



## Annex P

### MARS Ship Recycling Facility Plan

**ENGINEERING, PREPARATION, DECOMMISSIONING AND  
RECYCLE OF FLUMINENSE FPSO**

**For**

**the BIJUPIRA AND SALEMA (BJSA) DECOMMISSIONING Project**

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# 1 Introduction

The M.A.R.S. Europe Ship Recycling Facility Plan (SRFP) is an integrated part of the Environmental, Health and Safety management system.

The SRFP is made as a reference documents with links to relevant documents, and is structured in accordance with EU Regulation No 1257/2013 on ship recycling and amending Regulation, and in accordance with Hong Kong Resolution MEPC.210(63).

The SRFP is approved from EU in January 2023 where M.A.R.S. Europe was re-accepted on the EU-list of approved ship recycling facilities. It has since been updated.

The EHS Management system is a corporate system and is covering all activities for M.A.R.S. Europe and not only ship breaking, but recycling of all maritime structures

Documents referred to in SRFP will be submitted upon request.

## 2 EU Regulation No 1257/2013, Article 13

### Requirements necessary for ship recycling facilities to be included in the European List

Article 13 Section 1	Elements	Compliance Yes/No/Partly	Comments	Reference documents	Reference to sections in reference document
a	it is authorised by its competent authorities to conduct ship recycling operations;	Yes	Environmental approval received in March 2018 Approved for EU-list of ship recycling facilities in August 2018 Approved for handling and temporary storage of NORM in July 2020	Environmental Approval (GEO-2017-02702) Addendum to Environmental Approval (GEO-2021-04617) Approval on EU list (GEO-2018-02075) NORM Approval (AAKTIL-00001035) Pre-consent for import of ships for recycling (2020-64100)	
b	it is designed, constructed and operated in a safe and environmentally sound manner;	Yes	M.A.R.S. Europe site is designed with the best available techniques for operation of ship recycling in a safe and environmentally sound manner, with membraned soil and a drainage system with shut-off valves covering the entire site.  An Environment, Health, and Safety Management System has been developed and implemented in accordance with ISO 14001 and 45001.	EHS-PRO-366 Site Operations and Maintenance Plan EHS-PRO-367 Appendix for O&M Plan EHS-MAN-202 General EHS Plan	Appendix B Procedure Plan
c	it operates from built structures;	Yes	The site is constructed with quay area (off-load) and hinterland area with membrane. Office, warehouse, and storage of hazardous waste are in built structures.	EHS-PLN-600 Layout of Buildings EHS-PLN-601 Waste Warehouse Plan EHS-PLN-603 Site Layout	
d	it establishes management and monitoring systems, procedures and techniques which have the purpose of preventing, reducing, minimizing, and to the extent practicable eliminating:				
d(i)	health risks to the workers concerned and to the population in the vicinity of the ship recycling facility, and	Yes	M.A.R.S. Europe have implemented Hazard Identification and Risk Assessment to identify and correct those hazards within the workplace, which if left unchecked, could result in personal injury, or harm to the health of employees and visitors, or damage to equipment/structures.  All employees working in potentially dangerous surroundings are given internal awareness courses (e.g., lead awareness, working at height, confined space)  Work procedures and instructions includes e.g. Hot Work Permit, Cold Work Permit, Job Safety Analysis Program, Occupational Health and Working at Height. <ul style="list-style-type: none"> <li>Lead and dust surrounding the air of the process field are measured and analyzed regularly.</li> <li>All employees working in surroundings where they can be exposed to lead fumes have their blood analysed every 6 months, with specialist coming to the M.A.R.S. yard.</li> <li>If required, the noise from the operations is assessed and measured.</li> </ul>	EHS-PRO-313 Hazard Identification and Risk Assessment HRO-PRO-305 Training Matrix EHS-FRM-500 Hot Work EHS-FRM-510 Cold Work EHS-FRM-505 JSA EHS-PRO-316 Occupational Health EHS-PRO-327 Working at Height EHS-203 4429 Lead guidance EHS-PRO-329 Asbestos	
d(ii)	adverse effects on the environment caused by ship recycling;	Yes	The adverse effects on the environment from the shipbreaking facility is described and assessed in the Environmental Approval.  The following analyses are taken on a regular basis:	EHS-DEC-A101 Environmental Approval EHS-RPT-701 Environmental Aspect Register EHS-PRO-321 Environmental Monitoring EHS-PRO-366 Site Operations and Maintenance Plan	

