



Food and Agriculture  
Organization of the  
United Nations



## **BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS**

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**Sub-regional workshop for enhancing effective  
participation in the work of the  
CRC and POPRC;  
Lusaka  
Zambia  
10<sup>th</sup>-12<sup>th</sup> February,  
2015**

**Report of the Workshop**



# BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS

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## I. Introduction

1. Following the need for countries party to the Basel, Rotterdam and Stockholm Conventions to update their National Implementation Plans, the Secretariats of the Basel, Rotterdam and Stockholm (BRS) Conventions in collaboration with the Basel Convention Coordinating Centre for the Africa Region in Nigeria (BCCC-Nigeria) organized a 3 (three)-day training workshop in Lusaka, Zambia between the 10-12 February, 2015.
2. The Workshop's aim was at enhancing participants' understanding of the processes for reviewing and listing chemicals as well as to provide opportunities for information exchange and networking among Committee members, experts, Parties and observers. In addition, the Workshop aimed at providing a forum to discuss and explore a synergized approach for the implementation of the conventions at the national and regional levels. The Workshop included lectures, group exercises and training sessions, based primarily on the documentation to guide the work of the two subsidiary bodies ("Handbook for effective participation in the POPs Review Committee under the Stockholm Convention"; "Working procedures and policy guidance for the Chemical Review Committee"; "Pocket guide for effective participation in the Chemicals Review Committee"). The participants undertook case study exercises to allow them to acquire the necessary skills to submit information relevant to the reviewing of chemicals under both subsidiary bodies. The Workshop also highlighted relevant outcomes of the tenth meeting of the Chemical Review Committee and the tenth meeting of the POPs Review Committee held in Rome in October of 2014.

## II. Opening ceremony

3. The regional workshop on enhancing effective participation in the work of the CRC and POPRC Began at 9am and was opened by the Mr. Joseph Sakala, Director-General of the Zambian Environmental Management Agency who was represented by the Principal Inspector of the Zambian Environmental Management Agency, Mr. David Kapindula.
4. Mr. David Kapindula delivering the speech welcomed participants on behalf of the Government of Zambia. He highlighted in his speech that since 2009, joint workshops on enhancing the effective participation in the work of the Rotterdam Convention's CRC and the Stockholm Convention's POPRC have been held in Asia, Latin America, and Anglophone Africa and that these workshops have provided opportunities for information exchange and networking among the committee members and enhanced the understanding of parties and stakeholders on the work of the scientific bodies in those regions.
5. In closing he reminded the participants that the workshop was not only of National or Regional significance but of Global importance.
6. Also giving an opening remark at the workshop was Prof. Oladele Osibanjo from the Basel Convention Coordinating Centre for the Africa Region, Nigeria.
7. In his opening remarks he pointed out that mankind can hardly survive on earth without chemicals as they provide important benefits, with uses in many areas such as agriculture, medicine, industrial manufacturing, energy extraction and generation, public health and disease vector control.
8. He however also pointed out the danger of chemical releases into the environment from unsustainable production and consumption activities and their resultant negative effect on human health and the ecosystems.
9. Stressing that the best known and globally addressed chemical group were Persistent Organic Pollutants (POPs).

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10. He mentioned that POPs are, persistent in environment & in organism/body, toxic to humans/biota and mobile in the environment
11. In closing he pointed out that the elaboration and implementation of Multilateral Environmental Agreements (MEAs) on chemicals and wastes such as the (Basel, Stockholm, Rotterdam, SAICM etc.) are valuable tools for ensuring environmentally sound and safe management of chemicals along their lifecycle; hence the need for the Workshop.

### III. Objectives of the workshop

12. Prof. Oladele Osibanjo also took time to outline the objective of the workshop; which was to:
  - I. Enhance the understanding of all stakeholders of the processes for reviewing and listing chemicals under the Conventions.
  - II. Increase the understanding of information requirements and support participation of Parties and stakeholders in the process
  - III. Provide opportunities for information exchange and networking among Committee members, experts, Parties and observers
  - IV. Explore an integrated approach in chemicals management at the national and regional levels.
13. The round table introduction of experts and participants followed which was anchored by Mr. Mario Yarto from the BRS Secretariat. All participants expressed their gratitude to be invited to the workshop. Representatives from the following 12 countries attended the workshop: Ethiopia, Gambia, Kenya, Lesotho, Malawi, Somalia, Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe.
14. Participants from Botswana, Eritrea, Namibia and Seychelles were unable to attend.
15. A brief video interview featuring Reiner Arndt, former Chair of the POPRC, was watched by all participants.
16. In the interview Mr. Arndt highlighted the two scientific parts of the work of the POPRC
17. The first which involves the screening process to determine if a chemical is a POP.
18. Secondly the process of evaluating the chemical (Risk profile and Risk Management Evaluation) to determine if global action is warranted.
19. In responding to how parties could be more active in the work of the POPRC, Mr. Arndt pointed out the need for developing countries to collect relevant information so as to be able to make relevant contributions.

**10<sup>th</sup> February, 2015**

**Day 1**

**IV. Technical Session 1: Process for listing under the Stockholm Convention**

20. The proceedings began with a brief overview of the 'key obligations and process for listing under the Stockholm Convention', a presentation, which was given by Prof. Azhari Abdelbagi vice chair of the POPs Review Committee.

**V. Working groups on Candidate POPs to be included in Annexes A, B and/or C to the Stockholm Convention were formed.**

21. Participants were then divided into 2 working groups to identify steps to be taken and actors to be involved in listing chemicals under the Stockholm convention and also on how to collect information for risk profiles.
22. The chemical Dicofol was used as a case study.
23. Participants were given access to the internet and materials from which to build a risk profile in accordance with the provisions of Annex E.
24. Discussions were facilitated by Prof. Oladele Osibanjo from the BCCC-Africa, Ms. Francesca Cenni & Mr. Mario Yarto from the BRS Secretariat.
19. Reporting back to plenary, participants pointed out that:
- I. The process of filling the forms for the Risk Profile was quite challenging
  - II. The required data base for building the risk profile was unavailable
  - III. Although certain materials were provided for the exercise there was not enough time to extract the relevant information.
  - IV. The gathering of information from different sources was also challenge.
20. The proceedings continued with a presentation by Ms. Caroline Njoki Wamai, Senior Principal Chemist, Ministry of Transport and Infrastructure, Kenya and POPs Review Committee member.
21. She gave a presentation on the effective participation of countries in the process for listing under the Stockholm convention: experience of Kenya.
22. Ms. Wamai during her presentation pointed out that although Kenya had not sent any proposals to the Secretariat for any chemical to be listed; Kenya was currently engaged in promoting and developing of alternatives to POPs that need to be up-scaled to the level of commercialization.
23. She pointed out the need to assist developing-country parties and parties with economies in transition to participate effectively in the work of the Committee, through training opportunities such as organization of webinars, face to face and online meetings.
24. She further added that these trainings be aimed at building the capacities of parties, training incoming Committee members and training-trainers.
25. The need to encourage academic community, research institutions and companies to contribute their knowledge and experience as well as the need to develop tools to facilitate the sharing of information and resources such as training modules and videos was also highlighted
26. The last exercise for the day saw both groups carrying out an exercise on collecting information for a Risk Management Evaluation for Decabromodiphenyl ether which was the example being considered.

27. Reporting back to plenary, participants pointed out that:
- I. They lacked some measure of capacity in filling out the forms
  - II. Some of the information requested in the Socio-economic cost evaluation might require the expertise of an Environmental Economist for meaningful contributions to be made.
28. The day ended with Mr. Mario Yarto appreciating all participants for their efforts and contributions.

## **11<sup>th</sup> February 2015**

### **Day 2**

#### **VI. Technical session 2: Process for listing under the Rotterdam Convention**

29. At the beginning of the morning session a presentation was given by Mr. Omar Samba Bah 'brief overview of the key obligations and process for listing under the Rotterdam Convention. The presentation also featured a video which clearly outlined the procedure for listing under the Rotterdam Convention.
30. This was followed by a presentation by Francesca Cenni from the BRS secretariat on the concept of 'bridging'.
28. Most participants were introduced to this concept for the first time and commented that it was a difficult process especially due to the fact that local data most of the time unavailable.
29. Ms. Francesca Cenni from the BRS Secretariat highlighted the example of Japan as one of the countries who found it difficult while trying to have PCN listed.
30. She further stressed that bridging was as difficult for developed countries as it is for developing countries.
31. A presentation on Introduction to newly listed POPs under the Stockholm Convention and Rotterdam Convention was also given by Prof. Oladele Osibanjo from BCCC-Nigeria.
32. In his presentation he highlighted the newly listed POPs: Endosulfans, PBDEs and PFOs and its salts.
33. He also highlighted their past and current uses as well as possible alternatives.
34. At the end of the presentation Mr. David Kapindula from Zambia requested to know how willing the BCCC-Nigeria (University of Ibadan) was ready to share the results of its research on POPs and Heavy metals.
35. Prof. Oladele Osibanjo responded by saying that the BCCC-Nigeria was more than willing to do so.
36. Mr. Emmanuel Kaye from Uganda also wanted to know if there was evidence of releases of BFR from products use of recycled plastics before entering the waste stream. Eg. When recycled plastic containing BFR is used to make children's toys. He wanted to know to what level this could present a hazard.
37. Prof. Osibanjo responded by saying that it indeed posed a high risk and that it was important to trace where recycled plastics end up and what they should and should not be used for.

#### **VII. Working groups on process for listing under the Rotterdam Convention**

38. Participants were divided into 2 working groups to discuss how to prepare a notification for final regulatory action for a severely restricted chemical. Among the issues to be considered were:

Identifying steps to be taken and actors to be involved as well as process of collecting information for Annex 1

39. The working groups were facilitated by, Ms. Francesca Cenni & Mr. Mario Yarto from the BRS Secretariat.
40. Reporting back to plenary participants mentioned that:
  - I. They lacked some measure of capacity in filling out the forms
  - II. Some of the information requested in the Socio-economic cost evaluation might require the expertise of an Environmental Economist for meaningful contributions to be made.

## 12<sup>th</sup> February 2015

### Day 3

#### **VIII. Strengthening national capacities to deal with new chemicals listed under the Stockholm and Rotterdam Conventions.**

41. The day began with a simulation exercise on preparing proposals for a severely hazardous pesticide formulation.
42. Participants were divided into two groups to fill out forms reporting the environmental incidents and human health impact of severely hazardous pesticide formulation.

