

European Commission (DG ENV)

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THE FEASIBILITY OF A LIST OF "GREEN AND SAFE" SHIP DISMANTLING FACILITIES AND OF A LIST OF SHIPS LIKELY TO GO FOR DISMANTLING

Final Report

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Figure 34: Case Study 2: LEYAL Ship Dismantling Facilities

The LEYAL ship dismantling company has facilities located on the Turkish coast of Aliaga. LEYAL has a reported nominal ship dismantling capacity of 100 000 LDT¹⁶³. As one of the best performing GSSDF outside of Europe, they meet all the requirements listed in this study which would qualify LEYAL facilities as GSSDF. Furthermore, LEYAL is a member of ISRA and has also participated as one of the main partners of the European Commission during the project on investigating *cost effective and environmentally sound dismantling of obsolete vessels*¹⁶⁴, which took place between February 2005 and January 2009. The following case study will outline the performance of these facilities according to the parameters considered in this study.

▪ **Health and Safety**

In relation to safe and environmental protection, facilities in Turkey must satisfy at least two mandatory requirements:

- i) The facility must receive an external license
- ii) According to the requirements of the Ship Recycler's Association of Turkey (SRAT), and independent organisation must oversee and manage potentially hazardous operations on behalf of all ship recyclers in Turkey.

In addition to these requirements, another is in place at the voluntary level which requires work to be operated by properly equipped and trained company employees. However, Turkish yards are legally required to provide workers with standard personal protective equipment (PPE).

Training and emergency drills are organised by the SRAT, to ensure emergency preparedness and response.

As it is based in Turkey, LEYAL must abide by both safe-for-hot and safe-for-entry requirements set out in national legislation. During the surrendering process, a ship must be surveyed and certified by a competent authority to ensure conditions are safe for dismantling. During dismantling procedures at LEYAL facilities, atmospheric readings are taken at periodic intervals, which are then available for review by the regulating authority. LEYAL meets all of the above requirements through the company's internal management system.

▪ **Environment**

Turkey employs a comprehensive licensing and enforcement framework in relation to waste management, based on European legislation, which is overseen by the Turkish Ministry of the Environment. All the requirements of the Council Directive 91/689/EC on hazardous waste have been transposed into national law under the By-laws of Hazardous Waste Control (BLHWC). Moreover, the full list of hazardous waste and

¹⁶³ Note: This figure has not taken into account the level of dismantling complexity, therefore the actual capacity will vary depending on the selection of ships that are dismantled over a year.

¹⁶⁴ CORDIS FP6 [Available online: cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=3&CAT=PROJ&QUERY=01259d16c892:0d53:0005aae6&RCN=74798]

concentration limits laid down in 2000/532/EC have also been adopted by this legislation.

Hazardous materials generated from dismantling operations are managed on behalf of individual facilities by the SRAT. Identification, removal and temporary storage is carried out by this entity, and transportation and disposal is carried out by third-party companies. Both these entities must be licensed by the Ministry, and all operations must be recorded and communicated to the ministry. In the case of the latter, a list of licensed facilities is issued periodically by the Ministry, and facilities are required by law to contract one of these facilities to carry out disposal activities. All wastes are tracked and documented using the Turkish national waste tracking system, from the moment they are identified on the ship, until delivery to the final disposal facility.

LEYAL has put in place infrastructure, equipment and operations to prevent pollution from spills (both land and sea). Dismantling operations are performed on concrete paved areas with peripheral drainage. Oil booms and skimmers are also employed to prevent emission of effluents. In the case significant accidental spills, LEYAL is able to call on external contractors to assist.

▪ **Administrative and organisational**

Ship dismantling facilities in Turkey must be licensed for operation. The industry is jointly regulated by the Turkish ministries of Environment, Labour and Social Security, and Transport, as well as the Underscretariat of Maritime Affairs. Licenses are subject to renewal after a three-year period. Moreover, additional permission for dismantling is required for each ship that arrives for dismantling in Turkey.

In addition to being ISO 9001, ISO 14001 and OSHAS 18001 certified, LEYAL also has in place a comprehensive management system which has been certified by the NQA, is a leading British assessment, verification and certification body which is itself accredited by The United Kingdom Accreditation Service (UKAS).

Although activities are monitored and recorded internally, information is only provided at the request of a competent authority where it is required by law. As reports may carry include information, they may only be provided to an external third party following the ship-owners' waiver of confidentiality clause, and/or a relevant letter of indemnity and confidentiality.