**End of Waste**

**Inerts**

**Decree N° 127, from 28 June 2024,**

**New rules for the recovery of inert waste**

ECOPIANA

**The role of construction in the circular economy**

❖Construction and demolition waste plays a crucial role in the transition to the circular economy because:

✓ They are the most important flow of special waste produced at national (around 50%) and European (around 35%) level!

✓ At European level, important objectives have been set in terms of recovery: 70%!

❖The PNRR assigns over half of the resources to interventions that impact the construction sector and, of these, over 60% contribute to the ecological transition.

**The End of waste works as a lever for the transition to the circular economy**

✓ The cessation of waste status represents a fundamental tool for valorising materials

▪From an environmental point of view: it favours the replacement of raw materials with materials and substances derived from waste, thus reducing the waste of natural resources.

▪From an economic point of view, it creates the market conditions to facilitate this "replacement";

✓ Waste that ceases being waste must be counted for the purposes of calculating the achievement of recovery and recycling objectives established at national and European level

**The “End of Waste” decree for inert waste:**

• came into force on September 26th, 2024.

• consists of 9 articles and 3 annexes.

• Provides for a transitional period of 180 days from its entry into force.

• Envisages a monitoring phase of 24 months from its entry into force

**Scope of application**

To which inert waste does it apply?

**art.1**

❖ Inert waste resulting from construction and demolition operations (indicated in point 1 of table 1 of Annex 1);

❖ Inert waste of mineral origin (indicated in point 2 of table 1 of Annex 1 to this regulation);

❖ To abandoned waste: this is something new introduced with this novel regulation!!

Note. Buried waste from reclamation activities were excluded

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| 1. Inert waste from construction and demolition activities (Chapter 17 of the European waste list)  170101 Cement  170102 Bricks  170103 Tiles and ceramics  170107 Mixtures or slags of cement, bricks, tiles and ceramics, other than those mentioned in heading 170106  170302 Bituminous mixtures other than those mentioned in heading 170301  170504 TeITe and excavated rocks, other than those mentioned in heading 170503, excluding those coming from contaminated sites subject to reclamation  170508 Ballast for railway ballasts, other than that referred to in heading 170507  170904 Mixed wastes from construction and demolition activities, other than those referred to in headings 170901, 170902, and 170903 |
| 2. Other inert waste of mineral origin (not belonging to Chapter 17 of the European list of waste)  010408 Wastes of gravel and crushed stone, other than those mentioned in 010407  010409 Sand and clay waste  010410 Dust and similar residues, other than those mentioned in O 10407  010413 Wastes produced by cutting and sawing stone, other than those mentioned in O 10407  101201 Preparation mixture residues not subjected to technical treatment  101206 Snap Molds consisting exclusively of scraps and scraps of raw, glazed and fired ceramic products, scraps of fired brick and expanded clay possibly covered with raw glaze in a concentration < 10% in weight  101208 Waste ceramics, bricks, tiles and building materials (subjected to heat treatment)  101311 Wastes from the production of cement-based composite materials, other than those referred to in 101309 and 101310.  120117 Residues of sand material, other than those referred to in heading 120116, consisting exclusively of waste abrasive sands  191209 Minerals (e.g., sand, rocks, ine1ii)  200301 Unsorted municipal waste, limited to the inert fraction of abandoned waste coming from construction and demolition activities. |

**The main definitions**

**Art. 2**

❖ “**Recovered aggregate**”: aggregate (**recycled or artificial**) produced from inert waste covered by the regulation which has ceased to be such following one or more recovery operations in compliance with the conditions referred to in article 184-ter, paragraph 1, of Legislative Decree N° 152 of 2006, and the provisions of this regulation;

❖ “**Lot of recovered aggregate**”: a quantity not exceeding 3,000 cubic meters of recovered aggregate;

❖ “**Producer of recovered aggregate**” or “producer”: the manager of the plant authorized for the production of recovered aggregate;

❖ "**Declaration of conformity**": the declaration in lieu of certifications and affidavit issued by the manufacturer certifying the characteristics of the recovered aggregate, referred to in article 5;

❖ “**Competent Authority**”: the authority that issues the authorization pursuant to Title III-bis of Part II or Title I, Chapter IV, of Part IV of the Legislative Decree. N° 152 of 2006, or the authority receiving the communication referred to in article 216 of the same legislative decree.

**The technical conditions and specific purposes**

**Articles 3 and 4:**

❖ Inert waste ceases to be classified as waste and is classified as recovered aggregate if:

▪The criteria and conditions of Annex 1 are respected:

• Acceptance procedure

• Manufacturing process;

• limit quality requirements and values

• Technical reference standards for CE certification

▪They are used for the specific purposes set out in Annex 2

• Identification of goals;

• Definition of technical standards for use

• Performance parameters for Clinker production

**Technical reference standards for CE certification**

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| **Standard** | **Title** |
| UNI EN 13242 | Aggregates for unbound and hydraulically bonded materials for use in civil engineering works and road construction |
| UNI EN 12620 | Aggregates for concrete |
| UNI EN 13139 | Aggregates for mortar |
| UNI EN 13043 | Aggregates for bituminous mixtures and surface treatments for roads, airports and other areas subject to traffic. |
| UNI EN 13055 | Light aggregates |
| UNI EN 13450 | Aggregates for railway ballasts |
| UNI EN 13383-1 | Aggregates for protection works (armourstone). Specifics |
| UNI EN 13108 | Bituminous mixtures - Material specifications - Part 8: Recovered bituminous conglomerate |

**Identifying goals:**

**The recovered aggregate is used for:**

a) implementation of environmental recovery, filling, and reclaiming;

b) construction of the embankments of civil engineering land works;

c) creation of bituminous mixtures and basis for roads, railways, airports and civil and industrial yards

d) construction of foundation layers for transport infrastructures and civil and industrial construction sites;

e) creation of accessory layers for anti-capillary, anti-freeze and draining functions;

f) packaging of mixtures bound with hydraulic binders (such as cemented mixtures, concrete mixes);

g) preparation of concrete;

h) production of clinker for cement;

i) cement production.