#### **IX. Working groups on preparing a proposal for a severely hazardous pesticide formulation**

43. Participants were divided into 2 working groups to discuss identifying steps to be taken and actors to be involved Among the issues to be considered were: Collecting information for part 1 of annex IV
44. The working groups were facilitated by Ms. Francesca Cenni & Mr. Mario Yarto from the BRS Secretariat.
45. Reporting back to plenary, it was mentioned that:

- I. Especially in developing countries and countries with economies in transition that the legal/policy framework in support of the collection of data such as data from poisoning incidents was not well documented (hospitals e.t.c).
- II. Some of the information requested in the Socio-economic cost evaluation might require the expertise of an Environmental Economist for meaningful contributions to be made

#### **X. Technical session 3: Strengthening information collection and exchange at the national level**

46. At the beginning of the morning session a presentation was given by Prof. Azhari Abdelbagi, vice chair of the POPs Review Committee on 'Draft guidance for Rotterdam parties and CRC members when a chemical under review is a POP listed under the Stockholm Convention.
47. Following the presentation, participants pointed out that the close similarities between implementing the DG and the concept of bridging.
48. A quiz was organized on the topics covered during the workshop to ensure that participants were well acquainted with concepts taught during the workshop.
49. The competition took place between members of Group 1 and Group 2
50. The quiz competition ended in a tie.
51. The quiz covered topics such as bridging, who should fill out an SHPF form, when a party can request exemption and so on.

## **XI. Closing**

52. The representatives of the BRS secretariat appreciated the high level of commitment shown by all participants during the course of the workshop.
53. Mr. Justice Thwala from Swaziland speaking on behalf of all participants appreciated the facilitators for their openness and friendliness.
54. Speaking also, Mr David Kapindula from Zambia hoped that this would be the first of many more visits for the participants to Zambia.
55. Also speaking Prof. Oladele Osibanjo from BCCC-Nigeria appreciated the commitment of participants and encouraged the participants to continue to network after the workshop.

## **XII. Main conclusions and recommendations**

56. The main conclusions were that most participants realized the lack of capacity that currently exists in the process of listing chemicals under the SC & RC.
57. Participants brought to the fore the large data gap that currently exists in participating effectively in the activities of the CRC and POPRC
58. Participants pointed out that FRA notification requires local evidence-based information which most countries do not have the capacity and resources to gather.
59. Participants recommended that such workshops be organized more often.
60. Participants requested that more days be allocated for the workshop (minimum of 4 days)
61. Participants made recommendation for smaller working groups (maximum of 3 or 4)
62. It was remarked that certain of the participants were not from the DNA's; which created the impression of being out of place for some participants especially since the listing of chemicals is mainly a DNA affair.
63. Participants found the workshop to be very practical, informative and engaging.
64. Forms relating to the Stockholm Convention were relatively less complicated than those relating to the Rotterdam Convention.
65. Participants pointed out the need for facilitators with expertise in socio-economic cost evaluation for the exercise on Risk Management Evaluation.



**Annex I  
Workshop Agenda**

<b>Day 1: Opening, benefits in participating in the work of the Committees and listing new chemicals under the Stockholm Convention</b>		
8:30-9:00	Registration of participants	
9:00-9:30	Opening remarks and objectives of the workshop	<p>Director General, Zambia Environment Management Agency (ZEMA)</p> <p>Prof. Oladele Osibanjo, the Basel Convention Coordinating Centre for the African Region in Nigeria (BCCC-Nigeria)</p> <p>Ms Francesca Cenni, Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS)</p>
9:30-10:30	Introduction of the participants and warm-up session	Mr Mario Yarto, BRS Secretariat
10:30-10:45	<i>Coffee break</i>	
10:45-11:00	Why should Parties and observers participate in the work of the CRC and POPRC?	Recording of Reiner Arndt - former Chair of the POPRC (15') (video)
<b>Technical session I: Process for listing under the Stockholm Convention</b>		
11:00-11:30	Introduction: Brief overview of the key obligations and process for listing under the Stockholm Convention	Prof. Azhari Abdelbagi, Under-Secretary, Ministry of Higher Education and Scientific Research, Sudan and Vice-chair of the POPs Review Committee
11:30-12:30	<p>Exercise I: candidate POPs to be included in Annexes A, B and/or C to the Stockholm Convention:</p> <ol style="list-style-type: none"> <li>1) Identifying steps to be taken and actors to be involved (up to 15')</li> <li>2) Collecting information for Risk Profile</li> </ol> <p>Lessons learned</p>	Simulation exercise A (2h00')
12:30-14:00	<i>Lunch break</i>	
14:00-15:00	Exercise I (cont.)	Simulation exercise A
15:00-15:30	Effective participation of countries in the process for listing under the Stockholm Convention: experience of Kenya	Ms Caroline Njoki Wamai, Senior Principal Chemist, Ministry of Transport and Infrastructure, Kenya and POPs Review Committee member (15') Questions and answers (15')
15:30-15:45	<i>Coffee break</i>	

15:45-17:45	<p>Exercise 2: Candidate POPs to be included in Annexes A, B and/or C to the Stockholm Convention:</p> <ol style="list-style-type: none"> <li>1) Identifying steps to be taken and actors to be involved (up to 15')</li> <li>2) Collecting information for Risk Management Evaluation</li> </ol> <p>Lessons learned</p>	Simulation exercise A (2h00')
17:45-18:00	Wrap-up of the first day	Mario Yarto, BRS Secretariat
<b>Day II: Listing new chemicals under the Rotterdam Convention</b>		
<b>Technical session II: Process for listing under the Rotterdam Convention</b>		
9:00-9:30	Brief overview of the key obligations and process for listing under the Rotterdam Convention: Introduction	<p>Video</p> <p>Mr Omar Samba Bah, National Environmental Agency, Gambia and Chemical Review Committee member (30')</p>
9:30-10:00	Case study on bridging	<p>Ms Francesca Cenni, BRS Secretariat (10')</p> <p>Questions and answers / discussion (20')</p>
10:00-10:30	Introduction to newly listed POPs under the Stockholm Convention and Rotterdam Convention.	<p>Prof. Oladele Osibanjo, BCCC-Nigeria</p> <p>Questions and answers (10')</p>
10:30-11:00	<i>Coffee break</i>	
11:00 -12:30	<p>Exercise 3: Preparing a notification for final regulatory action for a severely restricted chemical:</p> <ol style="list-style-type: none"> <li>1) Identifying steps to be taken and actors to be involved</li> <li>2) Collecting information for annex I</li> </ol> <p>Lessons learned</p>	Simulation exercise B (2h30)
12:30-14:00	<i>Lunch break</i>	
14:00-15:00	Exercise 3 (cont.)	Simulation exercise B
15:00-15:30	<i>Coffee break</i>	
15:30-17:00	Quiz on implications of listing chemicals under the Rotterdam and Stockholm conventions Feedback	All participants facilitated by Ms Francesca Cenni and Mr. Mario Yarto, BRS Secretariat

17:00-17:15

Wrap-up of the second day

Mario Yarto, BRS Secretariat

**Day 3: Strengthening national capacities to deal with new chemicals listed under the Stockholm and Rotterdam Conventions**

09:00-10:30	Exercise 4: Preparing a proposal for a severely hazardous pesticide formulation: 1) Identifying steps to be taken and actors to be involved 2) Collecting information for Part I of annex IV	Simulation exercise C (2h00)
10:30-11:00	<i>Coffee break</i>	
11:00-12:00	Exercise 4 (cont.)	Simulation exercise C
12:00-12:30	Exercise C: lessons learned	All participants facilitated by BCCC Nigeria and BRS Secretariat
12:30-14:00	<i>Lunch break</i>	
<b>Technical session III: Strengthening information collection and exchange at the national level</b>		
14:00-14:30	Draft guidance for Rotterdam Parties and CRC members when a chemical under review is a POP listed under the Stockholm Convention	Prof. Azhari Abdelbagi, Under-Secretary, Ministry of Higher Education and Scientific Research, Sudan
14:30-16:00	Main benefits and challenges of participating in the work of the CRC/POPRC How to enhance participation in the work of the Committees?	All participants
16:00-16:30	<i>Coffee break</i>	
16:30-17:00	Conclusions and recommendations	Ms Francesca Cenni and Mr Mario Yarto, BRS Secretariat
17:00-18:00	Closing session: evaluation forms, certificates	ZEMA, BCCC-Nigeria and BRS Secretariat

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DRAFT

## **Annex III**

### **Composition of working groups**

#### **Group 1**

Rapporteurs: Mr. Ahmed Abdihakim (Day1/Session 1)

Ms. Thabile Dlamini (Day1/Session 2)

Mr. Diomedes Kalisa (Day2/Day 3)

Members:

- Ms. Thabile Dlamini (Swaziland)
- Mr. Omar S. Bah (Gambia)
- Ms. Moleboheng Petlane (Lesotho)
- Ms. Petlane Dhlakama (Zimbabwe)
- Mr. Diomedes Kalisa (Tanzania)
- Ms. Roman Kassahun (Ethiopia)
- Mr. Maurice Wanyonyi (Kenya)
- Mr. Ahmed Abdihakim (Somalia)
- Mr. Azhari Abdelbagi (Sudan)

#### **Group 2**

Rapporteurs: Mr. Clarence Matewe (Day 1/Sessions 1&2)

Ms. Mantoa Sekota (Day 2/Sessions 1&2)

Mr. Emmanuel Kaye (Day 3)

Members:

- Ms. Caroline Wamai (Kenya)
- Ms. Mantoa Sekota (Lesotho)
- Ms. Caroline Theka (Malawi)
- Mr. Ali Mahmoud (Sudan)
- Mr. Justice Thwala (Swaziland)
- Mr. Samuel Manyele (Tanzania)
- Mr. Clarence Matewe (Zimbabwe)
- Mr. Emmanuel Kaye (Uganda)

**Annex IV**  
**Results of the working groups**



# ROTTERDAM CONVENTION

SECRETARIAT FOR THE ROTTERDAM CONVENTION  
ON THE PRIOR INFORMED CONSENT PROCEDURE  
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES  
IN INTERNATIONAL TRADE



## FORM FOR NOTIFICATION OF FINAL REGULATORY ACTION TO BAN OR SEVERELY RESTRICT A CHEMICAL

**Country:**

SWAZILAND

### SECTION 1 IDENTITY OF CHEMICAL SUBJECT TO THE FINAL REGULATORY ACTION

**1.1 Common name**

Chlorinated Naphthalenes

**1.2 Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists**

PCN, polychlorinated naphthalenes, CNs naphthalene chloro-derivatives

**1.3 Trade names and names of preparations**

Nibren Waxes

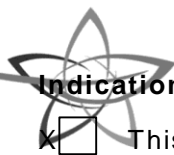
**1.4 Code numbers**

**1.4.1 CAS number**

70776-03-3

**1.4.2 Harmonized System customs code**

**1.4.3 Other numbers (specify the numbering system)**



# ROTTERDAM CONVENTION



1.5 **Indication regarding previous notification on this chemical**  
SECRETARIAT FOR THE ROTTERDAM CONVENTION  
ON THE PRIOR INFORMED CONSENT PROCEDURE  
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES  
IN INTERNATIONAL TRADE

1.5.1  This is a first-time notification of final regulatory action  
on this chemical.

1.5.2  This notification replaces all previously submitted notifications  
on this chemical.  
Date of issue of the previous notification: \_\_\_\_\_

## SECTION 2 FINAL REGULATORY ACTION

2.1 **The chemical is:**  **banned** OR  **severely restricted**

### 2.2 Information specific to the final regulatory action

2.2.1 Summary of the final regulatory action

The chemical PCN is severely restricted based on the decision No SZ1/2015 of the National council of Chemical Management of Swaziland (Country).

