

# *Excavated Soil and Rocks (ES&R) in Urban Areas ITALY*

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- The Italian legislation does not provide specific rules for the management of ES&R in urban areas
- ES&R management is primarily based on qualification (waste, exclusion from waste rule, by-product). The qualification depends on both the environmental characteristics of the material (e.g. ES&R concentrations vs. acceptable limits) and the conditions of reuse (purpose of the excavation, re-use on site or off site with respect to the production site, natural reuse or through normal industrial practices)
- If ES&R are qualified as by-product, the operational and administrative management will depend on additional conditions such as the relevance of works in which these materials are produced/reused (large IEA/EIA construction works, large construction works no IEA/EIA, small construction works, contaminated sites)

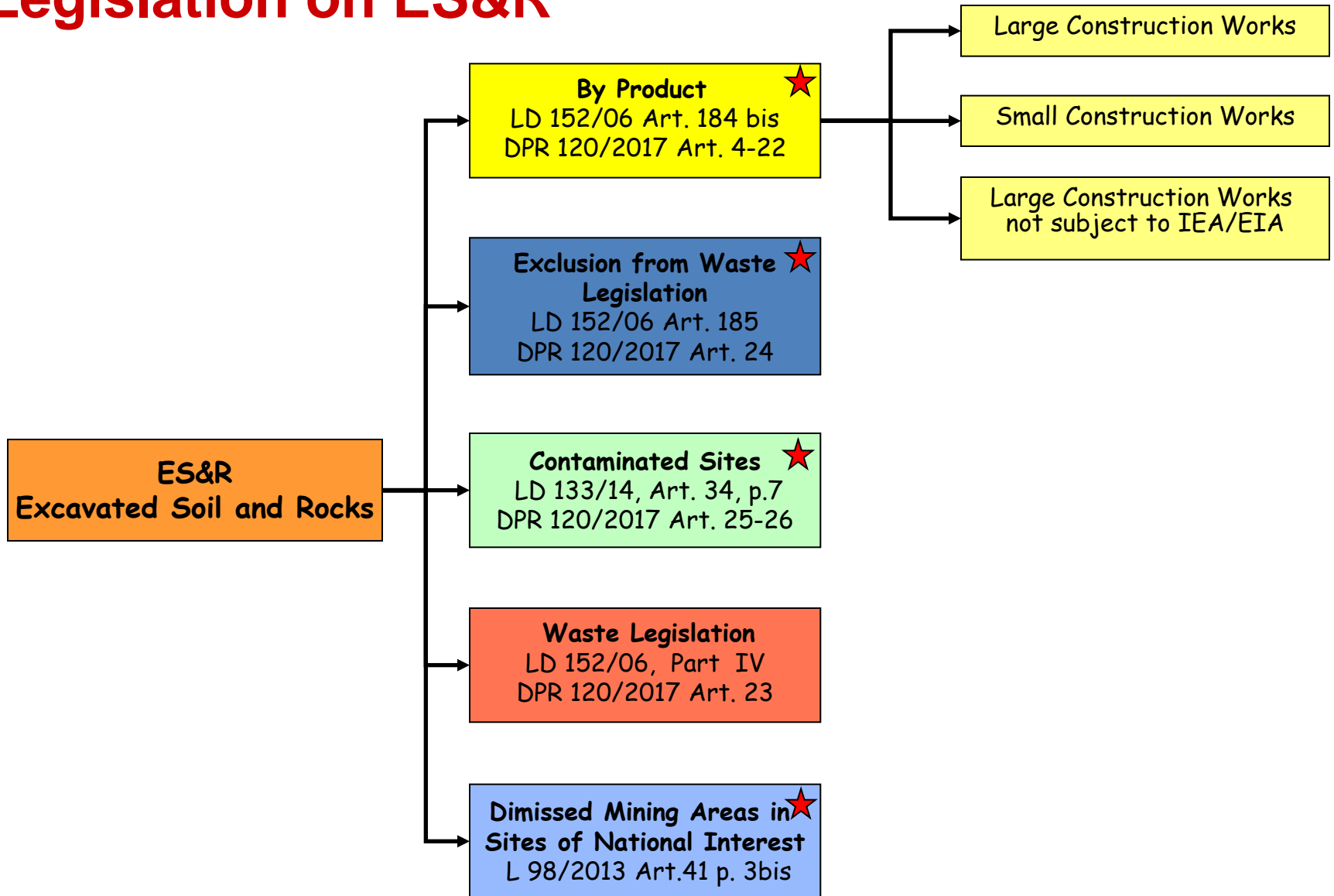


- Primarily ES&R should be considered as **"WASTE"** because the holder discards or intends or is required to discard (Art.183, Paragraph 1, Letter a) of Legislative Decree n. 152/2006)
- Moreover, ES&R should be considered as **"special waste"** and they are included in the List of Waste referred to in Article 7 of Directive 2008/98/EC (Waste Directive) :
  - *17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil*
  - *17 05 03\* soil and stones containing hazardous substances*
  - *17 05 04 soil and stones other than those mentioned in 17 05 03*

But some important **exceptions** are stated



# Legislation on ES&R



# Exceptions

## ***L.D. 152/06 Part IV - Art. 185 – Exclusion from waste legislation***

It may be excluded from the scope of this Regulation: (...)

“uncontaminated soil and other naturally occurring material excavated in the course of construction activities where it is certain that the material will be used for the purposes of construction in its natural state on the site from which it was excavated”;

## ***L.D. 152/06 Part IV - Art. 184 bis – By product***

A substance or an object can be considered a by-product and not a waste when:

- a) it results from a production process whose primary scope is not the production of that item;
- b) further use of the substance or object is certain;
- c) the substance or object can be used directly without any further processing other than normal industrial practice;
