

Keep the Promise at COP4

Measures to reduce or eliminate releases from wastes: The “Low POPs Content” – An IPEN Perspective

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Summary:

The current “low POPs content” levels provisionally set in the Basel General Technical Guidelines are much too high. Wastes are considered to have “*low POPs content*” if they contain less than 15 parts per billion (ppb) of Dioxin, or less than 50 parts per million (ppm) of other POPs. These concentrations are not protective of human health and the environment.

The Basel OEWG has made little progress towards establishing the concentration levels of the chemicals listed in Annexes A, B and C at which “*they do not exhibit the characteristics of persistent organic pollutants*” in order to define the low POPs content. The current provisional levels do not meet the requirements of the Stockholm Convention text. The continued failure to resolve this important issue not only undermines the intention of the Stockholm Convention and the effectiveness of the BAT-BEP Guidelines but can also encourage the export of hazardous, POPs-contaminated wastes from developed to developing countries to other countries unable to deal with those wastes safely.

The Stockholm Convention should therefore recover the task of establishing the “*low POPs limits*”. COP4 should add this task to the mandate of the Toolkit expert group with provisions for multi-stakeholder participation to review this matter for the purpose of developing a proposal for review at COP5.

History

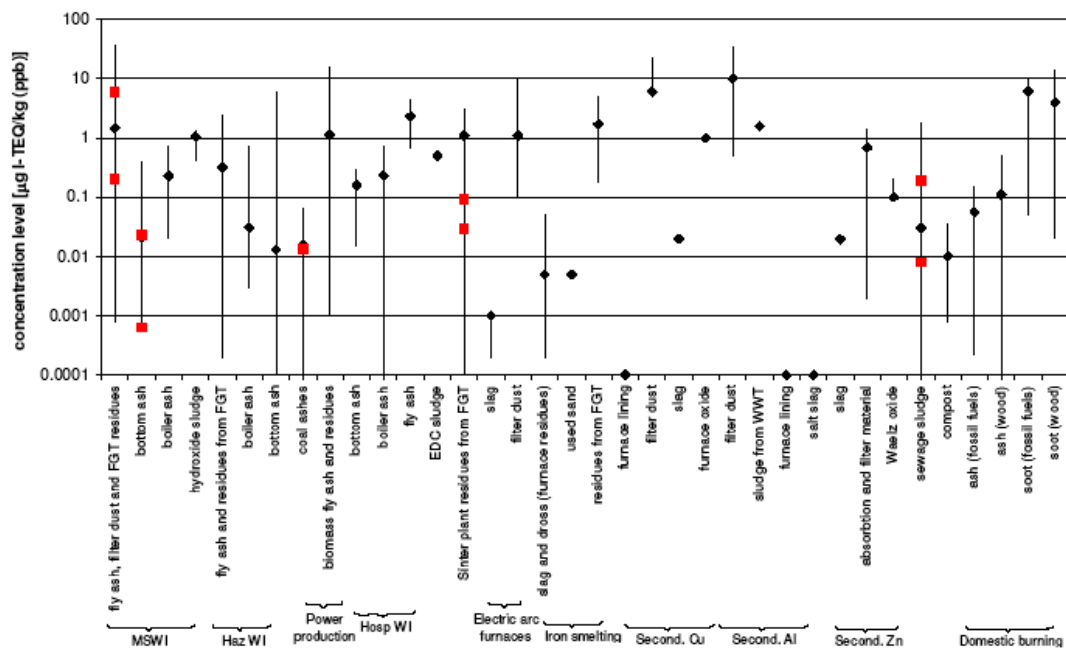
In June 2002, nearly two years before the Stockholm Convention came into force, Consultants acting for the Secretariat of the Basel Convention attempting to establish a “low POPs” limit wrote:

There is a need for setting up some ground rules for establishing a concentration level of POPs to defined as low levels of POPs by the TWG with regard to the following:

- *acceptable level of lifetime risk;*
- *representative ecological receptors and potential pathways; and*
- *toxicological characteristics/ criteria for acceptability.*

By May 2004 when the Stockholm Convention came into force no progress had been made on this. The Basel working group suggested a provisional “*low POPs*” level for PCDD/DFs in a range 1-10-50 µg TEQ/kg (ppb) and submitted these to COP7 of the Basel Convention in October 2007 . This was done without prior consultation with the Stockholm Convention in spite of the requirement of the Convention that levels should be determined in “*close co-operation*” between the Stockholm COP and appropriate bodies of the Basel Convention.

The values proposed had no technical basis. When the levels of dioxin in industrial wastes are plotted it can clearly be seen that none of the values exceed 50 µg/kg (ppb), few exceed 10 µg/kg (ppb) and even 1 µg/kg (ppb) does not unduly restrict the wastes:



The discussion in the Basel working group at the COP was not, in any case, based on the requirement to establish a level at which the wastes “do not exhibit the characteristics of persistent organic pollutants instead”. Instead, as the Earth Negotiations Bulletin confirms “while some participants supported the levels proposed by the OEWG” which was 10 mg/kg TEQ “others supported higher levels on the basis that a lower level would entail high regulatory costs and be difficult to enforce” (our emphasis).

Earth Negotiations Bulletin reported that Greenpeace “stated that the final level represents a setback from the original OEWG proposal, and does not respond to health or environmental considerations”.

