



CONSULTATION REPORT OF FSC- POL-30-001A V1-1 D1-0

Lists of Highly Hazardous Pesticides

13/02/2024



Title: Consultation Report of FSC-POL-30-001a V1-1 D1-0

Contact for comments: FSC International – Performance and Standards Unit
Adenauerallee 134
53113 Bonn
Germany

Phone: +49 -(0)228 -36766 -0

Fax: +49 -(0)228 -36766 -30

Email: psu@fsc.org

**© 2024 Forest Stewardship Council, A.C. All Rights Reserved
FSC® F000100**

You may not distribute, modify, transmit, reuse, reproduce, re-post or use the copyrighted materials from this document for public or commercial purposes, without the express written consent of the publisher. You are hereby authorized to view, download, print and distribute individual pages from this document subject for informational purposes only.

CONTENT

A.	Background Information	4
B.	Key changes made in the accelerated revision process	5
C.	Main stakeholders who provided responses in the focused consultation	6
D.	Key insights raised in the consultation responses	8
C.1	Key insights and responses obtained from Question 1.	8
C.2	Aggregated comments and FSC response.	9
E.	Abbreviations	14

A. BACKGROUND INFORMATION

FSC requires certified Organizations to use integrated pest management (IPM) to avoid, or aim to eliminate, the use of chemical pesticides in management units (MU) and minimize risks to human health and the environment while maintaining economically viable management.

However, in certain circumstances, after having identified and determined the likely impacts of a pest, weed or disease and having considered all available pest management strategies, the use of chemical pesticides may be identified as the most suitable control. The <[FSC-POL-30-001 FSC Pesticides Policy](#)> regulates the use of chemical pesticides in these situations.

The FSC Pesticides Policy is based on the following main considerations:

1. First, highly hazardous pesticides (HHPs) are identified and categorized as prohibited, highly restricted or restricted according to their hazard;
2. Second, where integrated pest management (IPM) identifies the need to use a permitted chemical pesticide as a measure of last resort, an environmental and social risk assessment (ESRA) is conducted at different levels to identify the nature and degree of risk together with the measures for mitigation, and the monitoring requirements.
3. The Policy highlights the importance of repairing and compensating for any damage to environmental values and human health and of monitoring both the use of pesticides and the impact of the Policy itself.

The FSC Pesticides Policy requires that the Lists of Highly Hazardous Pesticides are updated at least every 3 years, based on existing criteria, indicators and thresholds to reflect potential changes made to the classification of the active ingredients in the international sources listed in Annex 1 of the FSC Pesticides Policy. This update may lead to the incorporation of new HHPs, exclusion of HHPs or reclassification of HHPs.

The latest update of the FSC Lists of HHPs has been conducted between May 2023 and March 2024 through an accelerated revision process as described in <[FSC-PRO-01-001 The Development and Revision of FSC Requirements](#)>.

For this exercise, FSC has established an internal working group supported by two independent technical experts.

FSC conducted a focused consultation between 1 August and 30 September 2023. The consultation material for the focused consultation was:

1. FSC-POL-30-001a V2-0 D1-0 Lists of Highly Hazardous Pesticides (updated draft version of the addendum).
2. Supporting material: Changes in Draft 1-0.

This consultation report delivers:

1. a list of key changes made in the accelerated revision process;
2. a list of main stakeholder groups who provided responses in the focused consultation;
3. a list of the key insights raised in the consultation responses;
4. Technical working group responses to the key insights.

B. KEY CHANGES MADE IN THE ACCELERATED REVISION PROCESS

As a result of the update of the Lists of FSC HHP, 41 changes were identified.