			<ol style="list-style-type: none"> <li>1. Measurement of filtered water from water filtration system before release to harbor basin (8 times a year)</li> <li>2. All containers dedicated for NORM waste is measured before and after cleaning.</li> <li>3. Lead and dust in the air surrounding the process field.</li> </ol> <p>M.A.R.S. Europe has implemented procedures for conducting Environmental Aspect and Impact Identification and make an environmental aspect register.</p> <p>Work procedures and instructions includes e.g. Dust prevention and environmental monitoring.</p>		
e	it prepares a ship recycling facility plan;	Yes	The SRFP was submitted to the Municipality of Frederikshavn in July 2018, and Environmental Approval 2018 and EU list approval 2018 was given based on the SRFP.	Current document and attached reference documents	
f	it prevents adverse effects on human health and the environment, including the demonstration of the control of any leakage, in particular in intertidal zones;	Yes	<p>To ensure no leakage to the environmental surroundings, the following control measures are in place:</p> <ol style="list-style-type: none"> <li>1. No waste and/or liquids are transferred from ship to quay without being in closed containers.</li> <li>2. All ships are surrounded by floating booms</li> <li>3. When ship has been pulled to ship ramp, the ship is only cut in the parts that have been pulled across the drainage canal.</li> <li>4. The entire yard is purpose build with layers of membrane and draining system under a surface of granular material. In case of any oil spill on the yard, the crushed rocks are removed and send for landfill. Further, the yard is divided into sections with drainage canals making it possible to keep any major spills in a closed area without it leaking into other areas.</li> </ol> <p>Prevention of leakages is described in Environmental Approval. M.A.R.S. Europe has procedures for preventing, handling, and reporting spill and leakages.</p>	<p>EHS-DEC-A101 Environmental Approval EHS-PRO-309 Incident and injury Reporting EHS-PRO-351 Site Specific Emergency Response Plan EHS-PRO-321 Environmental Monitoring EHS-PRO-307 Hazardous Materials Response EHS-WIN-402 Use of Floating Booms</p>	Section 2.2, p. 31
g	it ensures safe and environmentally sound management and storage of hazardous materials and waste, including:				
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;	Yes	<p>In general waste will be handled in accordance with the IMO Resolution for ship recycling and Hong Kong resolution as well as municipality regulations.</p> <p>The site is constructed with quay area (off-load) and hinterland area with membrane. The entire site is covered with drainage systems.</p> <p>Storage of hazardous waste is located in built structures with concrete floors and spill trays.</p> <p>To ensure no leakage to the environmental surroundings, the following control measures are in place:</p> <ol style="list-style-type: none"> <li>1. No waste and/or liquids are transferred from ship to quay without being in closed containers.</li> <li>2. All ships are surrounded by floating booms</li> <li>3. When ship has been pulled to ship ramp, the ship is only cut in the parts that have been pulled across the drainage canal.</li> </ol> <p>The entire yard is purpose build with layers of membrane beneath a top of crushed rocks. In case of any oil spill on the yard, the crushed rocks are removed and send for landfill. Further, the yard is divided into sections with</p>	<p>EHS-PRO-306 Waste &amp; Materials Management Plan EHS-PRO-307 Hazardous Materials Response EHS-PRO-315 Personal Protective Equipment EHS-PRO-336 Naturally Occurring Radioactive Material (NORM) EHS-PLN-601 Waste Warehouse Plan EHS-PRO-366 Site Operations and Maintenance Plan EHS-PRO-367 Appendix for O&amp;M Plan</p>	<p>Appendix C – Layout of installations in load in Appendix D – Layout of installations in hinterland Appendix E – Layout of installations at cleaning facility</p>

			<p>drainage canals making it possible to keep any major spills in a closed area without it leaking into other areas.</p> <p>M.A.R.S. Europe has procedures for handling of hazardous materials and waste.</p>		
g(ii)	that all waste generated from the ship recycling activity and their quantities are documented and are only transferred to waste management facilities, including waste recycling facilities, authorised to deal with their treatment without endangering human health and in an environmentally sound manner;	Yes	<p>All hazardous waste present on ships is being thoroughly mapped before any removal and cleaning are started. M.A.R.S. are using trained and educated employees for mapping of hazardous materials in accommodation areas and living quarters. Process equipment, tanks, and pipes are being mapped by specialist subcontractor, Semco Maritime A/S.</p> <p>Once mapped, all hazardous and non-hazardous waste are collected and removed from the ship. All NORM and Mercy handling and transportation will be carried out by Semco Maritime A/S as subcontractor for M.A.R.S. and guarantor of operations in compliance to national and international rules and regulations, including terms of environmental approval. Semco is authorized to handle, store, pack, and transport NORM from their facility in Esbjerg. Semco has a dedicated fenced area at the M.A.R.S. site for temporary storage of NORM.</p> <p>All waste generated from ship recycling activities are monitored and logged in Waste Accounting and Reporting System. An accounting system is established for each project.</p>	<p>EHS-PRO-306 Waste &amp; Materials Management Plan</p> <p>EHS-PRO-336 Naturally Occurring Radioactive Material (NORM)</p> <p>EHS-PRO-363 NORM-handling flow chart</p> <p>EHS-DEC-A110 Semco NORM approval</p> <p>EHS-DEC-A104 Environmental Approval, Semco</p> <p>EHS-FRM-540 Waste Accounting and Reporting System</p> <p>QMS-PRO-314 Process Flow, Materials and Steel</p> <p>MARS, NORM Approval (AAKTIL-00001035)</p>	
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;	Yes	<p>M.A.R.S. Europe has identified and established emergency preparedness and response plans for the various facilities within the company. The plans cover facility specific and general emergency situations that have been identified and describe the response necessary to maintain control of the situation and to overcome any consequential Environmental, Health, &amp; Safety impacts.</p>	<p>EHS-PRO-309 Incident and Injury Reporting</p> <p>EHS-PRO-351 Site Specific Emergency Response Plan</p> <p>EHS-PRO-307 Hazardous Materials Response</p>	
i	it provides for worker safety and training, including ensuring the use of personal protective equipment for operations requiring such use;	Yes	<p>All M.A.R.S. Europe personnel performing tasks and jobs that may impact on EHS risks will be competent. The competence requirements for the task or job will be defined in terms of the education, training and/or experience necessary to perform it. All legal requirements are met. M.A.R.S. Europe has procedures for e.g. Personal Protective Equipment, Hazardous Materials Response, Training, Onboarding and Competence requirements.</p>	<p>EHS-PRO-315 Personal Protective Equipment</p> <p>EHS-PRO-316 Occupational Health</p> <p>EHS-PRO-323 Competent Persons</p> <p>HRO-PRO-320 Training Procedure</p> <p>HRO-PRO-(308-319) Competence Requirements</p> <p>HRO-PRO-305 Training Matrix</p> <p>HRO-PRO-304 Onboarding Procedure</p> <p>HRO-POL-101 Recruiting Strategy</p>	
j	it establishes records on incidents, accidents, occupational diseases and chronic effects and, if requested by its competent authorities, reports any incidents, accidents, occupational diseases or chronic effects causing, or with the potential for causing, risks to workers' safety, human health and the environment;	Yes	<p>Any non-conformance or incident with EHS significance is recorded and investigated, steps are taken to control any impact caused, and when appropriate and depending on seriousness or potential seriousness of the incident, corrective or preventive action is taken to prevent a recurrence. When necessary, Operating Procedures will be revised, or new procedures written. Software HSEQ Reports (Mellora) is used for observation reporting and incident investigation and records.</p>	<p>EHS-PRO-309 Incident and Injury Reporting</p> <p>EHS-PRO-321 Environmental Monitoring</p> <p>EHS-PRO-317 Root Cause Analysis</p>	

