

Guidelines on best available techniques and provisional guidance on best environmental practices

relevant to Article 5 and Annex C
of the Stockholm Convention on
Persistent Organic Pollutants



Contents

- Background
- History and evolution
- Structure and use of the guidelines
- Overview of the different sections

Background

- Article 5 of the Stockholm Convention on measures to reduce or eliminate releases from unintentional production
- Annex C, Part I-III

Mandate: Article 5 (d) and (e)

When applying BAT/BEP, Parties should take into consideration:

- The general guidance on prevention and release reduction measures in Annex C and
- Guidelines on best available techniques and best environmental practices to be adopted by the Conference of the Parties

INC process

In 2002 INC-6 established an expert Group on BAT and BEP (EGB)

- The group met 3 times between March 2003 and October 2004 (Research Triangle Park, North Carolina; Villarica, Chile and Tokyo-Japan)



INC process

EGB was a closed group composed of:

- Government-designated experts
 - 15 from developing countries
 - 3 from countries with economies in transition
 - 18 from developed countries
- Observers
 - 2 Intergovernmental organizations
 - 8 from non-governmental organizations (4 environment NGOs and 4 industrial NGO's)

INC process



EGB mandate:

- Develop guidelines on best available techniques and to develop provisional guidance on best environmental practices relevant to the provisions of article 5 of the Convention, for consideration by the Conference of the Parties upon entry into force of the Convention

INC process



EGB produced the “Draft guidelines on BAT and BEP relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants”

Submitted the draft guidelines for consideration of the COP at its first meeting in Punta del Este, Uruguay, 2 - 6 May 2005.

COP 1



Adopted decision SC-1/19 by which the Conference:

- Welcomes the draft guidelines and provisional guidance
- Encourages Parties to take the draft guidelines and provisional guidance into consideration, where practicable and feasible, in the development of action plans and other activities related to unintentionally produced POPs.
- Establishes an Expert Group with a mandate to complete the tasks identified in section II of its terms of reference, for consideration by COP 3

Mandate of the EGBATBEP



Decision SC-1/19

The Expert Group was tasked with the completion of further work on the enhancement or strengthening, were need be, of the BAT&BEP guidelines and guidance document referred to in decision SC-1/19, to assist the implementation of action plans

EGBATBEP



Meetings of the EGBATBEP :

- EGBATBEP 1 was held in Geneva 28 November – 2 December 2005
- EGBATBEP 2 was held in Geneva, Switzerland 19-24 November 2006

Membership

- 42 members drawn from Parties as follows:
 - 9 African States
 - 9 Asian and Pacific States
 - 4 Central and Eastern European States
 - 6 Latin American and Caribbean States
 - 14 Western European and other States

Geographical distribution



AFRICA	Benin, Botswana, Djibuti, Ghana, Kenya, Mali, Nigeria, Rwanda, Tunisia
ASIA AND THE PACIFIC	China, Fiji , Japan, Mongolia, Oman, Papua New Guinea, Philippines, Thailand, Yemen
CEE	Armenia, Czech Republic, Latvia, Republic of Moldova
GRULAC	Argentina, Brazil, Chile, Mexico, Uruguay, Venezuela
WEOG	Australia, Austria, Canada, Finland, France, Germany, Iceland, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom

COP 3

- Guidelines on best available techniques and guidance on best environmental practices were adopted by the Conference of the Parties at its third meeting in May 2007 by **decision SC-3/5**



Decision SC -3/5

- Guidelines on best available techniques and provisional guidance on best environmental practices relevant to Article 5 and Annex C of the Stockholm Convention on POPs, were adopted by the Conference of the Parties at its third meeting in May 2007



Document structure

The guidance document consists of six main sections:

- Sections I – IV: Introductory
- Sections V-VI: Source specific
 - Section V: Annex C Part II Sources
 - Section VI: Annex C Part III Sources



Use of the guidelines and guidance

Policy makers	Sections I, II, and III and IV
Regulatory authorities	Sections I, II, III and IV
Engineers and other technical users	Sections III, V, and VI
Other stakeholders and interested parties	Sections I to VI