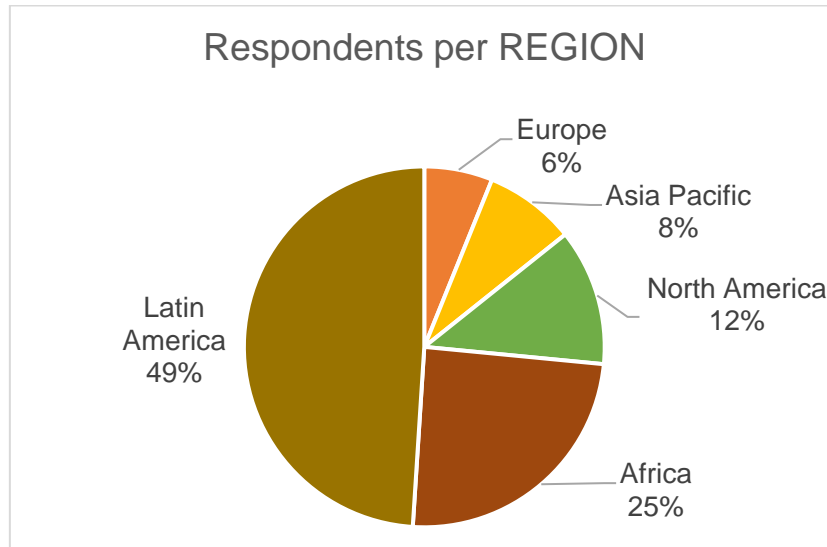
These changes include:

- a. 8 changes made to the List of FSC Prohibited HHP.
 - 2 pesticide active ingredients were brought from the List of FSC Highly restricted HHP.
 - 1 pesticide active ingredient was brought from the List of FSC Restricted HHP.
 - 5 pesticide active ingredients remain on the List of FSC Prohibited HHP (had updates in their criteria).
- b. 11 changes made to the List of FSC Highly restricted HHP.
 - 2 new pesticide active ingredients.
 - 3 pesticide active ingredient were brought from the List of FSC Restricted HHP.
 - 6 pesticide active ingredients remain on the List of FSC Highly restricted HHP (had updates in their criteria).
- c. 17 changes made to the List of FSC Restricted HHP.
 - 2 new pesticide active ingredients.
 - 1 pesticide active ingredient was brought from the List of FSC Prohibited HHP.
 - 1 pesticide active ingredient was brought from the List of FSC Highly restricted HHP.
 - 13 pesticide active ingredients remain on the List of FSC Restricted HHP (had updates in their criteria).
- d. 5 deleted pesticide active ingredients from the Lists of FSC HHP.
 - all from the List of FSC Restricted HHP.

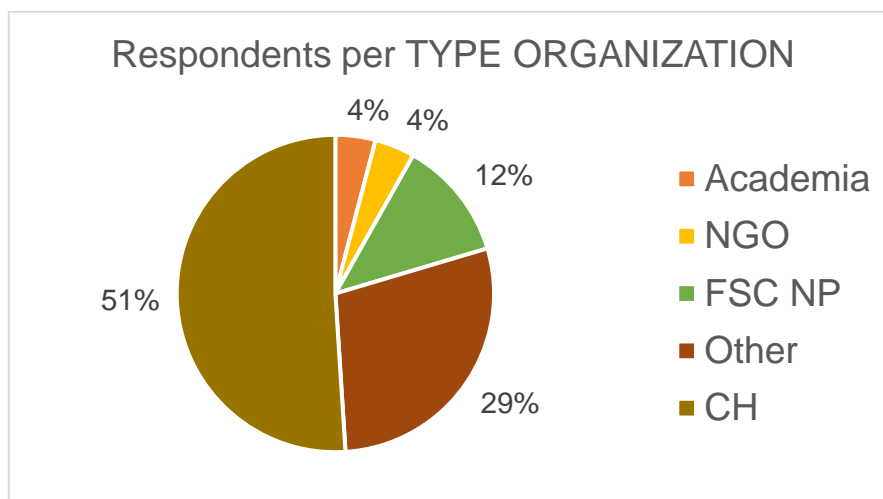
C. MAIN STAKEHOLDERS WHO PROVIDED RESPONSES IN THE FOCUSED CONSULTATION

49 people responded to the focused consultation questions.