2.2.2 Reference to the regulatory document, e.g. where decision is recorded or published

In the National gazette of Swaziland vol 1 /2015

2.2.3 Date of entry into force of the final regulatory action

January 2015

**2.3 Category or categories where the final regulatory action has been taken**

2.3.1 All use or uses of the chemical in your country prior to the final regulatory action

Use in electrical insulation, instrument seals, chemical resistant gauge fluids, flame proofing, wood preservation, engine and gear oil additives, dye production, dipping encapsulating compounds in electronic and automotive applications, temporary binders in paper coating and impregnation, binders for ceramic compounds.

2.3.2 Final regulatory action has been taken for the category

Industrial

Use or uses prohibited by the final regulatory action

wood preservation, engine and gear oil additives, dye production, dipping encapsulating compounds in electronic and automotive applications

Use or uses that remain allowed (only in case of a severe restriction)

Use in electrical insulation,

2.3.3 Final regulatory action has been taken for the category

Pesticide

Formulation(s) and use or uses prohibited by the final regulatory action

Formulation(s) and use or uses that remain allowed

(only in case of a severe restriction)

2.4 Was the final regulatory action based on a risk  Yes or hazard evaluation?

No (If no, you may also complete section 2.5.3.3)

2.4.1 If yes, reference to the relevant documentation, which describes the hazard or risk evaluation

Risk Profile on chlorinated naphthalene UNEP/POPS/POPRC.8/16/Add.1

2.4.2 Summary description of the risk or hazard evaluation upon which the ban or severe restriction was based.

2.4.2.1 Is the reason for the final regulatory action relevant to human health?  Yes

No

If yes, give summary of the hazard or risk evaluation related to human health, including the health of consumers and workers

Exposure of PCNs has long been known to be associated with chloracne and lethality in occupationally exposed men ( Hayward, 1988). According to Blankenship et al. (2000) it cannot be ruled out that this caused by other contaminants such as TCDD or PCBs  
  
Additional Information on chlorinated naphthalenes UNEP/POPS/ POPRC.7/INF/3

Expected effect of the final regulatory action

Reduced threat to human health

2.4.2.2 Is the reason for the final regulatory action relevant to the environment?  Yes

No

If yes, give summary of the hazard or risk evaluation related to the environment

The ecotoxicity of CNs has been reported for several species representing different trophic levels: algae, aquatic plants, invertebrates, fish, birds and rats (cf. section on adverse effects on human health). Many studies used Halowax mixtures and this can make the results difficult to interpret due to possible toxicological interactions and dioxin impurities (Noma et al., 2005).

0

Expected effect of the final regulatory action

Reduced threat to the ecosystem

**2.5 Other relevant information regarding the final regulatory action**

2.5.1 Estimated quantity of the chemical produced, imported, exported and used

	Quantity per year (MT)	Year
produced	No Production	
imported	50 Tonnes	2009-2011
exported	10 Tonnes	2009-2011
used	32 Tonnes	2009-2011

2.5.2 Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions

Likely to affect the neighbouring countries positively, by reducing threat to human health and environment.

2.5.3 Other relevant information that may cover:

2.5.3.1 Assessment of socio-economic effects of the final regulatory action

The benefit of the final regulatory action far outweighs the benefit of using Poly-chlorinated Naphthalenes as industrial chemical and pesticide.

2.5.3.2 Information on alternatives and their relative risks, e.g. IPM, chemical and non-chemical alternatives

2.5.3.3 Basis for the final regulatory action if other than hazard or risk evaluation

The Hazard and risk evaluation are the **main** two reasons for regulatory action.

2.5.3.4 Additional information related to the chemical or the final regulatory action, if any

No additional information

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**SECTION 3**                      **PROPERTIES**

**3.1 Information on hazard classification where the chemical is subject to classification requirements**

**International classification systems**  
e.g. WHO, IARC, etc.

**Hazard class**

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**Other classification systems**

**Hazard class**

e.g. EU, USEPA


### 3.2 Further information on the properties of the chemical

#### 3.2.1 Description of physico-chemical properties of the chemical

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Reference

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#### 3.2.2 Description of toxicological properties of the chemical

--

Reference

--

#### 3.2.3 Description of ecotoxicological properties of the chemical

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Reference

--

**SECTION 4****DESIGNATED NATIONAL AUTHORITY**

Institution

Address

Name of person in charge

Position of person in charge

Telephone

Telefax

E-mail address


Date, signature of DNA and official seal: \_\_\_\_\_

**PLEASE RETURN THE COMPLETED FORM TO:**

Secretariat for the Rotterdam Convention  
Food and Agriculture Organization  
of the United Nations (FAO)  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39 06) 5705 2188  
Fax: (+39 06) 5705 3224  
E-mail: pic@fao.org

**OR**

Secretariat for the Rotterdam Convention  
United Nations Environment  
Programme (UNEP)  
11-13, Chemin des Anémones  
CH – 1219 Châtelaine, Geneva, Switzerland  
Tel: (+41 22) 917 8296  
Fax: (+41 22) 917 8082  
E-mail: pic@pic.int

**Definitions for the purposes of the Rotterdam Convention according to Article 2:**

(a) 'Chemical' means a substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, but does not include any living organism. It consists of the following categories: pesticide (including severely hazardous pesticide formulations) and industrial;

(b) 'Banned chemical' means a chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health or the

environment. It includes a chemical that has been refused approval for first-time use or has been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(c) 'Severely restricted chemical' means a chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed. It includes a chemical that has, for virtually all use, been refused for approval or been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process, and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(d) 'Final regulatory action' means an action taken by a Party, that does not require subsequent regulatory action by that Party, the purpose of which is to ban or severely restrict a chemical.

DRAFT

## Introduction to the Severely Hazardous Pesticide Formulation Report Form - Environmental Incidents -

The severely hazardous pesticide formulation report form consists of three sections:

**Introduction**, the text is intended to provide relevant background information on the Rotterdam Convention and how the information collected by the form and submitted by the Designated National Authority will be used.

**Part A** is to be completed by the Designated National Authority once he/she receives Part B from the field. It reflects the information requirements of part 1 of Annex IV of the Convention. There is some redundancy between Parts A and B of the form particularly with respect to information on product identity. It was thought that this redundancy might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

**Part B** is designed to provide “*a clear description of the incidents related to the problem, including the adverse effects and the way in which the formulation was used*” (part 1 paragraph g of Annex IV of the Convention). The form has been constructed around these points. It consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available.

# SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM:

## ENVIRONMENTAL INCIDENTS

### INTRODUCTION

#### 1. Purpose of this form

The Severely Hazardous Pesticide Formulation (SHPF) Report Form - Environmental Incident Report Form - was developed to facilitate the identification of candidate formulations with environmental concerns for inclusion in the Rotterdam Convention. A similar form was developed for reporting health incidents. The Convention provides a mechanism for countries to decide whether or not they wish to receive future shipments of such pesticide formulations and for ensuring compliance with these decisions by exporting countries.

#### 2. What is the Rotterdam Convention?

The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade promotes a shared responsibility between importing and exporting parties in the international trade of certain hazardous chemicals. It gives importing countries the power to decide which chemicals they want to receive and to exclude those they cannot manage safely. The Convention includes provisions for developing countries and countries with economy in transition, that are experiencing health or environmental problems with severely hazardous pesticide formulations under conditions of use, to identify such formulations as candidates for inclusion in the Convention. Further information on the operation of the Rotterdam Convention may be found at [www.pic.int](http://www.pic.int).

#### 3. What is the severely hazardous pesticide formulation report form?

The form consists of two parts: – the Transmittal Form (Part A) – is to be used by the Designated National Authority (DNA) to transmit the Environmental Incident Report Form (Part B – EIRF) to the Secretariat. The Environmental Incident Report Form has been developed to meet the information requirements of the Convention, that is a clear description of the environmental incidents related to the use of a severely hazardous pesticide formulation, including the adverse effects and the way in which the formulation was used. Part B of the form consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available. Although programmes for collecting quantitative information on environmental incidents of pesticides may not be implemented in many countries, use of such national programmes for reporting environmental incidents should be made, where they exist. The format has been developed so that it might be widely used by States, aid agencies, intergovernmental organizations and non-governmental organizations etc., in reporting on environmental incidents related to the use of severely hazardous pesticide formulations. If there are other formats available, they may be used in preparing a submission to the Secretariat and forwarded through the DNA using Part A of the SHPF form provided that they meet the information requirements of Parts 1 and 3 of Annex IV of the Convention. There is some redundancy between Parts A and B of this form. It was thought that this might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

#### 4. What is an environmental incident?

For the purposes of this incident report form, an environmental incident is defined as the contamination of land, water and/or air by a severely hazardous pesticide formulation (SHPF) causing the temporary or permanent impairment or mortality of non-target organisms or biological processes under the “conditions of use” in developing countries or countries with economies in transition (Article 6). In this instance, “conditions of use” does not include accidental spills/leaks, nor deliberate misuse of an SHPF, and is clearly limited to effects caused by a certain formulation of a substance. The following are some examples of potential incidents:

- the poisoning of birds or other wildlife that ingest granular insecticides used for soil treatment. Such incidents may result from the application method (eg. broadcast application rather than injection into the soil) or from the behaviour of non-target organisms (eg. scavenging of granules).

- the poisoning of aquatic organisms due to the contamination of a stream or pond. Such incidents may occur if sufficient buffer zones between treated areas and waterways were not observed.
- the severe disturbance of non-target populations (e.g. honey bees, earthworms, beneficial insects).

5. What happens to the completed form?

Once Part B - Environmental Incident Report Form - has been completed to the extent possible based on the information available, it should be forwarded to the DNA. The DNA is to coordinate the completion of Part A - Transmittal form - and forward the entire document to the Secretariat. The Secretariat is required to collect additional information including physico-chemical and eco-toxicological properties of the pesticide formulation, information on environmental incidents related to the formulation in other States, and the existence of environmental restrictions or environmental guidelines in other states, or relevant evaluations, where available. This information along with the completed form is reviewed by the Chemical Review Committee (CRC). The CRC will decide whether or not to recommend the inclusion of the pesticide formulation in the Rotterdam Convention.