### 3 Hong Kong Convention, Resolution MEPC.210(63)

#### 2012 Guidelines for safe and environmentally sound ship recycling

SRFP	Elements	Compliance Yes/No/Partly	Comments	Reference Documents	Reference to sections in reference document
1	<b>Facility Management</b>				
1.1	Company Information	Yes	<p>M.A.R.S. Europe is the official owner and operator of the ship recycling facility. M.A.R.S. Europe is a subsidiary to M.A.R.S. Inc.</p> <p>A management system is established and certified to ISO 901, ISO 14001, and ISO 45001. The General EHS Plan and Quality Plan describes the Management System and the policies of M.A.R.S Europe. M.A.R.S. Europe sets annual EHS and Quality performance criteria and annual improvement objectives consistent with the EHS and Quality policies, including commitment to continual improvement.</p> <p>M.A.R.S. Europe monitors legislation, regulations and any relevant codes of practice apply to its activities. The information is presented in a Register of Legal and other Requirements.</p>	<p>EHS-MAN-2020 General EHS plan QMS-MAN-201 Quality Plan EHS-POL-100 EHS Policy EHS-POL-106 Environmental Objectives EHS-POL-107 OHS Objectives QMS-POL-100 Quality Objectives QMS-POL-101 Quality Policy ISO 9001:2015 Certificate ISO 14001:2015 Certificate ISO 45001:2018 Certificate QMS-PRO-315 Legal and Other Requirements EHS-FFO-915 List of Legal and Other Requirements HRO-PRO-321 Project Team, Competence Requirement</p>	
1.2	Training Program	Yes	<p>A training matrix listing the required trainings for all positions at M.A.R.S. Europe is established, together with detailed competence requirement descriptions. The training matrix includes both required education/certification/external training, and the needed internal training provided by M.A.R.S. Europe QEHS department.</p> <p>Records of employee trainings, certificates, and education are stored in employee files and registered in HR System (evovia.dk)</p>	<p>HRO-PRO-305 Training Matrix HRO-PRO-(308-319) Competence Requirements HRO-WIN-401 Evovia.dk Work Instruction</p>	
1.3	Worker Management	Yes	<p>Worker responsibilities are described in job descriptions and competence requirements. For specific tasks, workers responsibilities are described specific in procedures and work instruction.</p> <p>For each project a project organization will be set up and responsibilities distributed.</p>	<p>HRO FFO-(900-923) Job descriptions HRO-PRO-(308-319) Competence Requirements</p>	Section 4.1
1.4	Records Management	Yes	<p>All waste generated from ship recycling activities are monitored, weighed, and logged. When waste is removed from the ship, it is weighed and logged in internal weight log which is shared with the project administration. The waste is recorded in the internal waste accounting and reporting system. Hazardous waste and liquids are being stored in on-site waste warehouse that is administered by internal competent employee. After the waste have been packed, specialist subcontractor is called in for control of packaging, and preparation of labels and ADR documentation. All waste is marked with project number and when waste handling subcontractor has collected the waste, it is reported to the administration The waste accounting system is then updated, including quantities, EWC code, treatment method and final treatment station. Only approved facilities are used for treatment of waste. All records on waste are kept in project files.</p>	<p>QMS-PRO-314 Process Flow, Materials and Steel EHS-FRM-540 Waste accounting and reporting system EHS-FRM-539 Environmental accounting and reporting system EHS-PRO-309 Incident reporting QMS-PRO-313 Inspections and Maintenance SCM-WIN-400 Tracelink QMS-FRM-511 Maintenance and Inspection Plan EHS Statistics</p>	

