

DREDGED SEDIMENTS MANAGEMENT IN ITALY: LEGAL ASPECTS

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Abstract: Dredged sediment management is a much debated issue in Italy; especially, in recent times, in court. Talking about management firstly means to qualify sediments in the correct way: are they waste or freely manageable materials? The answer is not simple and, being aware of that, the Italian legislator repeatedly intervened, from 2006 to 2012, with laws and regulations in order to offer legal certainties to the interested parties. Unfortunately, this goal doesn't seem to have been reached.

At present, sediment management is indeed subject to five different regulations: Article 109 and Article 185 of Legislative Decree No. 152/2006 (as modified in order to implement Directive 2008/98/CE); Law. No. 84/94 as modified a first time by Law No. 296/2006 and recently again by Law Decree No. 1 /2012; Article 39 of Legislative Decree No. 205/2010; the latest Ministerial Decree No. 161/2012 that, for the first time, extended to dredged materials the same rules provided for topsoil and subsoil excavation activities.

Some of these regulations concern port dredged material, others are about general activities on surface waters, others more apply to dredging operations inside remediation Sites of National Interest; some provisions deal with disposal at sea; others with re-use, others more with the filling in confined disposal facilities. Some of them exclude dredged materials from waste legislation; others just admit the possibility that, under certain conditions, they could be qualified as by-products. The aim of this paper is to trace the choices that the Italian legislator made, sometimes implementing European directives, sometimes acting on his own initiative, and try this way to figure out the different cases and rules applying from time to time are the contents of this paper.

Keywords: sediments; Italian legislation; waste; by-product

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1. INTRODUCTION

Italian legislation on dredging has been subject to continued reforms. Nevertheless, the topic remains controversial. On the one hand there is the need to dredge the bottom of water bodies in order to grant navigation security or remove dangerous sediments; on the other hand it's necessary to clarify what dredged materials are (*waste* or *non-waste*?) and coordinate dredging operations with the possible remediation measures in the same area. Last but not least, there is the need to consider sediments as a resource that may and shall be reused⁴.

The evolution of the Italian legislation has taken into consideration, but just partially, what provided at European level (directive 2008/98/EC) and also for this reason the enforcement of the various provisions is not simple. This paper analyzes the different sources of law in force in Italy trying to supply a coherent and coordinated framework, while waiting for a legislative reorganization.

2. THE LEGISLATIVE FRAMEWORK

It should be clarified that in 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.).

These are, in a chronological order, the different sources of law that have directly addressed the topic of dredging management during the years.

- ❖ **LG.D. n. 22/1997**: is the first legislation affecting environmental issues; it implements Directive 91/156/EEC on *waste*, Directive 91/689/EEC on *hazardous waste* and Directive 94/62/EC on *packaging and packaging waste*. 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.
- ❖ **M.D. 05.02.1998**: 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). Point 12.1 of the Annex I to di M.D. identifies the possible recovery operations that may be conducted on dredged mud deriving from «*dredging of lakes bottom, ship or irrigation canals and water courses (internal waters), cleaning of water basins*»:
 - a) construction of road embankments and foundations, after drying and possible hygienization;
 - b) construction of banks and dikes, excluding works in direct or indirect contact with the marine environment, after drying and possible hygienization;
 - c) use for reprofiling portions of the morphometry of the concerned riverbed area, after drying and possible hygienization;
- ❖ **Article 35 LG.D. n. 152/1999**: is the Italian legislation on 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).
- ❖ **Article 109 LG.D. n. 152/2006**: reproduces the just mentioned Article 35. This provision has recently been modified by D.L. n. 5/2012⁵ (it removed the condition concerning the «*technical or economical impossibility to use them for the purposes of beach nourishment or recovery or alternative disposal*»).