Your co-operation in completing this form and your contribution for the identification of severely hazardous pesticide formulations posing environmental problems under conditions of use is greatly appreciated. If you have any questions or comments relating to the completion of this form please contact the Secretariat at the address below.

**Secretariat for the Rotterdam Convention  
Food and Agriculture Organization of  
the United Nations (FAO)**

Viale delle Terme di Caracalla

00153 Rome, Italy

Tel: (+39 06) 5705 2188

Fax: (+39 06) 5705 3224

E-mail: [pic@fao.org](mailto:pic@fao.org)

**OR**

**Secretariat for the Rotterdam Convention  
United Nations Environment Programme  
(UNEP)**

11-13, Chemin des Anémones

CH – 1219 Châtelaine-Geneva, Switzerland

Tel: (+41 22) 917 8296

Fax: (+41 22) 917 8082

E-mail: [pic@pic.int](mailto:pic@pic.int)

**SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM**

**ENVIRONMENTAL INCIDENTS**

**PART A - TRANSMITTAL FORM  
DESIGNATED NATIONAL AUTHORITY**

Information required from a Designated National Authority	
<b>1</b>	<b>Name of the formulation: GENIUS</b> .....
<b>2</b>	<b>Type of formulation (for example EC, WP, DP, GR, TB): EC AND GR FORMULATIONS</b> .....
<b>3</b>	<b>Trade name and name of producer, if available: GENIUS</b> .....
<b>4</b>	<b>Name of the active ingredient or ingredients in the formulation: XX</b> .....
<b>5</b>	<b>Relative amount of each active ingredient in the formulation: 40%</b> ..... (% concentration)
<b>6</b>	<b>Attach copy of the label(s), if available (or describe the key aspects of the label: language, etc.).</b> <b>UN:6.1, UN:II, IMDG, TECR(R)-61G41b</b>
<b>7</b>	<p><b>Common and recognized patterns of use of the formulation within the country – EC and GR to paddy field to control Golden snails ( Pomacea canaliculata)</b></p> <ul style="list-style-type: none"> <li>➤ the formulation is registered / permitted for use in the country? <b>GENIUS EC and GR</b></li> <li>➤ what uses are permitted? <b>rice and cotton:</b></li> <li>➤ are there any handling or applicator restrictions specified as a condition of registration; <b>None</b></li> <li>➤ information on the extent of use of the formulation, such as the number of registrations or production or sales quantity (indicate the source of information): <b>100 000Kg/year, used on in the regions where paddy fields and cotton</b></li> <li>➤ other information on how the formulation is commonly/typically used in the country: <b>56 - 72 % use EC and GR formulations of XX and is applied without any handling restriction.</b></li> </ul> <p><i>(this information should be submitted on a separate sheet attached to the completed form)</i></p>
<b>8</b>	<p>A clear description of incidents(s) related to the problem, including adverse effects and the way in which the formulation was used (for example <i>Part B pesticide incident report form identifies key elements and appropriate level of detail</i>). Other report formats which may exist at the national level may also be used, provided they contain comparable information.:</p> <p>The results of the field survey undertaken in five provinces of the central region showed that 94 per cent of farmers used pesticides and of those 60–76 % used EC and GR formulations of XX for golden apple snail control in paddy fields. Those formulations of XX were very effective in combating snails but also were very toxic to fish and other aquatic organisms. Almost all farmers in every province reported mortality of fish, snake, frog, eel and toad. However, farmers confirmed that they would continue using XX to control golden apple snail unless it is ineffective.</p> <p>The toxicological hazards identified in the existing scientific data, taken together with the effects</p>

	observed in the field survey, led to the decision to ban all formulations of XX except capsulated suspension (CS) formulations
9	<p>Any regulatory, administrative or other measure taken, or intended to be taken, by the proposing Party in response to such incidents.</p> <p>-The intention is to prohibit all formulations except the CS formulations. The CS formulation of XX has been shown to be ineffective in controlling golden apple snails and hence is not expected to be used for golden apple snail control in paddy fields. Therefore, the prohibition of import, production and use of XX in formulations other than the CS formulation would not lead to a significant reduction of the risks to the aquatic environment.</p> <p>-The toxicological hazards identified in the existing scientific data, taken together with the effects observed in the field survey, led to the decision to ban all formulations of XX except capsulated suspension (CS) formulations</p>

**Date, signature of DNA and official seal:**

**PLEASE RETURN THE COMPLETED FORM TO:**

**Secretariat for the Rotterdam Convention  
Food and Agriculture Organization of  
the United Nations (FAO)**  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39 06) 5705 2188  
Fax: (+39 06) 5705 3224  
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**Secretariat for the Rotterdam Convention  
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E-mail: [pic@pic.int](mailto:pic@pic.int)

**SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM**

**ENVIRONMENTAL INCIDENTS**

**PART B**  
**ENVIRONMENTAL INCIDENT REPORT FORM**

Note: If the reported incident is associated with the use of a mixture of more than one formulation, Section 2 (Product Identity) should be completed separately for each of the formulations. The remaining Sections of the form that describe how the formulation was used, the incident, adverse effects etc., need only be completed once for each incident.

In order to help keep the form as simple as possible, the term formulation is used throughout and refers to the chemical product (herbicide, insecticide, etc). For those incidents involving more than one formulation, it is understood that the use of this term in Sections 4–7 will refer to the mixture that was applied.

**SECTION 1. Number of formulations used**

**1. How many formulations were used when the incident took place?**

*(Please circle or fill in number and proceed as indicated)*

a. One formulation was used

- Yes  
 No

If yes, *complete Section 2 (Product Identity) once.*

If no,

b.   2   (number) different formulations were used at the same time (e.g. tank mix of a herbicide and a fungicide)

c. Please list the individual formulations here: EC and GR

e.g. Monitor (methamidophos 60 EC)

Formulation 1: EC \_\_\_\_\_

Formulation 2: GR \_\_\_\_\_

Formulation 3: \_\_\_\_\_

*Please complete Section 2 (Product Identity) for each of the listed formulations.*

## SECTION 2. Product Identity: Formulation used and its preparation

*Please complete this section for each formulation used*

2. Name of the formulation? GENIUS \_\_\_\_\_

3. Type of formulation (*please tick*):

- Emulsifiable concentrate (EC)       Wettable powder (WP)       Dustable powder (DP)  
 Water soluble powder (SP)       Ultra low volume (ULV)       Tablet (TB)  
 Granular (GR)       Other (please specify): \_\_\_\_\_

4. Trade names and names of the producer/manufacturer, if available: GENIUS \_\_\_\_\_

5. Name of the active ingredient(s) in the formulation: XX \_\_\_\_\_

6. What is the name and relative amount of each active ingredient (a.i.) in the formulation?

% concentration: XX, 40% \_\_\_\_\_

grams a.i./litre or: \_\_\_\_\_

ounce a.i./gallon or: \_\_\_\_\_

grams a.i./kg or: \_\_\_\_\_

ounce a.i./pound: \_\_\_\_\_

7. Attach a copy of the label(s) and instructions for use, if available, to this form (or describe the key aspects of the label: language, use instructions, etc).

Label attached       No  
                                  Yes

**AU:6.1, UN:II, IMDG, TEC(R)-61Gb**

8. What was the intended use (*please tick*)

- Insecticide       Herbicide       Tick control       Rodenticide  
 Fungicide       Unknown       Other (specify) \_\_\_\_\_

9. Are there any use restrictions or prohibitions regarding the use of this formulation or the active ingredient (*e.g. use of safety equipment, application restrictions*)?

No  
 Yes (*please specify*): \_\_\_\_\_

10. Was the formulation used as purchased or was it changed in any way?

Used as purchased  
 Changed (*please specify how*): \_\_\_\_\_

**11. Was the formulation in its original container?**

- a.  No (go to b)  
 Yes (go to Question 13)
- b. Did the repackaged formulation have a copy of the label attached?
- No  
 Yes

**12. Preparation of formulation:**

- a. Was the formulation (as outlined in Questions 2–8) mixed with a carrier or diluent before use (e.g. mixed with liquid, powder, bran)?
- No (go to Question 13)  
 Yes

If yes,

- b. How was the mixture prepared (e.g. mixed with water, diesel)?  
with **water** \_\_\_\_\_
- c. What was the mixing ratio? (*circle appropriate unit*) **No information**  
\_\_\_\_\_ litre or kg/lbs of formulation per \_\_\_\_\_ litre or kg/lbs of carrier/diluent
- d. Was the mixture used immediately or was it stored?
- Used immediately  
 Stored (*please specify*)

For how long? \_\_\_\_\_ hours/days/weeks (*circle appropriate unit*)

**13. Application rate:**

- (a) What was the application rate used? **No information**  
\_\_\_\_\_ e.g.: g a.i./ha; litre/ha; lb/acre (*circle appropriate unit*) or specify \_\_\_\_\_
- (b) How much of the chemical product / or active ingredient (a.i.) was used?  
For multiple applications, please estimate the total amount released.  
(*circle appropriate unit*)
- Total amount: \_\_\_\_\_ (L; gallons; kg; or lb) **100 000 Kg/year**
- Concentration: \_\_\_\_\_ (g a.i./L; oz a.i./gallon; g a.i./kg; or oz a.i./lbs) **40%**

### SECTION 3. Description of application

**14. Location where the formulation was used?**

Nearest village/city: not stated: **Mado** \_\_\_\_\_

Province/state/region/district: **Central Region 5- Provinces** \_\_\_\_\_

Country: **UGANDA** \_\_\_\_\_

**15. Date of application(s)**

What were the date(s) (if known) the formulation was used?

Beginning: \_\_\_\_\_ **2013** \_\_\_\_\_ End: \_\_\_\_\_ **2014** \_\_\_\_\_

**16. Was it a single or multiple application?**

Single application

Multiple application (*please specify*)

Number of applications: \_\_\_\_\_

Approximate date of each application: \_\_\_\_\_

**17. Were any other pesticides used in the same area at the time of the incident?**

**NONE** \_\_\_\_\_

**18. Treated area and target pest:**

a. What was the type of crop or situation treated (e.g. maize, grassland, forest, pond)?

**RICE and COTTON** \_\_\_\_\_

b. What was the target pest (e.g. weeds in maize, locusts in grasslands, moths in forests, mosquitoes in ponds)?

**GOLDEN APPLE SNAILS** \_\_\_\_\_

**19. Conduct of application**

a. How was the formulation applied (method of application)?