			<p>All incidents and accidents are investigated to provide a deeper understanding of the risks associated with work activities and to enable effective risk control measures.</p> <p>All injuries are recorded, and reports are prepared in collaboration by supervisors, persons involved, witnesses, and EHS department. Incident reports are stored in EHS folder and registered in EHS System (Mellora). All incidents are also reported to the Danish work authorities through www.virk.dk.</p> <p>Records on maintenance and services of machinery and equipment are logged and tracked in internal systems. All machinery is logged in Maintenance System and all equipment and tools (incl. safety equipment) are logged and tracked in inventory system (Tracelink).</p>		
<b>2</b>	<b>Facility Operation</b>				
2.1	Facility information	Yes	<p>M.A.R.S. Europe site is located at the Port of Frederikshavn in Northern Denmark. The area can be accessed by ship to quay with 14 meters water depth, and by road close to E45. The entire site is ISPS area and fences off with monitoring system installed. The site is 280,000 m<sup>2</sup> purpose build with layered membrane and draining system under a surface of granular material. An on-site water filtration system is built, for purifying off all water coming from the draining system before release to harbor basin. The site is divided into five main areas: process area, storage area, load-in area, ship ramp, and cleaning facility. The site has the capacity to recycle 200,000 tons of metal annually and to use 100 cutting torches at once. The process area is further divided into sections by projects, to ensure proper traceability.</p> <p>M.A.R.S. Europe have the following operational equipment available at the yard:</p> <ul style="list-style-type: none"> <li>1 x Manitowoc crawler crane with lifting capacity of 750 t.</li> <li>1 x Liebherr crawler crane with lifting capacity of 1350 t.</li> <li>1 x Grove mobile crane with lifting capacity of 300 t.</li> <li>3 x Fuchs material handlers for lifting and sorting of steel</li> <li>1 x Telescopic loader</li> <li>3 x Lifts with man basket</li> <li>1 x Reach stacker for lifting and moving steel sections</li> <li>2 x Winches with pulling capacity of 1000 t.</li> <li>2 x Forklifts</li> <li>1 x Excavator w. Genesis Shear attached</li> <li>2 x Excavators w. lifting device attached for moving and turning steel constructions</li> <li>2 x material handlers</li> </ul>	EHS-PLN-603 Site Layout Company presentation	
2.2	Permits, licenses and certification	Yes	<p>M.A.R.S. Europe have the following permits/approvals:</p> <ul style="list-style-type: none"> <li>- Environmental Approval, 2018</li> <li>- Addendum to Environmental Approval, 2022</li> <li>- EU-list Approval, 2018</li> <li>- NORM Approval</li> </ul> <p>A Management System has been developed and implemented in accordance with ISO 14001, ISO 45001, and ISO 9001.</p> <p>To ensure proper certification of Subcontractors, a subcontractor approval system is in place with requirement of yearly update from subcontractors.</p>	<p>Environmental Approval (GEO-2017-02702)          Addendum to Environmental Approval (GEO-2021-04617)          Approval on EU list (GEO-2018-02075)          NORM Approval (AAKTIL-00001035)          Pre-consent for import of ships for recycling (2020-64100)          ISO 9001:2015 Certificate          ISO 14001:2015 Certificate          ISO 45001:2018 Certificate          SCM-PRO-309 Assessment and approval of subcontractors</p>	

2.3	Acceptability of ships	Yes	<p>The annually capacity for M.A.R.S. is 200,000 tons of metal for recycling. The amount of waste capacities is listed in the addendum to the Environmental approval, received on the 12 July 2022. The total expected amount of hazardous waste annually is 14206 tons, and the maximum storage capacity at MARS on-site warehouse is 1061.7 tons. The total expected amount of non-hazardous waste annually is 7030 tons and the maximum storage capacity at MARS on-site warehouse is 270 tons.</p> <p>MARS have quay side at 565 meters with additional 600 meters available if needed, and a 90-meter-wide ship ramp available. Further, a load-in areas for skidding/SPMT of topsides, platforms, etc. is established with a ground bearing capacity of 60 t/m<sup>2</sup></p>	<p>Environmental Approval (GEO-2017-02702)          Addendum to Environmental Approval (GEO-2021-04617)          Company presentation          EHS-PLN-603 Site Layout</p>	
2.4	Ship Recycling Plan (SRP) development	Yes	<p>Before a project arrives at the M.A.R.S. Europe side, a Ship Recycling Plan including Method Statement is developed for the specific ship. The SRP is developed using an established form, to ensure compliance with the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Convention), ANNEX 2 RESOLUTION MEPC.196(62). The method statement for recycling and decommissioning of the ship, including waste management description, is attached to the SRP form, and combined they will be adopted as the SRP that will follow the ship throughout the recycling.</p>	EHS-FRM-514 Ship Recycling Plan	
2.5	Vessel Arrival Management	Yes	<p>Before arrival of a ship, the responsibilities for mooring and arrival management are established. Engineering departments are developing layouts and mooring spread, and mooring plan for the ship. A designated area is prepared for the arrival of the ship, and gangway or scaffolding are procured and installed by certified scaffolders. After the ship have been proper moored, handover from ship recycling company to MARS is conducted. Handover includes walk-through of ship, ship familiarization, emergency systems, power systems, ballasting system, sewage tank status, status of isolated machinery, inventory, etc. A handover checklist is prepared between MARS and Ship Recycling company before arrival, and checklist is signed after the walk-through.</p>	EHS-MAN-202 General EHS Plan	
2.6	Ship recycling methodology	Yes	<p>For each project a project specific method statement is developed. See also 2.4. Ships arrived at MARS site is recycled and cut from established ship ramp, that is 90 meters wide and have a slope of 1/0.15 meter.</p>		
2.7	Reporting upon completion	Yes	<p>Upon completion of ship recycling a close-out report, including information and data on waste fractions, amounts, and final treatment, safety statistics, and environmental statistics is submitted together with signed statement of completion to the competent authorities.</p>	EHS-MAN-202 General EHS Plan	
3	<b>Worker safety and health compliance approach</b>				