⁴ Indeed, The *Manual for the handling of marine sediments*, issued in 2006 by the Italian Agency for the Protection of the Environment and for Technical services (in Italian A.P.A.T.) and the Italian Central Institute for the scientific and technological Research Applied to the Sea (in Italian I.C.R.A.M.), specifies that «*the suggestion contained in Article 35 of the Legislative Decree n. 152/1999 [see after, par. 2], which recalls what provided by the London Convention of 1972 (in particular in the resolution approving the D.M.A.F. – Dredged material assessment framework), is to consider the resulting material as a “resource” to recover, rather than a waste material*».

⁵ In particular by Article 24, par. 1, d), n. 1 of the D.L. The D.L. has been confirmed by the Parliament which converted it into L. n. 35/2012.

- ❖ **Article 1, par. 996 L. n. 296/2006:** 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.)⁶. The system provided by Article 5, par. 11-bis to 11-sexies is briefly the following: 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, **a**) 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 **b**) filled in coastal retaining structures if they are non-hazardous. These provisions have been abrogated by Law n. 27/2012⁷ introducing Article 5-bis, par. 1-8 with new provisions for these materials.
- ❖ **M.D. 7 November 2008:** contains technical provisions for dredging operations within *remediation Sites of National Interest* (S.I.N.). This decree have 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:** 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/EC⁸: «*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 of 3 May*».
- ❖ **Article 39, par. 13 of LG.D. n. 205/2010:** specifies that the notion of *by-product*⁹ also applies «*to the material removed, exclusively for hydraulic security reasons, from the bed of rivers, lakes and creeks*».
- ❖ **L. n. 27/2012**¹⁰: 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, **a**) 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 **b**) reused on land pursuing the conditions of a dedicated ministerial decree if pollutants contained in them do not exceed certain thresholds, otherwise **c**) 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.
- ❖ **M.D. n. 161/2012:** regulates terms and conditions at which *excavated materials* may be reused as *by-products*¹¹ and thus managed as *non-waste*. 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 lakes bottoms*».

3. THE COORDINATED EXAM OF THE PROVISIONS IN FORCE

3.1. The jurisprudence and the doctrine interpretation

⁶ S.I.N. are areas of the Italian territory, strictly identified by the law, in which the competence for the management and remediation of environmental criticalities is assigned to the Ministry of Environment (see Article 252 LG.D. n. 152/2006).

⁷ It converted into law D.L. n. 19/2012.

⁸ Article 2, par. 3 of the 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 this Directive if it is proved that the sediments are non-hazardous*».

⁹ See Article 184-bis of LG.D. n. 152/2006.

¹⁰ It converted into law D.L. n. 19/2012.

¹¹ See note 9.

The first issue to be addressed is the legal status of sediments removed by dredging operations: **are they waste or non-waste?**

Italian Court of Cassation that first addressed the issue in a complete way (judgment n. 21488 of 21.7.2006) qualified them as *waste*; the Court examined the case even considering the well-known European Court of Justice judgment of 11.11.2004 (*Niselli*) and holding that there were not the conditions to qualify them as *by-products*. The Court of Cassation had formerly reached the same conclusion (judgment n. 4883 of 14.01.2005) excluding that dredged sediments could be considered as inert waste holding that *«they are waste with different characteristics and different E.W.C. codes»*. Similarly, the Administrative Court of Campania Region (judgment 08.10.2004 n. 1867) held that sediments could be not assimilated to *excavated soils and rocks*, which at that time were materials expressly excluded, under certain conditions, from the waste legislation (by L. n. 443/2001, then abrogated). It's important to specify from now that years later the legislator decided to adopt a single regulation addressing the management of both *excavated soils* and *sediments* as *by-products* (M.D. n. 161/2012 that will be examined in paragraph 3.5).

