SUBSED LIFE17 ENV/IT/000347

“Sustainable substrates for agriculture from dredged remediated marine sediments: from ports to pots"

Deliverable Action A1

REVIEW OF LEGISLATION ON DREDGED SEDIMENT MANAGEMENT
Introduction

The dredging activity is of great environmental importance throughout Europe since the 1970s in order to keep river waterways and ports navigable and safe. For this reason, it has been the matter of specific international Conventions and EC Directives, which are listed in Table 1. An assessment undertaken within the SedNet European network found that the total amount of sediment dredged in Europe is between 100 and 200 million cubic meters per year. Despite the need for regular dredging, there are no specific international or regional Conventions on the management of the dredged material, nor are there specific Directives. The existing regulations, in fact, are focused on the impact of dumping on the marine environment, while the European Community Directives essentially concern water, soil, waste and landfills. On the other hand, more than 500,000 tons per year of peat, pumice, perlite and other soil substrates are used in agriculture for plant nursery production in containers, with negative impacts on the economy and the environment, related to the disturbance of the delicate ecosystems of origin and to transport.

From these premises arises the LIFE SUBSED Project, aimed at obtaining a based phytoremediated dredged sediment substrate suitable for agriculture, with particular regard to ornamental and flower crops. This target is in accordance to the principles of the circular economy, since the main objective of the Project is to transform a waste in a supply.

In the current European legislation there are still no clear references to the possibilities and methods of using dredged sediments, which effectively constitute a new type of product that can be used in agriculture. For these reasons, many European countries are forced to rely on national regulations that are not always exhaustive. Currently none of the EU environmental Directives specifically concerns dredged material, but three of them are related to sediment management: i) the Water Framework Directive (2000/60/EC); ii) the Directive waste management framework (75/442/EEC,91/156/EEC); iii) the Habitats Directive (92/43/EEC). In order to stimulate new regulatory initiatives on this item and to raise awareness on this sensitive topic, a specific task has been included within SUBSED Project concerning Directives on both sediments and substrates.
<table>
<thead>
<tr>
<th>Convention/Protocol</th>
<th>Description</th>
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<tbody>
<tr>
<td>Oslo Convention (1972)</td>
<td>Convention on the Prevention of Marine Pollution by Dumping from Ship and Aircraft</td>
</tr>
<tr>
<td>OSPAR Convention (1992)</td>
<td>Convention for the Protection of the Marine Environment of the North-East Atlantic</td>
</tr>
</tbody>
</table>

**Directives 1999/31/CE** (the first EU waste and water directives)

Directive on the landfill of waste; it has a limited impact on the disposal of dredged material along waterways on agricultural land or suitable subaquatic locations are acceptable solutions, but concentrations of contaminants must remain below certain limits.

**EU Parliament Decisions 2000/532/CE**

Decision on hazardous waste, amended with the Decisions 20001/118/CE, 2001/119/CE and 2001/573/CE, established the European Waste Catalogue, where hazardous waste are defined.


Directive of the European Parliament and of the Council (Water Framework Directive), establishing a framework for Community action in the field of water policy: protection of all waters, protection and enhancement of the status of aquatic ecosystems. (Concerning dredged sediments: member States are required by law to submit proposals for quality standards applicable to the concentration of the main substances in surface water, sediments or biota).

**Decision 2455/2001/EC**

Decision of the European Parliament and of the Council, establishing the list of priority substances in the field of water policy and amending directive 2000/60/EC.

**Directive 2008/32/EC**


**Directive 2008/56/EC**

Directive of the European Parliament and of the Council (Marine
Strategy Framework Directive), establishing a framework for community action in the field of marine environmental policy, within each Member States shall take the necessary measures to achieve or maintain a good environmental status in the marine environment by the year 2020 at the latest.


Directive of the European Parliament and of the Council on waste and repealing certain Directives; it lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use. (Concerning dredged sediments: they are linked to waste because it is not yet clear if they should be considered waste or not waste. Art. 2.3 of the Directive assesses that “Sediments relocated inside surface waters are excluded from the scope of the Waste Directive when they are not hazardous and when they are relocated for the purpose of: managing waters and waterways, preventing floods, mitigating the effects of floods and droughts, land reclamation”).

**Directive 2008/105/EC**


**Directive 2009/90/EC**

Directive of the Commission laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, technical specifications for chemical analysis and monitoring of water status; it lays down technical specifications for chemical analysis and monitoring of water status in accordance with Article 8(3) of Directive 2000/60/EC. It establishes minimum performance criteria for methods of analysis to be applied by Member States when monitoring water status, sediment and biota, as well as rules for demonstrating the quality of analytical results.