It is now nearly five years since COP7 of the Basel Convention adopted the provisional levels and the Basel Open Ended Working Group has continued to control the determination process. Whilst many International standards are more protective than those promoted by the Basel Convention as can be seen on the attached table the Basel working group has made little of no progress in establishing levels which meet the definition of the Stockholm Convention. Nor has any expert group from the Stockholm Convention had an opportunity to take this important work forward.

IPEN position:

The Stockholm Convention should recover the task of establishing the “low POPs limits”. COP4 should add this task to the mandate of the Toolkit expert group with provisions for multi-stakeholder participation to review the establishment of protective “low POPs limits” which meet the requirements of the Convention for the purpose of developing a proposal for review at COP5.

Comparison of International Standards –for emissions, disposal and clean up

SOIL		
ATSDR Interim Policy Guidelines		
≤ 50 ppt	Screening level	ATSDR, 1997, 2006
≥ 50 ppt	Evaluation level – proposed ≥ 50 ppt in draft update	ATSDR, 1997, 2006
≤ 1,000 ppt		
≥ 1,000 ppt	Action level – proposed for deletion in draft update	ATSDR, 1997, 2006
Canadian Environmental Quality Guidelines		
4 ppt	Alert level	CCME, 2005a
New Zealand Interim Acceptance Criteria		
10 ppt	Agricultural	MoE, 1997
1,500 ppt	Residential	MoE, 1997
18,000 ppt	Industrial	MoE, 1997
90,000 ppt	Industrial – Paved, with Management Plan	MoE, 1997
21 ppt	Maintenance	MoE, 1997
EU Waste Incineration Directive		
0.3 ppt	release to water from waste incinerators	EU, 2000
Germany Federal and Lander Ministers of the Environment recommendations		
5-40 ppt	Agriculture	EU, 1999
100 ppt	Playgrounds	EU, 1999
1,000 ppt	Residential areas	EU, 1999
10,000 ppt	Industrial areas	EU, 1999
The Netherlands Guidelines		
1,000 ppt	Residential and agricultural areas	EU, 1999
10 ppt	Dairy farming	EU, 1999
Finland Ministry of the Environment, Department for Environmental Protection		
2 ppt	Proposed guideline	EU, 1999
500 ppt	Proposed limit value (agricultural and residential) for contaminated soil	EU, 1999
Hawaii Proposed dioxin action levels for East Kapolei Brownfield Site		
<42 ppt	Low risk, no further action required	DHH, 2006
>42 <390 ppt	Intermediate risk, further action	DHH, 2006
>390 ppt	High risk, Residential use not recommended in absence of remedial actions to reduce potential exposure.	DHH, 2006
US EPA Region 5 ecological screening levels		
11 ppt	PCDD soil guideline level	USEPA, 2003
38.6 ppt	PCDF soil guideline level	USEPA, 2003
US EPA Region 6 screening level for 2,3,7,8-TCDD		
39 ppt	Residential soil	USEPA, 2001
US EPA Region 9 preliminary remediation goal for 2,3,7,8-TCDD		
39 ppt	Residential soil	USEPA, 2000
Japan		
3ppb	Limit for solid wastes to landfill	Japan, 1971
10 pg-TEQ/l	Leaching limit	Japan XX
Czech Republic		
1 ppt	Background	BIPRO, 2006
100 ppt	Pollution limit	BIPRO, 2006
500 ppt	Action limit - living area	BIPRO, 2006
1 ppb	Action limit – recreational	BIPRO, 2006
10 ppb	Action limit – industrial	BIPRO, 2006
Denmark		
<5 ppt	Target concentration soil used for agricultural purposes	BIPRO, 2006
5 – 40 ppt	Control of products for dioxin transfer	BIPRO, 2006
>40 ppt	Restrictions on crops with minimum dioxin transfer	BIPRO, 2006
> 100 ppt	Soil exchange on children's playgrounds	BIPRO, 2006
> 1 ppb	Soil exchange in residential areas	BIPRO, 2006
> 10 ppb	Soil exchange independent of the location	BIPRO, 2006
Korea		
3 ppb	Low POPs level for solid wastes set in the Persistent Organic Pollutant Special Management Law	Jin, 2009
100 ppt	Low POPs level for liquid wastes set in the Persistent Organic Pollutant Special Management Law	Jin, 2009

Full citations can be obtained from IPEN

Keep the Promise, Eliminate POPs

IPEN- International POPs Elimination Network: www.ipen.org

EndNotes:

1. SENES Consultants Limited, *Draft Technical Guidelines for Environmentally Sound Management of Persistent Organic Pollutants Wastes* June 2002. 2002, Prepared for the Secretariat of the Basel Convention United Nations Office at Geneva: Ontario Canada.
2. Basel Convention, *UNEP/CHW.7/8/Add.1 Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal Seventh meeting Geneva, 25–29 October 2004 Item 6 of the provisional agenda* Report on the implementation of the decisions adopted by the Conference of the Parties at its sixth meeting "Technical guidelines for environmentally sound management of wastes consisting of, containing or contaminated with polychlorinated biphenyls, polychlorinated terphenyls or polybrominated biphenyls* August 2004. 2004: Geneva.
3. iisd, *Reports on the Seventh meeting of the Conference of the Parties (COP-7) to the Basel Convention 25-29 October 2004* <<http://www.iisd.ca/basel/cop7/>>, in *Earth Negotiations Bulletin*. 2004.