3.1	Worker health and safety	Yes	<p>M.A.R.S. Europe has implemented Hazard Identification and Risk Assessment to identify and correct those hazards within the workplace, which if left unchecked, could result in personal injury, or harm to the health of employees and visitors, or damage to equipment/structures.</p> <p>An occupational health procedure is established, and an Occupational Health and Safety (OHS) organization is established. The Occupational Health procedure aims to provide rules and guidance for all employees working at the site, on how to stay in good health both during and after work. Further, the procedure sets rules and guidance for health testing. The OHS organization ensures that all workers are familiar with the rules and guidance described in the procedure and ensures that an OHS representative is always available on the site during work.</p> <p>The following health management systems are in place:</p> <ol style="list-style-type: none"> <li>1. Medical Insurance</li> <li>2. First aid organization</li> <li>3. Observation reporting system</li> <li>4. Toolbox talks and Job Safety Analysis</li> <li>5. Permit to Work system</li> </ol>	<p>EHS-PRO-313 Hazard Identification &amp; Risk Assessment (HIRA)          EHS-PRO-314 Job Safety Analysis Program          EHS-PRO-316 Occupational Health          EHS-MAN-202 General EHS Plan          EHS-POL-100 EHS Policy          EHS-PRO-315 Personal Protective Equipment          EHS-PRO-322 Permit to Work System          EHS-PRO-373 Life Saving Rules          EHS-PRO-352 Occupational Health &amp; Safety Organisation</p>	
3.2	Key safety and health personnel	Yes	An EHS (Environment, Health and Safety) Organization is established at M.A.R.S., including one EHS Manager and two EHS Supervisors.	MARS Organigrams	
3.3	Job hazard assessment	Yes	Job Safety Analyses for all tasks being performed on the site is prepared. All workers must understand and sign the JSA before commencement of the work task.	EHS-PRO-314 Job Safety Analysis Program EHS-FRM-505 Job Safety Analysis FORM	
3.4	<b>Prevention of adverse effects to human health</b>				
3.4.1	Safe-for-entry procedures	Yes	<p>M.A.R.S. Europe have an established confined space procedure and ensures that all workers that needs to enter confined spaces are trained properly. Safe for entry criteria is established in the procedure and a checklist needs to be prepared before entering any confined spaces. Only a Competent Person can determine whether a confined space is safe for entry, and a confined spaces must not be entered before a Competent Person have prepared a Safe-for-entry certificate. A Competent person shall visually inspect and test each space on the ship to determine the areas which are safe for entry before issuing a certificate and before recycling activities are commenced. Safe-for-entry certification, inspection and testing shall be conducted in all spaces that have the potential to pose harm to human health as a result of the space's oxygen content, flammability or atmospheric toxicity, with particular attention paid to enclosed spaces and to spaces and adjacent spaces where hot work has been or will be performed during the course of the daily recycling work. Designation as "Safe-for-Entry" is not sufficient for hot work, as additional criteria should be met to address safety issues related to hot work.</p>	<p>EHS-PRO-324 Confined Space Entry          EHS-FRM-571 Work at Confined Space Checklist          EHS-FRM-572 Confined Space Rescue Plan          EHS-PRO-323 Competent Person          HRO-PRO-305 Training Matrix          EHS-FRM-510 Cold Work Permit          EHS-PRO-322 Permit to work system</p>	
3.4.1.1	Safe-for-entry-criteria	Yes			
3.4.1.2	Competent person for Safe-for-entry determination	Yes			
3.4.1.3	Safe-for-entry inspection and testing procedures	Yes			
3.4.1.4	Oxygen	Yes			
3.4.1.5	Flammable atmospheres	Yes			
3.4.1.6	Toxic, corrosive, irritant or fumigated atmospheres and residues	Yes			
3.4.1.7	Safe-for-entry determination by a competent person	Yes			
3.4.1.8	Safe-for-entry certificate, warning signs and labels	Yes			
3.4.1.9	Safe-for-entry operational measures	Yes			
3.4.2	Safe-for-hot-work-procedures	Yes	<p>M.A.R.S. Europe have an established Hot Work procedure, including a Safe-for-hot-work criteria. A space that is "Safe-for-hot-work" is one that meets all the Safe-for-entry criteria and the following criteria: /1/ Any residues or materials in the space are not capable of producing an oxygen-enriched or oxygen-deficient environment and are not capable of generating flammable or explosive vapors. /2/ All adjacent spaces have been cleaned, rendered inert or sufficiently treated to prevent the risk of explosion, the release of noxious or toxic fumes or gases and the spread of fire. /3/ Work in adjacent spaces is not affected by the hot work, such as tank entry, lifting operations or deconstruction by hand.</p>	<p>EHS-PRO-300 Hot Work Permitting          EHS-FRM-500 Hot Work Permit          EHS-FRM-573 Hot Work Checklist          EHS-PRO-323 Competent Person          EHS-PRO-322 Permit to work system</p>	
3.4.2.1	Safe-for-hot-work criteria	Yes			
3.4.2.2	Competent person for Safe-for-hot-work determination	Yes			
3.4.2.3	Safe-for-hot-work inspection, testing and determination	Yes			
3.4.2.4	Safe-for-hot-work certificate, warning signs and labels	Yes			
3.4.2.5	Safe-for-hot-work operational measures	Yes			