Also the legal scholars assumed that sediments could be correctly qualified as waste: *«without doubt the most important provision in this sense is Article 35 of LG.D. n. 152/1999 that regulates (providing a specific authorization by the Region) the immersion at sea of materials excavated from marine or salty bottoms. It is clearly an operation that can be ascribed to the more general activity of waste disposal; it is even proved by the fact that Annex B, point D7, to the decree “Ronchi” [LG.D. n. 22/1997] provides among disposal activities also the “immersion, including the burial in the marine subsoil”»* (GARZIA, 2004).

The scenario changed a few years later with the entry into force of Law n. 296/2006 (modifying Law n. 84/1994 on ports, see par. 2) and the ministerial decree of 07.11.2008. The Court of Livorno (judgment of 02.07.2009) held that dredged sediments were *non-waste* if managed pursuing Law n. 84/1994. But this Law (see par. 2) applied only to *remediation Sites of National Interest* (S.I.N.) identified by decree. Thus, paradoxically, in bottom areas outside the S.I.N. (even for sediments without any kind of contamination) it could not be possible to apply Law n. 84/1994 and, according to the cited case law, dredged materials had to be managed as *waste*, with all the resulting obligations¹². The judgment of the Court of Livorno shed some light on the issue and was favourably accepted by the scholars: *«[...] the Court points out that, due to the modification of Article 5 and the M.D. of 7 November 2008, waste provisions apply to materials dredged in ports within sites of national interest only if their use is different from the one identified in Article 5 and if contamination levels of those materials are the same that, according to the mentioned M.D., exclude their inserting into retaining tanks, rather imposing particular treatments. In all the other cases, including the one examined by the Court, the Port Authority compliance with the conditions and procedures specifically provided by the legislator guarantees the correct management of dredged materials and exempt the operators of such activities from further obligations»* (MUNARI, 2009).

3.2. Article 185, par. 3 of LG.D. n. 152/2006 in relation with the waste legislation (Part IV LG.D. n. 152/2006) and other special provisions.

Article 185, par. 3 of LG.D. n. 152/2006, originating from European legislation, expressly excludes from the *waste* legislation the sediments relocated inside surface waters. But there are two conditions:

(1) sediments shall be *non-hazardous*;

(2) their *relocation* shall have one the following purposes: (i) management of waters and waterways (ii) prevention of floods, (iii) mitigation of the effects of floods and droughts, (iv) land reclamation. At the base there seems to be the same reasoning of what provided in Article 185, par. 1, c) that **excludes from the scope of waste legislation the soil excavated in the course of construction activities, if uncontaminated and certainly reused in the same site from which it was excavated**. Although the provision on sediments is written in a less clear way, it may be possible to get the similarity between the two provisions and thus sustain that Article 185, par. 3 applies just in case sediments are reused within the same context from which they were extracted¹³. For sediments conferred in a different context from the one in which they were extracted, the exclusion could not apply. That doesn't imply – as we will see below – that they are *always* to be considered as

¹² It shall be anyway underlined that the Administrative Court of Liguria Region has recently held (judgment n. 907 of 29.06.2012) that Law n. 84/1994 could be applied also to areas outside the S.I.N.: *«This provision [Decree Law n. 1/2012] is not innovative but simply clarifies rules that could be inferred in those terms even before. Indeed it made no sense to request to common sites more onerous activities than those provided for sites of national interest»*. For an adverse opinion see BELTRAME, 2006, par. 3.3.

¹³ Article 185, par. 3 expressly provides the reuse of sediments for the purpose of *«land reclamation»*; this implies uncertainty when defining the extent of the *same context*, which should anyway include as a logical conclusion at least the portion of shoreline near the *body of water*.

waste: it is indeed possible to apply the notion of *by-product*. The importance of the exclusion contained in Article 185, par. 3 is hence obvious; it can be held that it could represent the general rule for the removal and reuse of dredged materials. However, since in Italy there are other provisions affecting these operations, we shall now verify if there is ground for possible coordination with Article 185, par. 3.

3.3. Article 185, par. 3 of LG.D. n. 152/2006 in relation with the provisions contained in Article 5-bis, par. 1-7 of L. n. 84/1994: dredging in the S.I.N.

