporary barriers and railings. A single red/ white striped warning tape was seen stretched across the half-cut topsides between the pontoons, but nothing else considering that work is going on at least 40 meters above ground with a straight fall down to the beach. The evaluators asked that the facility compiles a complete, and lean, working at heights instruction and emergency response. Bear in mind that moving a person who has fallen can be fatal, ensure a doctor or paramedic is involved in the emergency response instruction. Additionally, the applicant was requested to demonstrate that workers who work at height are trained on how to use the safety harness, and its instructions on the anchorage points for the safety harness. In response to the draft report the applicant forwarded a completely revised EPRP, with instructions on falling from heights. SRFP, with basic and clear instructions with key annexes.	Compliance could not be confirmed during the site inspection. Compliance was confirmed in response to the draft report.
MEPC 210(63) Section 3.3.4.1.8	Safety signage on site	Safety signage on site was abundant. Many signage was seen brand new. A significant amount of spare signage was seen stored in the supervisor office. There can also be too much signage, there was a cluster of PPE signage for every 50 m	Compliance was confirmed during the site inspection.

		the length of the plot. While it is necessary to be reminded and signage is good, it is basic training that counts.	
MEPC 210(63) Section 3.3.4.1.8	Safety signage on vessel	The vessel, a semi-submersible rig, was not inspected due to safety reasons. There was PPE signage at the foot of the gangway, but no signage could be seen from land.	N/A
MEPC 210(63) Section 3.3.4.6	Lifting equipment and instructions	Lifting of primary cuts was done by a 250-ton mobile crane, and a back-up crane of 120-ton SWL. The cranes were found in good working condition, with maintenance records and certificates. The cranes are certified by Perkon and now AFS.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.6	Crane operators' certification	Checked during the desk assessment.	The desk assessment showed compliance with this point.
MEPC 210(63) Section 3.1.2	Training of forklift operator	N/A	N/A
MEPC 210(63) Section 3.1.2	Certification/ training of cutters	Cutters were trained and certified as per requirements. A spot check on a random worker was carried out and found in order.	Compliance was confirmed during the site inspection.
MEPC 210(63) 3.4.3	Cutting procedures	The evaluators asked for the cutting plan for the semi-submersible oil rig under demolition, which was demonstrated in way of the SRP. The plan was at the uppermost level, the rig divided into 9 areas: 1–2: topside equipment 3: Derrick 4: Accommodation and deckhouses	Compliance was partially confirmed during the site inspection. Compliance was partially confirmed in response to the draft report.

	I		
		5: Topside deck structure6-8: Columns and braces9: Pontoons	Compliance was confirmed in response to the final report.
		Cutting is decided verbally day by day, by the ship supervisor in cooperation with a safety officer. All pieces are hooked up to the crane before the final release cut, the maximum weight of any block being 20 tons. No pieces fall on the intertidal zone.	
		1 field cutter and 1 ship cutter are always present during a lift.	
		To protect the cutters from structural bouncing after the final cut, due to released stresses in the structure, the final cut was carried out from lifting basket with an extended torch.	
		Necessary permits such as safe for entry, safe for hot work are provided in advance and posted by the gangway. Pieces to be cut have been pre-cleaned and are again checked for cleanliness and possible leaks before cutting. Cutting lines are stripped, the paint chips sent to SRAT. The facility did reportedly not use slag collectors; hence it became unclear to the evaluators how slag was collected from the intertidal zone.	
		Overall the facility explained good procedures for cutting, however the actual proceedings were not described in full and in detail in the SRFP. Verbal communication is also a procedure, the evaluators recommended the facility to update the methodology to exactly instruct what the facility does, step by step, to assure safe and environmentally sound dismantling above the intertidal zone.	
		In response to the final report the applicant has updated its procedures and made them more detailed. The updated procedures are adequate.	
MEPC 210(63) Section 3.3.4.3 / ILO SHG: p108ff:13.	Steel cutting machines	Only gas torches are used.	N/A
ILO SHG: p108ff:13.	Other machinery	N/A	N/A