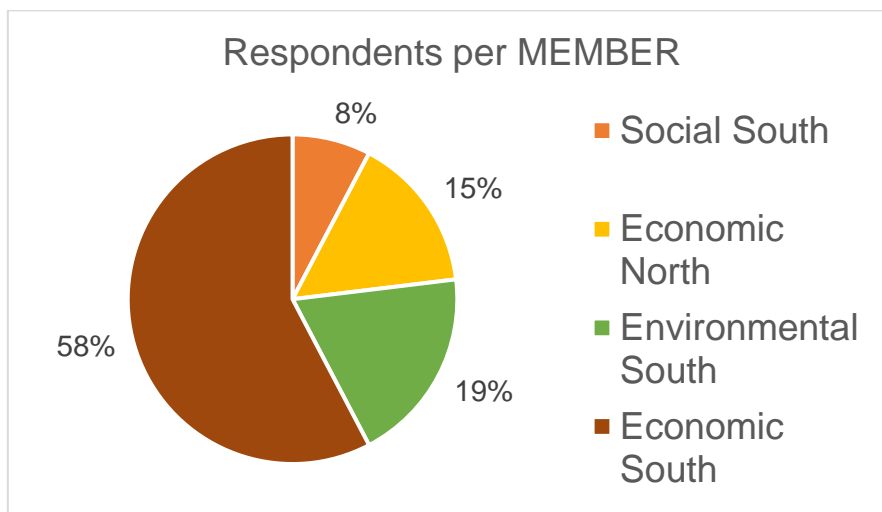
Almost half of the respondents are from Latin America, followed by Africa.



Half of the respondents are FSC certificate holders, followed by "others" (category that includes governmental organizations, consultant, interested actor), and by FSC network partners.



More than half of the respondents were FSC members. From them, almost three quarters belong to the economic chamber, followed by Environmental South.



D. KEY INSIGHTS RAISED IN THE CONSULTATION RESPONSES

The scope of the revision of the <FSC-POL-30-001a FSC Lists of Highly Hazardous Pesticides> is to update the lists of active ingredients based on existing criteria, indicators and thresholds and agreed sources defined in <FSC-POL-30-001 FSC Pesticides Policy>. It is not in the scope of this accelerated process to modify the existing criteria, indicators and thresholds defined in <FSC-POL-30-001 FSC Pesticides Policy>.

C.1 Key insights and responses obtained from Question 1.

- Question 1:** To what extent do you agree that this draft version of the updated FSC Lists of HHPs accurately reflects the classification of pesticides that meet the criteria, indicators and thresholds presented in FSC-POL-30-001 FSC Pesticides Policy according to the sources listed in Annex 1 of the Policy?

Results:

84% of the respondents agree between 50% and 100%. 41% of respondents agree to an extent of “50%” with the draft.

It was found that many of the respondents who chose answers of the type 0%, 25% or 50%, also provided responses to questions 2 to 6 that reflect that their disagreement is for reasons that are outside of the scope of this revision process.

The tables below show the responses to Question 1 per region, type of organisation and membership.

Region	Question 1 types of answers (range 0% - 100%)							Total	%
	0	25	50	75	100	NA*			
Latin America		1	16	4	3		24	49%	
Africa			2	2	4	4	12	24%	
North America			1	3	2		6	12%	
Asia Pacific	1	1	1		1		4	8%	
Europe	1			1	1		3	6%	
Total	2	2	20	10	11	4	49	100%	
%	4%	4%	41%	20%	22%	8%	100%		

Organisation	Question 1 types of answers (range 0% - 100%)							Total	%
	0	25	50	75	100	NA*			
Certificate Holder	1		6	8	7	3	25	51%	
Other		2	8	1	2	1	14	29%	
FSC Network Partner			4	1	1		6	12%	
Academia			1		1		2	4%	
NGO	1		1				2	4%	
Total	2	2	20	10	11	4	49	100%	
%	4%	4%	41%	20%	22%	8%	100%		

Membership	Question 1 types of answers (range 0% - 100%)							Total	%
	0	25	50	75	100	NA*			
Economic South		1	5	4	4	1	15	58%	
Environmental South			2		2	1	5	19%	
Economic North			1	2	1		4	15%	
Social South		1		1			2	8%	
Total	0	2	8	7	7	2	26	100%	
%	0%	8%	31%	27%	27%	8%	100%		

* NA indicates “Does not apply”. This occurred when responses to Question 1 and 2 conflicted with each other.

