# 5.D.1 - Domestic & Commercial Wastewater Handling

## Short description

| NFR-Code | Name of Category | Method | AD | EF | Key Category [1] |
|----------|------------------|--------|-----|-----|------------------|
| 5.D.1 | Domestic & Commercial Wastewater Handling | T1 | NS | D | no key categor |

## Method

Emissions reported under this category are calculated using the Tier 1 approach of the EMEP/EEA Guidebook 2016, where the emission factor (EF) is 15 mg/m³ wastewater (Part B, 5.D, chap. 3.2.2, Table 3-1, p. 7). This EF is multiplied with the total amount of wastewater (AD) treated in domestic and commercial wwt-plants, following the equation:

**Emissions $_{(NMVOC)}$ = AD x EF** (ibid., chap. 3.2.1)

### Activity data

Total volumes of treated municipal wastewater are derived by the German statistical agency (Statistisches Bundesamt, Fachserie 19, Reihe 2.1.2 [1]). The data source is published on a three-year basis with new data only for the respective year of the update. The availability of the data starts in 1991 with an exception for the following update, which was for 1995. Missing data are inter- or extrapolated

### Emisson factors

See method

## Uncertainties

The AD from Statistisches Bundesamt have an uncertainty of ±3% (normal distribution) whereas the uncertainty for the EF, due to its range (5/50 mg/m³), is -70 / +210 % and the distribution lognormal.

## Recalculations

Recalculations were not necessary

# Planned improvements

Currently no improvements are planned.

[1)]
Statistisches Bundesamt, Fachserie 19, Reihe 2.1.2