



# Update for EMEP/EEA Guidebook Chapter 5C1biii Clinical Waste Incineration

TFEIP Meeting 2023, 19 Apr 2023

Waste Sector Panel

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# Reasoning for Updates

- Check for updated emission factors
- Achieve consistency in emission factors
- Clinical Waste Incineration Practises changed in most countries completely over the last 30 years

# What's changed?

- Definition of clinical waste:
  - waste being generated from medical activities
- Tier 1: Emissions = AD x EF
  - from uncontrolled rotary kiln incinerator changed to rotary kiln incinerator equipped with spray dryer or fabric filter (as the least abatement technology)
  - reference is still UNEP but 1995 instead of 1993
  - PM10 and PM2.5 EF now available as % of TSP
- Tier 2: Emissions = AD x EF x abatement efficiency
  - EFs unchanged but description was wrong (EFs for uncontrolled incineration are given, but table 3.2 said controlled)
  - PM10 and PM2.5 EF now available as % of TSP
  - Abatement efficiencies are now consistent with the ones used for municipal waste incineration
  - Update of Abatement potentials for dioxins added from UNEP(2013)
- Data quality
  - New reference values for clinical waste incineration (BREF, 2019)

## To be noted

- Emission factors refer to US data → so the use of country specific emission factors is highly recommended
- It is good practise to amend the EFs along the time series, according to the incineration technology used - as incineration technologies in 1990 will not be the same as nowadays
  - the use of Tier 1 EF over the whole time series will most likely result in overestimations in recent years
  - while using the same Tier 2 EFs and abatement efficiencies will result in underestimation in earlier years

# Thank you!

In case, of any further questions or suggestions,  
please let me and the TFEIP secretariat know!

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