**Directive 2013/39/EU**


**Directive 2018/851/EU**

The Italian regulation

In 1992 with the L.G.D n. 99 the Directive 86/278 / EEC was adopted. It applied the regime for the diffusion of purified sludge in agriculture, in particular: conditions of use, prohibitions, jurisdiction of the State and the regions, authorizations and discipline, analysis of sludge and soil, penalties. A wide range of unclear regulations on sediment management succeeded each other from 1997 (Table 2), the year in which the dredged sediments were identified as wastes, according to the LG.D. (legislative decree) n. 22/1997.

It is clear that if we want to use waste within a production chain, we must first "stop it being a waste". Pursuant to art. 184-ter of LG.D 152/2006, and subsequent amendments, a waste ceases to be such, and therefore ceases to be regulated by the relevant legislation, when it has been subjected to a recovery operation, including recycling and preparation for reuse, and meet specific criteria, to be adopted in compliance with the following conditions: i) the substance or object is commonly used for specific purposes; ii) there is a market or a demand for this substance or object; iii) the substance or object meets the technical requirements for the specific purposes and complies with the existing legislation and standards applicable to the products; iv) the use of the substance or object will not lead to overall negative impacts on the environment or on human health.

The recovery operation must take place in compliance with the rules that regulate it.

In general, the M.D. 05/02/1998 (Identification of non-hazardous waste subjected to simplified recovery procedures pursuant to articles 31 and 33 of Legislative Decree 5 February 1997, No. 22) is the only legislation for inland reuse of dredged material but unfortunately it is only related to inland waters. In particular Annex I (Item 12.1) that identifies the possible recovery operations that may be conducted on dredged mud deriving from «dredging of lake bottoms, navigable or irrigation canals and water courses (internal waters), cleaning of water basins»; the M.D. 12/06/2002, n. 161 (Regulation implementing Articles 31 and 33 of Legislative Decree No. 5 February 1997, No. 22, concerning the identification of hazardous waste that can be admitted to simplified procedures): this regulation applies also to «lithoid material in general and anyway all the other possible granulometric fractions coming from excavations made in beds of both surface
water bodies and the dripping hydraulic network, in flood plains, beaches, sea and lake bottoms», it was abrogated and replaced by LG.D DPR 120/2017; the M.D. 11/17/2005, n. 269 (Regulation implementing Articles 31 and 33 of Legislative Decree No. 5 February 1997, No. 22, concerning the identification of hazardous waste from ships, which can be admitted to simplified procedures), art. 9-bis of the D.L. 06/11/2008, n. 172 (converted into law by Law dated 30/12/2008, No. 210); particularly concerning certain types of secondary solid fuels, the D.M. 14/02/2013, n. 22 (Regulation governing the cessation of the status of waste of certain types of secondary solid fuels (CSS), pursuant to Article 184-ter, paragraph 2, of Legislative Decree 3 April 2006, No. 152, and subsequent amendments).

As mentioned, in order for a substance to be qualified as a by-product, contextual compliance with all the conditions included in art. 184-bis of LG.D. 152/2006, namely: i) the substance or object originates from a production process, of which it is an integral part, and whose primary purpose is not the production of this substance or object; ii) it is certain that the substance or object will be used, during the course of the same or a subsequent production or use process, by the manufacturer or third parties; iii) the substance or object can be used directly without any further treatment other than normal industrial practice; iv) further use is legal, i.e. the substance or object meets, for the specific use, all relevant requirements regarding products and the protection of health and the environment and will not lead to overall negative impacts on the environment or human health.

In order to facilitate the use as a by-product of substances and objects that derive from a production process and that respect specific criteria, as well as to ensure a greater uniformity in the interpretation and application of the definition of ‘waste and by-product’ – terms that have been applied and interpreted in an unclear and non-homogeneous way over the years - the Ministry of the Environment has issued the M.D. 13/10/2016, n. 264 (published in the Official Journal 15/02/2017, No. 38), which provides indications to prove the existence of the above circumstances, without prejudice to the possibility of proving that a substance is a by-product and not a waste even in different ways, and without prejudice to the necessary respect, for each category of substance, of the relevant sector regulations.