By hand

Backpack sprayer

Tractor-mounted sprayer

Aircraft

In-furrow applicator

Hand-held sprayer

Other method (please specify): \_\_\_\_\_

b. What were the weather conditions at the time of application?

Temperature:

Hot

Warm

Cool

Sunny or cloudy: **SUNNY** \_\_\_\_\_

Rain:

Light

Medium

Heavy

Wind speed:

Light

Strong

Direction: \_\_\_\_\_

General description of conditions: \_\_\_\_\_

c. What were the weather conditions for the few days after application?

Temperature:  Hot  Warm  Cool

Sunny or cloudy: **SUNNY** \_\_\_\_\_

Rain:  Light  Medium  Heavy

Wind speed:  Light  Strong

Direction: N-K \_\_\_\_\_

General description of conditions: \_\_\_\_\_

**20. Please provide any relevant information regarding the person applying the formulation (e.g. level of training, literacy)**

Low levels of training and literacy

## SECTION 4. Description of the Incident

**21. What was the date when the incident was first noticed?**

November 2014 \_\_\_\_\_

**22. Location of the incident**

Was the location of the incident, the same location of the area treated? *Please indicate where the incident occurred (be as specific as possible).*

- Yes (as specified in Section 3 Question 14)  
 No (please specify) Geographical coordinates, if available

Village/city: **Village** \_\_\_\_\_

Province/state/region/district: **Mityana** \_\_\_\_\_

Country: **UGANDA** \_\_\_\_\_

**23. Please indicate where the incident occurred and the size of the area affected, by completing all areas of the following table that apply. Please be as specific as possible; mark all boxes as appropriate:**

Environment Affected	Size of area or volume affected (write a number)	Units (circle appropriate units)
<b>Land</b> <input type="checkbox"/> Home garden <input checked="" type="checkbox"/> Farm field <input type="checkbox"/> Grassland <input type="checkbox"/> Other _____	5 ha	m <sup>2</sup> hectare (ha) km <sup>2</sup> acre Other (specify) _____
<b>Fresh Water</b> <input type="checkbox"/> Fish pond <input checked="" type="checkbox"/> Stream <input type="checkbox"/> River <input type="checkbox"/> Lake <input type="checkbox"/> Sediments <input type="checkbox"/> Other _____	200,000M <sup>3</sup> approximately	<b>Surface Area</b> m <sup>2</sup> , ha, km <sup>2</sup> , acre or Other (specify) _____  <b>Volume</b> L, m <sup>3</sup> or Other (specify) _____
<b>Salt Water</b> <input type="checkbox"/> Estuary		<b>Surface Area</b> m <sup>2</sup> , ha, km <sup>2</sup> or

<input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Sediments <input type="checkbox"/> Other _____		Other (specify) _____ <b>Volume</b> L, m <sup>3</sup> or Other (specify) _____
--	--	---

**24. Please draw a rough map of the area around the incident. (Indicate scale if possible)**

*Use the box below or attach to the back of this form.*

Please include:

- a. the area affected;
- b. any nearby waterways that were, or could be, affected and the direction of water flow;
- c. location of any affected non-target organisms that were found;
- d. location where the formulation was applied;
- e. any other details which may further clarify the incident (e.g. topography, soil properties, water table).

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**25. Please describe any other details, additional information or facts that are not captured elsewhere in this form that further explain the cause of the incident, how it occurred, the result and any remediation efforts (attach extra pages if required).**

**Run off from rice/cotton field over a 2 year spraying.** \_\_\_\_\_

\_\_\_\_\_

**Building of canals directing runoff away from stream** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## SECTION 5. Description of adverse effects

26. Identify the non-target organism(s) adversely affected in the incident, including the number affected. Please be as specific as possible (common names and if possible scientific names) and complete as much as possible. Examples are provided in the table below.

SPECIES OF ANIMAL OR PLANT	NUMBER OR PROPORTION AFFECTED	AGE OR DEVELOPMENT STAGE (E.G. JUVENILE, LARVAL, SEEDLING)	OBSERVATIONS (E.G. ABNORMAL MORPHOLOGY OR BEHAVIOUR, TOXICOLOGICAL SYMPTOMS)	DURATION OF EFFECT (INCLUDING DATE OF DEATH OR RECOVERY)
<i>Examples</i>				
<b>Terrestrial vertebrate</b> <i>Domestic cattle</i>	10	Adults	Excessive salivating, loss of balance, lethargy.	Recovered 26 May 2002
<i>Birds – Mallard ducks</i>	40	Adults and juveniles	Disoriented, ruffled appearance, head lesions	Recovered 30 May 2002
	6	juveniles	Disoriented, lethargy	Recovered 21 May 2002
	5	juveniles	Disoriented, lethargy	Died 22 May 2002
<i>Fish e.g.: various species</i>	numerous	<b>All size classes</b>	Dead fish on riverbank up to 3km downstream of treatment area	<b>No information</b>
Invertebrates e.g. honey bee	100 colonies	Foraging during peak of flowering period	<b>Colonies dead</b>	All cases reported within 20 days post-application
<i>Vegetation e.g. grassland</i>	4 acres	Flowering	Wilted, yellowing	Dead patches
Fish (telapia and eel)	500	All size	Dead fish, 5KM	After 30 days of application
Frog	5	All size	Dead frog 5KM	As above
Snake (Mamba cobra)	10	Small and big ones	Dead within field	As above

27. Was there any indirect evidence of severe hazards to non-target organisms (e.g. unexpected population declines, disappearance of certain species in the incident area)?

No

Yes (Please describe these effects) **Fish, snake, Frog decline** \_\_\_\_\_

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**28. Please provide any other relevant information such as:**

- a. links between the use of the formulation (Section 4) and observed effects in non target organisms (question 26):

**Death observed immediately after application of the formulation** \_\_\_\_\_

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b. any analytical measurements, if available, which confirm residues of active ingredient(s) in soil, water, air or biological tissues

No

Yes (attach data and source)

## SECTION 6. Management

**29. What practical steps (if any) were taken at the time the incident occurred to limit or stop its further impact on the environment (excluding administrative and regulatory actions)?**

**1. Stop application of pesticide** \_\_\_\_\_

**2. Create ridges at lower end of field to stop direct flows to stream** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**30. What steps (if any) were taken to clean up the area after the incident or to rehabilitate any species affected in the incident?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## SECTION 7. Reporting/communication

**31. Date of data collection/consultation:** \_\_\_\_\_

**32. Name and address of investigator/data collector:**

\_\_\_\_\_

\_\_\_\_\_

**33. Category of investigator/data collector (e.g. environmental scientist, agricultural officer, government representative):**

\_\_\_\_\_

\_\_\_\_\_

**34. Contact if further information needed:** \_\_\_\_\_

Telephone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**35. Has this incident been reported elsewhere?**

- No  
 Yes (*who was it reported to*)
- 

**36. Have similar incidents happened in that area before?**

- No  
 Yes

If yes, were they reported?       No       Yes

***Please send the completed incident report form to the Designated National Authority.  
(Name and address of the DNA)***

**DNA- please attach all forms to Part A – Transmittal Form**

## Form-1

### Form for submission of information specified in Annex F of the Stockholm Convention pursuant to Article 8 of the Convention

Chemical name (as used by the POPs Review Committee)	Decabromodiphenyl ether (DBPE)
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**Explanatory note:**

1. This chemical is undergoing a risk management evaluation. It has already satisfied the screening criteria set out in paragraph 4 (a) of Article 8 of the Convention. A risk profile has also been completed for this chemical in accordance with paragraph 6 of Article 8 and with Annex E to the Convention.

Introductory information	
Name of the submitting Party/observer	Zambia
Contact details (name, telephone, e-mail) of the submitting Party/observer	Ministry of Lands, Natural Resources and Environmental Protection
Date of submission	10th February

Additional Annex E information	
(i) Production data, including quantity and location	Importation
(ii) Uses	Flame Retardent, Isolation for electric wires, electronic wires, carpets, Housing, computers and TV.
(iii) Releases, such as discharges, losses and emissions	<b>Losses:</b> spills, leaks <b>Discharge:</b> disposal, spraying <b>Emmissions:</b> Evaporate, waste waters

**Explanatory note:**

2. This information was requested for preparation of the risk profile in accordance with Annex E of the Convention. Please provide any additional or updated information.

(a) Efficacy and efficiency of possible control measures in meeting risk reduction goals (provide summary information and relevant references):	
(i) Describe possible control measures	<ul style="list-style-type: none"><li>• Restrict Importation of article/goods that contain DBDE except for transport</li><li>• Clean up contaminated sites</li><li>• Replace DBDE by alternatives</li><li>• Adopt guidelines for exposure limits</li><li>• Good management of stock piles</li><li>• Set maximum residual limits in the environment</li></ul>
(ii) Technical feasibility	Elimination of stock piles BAT/BEP
(iii) Costs, including environmental and health costs	The country needs to be capacited

--	--

**Explanatory note:**

3. "Risk reduction goals" refers to targets or goals to reduce or eliminate releases from intentional production and use, unintentional production, stockpiles and wastes and to reduce or avoid risks associated with long-range environment transport.

4. Possible control measures could include the following:

- (a) Prohibition or restriction of production, use, import and export;
- (b) Control of discharges or emissions;
- (c) Replacement of the chemical by alternatives;
- (d) Termination of processes which could lead to unintentional release of the chemical;
- (e) Clean-up of contaminated sites;
- (f) Environmentally sound management of obsolete stockpiles;
- (g) Prohibition of reuse and recycling of wastes or stockpiles;
- (h) Establishment of exposure limits in the workplace;
- (i) Establishment of maximum residue limits in water, soil, sediment or food.

5. The following factors may influence the efficacy and efficiency of possible control measures:

- (a) Legal, administrative, and enforcement measures in place including adequately trained personnel;
- (b) Monitoring measures in place including of suitable laboratory and monitoring capability;
- (c) Risk communication system and public participation;
- (d) Accessibility of alternative chemicals or processes;
- (e) Accessibility of safe installations and technology to eliminate stockpiles.

6. Technical feasibility refers to whether a control measure already exists or is expected to be developed in the foreseeable future and possible challenges to its implementation. The following factors may be considered:

- (a) What measures would be needed to effectively prohibit or restrict production and use;
- (b) Chemical or non-chemical alternatives which are already in use or which could be phased-in;
- (c) National standards for best available techniques and best environmental practices (BAT/BEP) and inventory of installations meeting the BAT/BEP standards;
- (d) Projects in progress involving elimination of stockpiles and clean-up of contaminated sites.

