

Briefing Document: REACH Regulation and Circular Economy (IMPEL Waste Management and Circular Economy Group)

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**Purpose:** This briefing document provides a summary and analysis of the key themes, important ideas, and facts presented in the IMPEL Waste management and Circular Economy Group's report on the intersection of the REACH Regulation and Circular Economy principles.

**Source:** Excerpts from "2022-24(III)WG2 REACH & CE - Final Report.pdf"

### **Executive Summary:**

The report from the IMPEL Waste management and Circular Economy Group examines the complex relationship between the EU's REACH Regulation concerning chemicals and the principles of the Circular Economy, particularly focusing on waste-based materials like by-products and materials that have achieved End-of-Waste status. A central theme is that while materials considered "waste" are generally outside the scope of REACH, once they transition to by-products or End-of-Waste materials, they become subject to REACH and other relevant chemicals and product legislation. The report details the basic requirements of REACH (registration, authorisation, and restrictions), how they apply to these waste-based materials, and relevant exemptions (by-product, recovery, SR&D, and PPORD). It also briefly touches upon other relevant chemical legislation (CLP, POPs, RoHS) and highlights the critical role of enforcement and the availability of information through databases like SCIP. The report emphasizes the responsibility of companies to assess and ensure compliance with both waste and chemical legislation.

### **Key Themes and Important Ideas:**

#### **1. Interface between Waste Legislation (WFD) and Chemical Legislation (REACH):**

- Materials considered "waste" under the EU Waste Framework Directive (WFD) are generally **not** within the scope of REACH.
- However, once materials cease to be waste and are classified as **by-products** (Article 5 WFD) or achieve **End-of-Waste** status (Article 6 WFD), they become subject to REACH and other applicable product and chemical legislation if placed on the market.
- The WFD explicitly states that "the natural or legal person who a) uses, for the first time, a material that has ceased to be waste and that has not been placed on the

market; or b) places a material on the market for the first time after it has ceased to be waste, shall ensure that the material meets relevant requirements under the applicable chemical and product related legislation." (Article 6(5) WFD, as amended by (EU) 2018/851).

- The processes for assessing by-product/End-of-Waste status under the WFD and fulfilling REACH obligations run in parallel. Recovery operators are potential registrants under REACH.

#### 1. **Applicability of REACH Basic Obligations to Waste-Based Materials:**

- **Registration:** By-products and End-of-Waste materials can be defined as substances, mixtures, or articles under REACH. As manufacturers (recovery operations are considered manufacturing processes), operators placing these materials on the market in quantities of 1 tonne or more per year must register the substances with ECHA, unless an exemption applies.
- **Authorisation:** Waste-based materials may contain Substances of Very High Concern (SVHCs) listed in Annex XIV, requiring authorization for specific uses.
- **Restrictions:** Annex XVII of REACH lists restrictions on the manufacture, placing on the market, or use of certain substances. These restrictions can apply to substances in recovered materials, although there may be different limits for waste-based materials in some cases (e.g., cadmium in recycled plastic).

#### 1. **REACH Exemptions Relevant to Circular Economy:**

- **By-product Exemption (Article 2(7)(b) and Annex V):** By-products are exempted from registration *unless they are imported or placed on the market themselves*. This exemption is generally limited to by-products used internally or delivered to another production process without being marketed.
- **Recovery Exemption (Article 2(7)(d)):** Substances recovered in the EU/EEA are exempt from registration if:
  - The recovered substance is the *same* as a substance that has already been registered.
  - Information required by Articles 31 or 32 (e.g., Safety Data Sheets, exposure scenarios) relating to the registered substance is available to the recovery operator.
  - The "sameness" assessment is the responsibility of the recovery operator and is based on the identity of the main constituents.

- This exemption is not tied to the volume or original uses of the registered substance, but recovery operators must provide information for safe use.
- **SR&D Exemption (Article 3(23)):** Substances manufactured for scientific research and development in quantities less than 1 tonne per year are exempt from registration, authorisation, and restrictions.
- **PPORD Exemption (Article 9):** Substances manufactured or imported in quantities >1 tonne/year for product and process orientated research and development are exempt from registration for 5 years, with a notification to ECHA. This exemption does *not* automatically exempt from authorisation or restriction schemes.