Article. 184-bis of LG.D. 152/2006 and subsequent amendments and additions establishes that, with ministerial decrees, measures may be adopted to establish qualitative or quantitative criteria to be satisfied so that - always within the general requirements above mentioned - specific types of substances or objects are considered by-products and not waste.
In implementation of this standard: i) the M.D. 10/08/2012, n. 161 (Regulations governing the use of excavated earth and rocks) includes provisions for excavated earth and rocks that come from activities or works subject to environmental impact assessment or integrated environmental authorization, with the exclusion of hypotheses of diving material derived from excavation activities into sea and laying cables and pipelines under the sea; ii) the art. 41-bis of the LG.D. 21/06/2013, n. 69 (converted into law by Law 09/08/2013, No. 98), contains provisions for further simplification for excavated earth and rocks deriving from small sites whose production does not exceed 6000 cubic meters (in any case, even when included within the works regulated by M.D. 161/2012) and activities and works that do not fall within the scope of the aforementioned M.D. 161/2012; iii) Annexes 1 and 2 to the D.M. 13/10/2016, n. 264, contain specific indications for the category of residual biomass destined for the production of biogas and residual biomass destined for the production of energy through combustion.

Table 2. Resume in chronological order of laws\(^1\) that have directly addressed the topic of sediment management and SIN areas

<table>
<thead>
<tr>
<th>Date</th>
<th>Law Description</th>
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<tbody>
<tr>
<td>LG.D. n. 99/1992</td>
<td>it implements Dir. 86/278/CEE applying the land-spreading regime of purified sludge in agriculture, in particular: conditions for use, bans, jurisdiction of the state and regions, authorizations and discipline, sludge and land analysis, penalties</td>
</tr>
<tr>
<td>LG.D. n. 22/1997</td>
<td>it is the first legislation affecting environmental issues. Annex I reproduces the European Waste Catalogue (E.W.C.) identifying with the code 17 05 00 the dredged soil and materials and with the code 17 05 02 the dredged soil. This Decree has been abrogated and replaced by LG.D. n. 152/2006.</td>
</tr>
<tr>
<td>M.D. 05.02.1998:</td>
<td>it identifies non-hazardous waste that, according to LG.D. n. 22/1997 (today 152/2006), may be subject to simplified procedures for recovery (the recovery may be started 90 days after a simple communication to the competent Province).</td>
</tr>
</tbody>
</table>
| Article 35 LG.D. n. 152/1999: | it regards water protection against pollution. It implements Directive 91/271/EEC concerning urban waste-water treatment and Directive 91/676/CEE concerning the protection of waters against pollution caused by nitrates from agricultural sources. Article 35 allows the immersion at sea, under authorization, of «excavated materials from marine or salty bottoms or emerged coastal soils», provided that it is proved that there is the «technical or economical impossibility to use them for the purposes of..."
beach nourishment or recovery or alternative disposal». This LG.D. was also abrogated and replaced by LG.D. n. 152/2006, in particular art. 109 (see below).

M.D.n.468/2001  National remediation and environmental restoration program: it identifies, along with others, the Sites of National Interest (SIN) area of Leghorn

M.D.n.161/2002  Regulation implementing art. 31 and 32 of LG.D.n.22/1997, concerning the identification of hazardous waste that can be admitted to simplified procedures

M.D.24.02.2003  It perimeters the Sites of National Interest (SIN) area of Leghorn

M.D.n.269/2005  Regulation implementing art. 31 and 32 of LG.D.n.22/1997, concerning the identification of hazardous waste from ships, that can be admitted to simplified procedures

Article 109 LG.D. n. 152/2006: it repeals the mentioned Article 35. This provision has recently been modified by D.L. n. 5/2012 (it removed the condition concerning the «technical or economical impossibility to use them for the purposes of beach nourishment or recovery or alternative disposal»).

Article 1, par. 996 L. n. 296/2006: it modifies Law n. 84/1994 (Italian Law on ports), introducing specific provisions for dredging operations to be conducted within remediation Sites of National Interest (in Italian S.I.N.). As reported in Article 5, dredging operations and remediation activities may be conducted concurrently on the base of a project approved by the competent authority not being detrimental to the site remediation; dredged materials may be, under authorization i) immersed at sea if their characteristics are similar to the background level of their original site, they are suitable for the destination site and they are not positive to eco-toxicity tests, otherwise ii) filled in coastal retaining structures if they are non-hazardous.