The first provisions addressing a particular situation are contained in Article 5-bis, par. 1-7 of L. n. 84/1994 that concerns the dredging of ports or marine-coastal areas within *remediation Sites of National Interest* (S.I.N.). Before going on with the exam, it should be specified that after the modification of Article 185 in 2010, it was possible to wonder if the more ancient law (L. n. 84/1994 amended in 2006) had been implicitly abrogated by the new one¹⁴. However, the fact that the Italian legislator, with the recent D.L. n. 1/2012, has again intervened to modify L. n. 84/1994, overcome the issue and imposes to find coordination between the two provisions. So, given that Article 185 par. 3 acts as a *general rule*, par. 1-7 of Article 5-bis acts as special provisions for dredging operations in the S.I.N. Legal scholars have indeed observed that the aim of L. n. 84/1994 (with the first amendment of 2006 and the same can be said for the second amendment of 2012) is not to qualify sediments (as Article art. 185, par. 3 does), but to **coordinate dredging operations with remediation activities to be conducted within the S.I.N.**: L. n. 296/2006 «*introduces a special legal system for dredging operations and disposal of resulting mud with the aim “of avoiding that these operations could be detrimental to the site future remediation” and concerns sites subjected to remediation activities of national interest, under Article 252 LG.D. n.152/2006, which boundaries include entirely or even in part the area corresponding to the district of the Port Authority*» (BELTRAME, 2006) .

Comparing the two provisions, after the recent amendments¹⁵, it is possible to notice some points of contact and some differences anyway justified by the importance of the interest for the remediation of the concerned areas: in both cases sediments shall be foremost exploited as a resource in the same body of water (when 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); they can be even reused on land upon the implementation of a specific release test (exactly the one provided by M.D. of 05.02.1998 that – see par. 2 – specifically addresses the recovery of dredging mud, in that case qualified as *waste*, in land areas for the construction of road embankments and foundations, banks and dikes and for reprofiling portions of the morphometry of the concerned riverbed area). Beside these elements in common, in the case provided by Article 5-bis the necessity to coordinate dredging operations with remediation activities in the S.I.N. imposes to follow a particular procedure having regard at least to competences. It is thus possible to draw a first conclusion holding that Article 185, par. 3 of D.LG. n. 152/2006 as amended in 2010 (*general rule*) and Article 5-bis, par. 1-7 of L. n. 84/1994 as amended in 2012 (*special provisions*) are consistent: in both cases sediments are excluded from the waste legislation, with the clarification that if the dredging area is inside a S.I.N. the *special provisions* of L. n. 84/1994 (consistent with Article 185, par. 3) shall apply, due to the necessity to coordinate the site remediation with the dredging operations.

3.4. Article 185, par. 3 of LG.D. n. 152/2006 in relation with Article 5-bis, par. 8 of L. n. 84/94 and with Article 109 of LG.D. n. 152/2006: dredging in port bottoms outside a S.I.N. and the immersion at sea

Let's now focus on Article 5-bis, par. 8 of L. n. 84/1994, as amended in 2012. It's a fundamental provision because it concerns port areas outside remediation Sites of National Interest (S.I.N.): «*materials dredged from the bottom of ports outside a S.I.N., provided by Article 252 of LG.D. n. 152/2006 and subsequent amendments, may be immersed at sea, under authorization of the competent authority, pursuing Article 109, par. 2 of LG.D. n. 152/2006. Those materials may be otherwise used for beach nourishment, even with spill in the part of the active submerged beach, or for the construction of infilling tanks or others coastal retaining structures in ports pursuing the Port strategic plan or along the seabord for the restoration of the coastline, under authorization of the competent regional authority provided by Article 21 of L. n. 179/2002*».

¹⁴ Implicit abrogation happens when two provision of the same hierarchical level (see par. 2), but enacted in different times, address the same situation in a different and conflicting way.