Sections I-IV

- Section I:** Introduction
- Section II:** Consideration of alternatives
- Section III:** Guidance, principles and cross-cutting considerations
- Section IV:** Compilation of summaries



Overview

Section I - Introduction

- Purpose**
- Structure of document and using the guidelines**
- Chemicals listed in Annex C: definitions, risks, toxicity**
- Article 5 and Annex C of the Stockholm Convention**
- Relationship to the Basel Convention**
- Relationship to other environmental concerns**

Overview



Section II – Consideration of alternatives in the application of BAT

Provides guidance on consideration of alternatives, incl.:

- The Stockholm Convention and new sources
- An approach to consideration of alternatives
- Information on other considerations of the Stockholm Convention (health, safety, environmental, social and economic, Annex C);

Overview



□ Section III – BAT and BEP: guidance principles and cross-cutting considerations

- **Guidance**
- **General principles and approaches**
- **Cross cutting considerations**

Overview



□ Section IV - a compilation of the summaries provided for each category sources in sections V and VI

- **Summaries of section V: source categories included in Part II of annex C**
- **Summaries of section VI: source categories included in Part III of annex C**

Section V: Annex C Part II Sources Section VI: Annex C Part III Sources



Sections V & VI - contain specific guidelines for each source category listed in Parts II and III of Annex C of the Stockholm Convention including:

- **Process description**
- **Sources of chemicals listed in Annex C**
- **Primary and secondary measures**
- **Performance standards**
- **Performance reporting**
- **Relevant case studies**



Section V: Annex C Part II Sources



- A. **Waste incinerators :**
 - I. Municipal, solid waste, hazardous waste and sewage sludge
 - II. Medical waste
- B. **Cement kilns firing hazardous waste**
- C. **Production of pulp using elemental chlorine or chemicals generating elemental chlorine**
- D. **Thermal processes in the metallurgical industry:**
 - **Secondary copper production**
 - **Sinter plants in the iron and steel industry**
 - **Secondary aluminium production**
 - **Secondary zinc production**

Section VI: Annex C part III sources



- A. Open burning of waste, including burning of landfill sites;
- B. Thermal processes in the metallurgical industry not mentioned in Part II;
- C. Residential combustion sources;
- D. Fossil fuel-fired utility and industrial boilers;
- E. Firing installations for wood and other biomass fuels;
- F. Specific chemical production processes releasing unintentionally released POPs;
- G. Crematoria;
- H. Motor vehicles, particularly those burning leaded gasoline;
- I. Destruction of animal carcasses;
- J. Textile and leather dyeing (with chloranil) and finishing (with alkaline extraction);
- K. Shredder plants for the treatment of end of life vehicles;
- L. Smoldering of copper cables;
- M. Waste oil refineries

Example: Waste incinerators – municipal waste



- **Process description:**
 - **Municipal solid waste incineration**



Example: Municipal waste incinerators (cont')



- **Alternatives:**
 - Zero waste management strategies
 - Waste minimization, source separation and recycling to reduce the waste volume
 - Composting, which reduces waste volume by biological decomposition
 - Mechanical biological treatment
 - High-temperature melting;
 - Specially engineered landfill, which contains and isolates wastes

Best environmental practices for waste incineration



- **Waste management practices**
 - Waste minimisation
 - Source separation and recycling
 - Waste inspection and characterization
 - Removal of non-combustibles at the incinerator
 - Proper handling, storage and pre-treatment, etc.
- **Incinerator operating and management practices**
 - Ensuring good combustion
 - Avoiding cold starts, upsets and shutdowns
 - Regular facility inspections and maintenance, etc.

Best environmental techniques for waste incineration



- **Site selection**
- **Waste input and control**
- **Combustion**
- **Flue gas treatment**
- **Solid residues**
- **Effluent treatment**

Optimal solution for a particular type of incineration installation varies according to local conditions

For more information please consult:

<http://pops.int/>



Thanks!