			Each space should be certified by a Competent person as “Safe-for-hot-work” as often as necessary to ensure that conditions within that space are maintained as established by the certificate. The frequency with which a space should be monitored to determine whether conditions are being maintained is a function of the following, but should in any event not exceed a ten-hour shift period: /1/ Temperature, /2/ Work in the space, /3/ Period of elapsed time, /4/ Unattended spaces, /5/ Work break, /6/ Ballasting or trimming, and/or /7/ Gases detectors		
3.4.3	Welding, cutting, grinding, and heating	Yes	An established procedure for Flame Cutting is used at M.A.R.S. Europe. The procedure lists the necessary considerations that needs to be taken during flame cutting at the M.A.R.S. Europe site (eye injuries, burns, and toxic fumes). Further, the procedure describes how torches are used and how the hoses are connected. Required PPE during flame cutting is also described. All workers performing flame cutting at the M.A.R.S. Europe yard are undergoing internal training and side-by-side training, to ensure awareness of hazards and use of proper PPE.	EHS-PRO-301 Flame Cutting EHS-PRO-300 Hot Work Permitting EHS-FRM-500 Hot Work Permit HRO-PRO-305 Training Matrix	
3.4.4	Drums, containers and pressure vessels	Yes	All gases, chemicals, fuels and other dangerous or hazardous materials, including the containers for materials, are tagged, identified, handled, stored, transported and disposed of in compliance with the applicable laws and regulations in a manner that otherwise prevents spillage or leaks or any other contamination of the environment.	EHS-PRO-331 Ozone Depleting Substances	
3.4.5	Prevention of falling from heights and accidents caused by falling objects	Yes	Procedure is in place to ensure that working at height is always conducted under controlled conditions. The following measures are in place: anyone working more than 2 meters above surface most use a fall protection; work conducted less than 2 meters above the surface but with a high potential for injury from fall should consider fall protection; when working at slipper areas at heights under 2 meter it is mandatory to use fall protection. To ensure the prevention of dropped objects, the following measures are in place: housekeeping; inspections; repairs/modifications; record keeping.	EHS-PRO-327 Working at Height EHS-PRO-381 Prevention of Dropped Objects	
3.4.6	Gear and equipment for rigging and materials handling	Yes	An inspection and maintenance are in place to ensure that all equipment is properly maintained and inspected. Further, all equipment and tools are logged in inventory system “Tracelink”, where the tool/equipment can be tracked/logged/controlled using the tag number from the tool/equipment. Latest inspection, records from inspection and next planned inspection are also tracked in system. Procedures for lifting, rigging, and lifting with man basket are established together with competence requirements for crane operators, machine operators and riggers.	QMS-PRO-313 Inspection and Maintenance SCM-WIN-400 Tracelink EHS-PRO-334 Cranes and Rigging EHS-WIN-410 Rigging Inspection and Color Coding EHS-PRO-379 Lifting with Man Basket HRO-PRO-319 Competence Requirements, Machine Operator HRO-PRO-318 Competence Requirements, Maintenance Worker HRO-PRO-315 Competence Requirements, Riggers HRO-PRO-305 Training Matrix	
3.4.7	Housekeeping and illumination	Yes	Housekeeping is a big part of working safely at M.A.R.S. Europe and teams are established to conduct continuously sweepings every day to ensure that there always is clear passageways and for preventing dropped objects.	EHS-MAN-202 General EHS Plan EHS-PRO-315 Prevention of Dropped Objects	
3.4.8	Maintenance and decontamination of tools and equipment	Yes	An inspection and maintenance are in place to ensure that all equipment is properly maintained and inspected. Further, all equipment and tools are logged in inventory system “Tracelink”, where the tool/equipment can be tracked/logged/controlled using the tag number from the tool/equipment. Latest inspection, records from inspection and next planned inspection are also tracked in system – both inspections required by legislation and internal fixed inspections.	QMS-PRO-313 Inspection and Maintenance SCM-WIN-400 Tracelink	
3.4.9	Health and sanitation	Yes	Locker rooms for all workers are available with separate locker rooms for men and women. Locker rooms have cupboards with locks for all workers and showers and bathrooms in it. The locker rooms are located outside the yard, making it possible to change into work clothes and full PPE before entering		