7. If relevant, provide information on uses for which there may be no suitable alternative or for which the analysis of social and economic factors justifies the inclusion of an exemption to any control measure adopted by the Conference of the Parties. Identify critical uses by detailing the negative impact on society that would result if no exemption is permitted. Explain why the exemption is technically or scientifically necessary and why potential alternatives are not technically or scientifically viable. In addition, provide a list of sources taken into account in arriving at the conclusion that no alternatives exist for a particular use.

8. Where relevant and possible costs should be expressed in United States dollars per year.

<b>(b) Alternatives (products and processes) (provide summary information and relevant references):</b>	
(i) Description of Alternatives	Methyl phosphinate (Meph) Phosphorous polyol (PhPol) PPO - Polyphenylene-oxide Tri-phenyl phosphate (Electric Wiring)
(ii) Technical feasibility	On trials in the USA
(iii) Costs, including environmental and health costs	No information
(iv) Efficacy	
(v) Risk	
(vi) Availability	
(vii) Accessibility	

**Explanatory note:**

9. Alternatives could include chemical and non-chemical alternatives such as a substitute chemical, material, product, system, production process or strategy for a specified end use of the chemical under consideration. Provide a brief description of any alternative product or process and, if appropriate, the sectors, uses or users for which it would be relevant. If several alternatives can be envisaged for the chemical under consideration, including non-chemical alternatives, provide information under this section for each alternative.

10. Technical feasibility refers to whether an alternative technology exists and is applicable or is expected to be developed in the foreseeable future. Specify for each proposed alternative whether it has actually been implemented, whether it has only reached the trial stage or whether it is just a proposal. If an alternative has not been tried or tested, information on projected impacts may also be useful.

11. Evaluation of costs should include environmental and health costs.

12. Evaluation of efficacy should include any information on performance, benefits, costs and limitations of potential alternatives.

13. Evaluation of risk should include any information on whether a proposed alternative has been thoroughly tested or evaluated in order to avoid inadvertently increasing risks to human health and the environment. It should also include any information on potential risks associated with untested alternatives and any increased risk over the life-cycle of alternatives, including manufacture, distribution, use, maintenance and disposal.

14. Availability refers to whether an alternative is on the market and ready for immediate use.

15. Accessibility refers to the extent to which geographic, legal or other limiting factors affect whether an alternative can be used. Information or comments on improving the availability and accessibility of alternatives may also be useful.

16. Specify if the information provided is connected to the specific needs and circumstances of developing countries.

<b>(c) Positive and/or negative impacts on society of implementing possible control measures (provide summary information and relevant references):</b>	
(i) Health, including public, environmental and occupational health	
(ii) Agriculture, including aquaculture and forestry	
(iii) Biota (biodiversity)	

(iv) Economic aspects	
(v) Movement towards sustainable development	
(vi) Social costs	

**Explanatory note:**

17. Social and economic considerations could include:

(a) Information on the impact, cost and benefits to the local, national and regional economy, including the manufacturing sector and industrial and other users (e.g., capital costs and benefits associated with the transition to the alternatives), and impacts on agriculture and forestry;

(b) Information on the impact on the wider society associated with the transition to alternatives, including the negative and positive impacts on public, environmental and occupational health. Consideration should also be given to the positive and negative impacts on the natural environment and biodiversity;

(c) Information on the costs and benefits associated with environmentally sound management of waste and stockpiles of the chemical under consideration and the clean-up of contaminated sites.

18. Information should be provided on how control measures fit within national sustainable development strategies and plans. Developing countries, countries with economies in transition and small island developing States should describe their need for technical assistance to implement certain control measures.

<b>(d) Waste and disposal implications (in particular, obsolete stocks of pesticides and clean-up of contaminated sites) (provide summary information and relevant references):</b>	
(i) Technical feasibility	
(ii) Costs	

**Explanatory note:**

19. The information provided on technical feasibility and costs should take the local context into account. This is particularly important for developing countries, countries with economies in transition, and small island developing States that require technical and financial assistance.

<b>(e) Access to information and public education (provide summary information and relevant references):</b>

**Explanatory note:**

20. Please provide details on access to information and public education with respect to both control measures and alternatives.

<b>(f) Status of control and monitoring capacity (provide summary information and relevant references):</b>

**Explanatory note:**

21. With regard to control capacity, the information required is on legislative and institutional frameworks for the chemical under consideration and their enforcement.

22. With regard to monitoring capacity, the information required is on the technical and institutional infrastructure for the environmental monitoring and bio-monitoring of the chemical under consideration. Please provide information on monitoring work relating to the Convention's priority matrices (ambient air, maternal milk, human blood) and other health or environmental matrices (water, soil, sediment, food, aquatic and telluric fauna, migratory birds, etc.).

**(g) Any national or regional control actions already taken, including information on alternatives, and other relevant risk management information:**

**Explanatory note:**

23. Actions or measures taken could include prohibitions, phase-outs, restrictions, cleanup of contaminated sites, waste disposal, economic incentives and other non-legally binding initiatives.

24. Information could include details on whether these control actions have been cost-effective in providing the desired benefits and have had a measurable impact on reducing levels of the chemical in the environment and have contributed to risk reduction.

**(h) Other relevant information for the risk management evaluation:**

**Explanatory note:**

25. Please provide any other relevant information for the risk management evaluation.

**I. Other information requested by the POPRC:**

**Explanatory note:**

26. The Committee may identify specific information required for the process of preparing a risk management evaluation in addition to Annex F information. Please provide any such information that you may have as indicated in the letter from the Secretariat inviting Parties and observers to provide information.

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## Form-2

### Form for submission of information specified in Annex E to the Stockholm Convention pursuant to Article 8 of the Convention

<b>Introductory information</b>	
Name of the submitting Party/observer	<b>Group 2 Lesotho</b> (Chaired by Caroline) Matewe Reporting
Contact details (name, telephone, e-mail) of the submitting Party/observer	Department of Environment- Ministry of Environment and Tourism
Chemical name (as used by the POPs Review Committee)	Dicofol
Date of submission	10 <sup>th</sup> February 2015

<b>(a) Sources, including as appropriate (provide summary information and relevant references)</b>	
(i) Production data:	No Production, only importation
Quantity	100 tonnes
Location	In different regions of the country (10 out of 20)
Other	No information
(ii) Uses	Insecticide (acaricide), miticide
(iii) Releases:	Air, water and soil
Discharges	vapour, leeching, run off
Losses	Spills, disposal, leaks,
Emissions	Vapour, volatilization, Dust
Other	Dust, atmospheric transport

**Explanatory note:**

1. Indicate units for all data.
2. Information on imports, exports and existing stockpiles could also be included under item (i) Production data: Other. Information on uses could include uses for agriculture (e.g., pesticides), for public health and for industrial purposes and uses by the informal sector.

<b>(b) Hazard assessment for endpoints of concern, including consideration of toxicological interactions involving multiple chemicals (provide summary information and relevant references)</b>
Endocrine disruptor, carcinogenic, highly toxic to aquatic organisms and classified according to EU/GHS as acute and chronic aquatic category 1 pesticide.

**Explanatory note:**

3. Information on endpoints of concern should cover, in particular, experimental data concerning human toxicity and ecotoxicity (i.e., toxicity for terrestrial, telluric, aquatic and benthic fauna) and any information on toxicological interactions involving multiple chemicals. Data on contamination of foodstuffs, water, soil or sediment may be entered in part (d) below.

<b>(c) Environmental fate (provide summary information and relevant references)</b>	
Chemical/physical properties	MWt: 370.5g/mol vapour pressure: $3.9 \times 10^{-7}$ torr, Water solubility: 1.32 mg/L CAS No: p,p'-dicofol 115-32-2 Ortho-para- dicofol 10606-46-9
Persistence	Half-life in water pH5 is 47 days Half life in water pH 7 is 2.8 days Half life in soil - specifically 105 days,

	in sediments 30 days, koc in sediments- 7060 ml/g.
How are chemical/physical properties and persistence linked to environmental transport, transfer within and between environmental compartments, degradation and transformation to other chemicals?	Low mobility in the soil and degradation in water is primarily via photolysis. overall Pov is 37 days makes it travel longer distances at most 2142km for op and 1467 km pp. the half life is long enough to allow long distance travel in the environment.
Bio-concentration or bio-accumulation factor, based on measured values (unless monitoring data are judged to meet this need)	Log Kow varies between 4.08 and 5.02. BCF in fish varies between 10000 to 43 000

**Explanatory note:**

4. Information on potential for long-range transport could include the results of modelling of long-range environmental transport.

<b>(d) Monitoring data (provide summary information and relevant references)</b>
No information available. This can be seen as a challenge for the Country.

**Explanatory note:**

5. Provide monitoring data, if possible, with an indication of the quality of the data or its degree of reliability, trend data and additional data on the criteria in Annex D, particularly persistence, bioaccumulation, long-range environmental transport and exposure.

6. Environmental monitoring data and exposure data in various compartments or media could include data from ambient air, maternal milk, human blood, biota, food products, water, soil, sediments, waste, effluents, etc.

<b>(e) Exposure in local areas (provide summary information and relevant references)</b>	
General	No Information (challenge)
As a result of long-range environmental transport	No Information (challenge)
Information regarding bio-availability	No Information (challenge)

**Explanatory note:**

7. Information on exposure in local areas could include the following:

- (a) General: Data on exposure in local areas, including data on human health and wild fauna and flora, data on occupational exposure, etc;
- (b) As a result of long-range environmental transport: Data concerning exposure in areas far from the sources of production or use of a chemical, experimental data or modelling results indicating possible long-range transport, etc;
- (c) Information regarding bio-availability: Studies describing how the chemical is absorbed by humans and other animals, concentrations in biological samples, half-life, etc.

<b>(f) National and international risk evaluations, assessments or profiles and labelling information and hazard classifications, as available (provide summary information and relevant references)</b>
<ul style="list-style-type: none"> <li>• Classified according EU/GHS as acute and chronic aquatic toxic category 1</li> <li>• There is need for national data for human exposure, terrestrial animal exposure and aquatic</li> </ul>

**Explanatory note:**

8. Information on national and international risk evaluations could include the following:

- (a) Rationale for the regulation of toxic chemical substances such as assessment information;
- (b) Information and hazard classifications;
- (c) National and international risk evaluations prepared by governmental and inter-governmental organizations, regional economic integration organizations and non-governmental organizations. The government and national stakeholders such as the academic community, civil society and others in the private sector may provide the data required.

**(g) Status of the chemical under international conventions**

Dicofol has been nominated as a POP by EU and it is at Risk Profile stage.

**Explanatory note:**

9. Information need not be provided on the most well known instruments. A list of those instruments may be found in document UNEP/POPS/POPRC.1/INF/10.



