## Review of the Forest Stewardship Indicators and Thresholds for identifying "highly hazardous pesticides"

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FSC-GUI-30-001 V2	FSC Pesticide Policy: Guidance on implementation		
Annex I	Indicators and thresholds for the identification of 'highly hazardous1'		
	pesticides		
Normative reference	FSC-POL-30-001		
	FSC-PRO-01-004		
	FSC-ADV-30-002		
Effective date	DRAFT VERSION		
Background			

## Font Red : Amendments/adding edited and aggreed by the panel of experts

Criterion	Indicator	Threshold
Quantitative or semi-quantita         1. Acute toxicity to mammals and birds         2. Carcinogenicity	<ol> <li>WHO toxicity class (active in- gredients)</li> <li>Acute toxicity (oral LD50 for rats/birds or by inhalation)</li> <li>Carcinogen or probable car- cinogen according to Interna- tional Agency for Research on Cancer (IARC)</li> <li>US Environmental Protection Agency (US EPA)</li> <li>Globally harmonized System (GHS) as classified by na- tional/international authorities.</li> </ol>	<ul> <li>WHO toxicity class la/lb</li> <li>If acute oral LD50 for rats/birds ≤ 200 mg/kg bodyweight (bw) (for most sensitive mammal/bird)</li> <li>GHS Hazard Statement H330 "Fatal if</li> <li>If listed in any category: <ul> <li>a) IARC) Group 1: 'The agent (mixture) is carcinogenic to humans', or IARC Group 2A: 'The agent (mixture) is probably carcinogenic to humans';</li> <li>(b) Pesticides which are carcinogenic and probable or likely carcinogenic to humans as classified by the US.EPA. This Applies to pesticides in Categories: "A", "B" (1986<sup>2</sup>);</li> <li>"Known/Likely" (1996) and "Likely to be carcinogenic" and "Carcinogenic to humans (1999, 2005-current).</li> <li>c) GHS IA and IB for carcinogenicity as classified by national/international authorities.</li> <li>d) GHS 2 as classified by national/international authorities or classified as "Suggestive Evidence of Carcinogenic Potential" resp. "Group CPossible Human Carcinogen" by the US EPA</li> </ul> </li> </ul>
3. Mutagenicity to mam- mals	1. Mutagenicity classification of Global Harmonized System (GHS) <sup>3</sup>	a) GHS Categories IA and Ib for mutagenicity as classified by national/international authorities.
4. Developmental and reproductive toxin	1. Classification for reproductive toxicants of the Global Harmo- nized System (GHS) <sup>4</sup>	a) GHS Categories IA and Ib for reproductive toxicity as classified by national/international authorities.

 <sup>&</sup>lt;sup>1</sup> See Annex II for more details
 <sup>2</sup> Years refers to the year when a certain classification *narrative* was established and used.
 <sup>3</sup> See Annex II for more details
 <sup>4</sup> See Annex II for more details

Criterion		Threshold
5. Endocrine disrupting chemical (EDC)	<ol> <li>EDC listed and/or classified by the EU</li> </ol>	<ul> <li>a) If classified as EDC category 1 or 2 by EU</li> <li>b) Classified in GHS Category 2 for Carcino- genicity AND Category 2 Reproduction<sup>5</sup> as classified by national/international authori- ties.</li> </ul>
6. Acute toxicity to aquatic organisms or honey bees	<ol> <li>Aquatic toxicity (LC50, EC50)</li> <li>Toxicity to honey bees</li> </ol>	<ul> <li>a) If LC50/EC50 &lt; 100 μg/l (microgrammes per liter)</li> <li>b) Daphnia as the test organism or other invertebrate or vertebrate aquatic organisms that show greater sensitivity than Daphnia. Acute test duration up to 96 hours.</li> <li>c) If LD50/LC50 (oral or contact &lt; 2 μg/bee (microgrammes per bee)</li> </ul>
<ul> <li>Persistence in soil or water and Soil sorp- tion potential.</li> <li>The target of protection is surface and ground water.</li> </ul>	<ol> <li>Half-life in soil or water (DT50)</li> <li>Soil sorption coefficient (Koc)</li> <li>Water solubility (S)</li> </ol>	a) If 'persistent' (DT50 ≥ 90 days) and com- bined with: - EITHER low Koc (< 300ml/g) -AND/OR high water solubility (> 30mg/l).
8. Bio-magnification, bio- accumulation	1. Octanol-water partition coef- ficient (KOW)	<ul> <li>a) If BCF ≥ 1000 or if KOW &gt; 1000 i.e. logP (KOW) &gt; 3</li> </ul>
	<ol> <li>bio- concentration factor (BCF) or</li> <li>bio-accumulation factor (BAF)</li> </ol>	b) BCF data supersede logP (KOW) data.
9. International legislation	1. Regulated by international agreement	<ul> <li>a) If banned by international agreement under the POP convention</li> <li>b) Listed in Annex III of the Rotterdam Con- vention</li> </ul>
		<ul> <li>c) Listed as ozone depleting substance un- der the Montreal Protocol</li> </ul>

<sup>5</sup> See Annex II for more details

Criterion	Indicator	Threshold
10. Dioxins (residues or emissions)	1. Equivalents of 2,3,7,8-TCDD	<ul> <li>a) If contaminated with any dioxins at a level of 10 part per trillion (corresponding to10ng/kg) or</li> <li>b) greater of tetrachlorodibenzo-p-dioxin (TCDD) equivalent, or</li> <li>c) if it produces such an amount of dioxin[s] when burned.</li> </ul>