C.2 Aggregated comments and FSC response.

- **Question 2:** Please briefly explain your rationale and/or include suggestions for improvement.
- **Question 3:** Do you identify further changes to be included to the List of FSC Prohibited HHP, according to the criteria, indicators, thresholds, and official sources of information presented in the FSC Pesticides Policy? Please briefly explain your rationale.
- **Question 4:** Do you identify further changes to be included to the List of FSC Highly Restricted HHP, according to the criteria, indicators, thresholds, and official sources of information presented in the FSC Pesticides Policy? Please briefly explain your rationale.
- **Question 5:** Do you identify further changes to be included to the List of FSC Restricted HHP, according to the criteria, indicators, thresholds, and official sources of information presented in the FSC Pesticides Policy? Please briefly explain your rationale.
- **Question 6:** Do you identify any risks or opportunities related to the proposed changes presented in the draft version? Please briefly explain your rationale and refer to specific active ingredients.

Nr	Topic	Comment	FSC response
1	Pesticides not considered in the Draft 1-0 (Questions 2, 5, 6)	<p>1) Pesticides 'recommended for listing' in the Stockholm Convention (chlorpyrifos, PFCA, chlorinated paraffins) were not considered.</p> <p>2) Pesticides in World Health Organization (WHO) updated listings were not taken into account (Mercuric acid-WHO 1a, phenylmercury acetate-WHO 1a, Benzovindiflupyr-WHO1b)</p> <p>3) Pesticides on both the 'recommended for listing' lists of both Rotterdam and Stockholm Conventions needs to be included.</p> <p>4) Consult the WHO, 2019 manual to ensure all WHO 1a and 1b pesticides are listed. The European Union (EU) has put out a list of 'Chemicals banned and/or severely restricted in the EU' as listed in Annex 1 to Regulation (EU) No 649/2012. Maybe this list should also be considered as it might have an impact on the forestry plantations in the EU member states?</p>	<p>1) The comment is unfortunately out of scope of this revision. The scope of the update of the lists of FSC HHPs is to incorporate changes in the identification and classification of HHPs according to criteria, indicators and thresholds, and sources specified in <u>FSC-POL-30-001 FSC Pesticides Policy</u>. The pesticides mentioned are "Proposed for listing" under the Stockholm Convention, not "Recommended for listing by the Chemical Review Committee" which leads to voting in the COP (Conference of the Parties). They are not included in the FSC prohibited list because, according to the agreed criteria, only the pesticides evaluated by the Persistent Organic Pollutants Review Committee (POPRC) and therefore recommended for listing are added to the FSC prohibited list.</p> <p>2) 'Mercuric acid' is not mentioned as such in the WHO Recommended Classification of Pesticides by Hazard, but 'mercuric acid' can be used as a synonym of 'mercuric oxide', which is classified as class Ib by WHO and included in the FSC prohibited list under "mercury and its compounds". Phenylmercury acetate is included as well. According to the WHO classification of 2019 Benzovindiflupyr is classified as Moderately hazardous (Class II - see the corrigenda done 2020)</p> <p>3) The comment is unfortunately out of the scope of this revision. Moreover, this is already included in the criteria and reflected in the lists and their revisions.</p> <p>4) The 2019 WHO Recommended Classification of Pesticides by Hazard is indeed one of the used sources. All of the pesticides listed under WHO's recommendations are included in the FSC lists, with the exception of Allyl alcohol as it is considered obsolete and Thallium sulfate was dismissed as pesticides by several countries long ago. Annex 1 to Regulation (EU) No 649/2012 is not used as a source, so this is out of scope of this revision. For precision, the Regulation lists in Part 1 chemicals subject to export notification procedure, in Part 2 chemicals qualifying for - The Rotterdam Convention on the Prior Informed Consent Procedure - (PIC) notification, in part 3 chemicals subject to the PIC procedure.</p>