# ROTTERDAM CONVENTION

SECRETARIAT FOR THE ROTTERDAM CONVENTION  
ON THE PRIOR INFORMED CONSENT PROCEDURE  
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES  
IN INTERNATIONAL TRADE



## FORM FOR NOTIFICATION OF FINAL REGULATORY ACTION TO BAN OR SEVERELY RESTRICT A CHEMICAL

**Country:**

GROUP 1

### SECTION 1 IDENTITY OF CHEMICAL SUBJECT TO THE FINAL REGULATORY ACTION

**1.1 Common name**

Polychlorinated naphthalenes (PCNs)

**1.2 Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists**

See UNEP/POPS/POPRC.8/16/Add.1

**1.3 Trade names and names of preparations**

Halowax, Nibren Waxes, Seekay Waxes and Cerifal materials

**1.4 Code numbers**

**1.4.1 CAS number**

70776-03-3

**1.4.2 Harmonized System customs code**

**1.4.3 Other numbers**  
(specify the numbering system)




# ROTTERDAM CONVENTION



1.5 **Indication regarding previous notification on this chemical as**  
SECRETARIAT FOR THE ROTTERDAM CONVENTION  
 ON THE PRIOR INFORMED CONSENT PROCEDURE  
 FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES  
 IN INTERNATIONAL TRADE

1.5.1  This is a first-time notification of final regulatory action  
 on this chemical.

1.5.2  This notification replaces all previously submitted notifications  
 on this chemical.  
 Date of issue of the previous notification: \_\_\_\_\_

## SECTION 2

## FINAL REGULATORY ACTION

2.1 **The chemical is:**  **banned** OR  **severely restricted**

### 2.2 Information specific to the final regulatory action

#### 2.2.1 Summary of the final regulatory action

A person must not manufacture, use, sell, offer for sale or import polychlorinated naphthalenes or a product containing them unless the toxic substance is incidentally present. A person may use, sell, or offer for sale a product containing polychlorinated naphthalenes if the product is manufactured or imported before the day on which these Regulations come into force (February 11, 2015).

#### 2.2.2 Reference to the regulatory document, e.g. where decision is recorded or published

Canada,

2.2.3 Date of entry into force of the final regulatory action

11 February, 2015

**2.3 Category or categories where the final regulatory action has been taken**

2.3.1 All use or uses of the chemical in your country prior to the final regulatory action

The prohibition on manufacture, use, sale, offer for sale or import of any toxic substances or products containing them.

2.3.2 Final regulatory action has been taken for the category

Industrial

Use or uses prohibited by the final regulatory action

The prohibition on manufacture, use, sale, offer for sale or import of any toxic substances or products containing them

Use or uses that remain allowed (only in case of a severe restriction)

Non

2.3.3 Final regulatory action has been taken for the category

Pesticide

Formulation(s) and use or uses prohibited by the final regulatory action

Formulation(s) and use or uses that remain allowed  
(only in case of a severe restriction)

2.4 Was the final regulatory action based on a risk or hazard evaluation?  Yes

No (If no, you may also complete section 2.5.3.3)

2.4.1 If yes, reference to the relevant documentation, which describes the hazard or risk evaluation

UNEP/POPS/POPRC.9/13/Add.1

2.4.2 Summary description of the risk or hazard evaluation upon which the ban or severe restriction was based.

2.4.2.1 Is the reason for the final regulatory action relevant to human health?  Yes

No

If yes, give summary of the hazard or risk evaluation related to human health, including the health of consumers and workers

IPCS (2001) state that possible long-term effects of CNs are of most concern, and that exposure to CNs should be minimized as much as possible, in part because effects on endocrine functions have been shown to occur at very low doses

Expected effect of the final regulatory action

A ban would be expected to reduce risks to human health by eliminating exposure.

2.4.2.2 Is the reason for the final regulatory action relevant to the environment?  Yes

No

If yes, give summary of the hazard or risk evaluation related to the environment

PCNs are highly persistent and bioaccumulative, when taken together with potential for environmental release or formation and potential for toxicity to organisms, provides a significant indication that it may be entering the environment under conditions that may have harmful long-term ecological

effects. The substances are persistent remain in the environment for a long time after being released, increasing the potential magnitude and duration of exposure. PCNs have long half-lives in mobile media (air and water) and partitions into these media in significant proportions have the potential to cause widespread contamination.

#### Expected effect of the final regulatory action

Prevention of potential risks of harm to the Group 1 environment by prohibiting the manufacture, use, sale, offer for sale or import of PCNs as well as products containing these substances with a limited number of exemptions.

### 2.5 Other relevant information regarding the final regulatory action

#### 2.5.1 Estimated quantity of the chemical produced, imported, exported and used

	Quantity per year (MT)	Year
produced	100 to 200 tonnes per year (US)	1980-1983
imported	18 tonnes (by Japan from UK)	2003
exported	18 tonnes (by UK to Japan)	2003
used	18 tonnes (used by Japan)	2003

#### 2.5.2 Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions

Human health concerns with respect to personal exposure that may be relevant to countries where PPEs is not readily available or practicable.

#### 2.5.3 Other relevant information that may cover:

##### 2.5.3.1 Assessment of socio-economic effects of the final regulatory action

Since there are more alternatives available, there will be no significant socio-economic effects.

2.5.3.2 Information on alternatives and their relative risks, e.g. IPM, chemical and non-chemical alternatives

Challenges

1. Access to the information
2. Time constraints
3. Inadequate resources

2.5.3.3 Basis for the final regulatory action if other than hazard or risk evaluation

2.5.3.4 Additional information related to the chemical or the final regulatory action, if any

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**SECTION 3                      PROPERTIES**

**3.1      Information on hazard classification where the chemical is subject to classification requirements**

**International classification systems**  
e.g. WHO, IARC, etc.

**Hazard class**


**Other classification systems**  
e.g. EU, USEPA

**Hazard class**

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### 3.2 Further information on the properties of the chemical

#### 3.2.1 Description of physico-chemical properties of the chemical

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Reference

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#### 3.2.2 Description of toxicological properties of the chemical

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Reference

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#### 3.2.3 Description of ecotoxicological properties of the chemical

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Reference

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## SECTION 4

## DESIGNATED NATIONAL AUTHORITY

Institution

--

Address

--

Name of person in charge  
Position of person in charge  
Telephone  
Telefax  
E-mail address


Date, signature of DNA and official seal: \_\_\_\_\_

**PLEASE RETURN THE COMPLETED FORM TO:**

Secretariat for the Rotterdam Convention  
Food and Agriculture Organization  
of the United Nations (FAO)  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39 06) 5705 2188  
Fax: (+39 06) 5705 3224  
E-mail: pic@fao.org

**OR**

Secretariat for the Rotterdam Convention  
United Nations Environment  
Programme (UNEP)  
11-13, Chemin des Anémones  
CH – 1219 Châtelaine, Geneva, Switzerland  
Tel: (+41 22) 917 8296  
Fax: (+41 22) 917 8082  
E-mail: pic@pic.int

**Definitions for the purposes of the Rotterdam Convention according to Article 2:**

(a) 'Chemical' means a substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, but does not include any living organism. It consists of the following categories: pesticide (including severely hazardous pesticide formulations) and industrial;

(b) 'Banned chemical' means a chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health or the environment. It includes a chemical that has been refused approval for first-time use or has been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(c) 'Severely restricted chemical' means a chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed. It includes a chemical that has, for virtually all use, been refused for approval or been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process, and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(d) 'Final regulatory action' means an action taken by a Party, that does not require subsequent regulatory action by that Party, the purpose of which is to ban or severely restrict a chemical.

DRAFT

**Introduction to the Severely Hazardous Pesticide Formulation Report Form  
- Environmental Incidents -**

The severely hazardous pesticide formulation report form consists of three sections:

**Introduction,** the text is intended to provide relevant background information on the Rotterdam Convention and how the information collected by the form and submitted by the Designated National Authority will be used.

**Part A** is to be completed by the Designated National Authority once he/she receives Part B from the field. It reflects the information requirements of part 1 of Annex IV of the Convention. There is some redundancy between Parts A and B of the form particularly with respect to information on product identity. It was thought that this redundancy might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

**Part B** is designed to provide “*a clear description of the incidents related to the problem, including the adverse effects and the way in which the formulation was used*” (part 1 paragraph g of Annex IV of the Convention). The form has been constructed around these points. It consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available.

DRAFT

**SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM:**  
**ENVIRONMENTAL INCIDENTS**

## **INTRODUCTION**

6. Purpose of this form

The Severely Hazardous Pesticide Formulation (SHPF) Report Form - Environmental Incident Report Form - was developed to facilitate the identification of candidate formulations with environmental concerns for inclusion in the Rotterdam Convention. A similar form was developed for reporting health incidents. The Convention provides a mechanism for countries to decide whether or not they wish to receive future shipments of such pesticide formulations and for ensuring compliance with these decisions by exporting countries.

7. What is the Rotterdam Convention?

The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade promotes a shared responsibility between importing and exporting parties in the international trade of certain hazardous chemicals. It gives importing countries the power to decide which chemicals they want to receive and to exclude those they cannot manage safely. The Convention includes provisions for developing countries and countries with economy in transition, that are experiencing health or environmental problems with severely hazardous pesticide formulations under conditions of use, to identify such formulations as candidates for inclusion in the Convention. Further information on the operation of the Rotterdam Convention may be found at [www.pic.int](http://www.pic.int).

8. What is the severely hazardous pesticide formulation report form?

The form consists of two parts: – the Transmittal Form (Part A) – is to be used by the Designated National Authority (DNA) to transmit the Environmental Incident Report Form (Part B – EIRF) to the Secretariat. The Environmental Incident Report Form has been developed to meet the information requirements of the Convention, that is a clear description of the environmental incidents related to the use of a severely hazardous pesticide formulation, including the adverse effects and the way in which the formulation was used. Part B of the form consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available. Although programmes for collecting quantitative information on environmental incidents of pesticides may not be implemented in many countries, use of such national programmes for reporting environmental incidents should be made, where they exist. The format has been developed so that it might be widely used by States, aid agencies, intergovernmental organizations and non-governmental organizations etc., in reporting on environmental incidents related to the use of severely hazardous pesticide formulations. If there are other formats available, they may be used in preparing a submission to the Secretariat and forwarded through the DNA using Part A of the SHPF form provided that they meet the information requirements of Parts 1 and 3 of Annex IV of the Convention. There is some redundancy between Parts A and B of this form. It was thought that this might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

9. What is an environmental incident?

For the purposes of this incident report form, an environmental incident is defined as the contamination of land, water and/or air by a severely hazardous pesticide formulation (SHPF) causing the temporary or permanent impairment or mortality of non-target organisms or biological processes under the “conditions of use” in developing countries or countries with economies in transition (Article 6). In this instance, “conditions of use” does not include accidental spills/leaks, nor deliberate misuse of an SHPF, and is clearly limited to effects caused by a certain formulation of a substance. The following are some examples of potential incidents:

- the poisoning of birds or other wildlife that ingest granular insecticides used for soil treatment. Such incidents may result from the application method (eg. broadcast application rather than injection into the soil) or from the behaviour of non-target organisms (eg. scavenging of granules).