¹⁵ On the other hand some scholars seem to hold that the new S.I.N. provisions, as defined by L. n. 84/1994 amended in 2012, will be effective only after the enacting of the ministerial decree provided by par. 6. It shall be anyway underlined that the mentioned par. 6 should not influence the effectiveness of the provisions themselves, but simply replace the M.D. of 7 November 2012 – still in force – containing technical rules specific for S.I.N. dredging (the reference to art. 252 made by art. 5-bis, par. 6 should be read in this sense).

Article 5-bis, par. 8 shall indeed be coordinated with the general rule contained in Article 185, par. 3 but also with another provision (which has been also subject to recent amendments) mentioned in the list of paragraph 2 of this paper: Article 109 of LG.D. n. 152/2006. The latter provides that:

«in order to protect the marine environment and in accordance with the provisions of relevant international conventions in force, the intentional immersion at sea from ships, aircrafts and structures placed in seawaters or contiguous areas, such as beaches, lagoons, salty basins and coastal embankments is allowed for the following materials: a) excavated materials from marine or salty bottoms or emerged coastal areas; [...] The authorization for the immersion at sea of the materials referred to in paragraph 1, a) is issued by the Region, excepting for the operations conducted in national protected areas regulated by L. n. 979/1982 and L. n. 394/1991 for which the authorization is issued by the Ministry of the Environment and Protection of Land and Sea, pursuing the conditions provided by decree to be enacted within 120 days from the entry into force of this decree by the Ministry of the Environment, in concert with the Ministries of Infrastructures and Transports, Agricultural and Forestry Policies, Productive Activities upon agreement with the Permanent Conference for relations among State, Regions and Autonomous Provinces of Trento and Bolzano».

Therefore, also for this provision we should wonder: what is the relation between the exclusion provided by Article 185, par. 3 and the possibility to immerse dredged materials at sea provided by Article 109? **Actually, also in the case provided by Article 109 the sediments are materials and not waste¹⁶, just as for Article 185, par. 3, comparing to which however there is no specific condition connected with the possibility of immersion.** So there are two potential interpretations: **1)** the immersion at sea, which is not a kind of reuse, doesn't request particular conditions, even in relation to the *non-hazardousness* of the materials; otherwise **2)** in so far as the immersion at sea constitute a *reuse* of the sediments and whereas they are managed within the same *context*, the *general principle* provided by Article 185, par. 3 applies. Even in presence of an unclear provision and in the meantime that the dedicated ministerial decree provided by Article 109 is enacted, it seems preferable for extreme prudence to adopt the second interpretation, at least with reference to the *non-hazardousness* of the materials (after all, the same Article 109, par. 1, b), when considering the immersion at sea of *inerts* materials requests their *compatibility* and *environmental inoffensiveness*; even more this should be true for material indicated in letter a) that we have just examined).

Let's remain within the range of Article 5-bis, par. 8 of L. n. 84/1994; as yet mentioned, beside the immersion at sea, the provision allows sediments to be used also *«for beach nourishment, even with spill in the part of the active submerged beach, or for the construction of infilling tanks or others coastal retaining structures in ports pursuing the Port strategic plan or along the seabord for the restoration of the coastline, under authorization of the competent regional authority as provided by Article 21 of L. n. 179/2002».* **In this case the reuse of the sediments as a resource is strongly remarked** and the conclusions yet drawn can apply: when the sediments are managed within the same context, assuming the *non-hazardousness* as a *general rule*, the reuse for beach nourishment (and other mentioned uses) of hazardous sediments shall be not allowed; otherwise, when the sediments are managed in a different context, Article 5-bis, par. 8 shall be coordinated with the waste legislation contained in Part IV of LG.D. n. 152/2006 (thus with Article 184-bis if the requested conditions are met).

