

REGIONAL TRENDS OF POPs IN EUROPEAN AMBIENT AIR

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Introduction

Air is an important transport medium for PTS in general. Reporting ambient air concentrations reflects the concentration during the sampling period but, due to rapid transport and fast mixing of pollutants in air, PTS concentrations will change quite rapidly

Heavy metals and persistent organic pollutants (POPs) were included in EMEP's monitoring programme in 1999. However, by 1995, co-operation concerning heavy metals and POPs between EMEP and other international programs was extended. This co-operation included the establishment of a database and collection of already available data on POPs among the participants. A number of countries have been reporting POPs within the EMEP area in connection with different national and international programmes such as HELCOM, AMAP, OSPARCOM, MEDPOP.

Methods and Materials

Few of the sites have reported data for POPs to date (Table 1). The stations are generally located distant from local emission sources in order to be representative for a larger region (Figure 1).

Table 1: List of monitoring stations included in the POP data base

Country	Station codes	Station name	Location		Height above sea
			Lat.	Long.	(m)
Belgium	BE0004R	Knokke	51°21'N	3°20'E	0
Czech Republic	CZ0003R	Kosetice	49°35'N	15°05'E	534
Iceland	IS0091R	Stórhöfði	63°24'N	20°17'W	118
Ireland	IE0002R	Turlough Hill	53°02'N	6°24'W	420
Netherlands	NL0009R	Kollumerwaard	53°20'N	6°17'E	0
Norway	NO0042G	Spitsbergen, Zeppelinfjell	78°54'N	11°53'E	474
	NO0099R	Lista	58°06'N	6°34'E	13

Table 2: General information about sampling and analysis of POPs in air (1999)

Country	Sites	POPs	Sampling period	Sampler	Analytical methods
Czech. Rep	CZ0003R	PAHs, PCBs, DDTs, HCHs, HCB	24 hrs every week	High volume	GC-MS
Iceland	IS0091R	PCBs, pesticides	15d	High volume	
Norway	NO0042G	PAH, pesticides, HCHs, HCB, PCBs	48h	High volume	GC-MS
	NO0099R	α -HCH, γ -HCH, HCB	48h	High volume	GC-MS

GC-MS: Gas chromatography with mass spektrometry