M.D. 7 November 2008: it deals with technical provisions for dredging operations within remediation Sites of National Interest (S.I.N.). This decree has been partially modified by M.D. 4 August 2010 introducing in Annex A the new table A2 (chemical analyses to be conducted on port sediments about to be dredged and related thresholds).

Article 13 LG.D. n. 205/2010:
It has entirely modified Article 185 of LG.D. n. 152/2006 dedicated to exclusions from the waste legislation; paragraph 3 of Article 185 textually reproduces what provided by Directive 2008/98/EC: «without prejudice to obligations under other relevant Community legislation, sediments relocated inside surface waters for the purpose of managing waters and waterways or of preventing floods or mitigating the effects of floods and droughts or land reclamation shall be excluded from the scope of Part Four of this Decree if it is proved that the sediments are non-hazardous pursuing Commission Decision 2000/532/EC».

Article 39, par. 13 of LG.D. n. 205/2010:
It specifies that the notion of by-product also applies «to the material removed, exclusively for hydraulic security reasons, from the bed of rivers, lakes and creeks».

L. n. 27/2012:
It has abrogated par. 11-bis to 11-sexies of Article 5 L. n. 84/94 replacing them with new Article 5-bis. According to par. 1-7, dredging operations of ports or marine-coastal areas within remediation Sites of National Interest (S.I.N.) and remediation activities may be conducted concurrently on the base of a project approved by the competent authority not being detrimental to the site remediation; dredged materials may be, under authorization, i) immersed in the same body of water if their characteristics are similar to the background level of their original site, they are suitable for the destination site and they are not positive to eco-toxicity tests, otherwise ii) reused on land pursuing the conditions of a dedicated ministerial decree if pollutants contained in them do not exceed certain thresholds, otherwise iii) filled in coastal retaining tanks if they are non-hazardous. According to par. 8 materials dredged from the bottom of ports outside a S.I.N. may be immersed at sea pursuing Article 109 of LG.D. n. 152/2006, otherwise they may be used for beach nourishment, even with spill in the part of the active submerged beach, or for the construction of coastal retaining structures in ports.

Art. 24 LG.D n. 5/2012 as converted into law by L. 35/2012:
It modifies Art. 109 of the LG.D. n.152/2006: it established that the competent body to authorize all possible management options for sediments dredged in a port not located inside a Contaminated Sites of National Relevance is the Region (with the exception of sea dumping for sea dumping inside the Italian marine protected areas, whose authorization is still released by the Ministry of the Environment).

M.D. n. 161/2012:
It regulates terms and conditions at which excavated materials may be reused as by-products and thus managed as non-waste.
<table>
<thead>
<tr>
<th>Document</th>
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<tbody>
<tr>
<td>M.D. n. 22/2013</td>
<td>Regulation governing the cessation of the status of waste of certain types of secondary solid fuels.</td>
</tr>
<tr>
<td>L. 98/2013</td>
<td>Contains provisions for further simplification for excavated earth and rocks deriving from small sites.</td>
</tr>
<tr>
<td>M.D. 22.05.2014</td>
<td>New definition of the perimeter of the SIN area of Leghorn. Are excluded from the SIN area: the ground areas included the tanks of fill in the sea, the industrial channels, the port areas within the breakwaters and the areas between breakwaters and 3 kilometers from the coast which have got values &lt;VI.</td>
</tr>
<tr>
<td>LG.D n. 91/2014, as converted into law by L. 116/2014:</td>
<td>It introduces important changes in the regulation of dredging materials: new art. 184-quater of LG. D. n. 152/2006, which is specifically dedicated to the use of dredging materials.</td>
</tr>
<tr>
<td>LG.D n. 133/2014, as converted into law by L. 164/2014</td>
<td>Art. 7, Comma 8-bis: art. 185, comma 3, del D.lg. 152/2006, Exclusion from the regulations on waste of sediments moved within the hydraulic appurtenances.</td>
</tr>
<tr>
<td>LG.D. n.221/2015</td>
<td>Art.78, if the pollutants are below specific thresholds the sites are excluded from the SIN areas.</td>
</tr>
<tr>
<td>M.D. 264/16</td>
<td>Regulation which provides indication to prove that a production residue is a by-product and not a waste.</td>
</tr>
<tr>
<td>M.D. 351/16</td>
<td>Procedure for deriving the reference values in marine and brackish areas inside the SIN.</td>
</tr>
<tr>
<td>M.D. 172/16</td>
<td>Regulation on the rules of the methods and technical standards for dredging operations in SIN. It must be approved by 'Conferenza dei servizi'.</td>
</tr>
<tr>
<td>M.D 173/16</td>
<td>Regulation on methods and technical criteria for the immersion in sea of seabed excavation materials.</td>
</tr>
<tr>
<td>LG.D DPR 120/2017</td>
<td>The sediments were excluded from the list of “excavation materials” because included in other regulations.</td>
</tr>
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</table>