Nr	Topic	Comment	FSC response
2	Identified changes to the Prohibited List (Question 3)	<p>1) Parathion is listed under WHO as Severely Hazardous Pesticide Formulations (SHPF), but Parathion-methyl is listed as SHPF in the table, this is incorrect.</p> <p>2) Mercury and its compounds should be listed under WHO 1a as well as mercuric acid.</p> <p>3) 1,3-dichloropropane should remain on prohibited listed as it is acutely toxic, carcinogen in the Globally Harmonized System for Classification and Labelling of Chemicals (GHS) 1a, H 301. 304, 311, 319, 331, 335 (PubChem)</p>	<p>1) Parathion methyl is listed under Rotterdam Convention as "Pesticide formulation" and the lists reflect the correct entry "SHPF". Parathion is as active ingredient and the lists do not reflect "SHPF". Therefore, the entries are correct.</p> <p>2) Not all mercury compounds are classified by "WHO Acute Guidelines" as WHO Class I because of their different hazard characteristics. Mercuric acid is not mentioned as such in the WHO Guidelines, but mercuric acid can be used as a synonym of mercuric oxide, which is classified class Ib by WHO and included in the FSC prohibited list.</p> <p>3) 1,3 -dichloropropene it is not carcinogenic according to GHS and it has been downgraded by the United States Environmental Protection Agency (EPA) as well, so following the new classifications it according to the rationale it is correctly classified under "restricted".</p>
3	Identified changes to the Highly Restricted List (Question 4)	To add Benzovindiflupyr - WHO1b - to the Lists of HHP as per WHO, 2019.	According to the most recent WHO classification (2019) Benzovindiflupyr is classified as Moderately hazardous (Class II - see the corrigenda done 2020)
4	Identified changes to the Restricted List (Question 5)	There are some pesticides on this list that feature on the PIC candidate chemicals list which are pesticides of concern for low- and middle-income countries, like azinphos-ethyl, chlorpyrifos, diazinon, dichlorvos, fenamiphos, methomyl, paraquat, etc which are targeted for phase-out and/or banning.	The comment is unfortunately out of the scope of this revision. The scope of the update of the lists of FSC HHPs is to incorporate changes in the identification and classification of HHPs according to criteria, indicators and thresholds, and sources specified in FSC-POL-30-001 FSC Pesticides Policy .
5	General classification of active ingredients (Questions 2, 5, 6)	Disagreement with the new list because active ingredients are classified as prohibited based on a particular situation present in a country and because the formulation is not considered.	The comment is unfortunately out of the scope of this revision. The agreed criteria of the FSC HHPs list defined prohibition/restriction based upon the properties of the active ingredient, not on specific countries' needs nor on individual formulations unless in specific cases as the SHPF classified under the Rotterdam Convention.