**Art. 5**

**Manufacturer's responsibility**

**The producer of the waste:**

❖ is responsible for the **correct attribution of the waste codes** and the **hazardous characteristics of the waste**, as well as for completing the **WIF** (waste identification form);

The **recovered aggregate** producer:

❖ is responsible for **compliance with the criteria** established by the regulation, which must be certified with a **declaration in lieu of an affidavit** (articles 46 and 47 of Presidential Decree 445/2000).

❖ must keep for 1 year, at the production plant or at its registered office, **a sample of the recovered aggregate taken at the end of the production process of each batch of recovered aggregate**, in compliance with the UNI 10802 standard

**Article 5**

**The declaration of conformity**

**The substitutive declaration must be:**

❖ **drawn up for each batch of recovered aggregate produced**, according to the form in Attachment 3.

❖ **sent** to the competent authority and to the territorially competent Regional Environmental Protection Bureau (ARPA by its acronym in Italian) **within 6 months from the date of production of the batch and before its exit from the plant**.

❖ **kept** (one copy) **at the production plant or at the manufacturer's registered office** (also possible in electronic format), for 5 years.

**Article 6**

**Management systems**

❖The **producer of recovered aggregate** must have a management system capable of demonstrating compliance with the criteria set out in the regulation, including quality control and self-monitoring.

❖ **Companies registered** pursuant to Regulation (CE) N°. 1221/2009 of the European Parliament and of the Council, and companies in possession of the UNI EN ISO 14001 environmental certification do not have to keep a sample of each batch of recovered aggregate at their production plant or registered office.

**Art. 7**

**Monitoring phases**

**24 months**

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| **From 26 September 2024**  (date of entry into force  of the new Ministerial Decree) | The Ministry of Environment and Energy Security (MASE, by its acronym in Italian) evaluates the opportunity to review the underlying criteria of the new regulations on the termination of waste qualification (art. 3 of the Decree). |

**Art. 8**

**Transitional period**

**Update:**

The manufacturer, within 180 days from the date of entry into force, submits to the competent authority:

❖ an update of the communication made pursuant to article 216 of Legislative Decree N° 152/2006 (**Simplified Procedure**);

❖ or a request to update the authorization granted pursuant to Chapter IV, Title I, Part IV, or Title III-bis, Part II of Legislative Decree N° 152/2006 (**Ordinary Procedure**).

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| **Note:** For simplified procedures, the rules of the Decree of 5 February 1998 continue to apply (on quantitative limits, limit values for emissions, and technical standards). |

**Art. 8**

**Transitional period:**

**Until the update:**

❖Producers operate with existing titles; while, in the case of renewal, these operate according to the titles being renewed until the authorization is concluded.

❖The aggregates produced until the update becomes effective can be managed according to the communication or in compliance with the authorization still effective at the time of the update or renewal request.

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| The new criteria applies after the update or renewal of the authorizations, or after the effective date of the updated communication has expired.  Note. The provision envisaged by the art. 5, paragraph 4 (storage of the sample at the plant or in the registered office for 1 year) is applicable from the entry into force of the new Ministerial Decree. |

**Article 9**

**Operation**

❖With the entry into force of the Regulation, the previous MASE Decree N° 152 of 27 September 2022, is abrogated.

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| ❑Published in the Official Journal N° 213 of 11/09/2024, the Decree “End of Waste inert waste” came into effect on September 26, 2024. |

**What about waste that is not included?**

**End of Waste assessment on a case-by-case basis**

The notion of end of waste was born at Community level with the framework directive on waste (2008/98/EC). In particular, the art. 6 states that “a waste ceases to be waste when it is subjected to a recovery operation, including recycling, and meets specific criteria to be developed in accordance with the following conditions:

a) the substance or object is commonly used for specific purposes;

b) there is a market or demand for that substance or object;

c) the substance or object meets the technical requirements for the specific purposes and complies with existing legislation and standards applicable to said products;

d) the use of the substance or object will not lead to overall negative impacts on the environment or human health.

**Soil Washing system implementation**

Soil washing systems are created for the treatment of contaminated earthy materials, generally coming from abandoned or compromised areas (environmental reclamation) with the aim of recovering the valuable part which is identified as an alternative resource to reduce the need for new quarries and landfills, in order to protect the environment.

The soil washing treatment through the intensive washing of the soil to be treated allows the pollutants present (hydrocarbons and heavy metals in particular) to be conveyed through the finer particles (silt, clay), from the solid phase to the liquid phase and thus allowing the recovery of the inert fraction with larger grain size (sand and gravel), the latter will be treated as End of Waste and must comply with all the requirements established in the Ministerial Decree. 127/24

In the liquid phase, the contaminants tend to bind to the finer inert fraction (silt and clay). This produces a turbidity containing suspended solids and pollutants which is sent to the purification and clarification treatment. The clarified water is reused in closed cycle in the washing process, while the sludge obtained in the clarification process contains the pollutants which will be sent after dehydration to be disposed of at landfills.

**Soil Washing system implementation**

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