1In the Italian system there are: a) primary sources of law: the Law (L.), the Legislative Decree (LG.D.) and the Decree Law (D.L.); b) secondary sources of law: Regulations, taking the form of Decree of the President of the Republic (D.P.R.) or Ministerial Decree (M.D.).
A Technical Table has been recently set up at the Ministry for Environment, Land and Sea Protection for the revision of the legislation on waste management and treatment and the implementation of the European directives 2018/849 end-of-life vehicles, 2018/850 landfills, 2018/851 waste, 2018/852 packaging and packaging waste.

The Technical Table will be divided into working groups and two groups will also address the topic of ‘sediments’: both concern the landfill EU directive 2018/850; the first one will focus on the sludge treatments, while the second one on the prevention of waste formation in fulfillment of art. 1 paragraph 10, art. 1, 3 and 4 regarding disposal regulations of the waste dispersed in the marine environment and its management once on land.

**The Spanish regulation**

Approximately 74% of the non-EU merchandise transport and 37% of intra-EU traffic moves through seaports, in the case of Spain with a coastline of 7,880 km and 3 seaports among the top 10 in Europe dredging operations are essential in order to allow access to the ports of ships, each time, they have higher draft requirements due to higher dimensions.

Since Spain has started to keep historical records of these dredging operations in (1975), the volume of dredged material in Spanish ports is about 334 million cubic meters with an average of nearly 8,7 million year, of which 51% has been reused.

Currently in some countries the sediments dredged extraction is increasing due to the many uses of these, which can be used for flood and coast defense, beaches regeneration or even to cover the demand of aggregates, replacing materials extracted from terrestrial sources.

Therefore if operations of such magnitude are executed without following the adequate environmental criterias, the environmental status of the marine habitat could be compromised.

It is important consequently to compare benefits obtained with the potential negative impacts of the material extraction. To control this activity, it is recommended that regulatory agencies develop and work within a strategic framework that will make the decision on each specific action. Through various Conventions to which Spain has adhered, they have adopted guidelines for the dredged material management or that provide guidance for the states to develop their own national regulations.

For that reason in 1994, the studies and experimentation of the public works center in Spain (CEDEX) published the "Recommendations for the management of dredged material in Spanish ports", as agreed by the different organs of the General Administration of State, competent in approval procedures and authorization of dredging and discharge into the sea.
The national legislation in force regulate dredging works in a very general way inasmuch as Article 64 of Royal Legislative Decree-law 2/2011, 5th of September, by which the revised text of the Law on State Ports and Merchant Marine is approved only establishes the scheme applicable authorizations and in paragraph 3 indicates that dredging projects include a study of the management of dredged products, and in particular the location of the zone or zones of discharge and treatment, as well as in general terms, the necessary studies from the environmental standpoint but without specifying the content and range of it.

Likewise, its article 56 of Law 22/1988 of Coast establishes that discharges from ships and aircraft shall be regulated by specific legislation and its article 63 indicates that, to grant authorizations for extraction of aggregates and dredging, assessment of its effects on the maritime-terrestrial public domain will be necessary, regarding both the place of extraction or dredging as to discharge in it case.

Afterwards different Community directives have been transposed into Spanish law, such as the Waste Framework Directive (2008/98/EC), transposed in Spain to Law 22/2011, 28th of July, relative to waste and contaminated soil, Directive 2008/105 / EC relative to environmental quality standards in the area of water policy, transposed in Spain to Royal Decree-law 60/2011, 21st of January, which includes, in addition to environmental quality standards priority substances, other substances, called "preferred" by their specific importance in the Spanish context. Directive 2008/56/EC, 17th of June, (Framework Directive of Marine Strategy), transposed into Spanish law by Law 41/2010, 29th of December relative to the protection of the marine environment, and having the main objective to achieve or maintain good environmental status of the marine environment no later than 2020, for which the strategies as a tool for planning the marine environment are created.

The interministerial commission has drafted in 2017 the Guidelines for the characterization of dredged material and its relocation in waters of the maritime-terrestrial public domain, in which in addition to contemplating the procedures for dredging, the conditions and methodology of analysis, contemplates also the possibility of using sediments in public works such as agriculture, fisheries and the environment.