ILO SHG: p67:7.2.4.4, p108ff:13.	Winches, mooring gear.	Excavators are used for pulling the vessels.	N/A
MEPC 210(63) Section 3.3.4.6.	Ropes/chains/ slings	There was initially no traceability of lifting equipment such as shackles, slings and wire ropes. Mixed in accumulates waste and scrap, lay unused or discarded lifting equipment with no "do not use" label or identification. The facility had, however, started to implement a lifting equipment registration system, with a dedicated container to store and mark equipment. Status on lifting equipment was marked according to a colour code, marked on the equipment by coloured tape. The colour code instructions were posted by the door of the container, and equipment within inspected and verified. Hooks and slings in the room also had ID tabs in metal. The 4 shackles hooked to the slings of the main dismantling crane were found marked and tagged. The facility needs to implement the system in full, and to remove permanently all lifting equipment not in use. No instructions for use of lifting equipment was demonstrated. In response to the draft report the applicant replied that lifting equipment instructions are displayed in the "Lifting Room". Unused slings, hooks and shackles are discarded. The number of slings in use and number of back up slings are included in the instructions. This is supported by photos ('instructions 1.jpg', 'instructions 2.jpg', 'sling room.jpg' and 'sling room 2.jpg').	Compliance was partially confirmed during the site inspection. Compliance was confirmed in response to the draft report.
MEPC 210(63) Section 3.3.4.8	Maintenance and decontamination of tools and equipment	Maintenance records of cranes and excavator were witnessed and found in order. Every morning critical equipment is inspected by the ship- and yard supervisors, following a checklist. This procedure was seen in the SRFP rev.11 and confirmed by witnessing actual used checklists, with dates, signed and duly filed.	Compliance was confirmed during the site inspection.
ILO SHG 16.1.6	Eye-wash	Eyewash bottles, all seemingly new, were located at the temporary waste storage, in the emergency cabinet and on the emergency basket. It is recommended that the facility checks the material safety data sheet (MSDS) of the	Compliance was partially confirmed during the site

		various paints and chemicals they handle on site. In many MSDS the first aid required is 15 min of continuous eye flushing. Eyewash bottles typically hold less than a litre 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. The evaluators recommended that an eyewash station with flushing water is provided. In response to the draft report the applicant replied that eyewash stations are renewed with flushing water. This is supported with photos ('eyewash 1.jpg', 'eyewash 2.jpg' and 'eyewash 3.jpg')	inspection. Compliance was confirmed in response to the draft report.
MEPC 210(63) Section 3.3.4.8	Condition of electrical equipment	The electrical equipment was observed to be in mostly good condition, including the generator, the switchboard and starter boxes, but showing age. Some cabling was lying around on the ground, some tangled around piping. Cable routing could be improved, the facility should do a round and tidy up. In response to the draft report the applicant replied that renewal of electrical wiring will reportedly be discussed in the following 2 months. It is suggested that the outcome of these discussions is forwarded to the Commission.	Compliance was partially confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.7	Housekeeping and illumination	It was observed during the inspection that housekeeping could be improved, see previous comment on waste, scrap and debris along the perimeters of the plot. It was also noted that illumination could be improved in the emergency room; there seemed to be no light inside the emergency room at the time of the inspection. In response to the draft report the applicant described that they will buy a small excavator dedicated to housekeeping. The cutting area will reportedly be washed weekly. In addition, the applicant has forwarded the procedure 'PL.11 Annual Periodic Controls-Maintenance Plan 2019.pdf'. This procedure gives a good overview of planned housekeeping activities. The applicant has also forwarded photographic evidence that light has been provided in	Compliance was partially confirmed during the site inspection. Compliance was confirmed in reply to the draft report.

		the emergency room (('6. Emergency Room.jpg').	
Technical guidance note 2.1.3, MEPC 210(63) Section 3.3.5/3.3.6 / BC TG: p63: 4.5	Fire station	Izmir fire department has a station in Aliaga and reportedly (http://itfaiye.izmir.bel.tr/en/cars/1059/1206) 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. No drills are held with the participation of the local fire brigades.	Compliance was confirmed during the site inspection.
ILO SHG: p49: 7.1.7	Instructions and signage	Basic firefighting instructions and warning signage were seen to be in place.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.3, MEPC 210(63) Section 3.1.2 ILO SHG: 8.8	Fire station manning, fire-fighters	All workers are trained in basic fire-fighting by licenced fire brigade. The response regime is split into worker teams, with one fire team always on board the vessel, one team in the field and one team in the metal / separation area. There are no smoke divers in-house and no one has been trained in using breathing apparatus. The facility advised that it was a requirement from SRAT and Fire Brigade to keep the personal fire equipment found in the emergency room. 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.
ILO SHG: p83: 8.8.8	Fire station equipment	N/A	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.6,	Fire alarm system	Several alarm buttons were located along the east perimeter, connected to sirens and	Compliance was confirmed during the

