

Category		Title
NFR:	2.E	Production of persistent organic pollutants
SNAP:	040526	Production of persistent organic compounds
ISIC:		
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1 Overview

The present chapter deals with the production of persistent organic pollutants (POPs) and pesticides. Emissions from this source category are not significant, since the contribution to the total national emissions is less than 1 % of the national emissions of any pollutant.

There is overlap between the present chapter and chapter 2.B Chemical Industry. The latter chapter deals with emissions from pesticide production, while the present chapter deals with the production of POPs in general.

Compared to the use of POPs, the production of POPs is not a key category since the production processes are mostly highly controlled in order to manage health and environmental effects. In addition, no emission factors are available for the production of POPs.

The present chapter covers only the production of POPs; the use of POPs is covered by chapter 2.F Consumption of Persistent Organic Pollutants and Heavy Metals.

2 Description of sources

2.1 Process description

The production of POPs excludes the production of pesticides, which are dealt with in chapter 2.B.

2.2 Techniques

No information available.

2.3 Emissions

From the production of POPs, emissions of the main pollutants — nitrogen oxides (NO_x), sulphur oxides (SO_x), non-methane volatile organic compounds (NMVOC), carbon monoxides (CO) and ammonia (NH₃) — may occur, as well as particulate emissions and POPs.

2.4 Controls

Processes in the production of POPs are likely to be highly regulated and have a high degree of control because of the serious impacts caused by POPs on health and environment.

3 Methods

3.1 Choice of method

Only a Tier 1 default approach is presented in this chapter.

3.2 Tier 1 default approach

3.2.1 Algorithm

The Tier 1 approach for emissions from this source category uses the general equation:

$$E_{\text{pollutant}} = AR_{\text{production}} \times EF_{\text{pollutant}} \quad (1)$$

This equation is applied at the national level, using annual national statistics on the production of POPs.

3.2.2 Default emission factors

There are no emission factors available for the production of POPs. In most cases, emissions can be assumed to be negligible, especially when compared to the use of these products.

Table 3.1 Tier 1 emission factors for source category 2.E Production of persistent organic pollutants

Tier 1 default emission factors		
NFR Source Category	Code	Name
	2.E	Production of POPs
Fuel	NA	
Not applicable	Pb, Cd, Hg, As, Cr, Cu, Ni, Se, Zn, PCDD/F, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Total 4 PAHs	
Not estimated	NOx, CO, NMVOC, SOx, NH3, TSP, PM10, PM2.5, Aldrin, Chlordane, Chlordecone, Dieldrin, Endrin, Heptachlor, Heptabromo-biphenyl, Mirex, Toxaphene, HCH, DDT, PCB, HCB, PCP, SCCP	

3.2.3 Activity data

Not applicable.

3.3 Tier 2 technology-specific approach

Not available for this source category.

3.4 Tier 3 emission modelling and use of facility data

Not available for this source category.

4 Data quality

There are no source specific issues in this source category.

5 Point of enquiry

Enquiries concerning this chapter should be directed to the relevant leader(s) of the Task Force on Emission Inventories and Projection's expert panel on combustion and industry. Please refer to the TFEIP website (www.tfeip-secretariat.org) for the contact details of the current expert panel leaders.