In the following table 3 there is a resume, with the different sources of law that have addressed the topic of dredging management in Spanish legislation.

<table>
<thead>
<tr>
<th>Table 3 – Spanish regulation on dredging management</th>
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<tbody>
<tr>
<td><strong>Law 22/1988, 28 July</strong> of the Coastal law. The present law aims the determination, protection, use and police of maritime-terrestrial and especially seashore public domain. Article 56 establishes that discharges at sea from ships and aircraft shall be regulated by specific legislation, while Article 63 indicates that, in order to obtain the authorization for aggregates extraction and</td>
</tr>
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...
A previous study showed the potential impact on land and maritime public domain is required, regarding the place of extraction or dredging and discharged area as well. This law was amended by Law 2/2013, 29 May.

<table>
<thead>
<tr>
<th>Ministerial Order MAM 304/2002, 8 February</th>
<th>through which the dispositions for the recovery operations, dregs disposal and the European waste list are published.</th>
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<tbody>
<tr>
<td>Law 41/2010, 29 December</td>
<td>for the protection of the marine environment; its main objective was to achieve or maintain good environmental status of the marine environment at the latest in 2020, for which planning tools of marine environment are were created. The assessment of the environmental status of the marine sites should be carried out through 11 descriptors included in its Annex I, three of them related to dredging operations and product management of dredging at sea.</td>
</tr>
<tr>
<td>Royal Decree-law 60/2011, 21 January</td>
<td>regards the environmental quality standards in the context of water policy. This Royal Decree aims to: 1. Establish environmental quality standards (EQS) for priority substances and other contaminants listed in annex I in order to achieve good chemical status of surface water. 2. Establish EQS for priority substances listed in annex II and fix the procedure to calculate the EQS not contained in annexes I and II of contaminants of annex III in order to achieve good ecological status of surface waters or a good ecological potential of these waters, when proceed.</td>
</tr>
<tr>
<td>Law 22/2011, 28 July</td>
<td>is related to dregs and contaminated soil. This law aims at regulating the dregs management by promoting measures that prevent its generation and mitigate adverse impacts on human health and the environment associated with its generation and management, improving resources use efficiency. It also aims to regulate the legal status of contaminated soils.</td>
</tr>
<tr>
<td>Royal Legislative Decree-law 2/2011, 5 September</td>
<td>approves the revised text of the state ports law and merchant marine. The objectives of this law are: a) Determine and classify ports falling within the jurisdiction of the State General Administration.</td>
</tr>
</tbody>
</table>
b) Regulate the planning, construction, organization, management, economic and financial regime and police them. c) Regulate the provision of services in these ports as well as their utilization. d) Determine the state port organization, providing ports of general interest of a regime of functional autonomy and management for the exercise the competences attributed by this law, and regulate the autonomous communities of Port authorities government.

e) Establish the regulatory framework of the merchant marine. f) Regulate own administration of merchant marine. g) Establish the regime of infractions and sanctions applicable in the merchant marine area and in the state competency port. The Article 64, Paragraph 3 of this royal legislative decree-law, indicates that dredging projects will include a study of the management of products dredging, and in particular the dumping area location and its treatment, as well as, in general terms, the necessary studies from the environmental point of view.

Law 2/2013, 29 May

Protection and sustainable use of the coastal.

Royal Decree-law 817/2015, 11 September

established the criteria for monitoring and evaluating the surface water status and environmental quality standards. In order to protect water, this royal decree states:

I. The basic and homogeneous criteria for the design and implementation of surface water masses state monitoring programs and for additional control of protected areas.

II. The environmental quality standards (EQS) for priority substances and other contaminants in order to achieve good chemical status of surface waters. Establish EQS for priority substances and fix a procedure to calculate specific contaminants EQS in order to achieve good ecological status of surface waters or good ecological potential of these waters, when proceed.

III. Reference conditions and limits class status indicators of biological, physicochemical and hydromorphological quality elements to classify the ecological or potential status of surface water masses.

IV. Minimum standards for the information exchange concerning water status and quality between the state general administration and administrations with responsibility for water, aiming at compliance of laws that regulated the rights of access to
information and public participation.

Guidelines for the characterization of dredged material and its relocation in waters of the maritime-terrestrial public domain. 2015. Interministerial Commission on Maritime Strategies. Spain


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