ILO SHG: 8.8.11	on shore	well-marked with signage.	site inspection.
ILO SHG: 8.8.11	Fire alarm system on vessel	The vessel was not inspected due to safety reasons.	N/A
Technical guidance note 2.3.3, MEPC 210(63) Section 3.3.6, ILO SHG: 8.8	Fire prevention measures general	The facility demonstrated its fire prevention methods in the EPRP, no particular fire risks were noted during the site inspection.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.6, ILO SHG 13.4.5	Combustible materials and hot- work	The facility reportedly stripped accommodation areas to bare steel before cutting, and otherwise cleared out combustible and flammable materials before cutting. They had never had a fire.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.4, ILO SHG 8.8.1, 13.5.2.	Condition of AC/OX lines	AC / OX lines were mostly found in good to very good condition, with pipes and hoses clean, clamped and bundled along the east perimeter. At the lower part, towards the shoreline, situation worsened somewhat with hoses lying on the ground of rough concrete and among scrap and waste. Facility should tidy up the area as a whole.	Compliance was confirmed during the site inspection.
MEPC 210(63) Section 3.3.4.4	Transporting/ storing flammable gases	The centralized LPG- and oxygen storages were caged in and found in good condition.	Compliance was confirmed during the site inspection.
MEPC 210(63): p21: 3.3.5, p23: 3.3.6	Fire hydrants	Tested and found in order. There were 3 fire pumps, all located in one shed.	Compliance was confirmed during the site inspection.
ILO SHG: p83: 8.8.10	Fire extinguishers	A number of them were checked, all with valid dates. Foam concentrate was checked on site and found in order.	Compliance was confirmed during the site inspection.
MEPC 210(63): p22: 3.3.6, ILO SHG: p82: 8.8.3	Smoking areas	No.	Compliance was confirmed during the

			site inspection.
	Security management	N/A	Security management is not a requirement.
	Access control to facility; security patrols	The area was closed to the road by a guarded gate, otherwise the regular access scheme to the Aliaga facilities was in force. The evaluators were not given access cards or registry at the security gate. The facility was covered by CCTV, operable from the management's smartphones.	Access control to facility is not a requirement.
	Data security	N/A	Data control is not a requirement.
ILO SHG 8.4.2	Entrances / gates, fencing	See above.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.3, 2.1.4, 2.3.1, MEPC 210(63) Section 3.1.2, 3.1.4, 3.3.4.3, 3.3.6, 3.4.4 / BC TG: p3: figure 1, p84: 6.1, 6.2,	Training	The site inspection proved that the facility had a good training regime in place. The training plan and schedule for 2019 was witnessed. Toolbox trainings of about 30 minutes were reportedly held averagely twice a month, or minimum once a month, according to needs, held either in the canteen or in the field. Records of toolbox training, main training and drills were kept by the QA representative. Records and signed participant lists were witnessed and found in very good order. The facility is assisted by OSGB in developing training programs.	Compliance was confirmed during the site inspection.
Technical guidance note 2.3.2, MEPC 210(63) Section 3.3.4.10	PPE	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 half face masks with gas filters. Reportedly the applicant had started using gas filtered mask two years ago and had tried out different masks before	Compliance was confirmed during the site inspection.

		they decided on a specific type. The workers use two-piece boiler suits, meeting the	
		requirements of the national regulations for shipyards and recycling yards.	
		PPE is unambiguously provided by the facility to the workers free of charge and replaced	
		as required. This was confirmed in interviews with workers on-site.	
		Ear protection was not seen, but a box of ear plugs was observed on-site. The evaluators	
		recommend that the applicant ensures that ear protection is worn, especially in the	
		separation and cutting area, as recommended in the noise measurement report.	
		No other breach of PPE was observed during the site inspection, however little work was	
		going on in the secondary cutting zone.	
competent a causing, risk	uthorities, reports	records on incidents, accidents, occupational diseases and chronic effects and, if reany incidents, accidents, occupational diseases or chronic effects causing, or with try, human health and the environment;	
Technical guidance note	Medical	Procedures for medical monitoring were documented. Worker accidents, injuries and	Compliance was
2.3.4, MEPC	monitoring,	medical/health records such as occupational health examinations are recorded.	confirmed during the
210(63) Section 3.3.4.11 and Appendix IV, ILO		The facility followed OSHAS and Turkish law defined as a "hazardous workplace".	site inspection.
conventions		In general, the medical monitoring schemes were found well and well documented in	
		organized records. Annual tests included hearing, vision, lung capacity, blood test and	
		lung x-ray. New hires were obliged to medical examination before starting work. Blood,	
		urine and lead was tested every third month.	
		The lead content in blood were for all the workers observed to be well below the national limit.	
	Incident	Incidents and accidents were witnessed well recorded, logged and filed. Including root	Compliance was
	monitoring and	cause and follow-up. This is also an official requirement.	confirmed during the
	reporting	A few examples were witnessed, a broken arm, a fall from height and a sprained wrist.	site inspection.
	Statistics	Statistics last 2 years:	Compliance was