			the yard. At the yard, heated canteens are placed at different locations to make sure that the workers are always working close to their appointed canteen. In the canteen's refrigerators, coffee machines, and kettles are available. Toilets are available for the workers throughout the yard as well. When it is needed to work on a project with access through scaffolding stairs for a longer period, canteens, toilets and smoking areas are prepared and made available on the structure. Dedicated smoking areas on the yard are also places at different locations.			
3.4.10	Personal protective equipment	Yes	All workers are given appropriate Personal Protective Equipment when they start working along with proper training in how to use it. Lockers for PPE is available in locker room and in warehouse for larger PPE, such as respiratory protections. When a PPE is damaged due to usage or improper use, it is delivered to the warehouse where the worker is given new PPE. All PPE are in accordance with regulative requirements as described in procedure.	EHS-PRO-315 PERSONAL PROTECTIVE EQUIPMENT EHS-PRO-333 RESPIRATORY PROTECTION		
3.4.11	Worker exposure and medical monitoring	Yes	The following is monitored continuously at M.A.R.S. Europe, to ensure workers health: <ul style="list-style-type: none"> <li>• Lead and dust surrounding the air of the process field are measured and analyzed regularly.</li> <li>• All employees working in surroundings where they can be exposed to lead fumes have their blood analysed every 6 months, with specialist coming to the M.A.R.S. yard.</li> <li>• If required, the noise from the operations is assessed and measured.</li> </ul>			
3.5	Emergency preparedness and response plan	Yes	An emergency response plan is prepared for the entire yard and is continuously monitored and updated. Further, an emergency response plan for the specific project is established before arrival. The emergency response plan is made available for all workers through integrated online document center and updated copies are always kept at offices throughout the yard. Project-specific plans are available at tally stations by the entrance of the project. Whenever there is a change in the emergency response plan, all workers are made aware at morning toolbox talks.	EHS-PRO-351 Site specific emergency response plan		
3.6	Fire and explosion prevention, detection, and response	Yes	All flammable liquids, solids and gases are safely stored in dedicated area in waste warehouse. It is prohibited to smoke at the M.A.R.S. yard outside of dedicated smoking areas. Hot work is only permitted after a Hot Work Permit has been prepared and signed by a dedicated EHS supervisor or EHS manager.	EHS-PLN-601 Waste Warehouse Plan EHS-PRO-300 Hot Work Permitting EHS-FRM-500 Hot Work Permit		
<b>4</b>	<b>Environmental compliance approach</b>					
4.1	Environmental Monitoring	Yes	The environmental monitoring plan follows the terms from the environmental approval	EHS-PRO-321 Environmental monitoring		
4.2	Management of Hazardous Materials	Yes	The management of hazardous materials flow is described in the M.A.R.S. Europe Waste & Materials management plan.  Hazardous materials and waste handling will be carried out in compliance to national and international rules and regulations, including terms of environmental approval. Subcontractor, RECOVER is used for handling asbestos, PCB and Ceramic Fibres. Attached is documentation from RECOVER. All handling RECOVER will be in accordance with national regulations. Non-hazardous waste will be handled by M.A.R.S. Employees and packed and transported by Marius Pedersen A/S. Documentation for the authorization will be required and stored in M.A.R.S EHS system. Quantities of the different fractions of hazardous and non-hazardous waste will be registered and documented for each project.	EHS-PRO-306 Waste & Materials Management Plan EHS-PRO-336 Naturally Occurring Radioactive Material (NORM) EHS-PRO-363 NORM-handling flow chart EHS-DEC-A110 Semco NORM approval EHS-DEC-A104 Environmental Approval, Semco EHS-FRM-540 Waste Accounting and Reporting System EHS-PRO-304 DANGEROUS GOODS / HAZARDOUS MATERIALS TRANSPORTATION		
4.2.1	Potentially containing Hazardous Materials					
4.2.2	Additional sampling and analysis					
4.2.3	Identification, marking and labelling and potential on-board locations					

