



Limits for definition of POPs waste proposed by IPEN

POPs waste is defined, according Article 6 of the Stockholm Convention, by setting Low POPs Content Levels (LPCLs). This establishes an important kind of “limit value” because POPs waste should be treated such that POPs are either destroyed or irreversibly transformed. **They cannot be landfilled, reused, or recycled, because POPs content in that waste would also be recycled and thus would not stop this chemical pollution from entering the environment.** Neither can POPs waste be exported to countries lacking the capacity for its destruction or transformation, which in most cases means it cannot be exported from developed to developing countries.

Currently there are set provisional Low POPs Content Levels for POPs already listed under Stockholm Convention for a longer time. Some of these “provisional” levels are not safe and do not meet requirements to protect health and environment. They were set under pressure from economic interests in certain industrial sectors.

In the table below are IPEN’s suggested LPCLs compared

with current provisional levels which are defined in General Technical Guidelines on POPs Waste.

HBCD and PBDEs

The two options currently available for LPCLs for brominated flame retardants (BFRs) give wrong message to the parties of Stockholm Convention that both options are acceptable and that level of 1000 mg/kg is a safe value. It leads to continuous use of recycled plastics with high levels of PBDEs and HBCD. It allows also exports of wastes with high levels of BFRs into developing countries. IPEN has found very serious contamination of recycled plastics containing PBDEs and brominated dioxins (PBDD/Fs), which accompany PBDEs as unintentional by-products of their production. Brominated dioxins are of similar toxicity as chlorinated dioxins (PCDD/Fs).

POP	IPEN proposal	Current Low POP content
HBCD	100 mg/kg	100 mg/kg or 1000 mg/kg
Hexa-, hepta-, tetra-, and pentabromodiphenyl ether (PBDEs)	50 mg/kg as a sum (including decabromodiphenyl ether)	50 mg/kg or 1000 mg/kg as a sum*
PCDDs and PCDFs	1µg TEQ/kg (including dioxin-like PCBs)	1µg TEQ/kg or 15 µg TEQ/kg**

* The limit value has been set for the sum of tetra-, penta-, hexa-, and hepta-BDE, because commercial mixtures have varying congener composition (see section I.B.1 of the POP-BDE guidelines), and for analytical efficiencies.

** TEQ as referred to in Annex C, part IV, paragraph 2, to the Stockholm Convention, but only for PCDDs and PCDFs.

Dioxins (PCDDs and PCDFs) and dioxin-like PCBs (dl PCBs)

It was found that contamination of soil with levels 0.05 µg TEQ/kg – or even less – in soil can lead to serious pollution of the food chain, to simply unacceptable levels of dioxins in food, such as poultry meat and eggs or sea food (fish, crabs). Contamination of soil at this critical level can be reached by unsafe disposal of waste with levels of PCDD/Fs 1 µg TEQ/kg or lower.

A recently published study has revealed several cases where processed waste contained PCDD/Fs levels between 20 and 12,000 pg TEQ/g (0.02 and 12 ppb). Based on these findings IPEN suggest LPCL be set to 1 µg TEQ/kg. This is the acceptable maximum limit for POPs waste in combination with a ban on the use of waste above 0.05 µg TEQ/kg without any pretreatment on soil surface.

The current provisional level of LPCL for PCBs is defined using only their *intentionally* produced congeners. **Levels don't reflect unintentional POPs products.** Therefore we suggest to include those under LPCL for PCDD/Fs, as they



THE PRICE FOR WEAK LIMITS FOR DIOXINS IN WASTE?
7KG OF DIOXINS RELEASED TO THE ENVIRONMENT PER YEAR

THAT'S 133x TOLERABLE INTAKE FOR THE ENTIRE PLANET

DEMAND A STRICT LIMIT FOR DIOXINS IN WASTE: 0.001 MG TEQ/KG

IPEN.ORG AFNIKA.ORG #StopDioxinPollution

nearly always accompany PCDD/Fs and are found together in measurements of wastes and other matrices.

Leaving current provisional LPCL for dioxins will leave out of control approximately 7.5 - 10 kg TEQ of dioxins in wastes every year globally. **Seven and a half kilograms may seem small, but it is equal to tolerable daily intake of dioxins for global population of 133 planet Earths.**

Proposed levels of LPCL for short chained chlorinated paraffins (SCCPs)

Considering SCCPs' demonstrated long-range transport and ability to accumulate, there is a potential for increases in environmental levels should releases continue or increase.

The EU proposal would result in these kinds of increased releases. Our suggestion for LPCL of 100 ppm is based on available science, including the report prepared by BiPRO for the German Federal Environment Agency in 2015.

POP	IPEN proposal	Current Low POP content
SCCPs	100 mg/kg	10,000 mg/kg
PFOA and related compounds	0.25 mg/kg for PFOA and salts; 10 mg/kg	50 mg/kg