		2017: 2 near misses, 2 accidents 2018: 8 near misses, 6 accidents In the 9 years the facility had been in operation, there had been no fatal accidents.	confirmed during the site inspection.
	Near-miss reporting	There was a near-miss reporting in place, also seen in reports. It is always uncertainty with regards to how efficient a facility's near miss reporting works, how the culture is to report near misses by the workers. Although the statistics were low in 2017, only 2, the system is in place.	Compliance was confirmed during the site inspection.
	Non-conformance procedures	Non-conformances are discussed in management meetings, with revised procedures as needed. Field cases are reportedly discussed in toolbox meetings.	Compliance was confirmed during the site inspection.
	HSE Incentives	The facility pays for health checks. The facility was thinking about introducing a reward / incentive system and emphasized that they were opposed to any sort of punishment regime, realizing that everyone makes mistakes and need to learn from them. They were also open to employees keeping parts found on the vessel that they wanted to have.	Compliance was confirmed during the site inspection.
	Corporate social responsibility	No statement as such.	Not a requirement to have a CSR policy or statement.
		of a ship recycling facility shall send the ship recycling plan, once approved in accostant administration or a recognised organisation authorised by it;	rdance with Article
MEPC 210(63) Section 3.2.4, 3.4.2.1	Ship recycling plan	The facility follows the requirements of compiling an SRP, which was witnessed during the site inspection. Comments are related to the SRFP, where cutting methodology and procedures could be better explained, in as few words as possible. The cutting plan is at very high level and could be improved. Also, requirements to reporting and monitoring	Compliance was confirmed during the site inspection.

		could be explained in the SRP.	
	(b): report to the	administration that the ship recycling facility is ready in every respect to start the	recycling of the ship;
MEPC 3.2.3-3.2.6	Ready for recycling certificate	The facility has extensive experience in running projects in line with IMO/EU Regulation procedures with IHM Part 1,2 and 3 and a SRP.	The evaluators are of the impression that
		However, a ready for recycling certificate cannot be issued as of today, as there is no legislation in place in Turkey to approve SRPs according to the EU SRR. Turkey is a third country, and a ship recycling facility's inclusion into the list is independent from the Turkish government.	the organisation can adapt to new legal regimes.
		A recognized organization may, based on the EU SRR, check the SRP with respect to the following;	
		Reflection of IHM Part I, II and III in the SRP	
		Safe for hot work and safe for entry procedures are established and monitored.	
		The evaluators are nonetheless of the impression that the ship recycling facility can adapt to new legal regimes.	
		Please refer to 'explicit or tacit procedure' below in this table.	
date of the t which issued accidents da	otal or partial recyc d the ready for recy	al or partial recycling of a ship is completed in accordance with this Regulation, wit cling in accordance with the ship recycling plan, send a statement of completion to cling certificate for the ship. The statement of completion shall include a report on lth and/or the environment, if any.	the administration
MEPC 210(63) Section 3.2.7	Statement of completion	A statement of completion was written after each recycling as per authority requirements. A complete report would be made only if required by the client, of which most are oil and gas owners.	Compliance was confirmed during the site inspection.
		A report was witnessed and found in order, with the exception of missing incident and accident statistics.	
	Lessons learned	Lessons learned are handled as part of the regular QMS management review regime. There are no dedicated lessons learned meetings as such.	