- d) further use is legal, i.e. the substance or object fulfills all relevant product requirements, environmental and health protection requirements for the specific use and will not lead to adverse environmental or human health impacts

**The environmental criteria regarding ES&R as by product  
are given in DPR 120/2017**



# Minor Exceptions

- ES&R produced in contaminated sites interested by linear construction operations also of public interest (L.D. 133/14, Art.34)
- ES&R coming from dismissed or exhausted mines within Sites of National Interest (L.98/2013, Art.41, p.3bis)



# L.D. 152/06 - Art. 185 - Exclusion from waste legislation

Three conditions:

1. uncontaminated soil or other material at natural state;
2. excavated material during construction activities;
3. materials are used for construction purposes at natural state within the same site.

→ Only excavation if determined as a result of a construction activity and not other activities, like demolition (Art. 3 of DPR 380/2001, «Building Law”).

→ the absence of contamination is mandatory also for materials at natural state and should be evaluated with reference to «screening values» (CSC) for soil (Table 1, Annex 5 Title V of L.D. 152/06) in contaminated sites legislation.

*For ES&R used in sites different from the place of production Art. 185 do not provide exceptions from waste legislation. It refers to the general concepts of "waste", "by-product" and "cessation of the qualification of a waste" ("end of waste") provided in the Environmental Code (L.D. 152/06).*



# Backfilling materials

The **L.D. 25 January 2012, n. 2** (called «Environmental Emergencies») have applied the concept of «soil» included in Art. 185 also to the «backfilling materials».



« Art.3, p.1 Without prejudice to the discipline regarding the remediation of contaminated soils, **the references to the "soil" contained in article 185, paragraphs 1, letters b) and c), and 4 of the Legislative Decree 3 April 2006, n. 152, are interpreted as referring also to the backfilling materials** referred to in Annex 2 to Part IV of the same Legislative Decree, consisting of an **heterogeneous mixture of anthropogenic materials, such as residues of production and consumption, and soil, which composes a specific stratigraphic horizon with respect to the geological and stratigraphic characteristics of natural soil in a determined site and are used for fills, embankments and backfilling.** »