Nr Topic	Comment	FSC response
<p>6 Specific classification of active ingredients (Questions 2, 5, 6)</p>	<p>1) Fipronil: the risk identified for the classification of Fipronil refers to productive issues, being the only option available to date on the market for ant control.</p> <p>2) Iprodione: disagreement with the new list because the active ingredient is classified as prohibited based on a particular situation present in a country, which is not the case in all countries.</p> <p>3) Formulation: in the case of a specific molecule, the formulation used is not considered.</p> <p>4) Imidacloprid: difference observed in terms of the value of aquatic toxicity for crustaceans (environmental) identified a value in the 96-hour acute form LC₅₀ (mg l⁻¹): 0.00014 being the value that arises from the sources cited as reference 96 acute hours LC₅₀ (mg l⁻¹): 0.034.</p> <p>5) Imidacloprid: FSC toxicological evaluation based on the database of the University of Hertfordshire which considers <i>Americamysis bahia</i> as a test organism, a species found in marine environments in the northern hemisphere. Toxicological analysis carried out by the Brazilian Institute (IBAMA), classifies Imidacloprid as "moderately toxic" for the test organism <i>Daphnia magna</i>, a freshwater microcrustacean. Important that the FSC includes toxicological references of pesticides from the countries in which they will be used.</p> <p>6) Disagreement with having glyphosate on the HHP list. Fipronil should not be on this list.</p>	<p>1) The change of Fipronil from the Restricted List to the Highly Restricted List does not inflict a prohibition. Indeed, if it's the only possible option and it can be proven following the environmental and social risk assessment (ESRA), then it can be used under control.</p> <p>2) The agreed criteria of the FSC HHPs list defined prohibition/restriction based upon the properties of the active ingredient, not based on countries' needs. Iprodione is now recommended for listing under the Annex III of the Rotterdam Convention, therefore is now in the FSC Prohibited list.</p> <p>3) The agreed criteria of the FSC HHPs list defined prohibition/restriction based upon the properties of the active ingredient, not on individual formulations unless in specific cases as the SHPF classified under the Rotterdam Convention.</p> <p>4) Some species can be less sensitive to a pesticide than others, that is the reason that the "Indicator and Threshold" demand to consider the most sensitive value. However, being the FSC threshold 0,05 mg/l; 0,034 would have been below this threshold, it would therefore meet the criterion anyways.</p> <p>5) It is known that <i>Daphnia magna</i> is a rather insensitive species towards imidacloprid and therefore not suitable to represent the aquatic invertebrate fauna in this case. The difference in sensitivity is the reason that the "Indicator and Threshold" demand to consider the most sensitive value. Regardless of whether the species is a freshwater or saltwater species. There is currently no indication that tropical species are less sensitive to pesticides than temperate species, therefore there is no reason to change the indicators and threshold or the references - which is not in the scope of this update.</p> <p>6) The comment is unfortunately out of scope of this revision. Fipronil and glyphosate meet the criteria, indicators and thresholds to be on the HHP lists.</p>

Nr	Topic	Comment	FSC response
7	General suggestions (Questions 2, 5, 6)	<p>1) FSC should go further, apply independent field work to collect data and create a spot to specify the risk of those pesticides describing them further.</p> <p>2) With the global implementation of the GHS system in many countries, I believe there is the opportunity to align the FSC system with this to make it easier for CHs to implement. I see the opportunity to make it easier to implement if there is only one system (vs. the plethora it currently has, resulting in a very technical and cumbersome process).</p>	<p>1) The comment is unfortunately out of the scope of this revision. The scope of the update of the list of FSC HHPs is to incorporate changes in the identification and classification of HHPs according to previously agreed criteria, indicators and thresholds, and sources.</p> <p>2) The comment is unfortunately out of the scope of this revision. GHS is not one unique system, and it could be different in different countries. There are still no publicly available comprehensive lists of classification for active ingredients (except from Japan and the EU (Australia applies the EU list). The results of the JP and EU GHS are not always equal: Japan has partly different classification than the European Union for the same chemical, because the data "entering" the GHS may differ (toxicity studies with different outcomes will lead to different classifications regardless the GHS) - so the GHS will not entirely harmonize the toxicity classifications. Using accepted and official classifications as the WHO, EPA, the listing of the International Conventions along the GHS system makes the rationale more solid and independent. The GHS is applied in some countries for the formulated products.</p>

The FSC Forest Management team thanks very much all participants in the focused consultation for their valuable contributions.

Please find more about this revision process on the [dedicated process page](#) on FSC Connect.

E. ABBREVIATIONS

CH	Certificate holder
ESRA	Environmental and Social Risk Assessment
EU	European Union
FSC	Forest Stewardship Council
GHS	Globally Harmonized System for Classification and Labelling of Chemicals
HHP	Highly Hazardous Pesticide
IPM	Integrated Pest Management
MU	Management unit
PIC	The Rotterdam Convention on the Prior Informed Consent Procedure
SHPF	Severely Hazardous Pesticide Formulations
WHO	World Health Organization



FSC International – Performance and Standards Unit

Adenauerallee 134

53113 Bonn

Germany

Phone: +49 -(0)228 -36766 -0

Fax: +49 -(0)228 -36766 -30

Email : psu@fsc.org