	Suggestions for	Suggestions for improvement are discussed in management meetings, ad hoc, weekly	
	improvements	and during the annual management review meetings. Suggestions from workers are	
	improvements	channelled mostly verbally to supervisors or management, and via suggestion box. The	
		facility emphasized that the operation was based on openness and freedom to speak.	
where relev	ant, the permit, lic	permit, license or authorisation granted by its competent authorities to conduct the scense or authorisation granted by the competent authorities to all its contractors and so of ship recycling and specify all information referred to in Article 16(2);	
echnical	Authorisation	Found in order.	Compliance was
uidance note .2.1, MEPC	Additions	round in order.	confirmed during the
10(63) Section			site inspection.
.2.2			site inspection.
ЛЕРС 210(63) 8: 3.1.2, p10:	Sub-contractors	Does not use sub-contractors.	Compliance was
.2.2 / BC TG:			confirmed during the
38: 3.4.3			site inspection.
rocedure,		ether the ship recycling plan will be approved by the competent authority through a ew period relating to tacit approval, in accordance with national requirements, where	
/IEPC.196(62) ection 5	Explicit or tacit	Today the SRP is approved by tacit approval. The SRP is part of a wide set of documents,	The evaluators are o
	procedure	surveys and permits/licenses that are submitted to the competent authorities for	the impression that
		obtaining permission to dismantle a ship. The SRP is neither explicitly approved nor	the organisation
		rejected as a standalone document.	easily can adapt to
		The evaluators were of the impression that the organisation can adapt to new local	these new legal
		The evaluators were of the impression that the organisation can adapt to new legal	these new legal regimes.
		The evaluators were of the impression that the organisation can adapt to new legal regimes with regards to approval of the SRP.	
		regimes with regards to approval of the SRP. of recycling; (b) the type and size of ships that can be recycled; (c) any limitation are	regimes.
which the sorocedure,	hip recycling facilit as referred to in Ai	regimes with regards to approval of the SRP.	regimes. nd conditions under xplicit or tacit
which the s procedure,	hip recycling facilit	regimes with regards to approval of the SRP. of recycling; (b) the type and size of ships that can be recycled; (c) any limitation are ty operates, including as regards hazardous waste management; (d) details on the exticle 7(3), for the approval of the ship recycling plan by the competent authority; (e)	regimes. nd conditions under xplicit or tacit) the maximum
which the s procedure,	hip recycling facilit as referred to in Ai recycling output.	regimes with regards to approval of the SRP. of recycling; (b) the type and size of ships that can be recycled; (c) any limitation are ty operates, including as regards hazardous waste management; (d) details on the ex	regimes. nd conditions under xplicit or tacit

	Type and size of ships that can be recycled	All ship types not exceeding 75m width and 17m draught. The facility has as business case to focus on oil rigs with high content of non-ferrous materials.	Compliance was confirmed during the site inspection.
	Any limitation and conditions	None.	Compliance was confirmed during the site inspection.
	Maximum annual ship recycling output	The desk assessment did not show full compliance on this point. Hence, the applicant was requested to provide completion reports for the vessels dismantled in the year where the applicant achieved the maximum annual ship recycling output. In response to the draft report the applicant forwarded a list of ships recycled in 2017 whit supporting completion reports. The maximum annual ship recycling capacity achieved is 91 850 MT.	The desk assessment did not show full compliance on this point. Compliance was confirmed in reply to the draft report.
Article 15 (2 Regulation;	2) (c): confirm that i	it will only accept a ship flying the flag of a Member State for recycling in accordance	ce with this
	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.
		ence that the ship recycling facility is capable of establishing, maintaining and moni	toring of the safe-
HKC: p14: R1(7), MEPC 210(63) Section 3.3.4.2 / ILO SHG: p110:13.4	Safe- for- hot work certificate, warning signs and labels	Procedures, training, certificates, checklists and signage witnessed and found in order. Work permit of the day was posted by the gangway. Normally the vessels are ventilated and checked for 10 to 14 days before work is allowed.	The desk assessment showed compliance with this point.
-		Hormany the vessels are ventilated and effected for 10 to 14 days before work is allowed.	Confirmed during the

