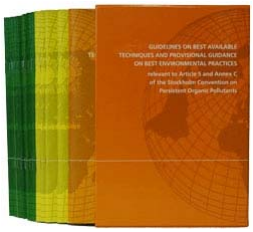
Revised Draft Guidelines on best available techniques and provisional guidance on best environmental practices

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



Article 5: Unintentionally produced POPs

- **Goal is continuing minimization and, where feasible, ultimate elimination of total releases of chemicals in Annex C derived from anthropogenic sources (dioxins, furans, HCB, PCBs)**
- Parties must:
  - **develop action plans within 2 years of entry into force, and implement their plans**
  - **promote application of available, feasible and practical measures to achieve realistic and meaningful levels of release reduction or source elimination**
  - **promote development and, where appropriate, require use of substitute or modified materials, products and processes to prevent formation and release of POPs**

Unintentionally produced POPs

- For sources with the potential for comparatively high formation & release of POPs to the environment (including but not limited to the industrial source categories listed in Annex C Part II), Parties must:
  - for new sources:
    - promote and, as provided for in an action plan, require use of best available techniques (BAT), and
    - phase in any BAT requirements as soon as practicable but no later than 4 years after Convention enters into force
    - promote use of best environmental practices (BEP)
  - for existing sources, in accordance with its action plan, promote use of BAT & BEP

Best Environmental Practices (BEP)

"Best environmental practices" means the application of the most appropriate combination of environmental control measures and strategies

Best Available Techniques (BAT)

"Best available techniques" means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for release limitations designed to prevent and, where that is not practicable, generally to reduce releases of chemicals listed in Part I of Annex C and their impact on the environment as a whole…

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 adopted by Conference of the Parties in May 07 (SC-3/5)

Structure of the guidance document

- The document consists of six main sections
- Sections I - IV: General in nature
- Sections V - VI: source specific

Use of the guidelines and guidance

Policy makers	Sections I, II and II
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

Structure of document

- Section I - Introduction
  - **purpose and structure of the document**
  - **a brief description of the characteristics and risks of chemicals listed in Annex C of the Stockholm Convention**
  - **directly relevant provisions of the Stockholm Convention, Article 5 and Annex C**
  - **a summary of required measures under these provisions**
  - **relationship of these provisions to the Basel Convention**

Structure of document

- 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);

Structure of document

- Section III - general guidance, applicable principles and descriptions of considerations that cut across multiple source categories
- Section IV - a compilation of the summaries provided for each category sources in sections V and VI

Structure of document

- Sections V & VI - contain specific guidelines for each source category listed in Parts II and III of Annex C of the Stockholm Convention:
  - Process description
  - Sources of chemicals listed in Annex C
  - Primary and secondary measures
  - Performance standards
  - Performance reporting
  - Relevant case studies

Section V: guidance for Annex C Part II sources

1. **Waste incinerators** incl. municipal, hazardous, medical waste and sewage sludge

2. **Cement kilns firing hazardous waste**

3. **Production of pulp** using elemental chlorine or chemicals generating elemental chlorine for bleaching

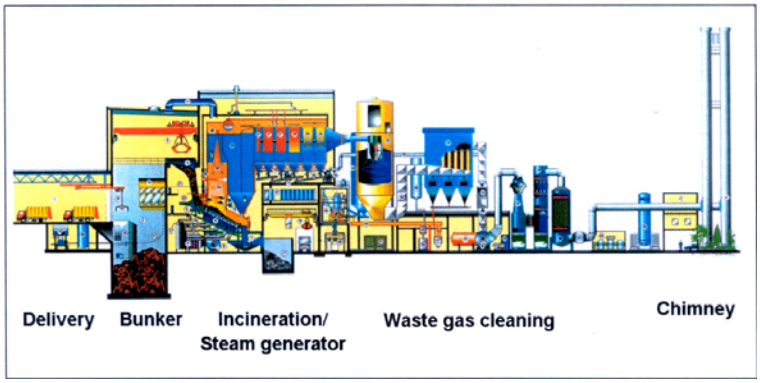
4. Some **thermal processes in the metallurgical industry:**
   - **Secondary copper production**
   - **Sinter plants in the iron and steel industry**
   - **Secondary aluminium production**
   - **Secondary zinc production**

Section VI: guidance for Annex C part III sources

- Open burning of waste, including burning of landfill sites;
- Thermal processes in the metallurgical industry not mentioned in Part II;
- Residential combustion sources;
- Fossil fuel-fired utility and industrial boilers;
- Firing installations for wood and other biomass fuels;
- Specific chemical production processes releasing unintentionally formed POPs, especially production of chlorophenols and chloranil;
- Crematoria;
- Motor vehicles, particularly those burning leaded gasoline;
- Destruction of animal carcasses;
- Textile and leather dyeing (with chloranil) and finishing (with alkaline extraction);
- Shredder plants for the treatment of end of life vehicles;
- Smouldering of copper cables;
- 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
  - 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://chm.pops.int/

Thanks!