#### 1. Importance of Substance Identification:

- Accurate identification of the substances present in by-products and End-of-Waste materials is crucial for determining the applicability of REACH and other chemical legislation.
- Substances can be well-defined or Substances of Unknown or Variable Composition, Complex Reaction Products or Biological Materials (UVCBs). Recovery operations often produce mixtures and UVCB substances.
- For UVCBs, identification relies on chemical composition, source material, and processing steps.

#### 1. Other Relevant Chemicals Legislation:

- **CLP Regulation (EC) No 1272/2008:** Applies to by-products and End-of-Waste materials, requiring classification, labelling, and packaging of hazardous chemicals.
- **POP Regulation (EU) 2019/1021:** Bans or restricts POPs in chemical products and articles, including in recycled materials. End-of-Waste materials must comply with concentration limits for POPs in products (Annex I). Wastes exceeding Annex IV limits require specific disposal/recovery methods.
- **RoHS Directive 2011/65/EU:** Limits hazardous substances in Electrical and Electronic Equipment (EEE). This impacts the use of recycled materials in EEE production and highlights the need to know the chemical content of waste streams.

#### 1. Information and Enforcement:

- The **SCIP database** (Substances of Concern In articles as such or in complex objects (Products)) requires suppliers of articles containing SVHCs above 0.1% w/w

to notify ECHA. This database improves information availability throughout the lifecycle, including at the waste stage.

- Enforcement is challenging, particularly in identifying waste operators placing End-of-Waste materials on the market. Cooperation between waste and REACH inspectors and the use of national End-of-Waste databases are recommended.
- Case studies (Italy, Netherlands, Finland, Estonia, Slovenia, Germany) illustrate practical challenges and interpretations of REACH and its exemptions for waste-based materials.

### **Important Facts and Quotes:**

- "Materials that are considered waste under the EU Waste Framework Directive (2008/98/EC4, WFD) are not considered substance, mixtures or articles according to Article 2(2) of REACH Regulation and are not considered in the scope of REACH." (p. 7)
- "By-products are not considered waste if they meet the criteria set with the WFD and will fall under the full scope of REACH if placed on the market themselves." (p. 7)
- "All forms of recovery, including mechanical processing, are considered as a manufacturing process under REACH whenever they result in the generation of one or several substances as such or in a mixture or in an article that have ceased to be waste." (p. 7-8)
- "Before the material is placed on the market basic requirements of REACH have to be fulfilled." (p. 11)
- "As by-products and End-of-Waste materials are not considered waste, they can be defined as substances, mixtures or articles according to REACH Regulation. Following that the rules of registration, authorisation and restrictions may be applied to them." (p. 11)
- "The fact that a substance is registered under REACH does not automatically mean that it has ceased to be waste." (p. 12)
- "By-products, unless they are imported or placed on the market themselves." (Annex V, Point 5, quoted on p. 26)
- "According to Article 2(7)(d) (the so-called recovery-exemption), no registration is required for substances recovered in the EU-EEA, if the substance that results from the recovery process is the same as a substance that has already been registered and the information required by articles 31 or 32 relating to the substance that has

been registered in accordance with Title II is available to the establishment undertaking the recovery." (p. 27)

- "If, for some reason, the same substance has not been registered at the manufacturing or import stage, the recovered substance must be registered." (Quoting ECHA Guidance on registration, p. 28)
- "The assessment of the 'sameness' is in the hands of the recovery operator and the sameness is not confirmed or verified by the ECHA." (p. 28)
- "New products produced from recycled materials, such as recycled plastics that have reached End-of-Waste status, must fulfil the UTC concentration requirements for POP substances in products set in Annex I of the POP Regulation." (p. 17)
- "Companies supplying articles containing SVHCs in a concentration above 0.1% (w/w) have to submit information to ECHA." (p. 24, summarized from Article 9(1)(i) WFD)
- "For recovered polymers, the monomers and other substances in the polymer must have been registered in order for it to be possible to make use of the exemption in REACH." (Quoting Swedish KEMI Report, p. 33)

## **Conclusion:**

The report effectively outlines the regulatory landscape for waste-based materials in the context of REACH and the Circular Economy. It underscores that achieving by-product or End-of-Waste status under the WFD triggers the applicability of REACH and other chemical legislation. Recovery operators and businesses utilizing these materials must be diligent in understanding and fulfilling their obligations, particularly regarding substance identification, registration (or demonstrating applicable exemptions), authorization, and restrictions. The report highlights the need for clear guidance, information sharing, and effective enforcement to ensure both environmental and human health protection while promoting the transition to a circular economy.