		6 people are trained for gas-freeing.	site inspection.
		Spaces are crossed out on the GA plan as they are checked and approved for entry.	
HKC: p26: R19(2), BC TG: p47: 4.2.1	Confined spaces	Ventilation, gas-freeing method and measurement was inspected, with witness of supporting documents and checklists.	
		The revised EPRP is updated with response in case of casualty in confined space.	
	2) (e): attach a map	of the boundary of the ship recycling facility and the location of ship recycling ope	rations within it;
HKC: p43: 1.5, MEPC 210(63) Section 3.2.1	Map of facility	Multiple drawings were witnessed by the evaluators, proven to correspond to the landscape and facility lay-out, containing all safety equipment and -information.	Compliance confirmed during the site inspection.
(f) for each specify:	hazardous material	referred to in Annex I and additional hazardous material which might be part of th	e structure of a ship,
(i) whether		acility is authorised to carry out the removal of the hazardous material. Where it is to carry out the removal shall be identified and evidence of their competence shall be	
MEPC 210(63) Section 3.1.3, 3.1.4	Workers' certificates/ licences	The desk assessment showed compliance with this point.	The desk assessment showed compliance with this point.
another was	ste treatment metho provide evidence th	process will be applied within or outside the ship recycling facility such as incineration, the name and address of the waste treatment facility if different from that of the hat the applied process will be carried out without endangering human health and in	e ship recycling
MEPC.210(63), Section 3.1.1	Regulatory requirements environment	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 summary (p1), 4.3, 2.1, 2.5, 3.2, 3.4.2, 3.4.4, 4.1, 4.2.2, 4.2.5, 6.2, 7.1, 7.3,	Environmental management	Removal and management of hazardous waste is conducted by SRAT. The facility stores various equipment for further dismantling, to separate metals, in a pile. In general, the pile contained various types of metal equipment, but cables were also observed in the pile.	Compliance was confirmed during the site inspection.
Technical guidance note 2.2.5, MEPC210(63) Section 3.4.2, BC TG: p45: 4.2, ILO SHG: p4: 2.3.2	Management of hazardous waste	The facility does not manage any hazardous waste. This is only conducted by SRAT.	Compliance was confirmed during a previous site inspection of another ship recycling facility in June 2018.
Technical guidance note 2.2.3, MEPC210(63) Section 3.4.3.1, ILO SHG p90: 9.2.3	Management of asbestos	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. A previous site inspection in June 2018 included a site visit to the Süreko facility, but the landfill could not be observed due to road works on-site.	Compliance was confirmed during a previous site inspection of another ship recycling facility in June 2018.
MEPC210(63) Section 3.4.3.2	Management of PCB's	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	Compliance was confirmed during a previous site

		mg/kg is delivered to Izaydaş for incineration. Information regarding Izaydaş has been provided. It is described that wastes are incinerated at a temperature range between 1000° C and 1200° C in a Rotary Kiln. Izaydaş 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.	inspection of another ship recycling facility in June 2018.
MEPC210(63) Section 3.4.3.3	Management of Ozone-depleting substances (ODS)	The facility does not manage any hazardous waste. This is only conducted by SRAT. Ozone depleting substances are removed by licensed experts, and temporarily stored before sent to disposal at Izaydaş, 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. Izaydaş 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 ODS. Hence, the evaluators have reason to expect that Izaydaş will be operated in accordance with human health and environmental protection standards that are broadly equivalent to relevant international and Union standards. SRAT has confirmed that insulation foam in cooling chambers that contain ozone depleting substances used as blowing agents will be sent to Izaydaş for incineration. This is stated within the revised procedure P-17 (ODS) of SRAT.	Compliance was confirmed during a previous site inspection of another ship recycling facility in June 2018, together with additional information received from SRAT in October 2018.
MEPC210(63) Section 3.4.3.4	Management of paints and coating including antifouling with organotin TBT	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. The cement factories have air emissions limitations, continuously measured and reported to the Ministry of Environment. Please refer to 15(5) below.	Compliance was confirmed during the site inspection.
MEPC210(63) Section 3.4.3.5	Procedures for operationally	The facility does not manage any hazardous waste. This is only conducted by SRAT.	Compliance was confirmed during the

	generated wastes	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 Izaydaş or the cement factories to be used as fuel additive. This is considered broadly equivalent to Union standards.	site inspection.
	Perfluorooctane sulfonic acid (PFOS)	The facility does not manage any hazardous waste. This is only conducted by SRAT. SRAT has updated its procedures in accordance with European Union (Regulation (EU) No 757/2010; Fire-fighting foams containing PFOS that were placed on the market before 27 December 2006 may be used until 27 June 2011 after that it needs to be replaced. In its updated P-20 procedure, dated 16.10.2018, SRAT has included references to downstream waste management under "4. Hazard limits (Threshold value)": For material containing PFOS below 50mg/kg, including firefighting foam, the waste will be used in RDF process at Süreko. For material containing PFOS above 50mg/kg, including firefighting foam, the waste will be sent for incineration at Izaydaş.	Compliance was confirmed during a previous site inspection of another ship recycling facility in June 2018, together with additional information received from SRAT in October 2018.
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	Compliance was confirmed during the site inspection.