# Backfilling materials

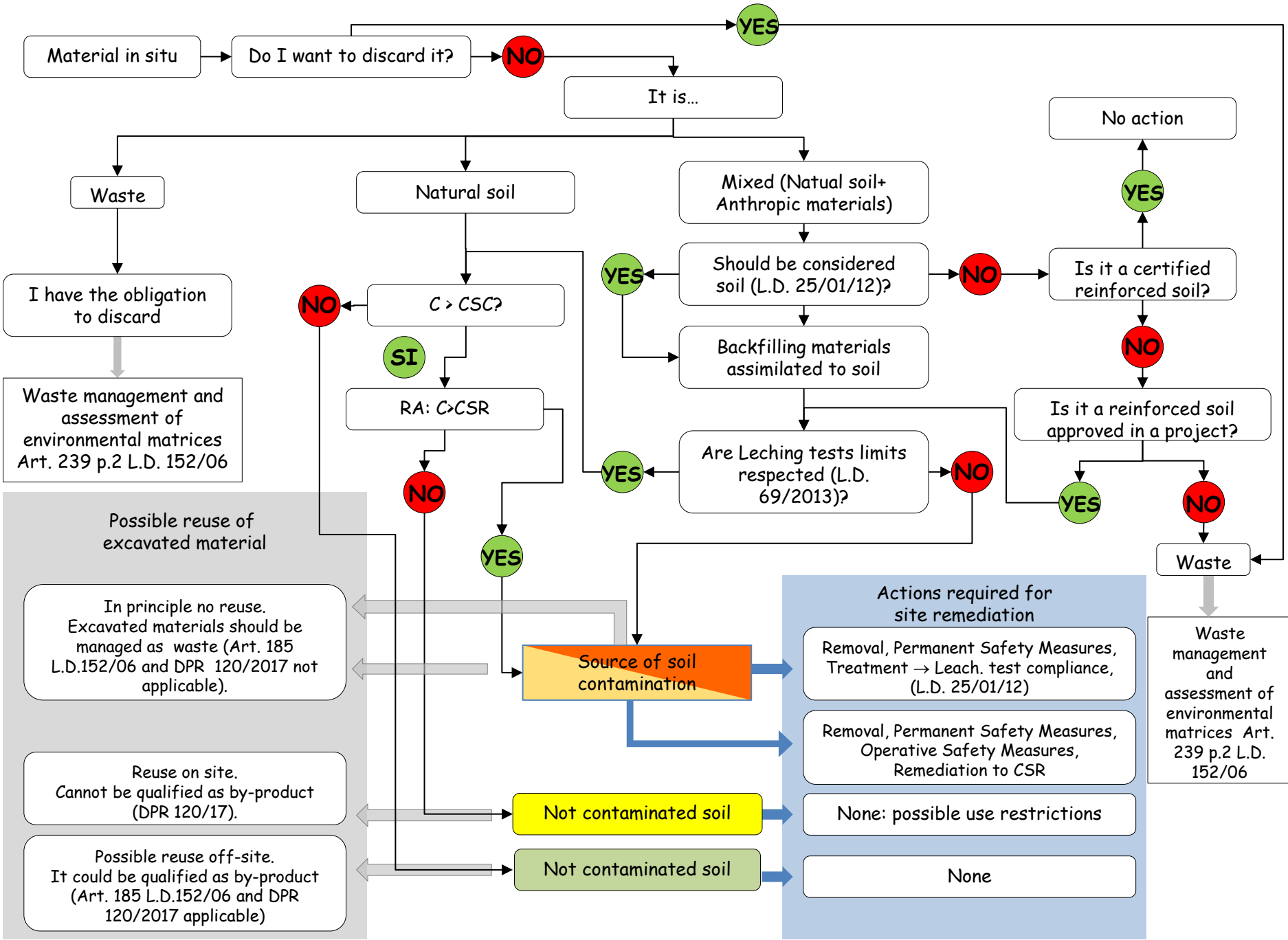
**Legislative Decree 69/2013** established that in order to apply the exceptions of Article 185 to the backfilling materials a **leaching test** should be applied "**to exclude risks of groundwater contamination**".

Where compliant with the limits of the leaching test (i.e. concentrations of inorganic substances present in the leachate respect the “screening values” for GW), the backfilling materials **must in any case follow the provisions of the legislation on contaminated sites** remediation (Title V in Part IV of Legislative Decree 152/2006).

Where backfilling materials **are not compliant with the limits of the leaching test**, they must be considered primary sources of contamination and must be:

- removed or,
- made compliant with the limits of leaching tests removing contaminants or,
- subject to permanent safety measures (e.g. containment) using the best available techniques at sustainable costs to allow the use of the site without health risks.





**Thank you for your attention!!!**



**Please...  
simple questions...**

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