



31 January, Brussels

## Joint Position Paper of Waste Management and Trade Union Associations on the CLP Classification and Impact of Nitrous Oxide under REACH

**FEAD**, the European Federation for Waste Management and Environmental Services, **CEWEP**, the Confederation of European Waste-to-Energy Plants, **EPSU**, the European Federation of Public Service Unions, and **Municipal Waste Europe**, the European Umbrella Association for Public Waste Management, welcome the classification of nitrous oxide as a category 1B reproductive toxicant under the CLP Regulation and support the subsequent restriction under REACH as proposed by the European Commission at the 53<sup>rd</sup> CARACAL meeting in agenda item 7.1 of the Joint CLP - REACH session.

We **fully support the proposed REACH restrictions**, in particular on large N<sub>2</sub>O canisters, which have proven to be a significant hazard in waste management. Recreational misuse and improper disposal of these canisters result in explosions at waste facilities, posing serious risks to worker safety, causing extensive damage to infrastructure and undermining operational efficiency in the waste sector.

### Key Concerns: Hazards of Large Nitrous Oxide Canisters in Waste Management

The improper disposal of large nitrous oxide canisters represents a critical challenge for waste management facilities across Europe. Waste-to-Energy (WtE) operators frequently report incidents of **explosions caused by these canisters, leading to significant health and safety risks and financial and operational burdens**. For instance, Belgium recorded over 2,000 explosions in just the first seven months of 2024, resulting in extensive repair costs and unplanned shutdowns for repairs – on 62 days out of 210 there was at least one Belgian WtE plant that had a line offline for repairs due to nitrous oxide. Similar incidents have been reported in the Netherlands, France, Czechia, Norway, Sweden, and Austria, with explosions damaging critical infrastructure such as boilers and grates, necessitating costly repairs and disrupting operations.

The **safety risks to workers in waste management facilities** are profound. Explosions expose workers to life-threatening hazards, particularly during maintenance or when clearing blockages in incinerators and conveyor belts. In Belgium and the Netherlands, workers have narrowly escaped serious injury from the pressure and shrapnel caused by such explosions. These risks are exacerbated by the increasing prevalence of large N<sub>2</sub>O canisters in waste streams due to increased misuse for recreational purposes. It is worth noting that these large canisters are often fraudulently marketed as food additives, but have no legitimate culinary use.

The **environmental and economic repercussions** are equally concerning. Explosions lead to significant downtime, reducing waste processing capacity and increasing emissions from facility restarts. A single explosion at an Austrian WtE plant, for example, incurred approximately €400,000 in damages and operational losses.

This document is accompanied by a **list of incidents recorded in 2024 by CEWEP members** across Europe.

### Urgent need for a restriction of large nitrous oxide canisters

Our associations support the ban of large canisters of nitrous oxide for consumer use to reduce the risks associated with their improper disposal. Restricting the sale of such canisters to professional entities with verifiable culinary or industrial applications, with appropriate enforcement measures, is essential. National regulations addressing recreational misuse, such as bans in Belgium, France and the Netherlands, have proven to be inconsistent and insufficient, highlighting the **need for a harmonised EU-wide restriction** to address enforcement gaps and ensure comprehensive risk mitigation.

Therefore, **our associations support the Commission's proposal** to restrict the placing on the market and use of nitrous oxide for the general public via the addition of nitrous oxide under Annex XVII - Appendix 6 of the REACH Regulation, as well as the inclusion of a specific and targeted exemption in Appendix 11 for nitrous oxide placed on the market as a food additive and used by consumers as a food additive, for canisters with a maximum capacity of 125 mL. Our associations understand that limiting the capacity of canisters that can be placed on the market for the general public will certainly **help to reduce the risks and hazards associated with the large canisters** of nitrous oxide, as highlighted in this document.

However, the undersigned associations **warn against the availability of large capacity nitrous oxide canisters to professionals** and therefore call for an assessment of whether such use of large canisters in a professional environment is justified, given the risks involved for waste management operators, and if additional measures should be taken for these uses. In any case, it will be key to the enforcement of the restrictions under REACH that the **availability of larger canisters to professionals is strictly controlled to avoid the continuation of the recreational market.**

In addition to banning nitrous oxide canisters larger than 125mL, we recommend **mandatory design improvements for nitrous oxide canisters**, including the inclusion of safety features such as pressure relief valves to prevent explosions during waste processing. Clear labelling requirements should also be enforced to distinguish canisters intended for professional use from those intended for legitimate consumer use. In addition, we are calling for these canisters to be included in **Extended Producer Responsibility (EPR) schemes**, requiring producers to fund their collection, recycling and safe disposal, as well as a **deposit and return system to ensure the safe return** of the canisters in a separate controlled stream. This approach is in line with circular economy principles and reduces the financial burden on waste operators.

The waste management sector is steadfast in its commitment to protecting workers, safeguarding the environment, and fostering a circular economy. However, the continued prevalence of large nitrous oxide canisters poses unacceptable risks that jeopardize these efforts. Our associations strongly encourage the European Commission to finalize and implement the proposed REACH restrictions targeting large nitrous oxide canisters. **Harmonized measures across the EU are imperative** to address misuse and improper disposal effectively. Collaboration with stakeholders, including Member States, waste operators, and industry associations, is essential to ensure robust enforcement and successful risk mitigation.

We stand ready to support further dialogue and provide additional data or insights to aid in the effective implementation of these critical measures.

**CEWEP** (Confederation of European Waste-to-Energy Plants) is the umbrella association of the operators of Waste-to-Energy plants across Europe. <https://www.cewep.eu/>

**EPSU** (European Federation of Public Service Unions) organises workers in the energy, water and waste sectors, health and social services and local, regional and central government, in all European countries. <https://www.epsu.org/>

**FEAD** is the European Waste Management Association that represents the private waste management and resource industry across Europe. <https://fead.be/>

**Municipal Waste Europe** is the the European Umbrella Association for Public Waste Management. <https://www.municipalwasteurope.eu/>