		insulation. The insulation is sent to the cement factories to be used as fuel. 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 has updated its procedure for PBB and PBDE based on the July 2018 comments.	
MEPC210(63) Section 3.4.2.2	Additional sampling and analysis	SRAT conducts an initial inspection of a vessel when it has arrived at the facility. SRAT confirms the IHM or prepare an IHM if the vessel arrives without an IHM (possible for non-EU flagged vessels). SRAT performs at such both initial and additional sampling as required. SRAT is well experienced in this.	Compliance was confirmed during the site inspection.
		It was advised that the second paragraph in section 3.4.2.2 is rewritten or removed from the SRFP as it is confusing. The applicant does not take air samples of asbestos. It is sufficient to refer to the SRAT procedure on asbestos.	
		The above-mentioned section has been revised in the updated SRFP ('10-19. SRFP v 12.pdf').	
MEPC210(63) Section 3.4.2.3	Identification, marking and labelling	The SRFP briefly describe identification, marking and labelling. SRAT marks and label hazardous materials before the dismantling starts.	Compliance was confirmed during the site inspection.
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.	Compliance was confirmed during the site inspection.
Technical guidance note 2.2.5 (c)	Applied process	Please refer to Article 15 (5) below.	

		at the company adopted a ship recycling facility plan, taking into account the relevant	
		Please refer to Article 13 (1) (e) above in this table.	
Article (2) ((h): provide the i	nformation necessary to identify the ship recycling facility.	
		Please refer to Article 13 (1) (a) above in this table.	
sound mana managemei	agement may only not facility which r	ses of Article 13, with regard to the waste recovery or disposal operation concerned, or the second of the second	t the waste
echnical uidance note	Waste	SRAT forwarded a document describing its procedures and downstream waste	Compliance was
2.5 (c)	management	management in more detail as a response to the desk assessment of application 15 and	confirmed during the
	facilities	16. The comments made for application 15 and 16 are also valid for the remaining	site inspection with
		Turkish yards that have applied to the EU list.	additional document
		DNV GL and the EU Commission had a meeting with the Ship Recycling Association of Turkey (SRAT) on 6 June 2018 and visited the downstream waste management facility Süreko on the same day. The temporary storage areas of SRAT were inspected by DNV GL in on 8 June 2018.	received for Dikkan Metal Ürünleri Sanay ve Ticaret A.Ş.
		In connection with the inspection of application 14 and 18, DNV GL and the EU Commission had a follow up meeting with SRAT on 16 October 2018.	
		Waste are only transferred to licensed facilities, cross checked by the evaluators on http://izinlisans.cevre.gov.tr/Sorgular/YazilimNetIzinLisansSorgula.aspx . This information is	
		now moved to the integrated portal "EÇBS" (Integrated Environment Information System), which can be accessed 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 Izaydaş, 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 Izaydaş, Süreko and the cement factories are monitored (recording devices placed on the chimney) recorded and checked online by the Ministry of Environment (emissions information "Sera gazları izleme, raporlama ve doğrulama"). These data are currently not available to the general public.

As part of a GEF (Global Environment Facility) Project entitled "Persistent Organic Pollutants Legacy Elimination and POPs Release Reduction Project", a test burn program was carried out at Izaydaş in December 2016, while the report was completed in September 2017 (https://www.lzaydaş.com.tr/defaultEn.aspx). The project was supported by the United Nations Development Program (UNDP). The overall conclusion made on the basis of the results from the test burn program was that the Izaydaş facility more than meets both national regulatory requirements and prevailing international standards when applied to POPs pesticide and high concentration PCB oil wastes. The national standards in Turkey have been harmonized with the EU Incineration Directive (2000/76/EU) in respect to operating conditions, technical requirements and flue gas emission limits. This Directive is however, no longer in force as it has been integrated into the Industrial Emissions Directive 2010-75-EU.

International standards used for guidance in the project includes:

"General technical guidelines on the environmentally sound management of wastes of wastes consisting of, containing or contaminated with persistent organic pollutants"; The Basel Convention, UNEP/CHW.12/5/Add.2/Rev.1, Geneva, July 2015

"Selection of Persistent Organic Pollutant Disposal Technology for the Global Environmental Facility, An Advisory Document", GEF Scientific and Technical Advisory Panel (STAP), November 2011

Directive 2010/75/EU of the European Parliament and the Council on Industrial Emissions

(Integrated Pollution Prevention and Control)

Per the website of Çimentaş İzmir (cement factory), the following substances are monitored in the exhaust gas: Dust, TOC, CO, NOx, SO2, O2, flow rate, pressure, humidity and temperature. All results are below the threshold levels.

Reportedly non-hazardous waste will be managed by Uzaylar Geri Dönüşüm or Aclev. Licenses for both facilities are attached to additional received documentation from SRAT.