			All NORM and Mercy handling and transportation will be carried out by Semco Maritime A/S as subcontractor for M.A.R.S. and guarantor of operations in compliance to national and international rules and regulations, including terms of environmental approval. Semco Maritime A/S is fully authorized/approved and is certified according to ISO 14001, ISO 45001 and ISO 9001. Semco is authorized to handle, store, pack, and transport NORM from their facility in Esbjerg. Semco has a dedicated fenced area at the M.A.R.S. site for temporary storage of NORM.		
4.2.4	Removal, handling, and remediation				
4.2.5	Storage and labelling after removal				
4.2.6	Treatment, transportation and disposal		Quantities of the different fractions of hazardous and non-hazardous waste will be registered and documented for each ship, using the Waste Accounting system.		
4.3	Environmentally sound management of hazardous materials				
4.3.1	Asbestos and materials containing asbestos	Yes	Asbestos and materials containing asbestos will be cleaned and removed by authorized subcontractors, Recover. All employees working with cleaning and stripping in areas that have the risks of being infected with asbestos, must have completed the course "Asbestos awareness"	EHS-PRO-329 Asbestos HRO-PRO-305 Training Matrix	
4.3.2	PCBs and materials containing PCBs	Yes	PCB and materials containing PCB will be cleaned and removed by authorized subcontractors, Recover. All employees working with cleaning and stripping in areas that have the risks of being infected with PCB, must have completed the course "PCB awareness"	EHS-PRO-385 PCB HRO-PRO-305 Training Matrix	
4.3.3	Ozone-depleting substances (ODSs)	Yes	All equipment that is being maintained or in the process of being recycled as part of a SRP of facility work procedure will be performed by a trained person qualified to recover and transport any identified ozone depleting chemicals. All ozone depleting chemicals will be recycled or disposed of according to the Waste and Materials Management Procedures. All ozone depleting chemicals will be transported according to Dangerous Goods / Hazardous Materials Transportation.	EHS-PRO-331 Ozone Depleting Substances (ODS)	
4.3.4	Paints and coatings				
4.3.4.1	Anti-fouling compounds and systems (organotin compounds including tributyltin (TBT))				
4.3.4.2	Toxic and highly flammable paints	Yes	High pressure spray jetting is performed in order to remove coatings prior to further cutting and shearing of vessel or platform/structure fractions. Any coatings removal process will be carried out on area I, II or III, as wastewater, possibly containing, lead, TBT etc. must be collected for treatment prior to discharge. Sewage system is sectioned in these areas and membrane will enable total collection of wastewater. Cleaning will always be performed using enclosure in order to prevent spread of materials.	EHS-PRO-306 Waste & Materials Management Plan EHS-PRO-387 Tributyltin (TBT) Awareness EHS-PRO-384 Draining Procedure EHS-PRO-382 UHP and HP Water Jetting	
4.3.5	Hazardous liquids, residues and sediments (such as oils, bilge, and ballast water)		All liquids, oils, residues and sediments are removed by Subcontractor Semco Maritime Services A/S. Liquids are drained from piping systems, and tanks are emptied and cleaned using UHP and HP water jetting.		
4.3.6	Heavy metals (lead, mercury, cadmium and hexavalent chromium)	Yes	Scrapes of coatings are taken before demolition is commenced to if heavy metals are expected to be contained. Painting containing heavy metal is removed from cutting lines before cutting of structures and additional PPE is worn during demolition. All workers are given awareness courses before cutting.	EHS-PRO-306 Waste & Materials Management Plan EHS-PRO-342 Lead EHS-PRO-343 Cadmium Awareness EHS-PRO-348 Hexavalent Chromium Awareness	
4.3.7	Other Hazardous Materials		Other hazardous materials are handled in accordance with waste management plan and applicable legislation	EHS-PRO-306 Waste & Materials Management Plan EHS-PRO-336 Naturally Occurring Radioactive Material (NORM)	
4.4	Prevention of adverse effects to the environment				
4.4.1	Spill prevention, control, and countermeasures	Yes	Prevention of leakages is described in Environmental Approval. To ensure no leakage to the environmental surroundings, the following control measures are in place: 1. No waste and/or liquids are transferred from ship to quay without being in closed containers.	EHS-DEC-A101 Environmental Approval EHS-PRO-309 Incident and Injury Reporting EHS-PRO-351 Site Specific Emergency Response Plan EHS-PRO-321 Environmental Monitoring	

			<ol style="list-style-type: none"> <li>2. All ships are surrounded by floating booms</li> <li>3. When ship has been pulled to ship ramp, the ship is only cut in the parts that have been pulled across the drainage canal.</li> <li>4. The entire yard is purpose build with layers of membrane and draining system under a surface of granular material. In case of any oil spill on the yard, the crushed rocks are removed and send for landfill. Further, the yard is divided into sections with drainage canals making it possible to keep any major spills in a closed area without it leaking into other areas.</li> </ol>	EHS-PRO-307 Hazardous Materials Response EHS-WIN 402 Use of floating Booms	
4.4.2	Storm-water pollution prevention	Yes	<p>A water treatment plant (quay area) and filtration system (hinterland) are constructed at the site.</p> <p>Water from quay areas, ship ramp area above drain, concrete area and tank is discharged to the recipient via sand trap, coalesces type oil separator, buffer tank, water treatment facility with heavy metal felling and measuring well.</p> <p>Water from hinterland areas is discharged to the recipient via filtration system, coalescence type oil separator and measuring well.</p>	EHS-PRO-366 Site Operations and Maintenance Plan EHS-PRO-367 Appendix for O&M Plan EHS-PLN-603 Site Layout	
4.4.3	Debris prevention and control	Yes	All waste containers are kept clean of any debris at all times.	EHS-PRO-351 Site Specific Emergency Response Plan EHS-PRO-306 Waste & Materials Management Plan	
4.4.4	Incident and spills reporting procedures	Yes	Spill response and reporting procedures is a part of the integrating hazardous response procedure. Spill kits are made available all around the yard and on the structures to ensure immediate spill clean-up. Competent person is available on site in case of spill.	EHS-PRO-307 Hazardous Materials Response EHS-PRO-351 Site Specific Emergency Response Plan EHS-PRO-309 Incident and Injury Reporting EHS-PRO-307 Hazardous Materials Response	