3.5. Article 185, par. 3 of LG.D. n. 152/2006 in relation with Article 184-bis of LG.D. n. 152/2006, M.D. n. 161/2012 and Article 39, par. 13 of LG.D. n. 205/2010

The extent of two other provisions needs to be verified, always in the perspective of a general coordination. As recalled in paragraph 2, LG.D. n. 205/2010 introduced not only the exclusion under Article 185, par. 3 but also a **specific provision (Article 39) for «the material removed, exclusively for hydraulic security reasons, from the bed of rivers, lakes and creeks».** In particular, Article 39, par. 13 provides that Article 184-bis of LG.D. n. 152/2006 also applies to this material. The referred Article fixes the **four conditions at which every material or substance may be qualified as by-product** (Article 184-bis, just like Article 185, par. 3, is an exact implementation of a European provision¹⁷). Two or the four conditions requested by Article 184-bis (certainty of the reuse and absence of overall adverse environmental or human health impacts) seems to overlap with the

¹⁶ The *non-waste* nature of the materials indicated by Article 109 is confirmed by the fact that if they were waste they could not be immersed in sea (except in case of a specific dispensation) because of the general ban to dump waste in surface waters provided by Article 192, par. 2 of LG.D. n. 152/2006.

¹⁷ Article 5 of Directive 2008/98/EC provides that: *«A substance or object, resulting from a production process, the primary aim of which is not the production of that item, may be regarded as not being waste referred to in point (1) of Article 3 but as being a by-product only if the following conditions are met:(a) further use of the substance or object is certain;(b) the substance or object can be used directly without any further processing other than normal industrial practice;(c) the substance or object is produced as an integral part of a production process; and (d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts».*

ones of Article 185, par. 3 (specific purposes for the reuse and non-hazardousness); other two conditions (the production as an integral part of a production process and the absence of further processing other than normal industrial practice) are peculiar of *by-product*. As known, every material or substance can be qualified as *by-product* if the four conditions of Article 184-bis are met; therefore, Article 39 is superfluous (it was not necessary a specific provision to say that sediments of rivers, lakes and creeks could be qualified as *by-products*). Nevertheless, this provision represents a starting point for reflection: if the exclusion under Article 185, par. 3 refers, for the yet mentioned reasons, to the sediments removed and reused in the same context, here's that every time the sediments are reused in a different context from the one in which they were extracted the exclusion of Article 185, par. 3 doesn't apply and, according to the waste legislation, **they can be anyway qualified as *by-products* occurring all the conditions of Article 184-bis**. Recalling the similarity with the *excavated soils*, a confirmation of this conclusion may be inferred by Recital 1 of the Directive 2008/98/EC: «*the waste status of uncontaminated excavated soils and other naturally occurring material which are used on sites other than the one from which they were excavated should be considered in accordance with the definition of waste and the provisions on by-products or on the end of waste status under this Directive*»¹⁸.

Therefore, in case of sediments not excluded under Article 185, par. 3 but **qualified as *by-products* under Article 184-bis, the recent M.D. n. 161/2012 shall apply**. It is specifically dedicated to *excavated soils and rocks*, but expressly 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 lakes bottoms*». The text is clear and legal scholars have confirmed the applicability of M.D. n. 161/2012 to sediments wherever dredged. A last question should be asked: the M.D. n. 161/2012 has implicitly abrogated one or more of the previous provisions? Definitely not, for at least three reasons: **(1)** the M.D. is a *secondary* source of law (see paragraph 2) and cannot abrogate a *primary* source of law; **(2)** Annex n. 2 to the M.D. n. 161/2012 provides that the characterization of sediments shall be conducted pursuing the M.D. of 07.11.2008 implementing L. n. 84/1994 amended for the first time in 2006; **(3)** Annex n. 4 to the M.D. n. 161/2012 expressly recalls L. n. 84/1994¹⁹. Briefly, it shall be underlined that M.D. n. 161/2012 provides the drafting of a Usage Plan, approved by the competent authority, by which the proponent gives evidence of the existence of the four conditions for *by-product*; the non-compliance with the Plan implies that the excavated material loses their legal status of *by-product* and shall be managed pursuing the waste legislation (Part IV of LG.D. n. 152/2006).