Steel is sent to Dikkan group companies for further processing. In Turkey, steel plants are regulated by "Sera gazi emisyonlarinin takibi hakkinda yönetmelik" (Regulation on monitoring greenhouse gas emissions),

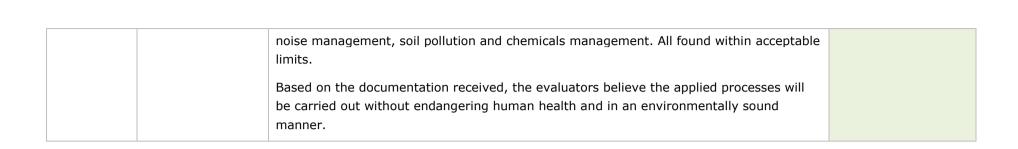
http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.19678&MevzuatIliski=0&source XmlSearch=sera and "Sanayi kaynakli hava kirlilignin kontrolu yönetmeligi") (Regulation on control of industrial air pollution)

http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.13184&MevzuatIliski=0&

For the latter, emission limitations for dust, lead, cadmium, chlorine, hydrogen chloride and gaseous inorganic chloride compounds, hydrogen fluoride and gaseous inorganic fluoride compounds, hydrogen sulphide, carbon monoxide, sulphur dioxide, nitrogen dioxide [NOx (in NO₂)] and total organic compounds are set and monitored for compliance. The monitoring is recorded and checked online by the Ministry of Environment.

The applicant was requested to forward emissions monitoring results of the steel plant in the Dikkan group that is used by Isiksan. In response to the draft report the applicant forwarded 'Emission Measurement Report.pdf' from the accredited laboratory Egetest, 'Ministry of Environment Licence.pdf', 'Ministry Approval Letter for Gas Emmisions.pdf' and 'Industrial Waste Management Plan 2018.pdf' for Dikkan Metal Ürünleri Sanayi ve Ticaret A.Ş.

In addition, the applicant forwarded 5 Consultant Monthly Reviews pdf's from Denetim Çevre Müh. Danişmanlik Hiz. Four of the reports were from 2018 and one report was from 2019. The reports review water and wastewater, air emissions, waste management,



7 PHOTOS FROM THE INSPECTION



Overview over the facility from the office building.



Clear access routes for firefighting and ambulances were observed on-site.



Cutters were observed to wear helmets, shoes, eye protection, gloves and masks with gas filters.



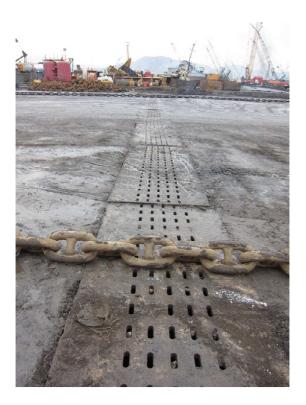
Access ways to the pontoons of the rig.



Secondary (emergency) access is in way of basket and crane, shore side.



Secondary (emergency) access is in way of basket and crane, on rig.



Drainage system runs across the plot.



Drainage system pump was out of function.



Primary drain line overflowing on the second day of the inspection, but water is collected in the emergency drain line closer to the seafront.



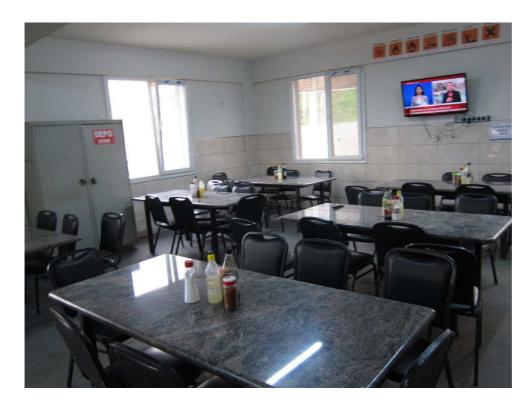
Storage capacity for drained water.



Accumulated sediments in the enclosure of the firefighting water tank, with a distinct smell of oil.



Pile of waste to be separated covered with tarpaulin.



Canteen where workers are served hot lunch every day.



About DNV GL DNV GL is a global quality assurance and risk management company. Driven by our purpose of safeguarding life, property and the environment, we enable our customers to advance the safety and sustainability of their business. We provide classification, technical assurance, software and independent expert advisory services to the maritime, oil & gas, power and renewables industries. We also provide certification, supply chain and data management services to customers across a wide range of industries. Operating in more than 100 countries, our experts are dedicated to helping customers make the world safer, smarter and greener.