

(English version)

Question for written answer E-001389/25
to the Commission
Biljana Borzan (S&D)
(4 April 2025)

Subject: Regulation of airborne microplastics under EU environmental and health legislation

An expanding body of scientific research confirms the presence of microplastics in atmospheric particulate matter, including PM 2.5 and PM 10 fractions. Inhalation of these particles, particularly in urban and industrial areas, represents a potentially significant route of human exposure, with implications for respiratory and systemic health.

Currently, EU legislation on microplastics focuses primarily on the contamination of water and soil. Emissions of airborne microplastics — arising from tyre and road wear, industrial processes, construction activities, and the degradation of synthetic textiles — remain largely unregulated, creating a potential gap in the EU's environmental and public health policy framework.

In this context:

1. Can the Commission clarify whether it intends to expand existing legislative instruments, such as Directive 2008/50/EC on ambient air quality and cleaner air for Europe, to explicitly include airborne microplastics within the scope of air quality monitoring and regulation?
2. Furthermore, is the Commission considering incorporating this issue into legislation on occupational health and industrial emissions?
3. Finally, does the Commission plan to support the development of harmonised methodologies for monitoring airborne microplastics and the establishment of science-based threshold exposure levels for both indoor and outdoor environments?

Submitted: 4.4.2025

Answer given by Ms Roswall on behalf of the European Commission
(17 June 2025)

The Ambient Air Quality Directive ⁽¹⁾ entered into force on 10 December 2024. It does not include specific references to microplastics.

However, provisions regulating particulate matter concentrations have become more stringent, thus requiring the Member States to take the appropriate measures to reduce overall particulate matter concentrations.

Also, the Commission should regularly review the scientific evidence related to pollutants, their effects on human health and the environment with first review carried out by 31 December 2030.

Under EU legislation on occupational safety and health, employers are required to assess all occupational risks to the health and safety of their workers, and to take the measures necessary for the prevention of these risks and the protection of their workers ⁽²⁾. This includes risks arising from exposure to microplastics at the workplace.

The Industrial Emissions Directive ⁽³⁾ provides a legal basis for Member States to include emission limit values for airborne microplastics in industrial permits, particularly when emissions are scientifically recognised as harmful and likely to occur.

The Commission is supporting the development of harmonised methodologies for monitoring microplastics and the establishment of threshold exposure levels for different sources.

For tyres, EURO 7 Regulation ⁽⁴⁾ provides for abrasion limits to be set for passenger car (type C1), light truck (C2), and heavy truck (C3) tyres based on methods developed at the United Nations Economic Commission for Europe level.

⁽¹⁾ Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast), OJ L, 2024/2881, 20.11.2024.

⁽²⁾ Among others, Article 5(1) and Article 6 of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work, OJ L 183 29.6.1989, p. 1.

⁽³⁾ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17.12.2010, p. 17-119.

⁽⁴⁾ Regulation (EU) 2024/1257 of the European Parliament and of the Council of 24 April 2024 on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7), amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 715/2007 and (EC) No 595/2009 of the European Parliament and of the Council, Commission Regulation (EU) No 582/2011, Commission Regulation (EU) 2017/1151, Commission Regulation (EU) 2017/2400 and Commission Implementing Regulation (EU) 2022/1362, OJ L, 2024/1257, 8.5.2024.

Microplastics from textiles and pellets are covered in the 2025 annual Union work programme for European standardisation ⁽⁵⁾.

⁽⁵⁾ Commission Notice — The 2025 annual Union work programme for European standardisation, C/2025/1654, OJ C, C/2025/1818, 27.3.2025.