4. CONCLUSIONS

Given that, as affirmed in the introduction, an intervention by the legislator is needed for the reorganization of the numerous legislative and regulatory provisions in force, the following conclusions can be drawn:

- a) sediments **extracted and replaced in the same context** are subject to the exclusion from waste legislation provided by Article 185, par. 3, coming from the European legislation, that acts as a general rule. As a consequence, if sediments are directed to a *different context* from the one in which they were extracted the exclusion doesn't apply (see paragraph 3.2.);
- b) sediments **extracted in a certain context and relocated in a different context**, for which the exclusion under Article 185 par. 3 doesn't apply, shall be qualified as *waste* or, when the four conditions of Article 184-bis are met, as *by-products*. In the latter case also M.D. n. 161/2012 shall apply (see paragraph 3.5.). A specification: the application of M.D. n. 161/2012 also to cases regulated by Article 185, par. 3 is not provided by law²⁰, but could be suggested to both operators and controlling bodies in order to grant a greater sharing and thus certainty on concrete operating methods to be adopted;
- c) sediments **extracted in the bottom of ports outside a S.I.N.** are subject to Article 5-bis, par. 8 of L. n. 84/1994, so we can have: **(1)** the immersion at sea regulated by Article 109 of LG.D. or **(2)** the reuses/embankments indicated by the same paragraph 8. In this second case it seems correct to apply also Article 185, par. 3 or Article 184-bis depending on the context in which the sediment are relocated, see

¹⁸ In the same way Article 185, par. 4 provides that: «*the waste status of uncontaminated excavated soils and other naturally occurring material which are used on sites other than the one from which they were excavated should be considered in accordance with, in order, Articles 183, par. 1, a), 184-bis and 184-ter*».

¹⁹ The regulation actually contain a possible mistake because it refers to the previous Article 5, par. 11-bis of L. n. 84/1994 and not to the present Article 5-bis.

²⁰ In a similar way, the Ministry of Environment has recently specified that M.D. n. 161/2012 does not apply to excavated soils and rocks reused in the same site, because they are subject to the general exclusion under Article 185, par. 1, c) (opinion prot. n. 0036288 of 14.11.2012).

letters a) and b); some perplexities remains about the conditions for the immersion at sea, in the meantime that the legislator enacts the specific decree (see paragraph 3.4);

- d) finally, sediments **extracted in ports or marine-coastal areas within remediation Sites of National Interest (S.I.N.)** are subject to the **special provisions** contained in Article 5-bis, par. 1-7 that are consistent with Article 185, par 3 but address a particular situation where dredging operations need to be coordinated with the remediation activities (see paragraph 3.3.).

REFERENCES

Garzia G., Il regime giuridico delle attività dei materiali di dragaggi dei fondali in aree portuali (The legal status of the activity of dredging material from the bottom of port areas), *Rivista Giuridica dell'Ambiente*, n. 6/2004, pp. 849-859.

Munari F., Le norme sui dragaggi nei porti e il loro coordinamento con la disciplina ambientale: norme speciali e recenti applicazioni in giurisprudenza (The provisions on dredging in ports and their coordination with the environmental legislation: special provisions an recent case law enforcement), *Diritto Marittimo*, n. 3/2009, pp. 627-643.

Beltrame S., Come “disfarsi” lecitamente dei fanghi (e materiali vari) provenienti dai dragaggi: un problema che intuitivamente riguarda tutta la penisola [How to legally ‘discard’ mud (and various materials) coming from dredging: a problem that intuitively affects all the peninsula], *Rivista Giuridica dell'Ambiente*, n. 2/2007, pp. 332-349.