- the poisoning of aquatic organisms due to the contamination of a stream or pond. Such incidents may occur if sufficient buffer zones between treated areas and waterways were not observed.
- the severe disturbance of non-target populations (e.g. honey bees, earthworms, beneficial insects).

10. What happens to the completed form?

Once Part B - Environmental Incident Report Form - has been completed to the extent possible based on the information available, it should be forwarded to the DNA. The DNA is to coordinate the completion of Part A - Transmittal form - and forward the entire document to the Secretariat. The Secretariat is required to collect additional information including physico-chemical and eco-toxicological properties of the pesticide formulation, information on environmental incidents related to the formulation in other States, and the existence of environmental restrictions or environmental guidelines in other states, or relevant evaluations, where available. This information along with the completed form is reviewed by the Chemical Review Committee (CRC). The CRC will decide whether or not to recommend the inclusion of the pesticide formulation in the Rotterdam Convention.

Your co-operation in completing this form and your contribution for the identification of severely hazardous pesticide formulations posing environmental problems under conditions of use is greatly appreciated. If you have any questions or comments relating to the completion of this form please contact the Secretariat at the address below.

**Secretariat for the Rotterdam Convention  
Food and Agriculture Organization of  
the United Nations (FAO)**

Viale delle Terme di Caracalla

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**Secretariat for the Rotterdam Convention  
United Nations Environment Programme  
(UNEP)**

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CH – 1219 Châtelaine-Geneva, Switzerland

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**ROTTERDAM CONVENTION**  
SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM

SECRETARIAT FOR THE ROTTERDAM CONVENTION  
ON THE PRIOR RESTRICTION OF CERTAIN SEVERELY HAZARDOUS PESTICIDES  
**ENVIRONMENTAL INCIDENTS**



**PART A - TRANSMITTAL FORM**  
**DESIGNATED NATIONAL AUTHORITY**

**Information required from a Designated National Authority**

<b>1</b>	<b>Name of the formulation:</b> GENIUS.....
<b>2</b>	<b>Type of formulation (for example EC, WP, DP, GR, TB):</b> EC and GR .....
<b>3</b>	<b>Trade name and name of producer, if available:</b> .....
<b>4</b>	<b>Name of the active ingredient or ingredients in the formulation:</b> XX .....
<b>5</b>	<b>Relative amount of each active ingredient in the formulation:</b> XX 40%.....

**6 Attach copy of the label(s), if available (or describe the key aspects of the label: language, etc.).**

**Label of pesticide formulation**

4. Hazards and Risks to human health and the environment				
4.1 Hazard Classification				
<b>WHO / IPCS</b>	Technical a.i.:	Class II (moderately hazardous) LD <sub>50</sub> rat: 80 mg/kg bw (WHO 2004)		
	Formulations			
		Oral toxicity LD <sub>50</sub> rat: 80 mg/kg bw (WHO 2004)		
	Liquid	a.i. (%)	Hazard class	
		≥ 40	Ib	
		≥ 4	II	
	Solid	< 4	III	
≥ 16		II		
	< 16	III		
<b>IARC</b>	Not evaluated			
<b>European Community</b>	Classification of the active substance is (Commission Directive 93/72/EEC, 1 September 1993): T (toxic) Xi (Irritant) N (dangerous for the environment) R 24/25 (Toxic in contact with skin/ if swallowed) R 36 (Irritating to eyes) R 50/53 (Very toxic to aquatic organisms / may cause long-term adverse effects in the aquatic environment)			
<b>US EPA</b>	Toxicity Class I (formulation)			
4.2 Exposure limits				

**Food:** The FAO/WHO Joint Meeting on Pesticide Residues (JMPR) established an Acceptable Daily Intake (ADI) of 0-0.006 mg/kg bw and an acute reference dose (ARfD) of 0.02mg/kg bw. (JMPR1998).

**Drinking water:** No limits were reported. WHO Drinking Water Guidelines: a health-based value of 20µg/l can be calculated for XX on the basis of an ADI of 0.006 mg/kg bw (WHO 2003).

#### 4.3 Packaging and labelling

The United Nations Committee of Experts on the Transportation of Dangerous Goods classifies the chemical in:

<b>Hazard Class:</b>	UN: 6.1
<b>Packing Group:</b>	UN: II
<b>International Maritime Dangerous Goods (IMDG) Code</b>	Severe marine pollutant Do not transport with food and feedstuff.
<b>Transport Emergency Card</b>	TEC (R)-61G41b

#### 7 Common and recognized patterns of use of the formulation within the country –

- the formulation is registered / permitted for use in the country? YES
- what uses are permitted? Controlling golden apple snails in cotton and rice fields
- are there any handling or applicator restrictions specified as a condition of registration; None
- information on the extent of use of the formulation, such as the number of registrations or production or sales quantity (indicate the source of information); About 100,000 kg/year
- other information on how the formulation is commonly/typically used in the country: used in paddy fields to control golden apple snails

*(this information should be submitted on a separate sheet attached to the completed form)*

#### 8 A clear description of incidents(s) related to the problem, including adverse effects and the way in which the formulation was used (for example *Part B pesticide incident report form identifies key elements and appropriate level of detail*). Other report formats which may exist at the national level may also be used, provided they contain comparable information.

Field survey five provinces of the central region showed that 94 per cent of farmers used pesticides and of that 60–76 % used EC and GR formulations of XX for golden apple snail control in paddy fields. Those formulations of XX were very effective in combating snails

*Adverse effects:* very toxic to fish and other aquatic organisms. Almost all farmers in every province reported mortality of fish, snake, frog, eel and toad. However, farmers confirmed that they would continue using XX to control golden apple snail unless it is ineffective.

The toxicological hazards identified in the existing scientific data, taken together with the effects observed in the field survey, led to the decision to ban all formulations of XX except capsulated suspension (CS) formulations

#### 9 Any regulatory, administrative or other measure taken, or intended to be taken, by the proposing Party in response to such incidents.

The intention is to prohibit all formulations except the CS formulations.

Date, signature of DNA and official seal:

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**PLEASE RETURN THE COMPLETED FORM TO:**

**Secretariat for the Rotterdam Convention  
Food and Agriculture Organization of  
the United Nations (FAO)**  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39 06) 5705 2188  
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DRAFT

**SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM**

**ENVIRONMENTAL INCIDENTS**

**PART B**  
**ENVIRONMENTAL INCIDENT REPORT FORM**

Note: If the reported incident is associated with the use of a mixture of more than one formulation, Section 2 (Product Identity) should be completed separately for each of the formulations. The remaining Sections of the form that describe how the formulation was used, the incident, adverse effects etc., need only be completed once for each incident.

In order to help keep the form as simple as possible, the term formulation is used throughout and refers to the chemical product (herbicide, insecticide, etc). For those incidents involving more than one formulation, it is understood that the use of this term in Sections 4–7 will refer to the mixture that was applied.

**SECTION 1. Number of formulations used**

**1. How many formulations were used when the incident took place?**

*(Please circle or fill in number and proceed as indicated)*

c. One formulation was used

Yes

No

If yes, complete Section 2 (Product Identity) once.

If no,

d. Two (2) different formulations were used at the same time (e.g. tank mix of a herbicide and a fungicide)

c. Please list the individual formulations here:

e.g. Monitor (methamidophos 60 EC)

Formulation 1: XX 40% GR \_\_\_\_\_

Formulation 2: XX 40% EC \_\_\_\_\_

Formulation 3: \_\_\_\_\_

*Please complete Section 2 (Product Identity) for each of the listed formulations.*

## SECTION 2. Product Identity: Formulation used and its preparation

Please complete this section for each formulation used

2. Name of the formulation? GENIUS \_\_\_\_\_  
\_\_\_\_\_

3. Type of formulation (please tick):

- Emulsifiable concentrate (EC)       Wettable powder (WP)       Dustable powder (DP)  
 Water soluble powder (SP)       Ultra low volume (ULV)       Tablet (TB)  
 Granular (GR)       Other (please specify): \_\_\_\_\_

4. Trade names and names of the producer/manufacturer, if available: \_\_\_\_\_  
\_\_\_\_\_

5. Name of the active ingredient(s) in the formulation: XX \_\_\_\_\_  
\_\_\_\_\_

6. What is the name and relative amount of each active ingredient (a.i.) in the formulation?

% concentration: XX 40% \_\_\_\_\_  
grams a.i./litre or: \_\_\_\_\_  
ounce a.i./gallon or: \_\_\_\_\_  
grams a.i./kg or: \_\_\_\_\_  
ounce a.i./pound: \_\_\_\_\_

7. Attach a copy of the label(s) and instructions for use, if available, to this form (or describe the key aspects of the label: language, use instructions, etc).

Label attached       No  
                                  Yes

8. What was the intended use (please tick)

- Insecticide       Herbicide       Tick control       Rodenticide  
 Fungicide       Unknown       Other (specify) Molluscide \_\_\_\_\_

9. Are there any use restrictions or prohibitions regarding the use of this formulation or the active ingredient (e.g. use of safety equipment, application restrictions)?

No  
 Yes (please specify): \_\_\_\_\_

10. Was the formulation used as purchased or was it changed in any way?

Used as purchased  
 Changed (please specify how): \_\_\_\_\_

### 11. Was the formulation in its original container?

- c.  No (go to b)  
 Yes (go to Question 13)
- d. Did the repackaged formulation have a copy of the label attached?
- No  
 Yes

### 12. Preparation of formulation:

- e. Was the formulation (as outlined in Questions 2–8) mixed with a carrier or diluent before use (e.g. mixed with liquid, powder, bran)?
- No (go to Question 13)  
 Yes

If yes,

- f. How was the mixture prepared (e.g. mixed with water, diesel)?

\_\_\_\_\_

- g. What was the mixing ratio? (*circle appropriate unit*)

\_\_\_\_\_ litre or kg/lbs of formulation per \_\_\_\_\_ litre or kg/lbs of carrier/diluent

- h. Was the mixture used immediately or was it stored?

- Used immediately  
 Stored (*please specify*)

For how long? \_\_\_\_\_ hours/days/weeks (*circle appropriate unit*)

### 13. Application rate:

- (c) What was the application rate used?

\_\_\_\_\_ e.g.: g a.i./ha; litre/ha; lb/acre (*circle appropriate unit*) or specify: not indicated \_\_\_\_\_

- (d) How much of the chemical product / or active ingredient (a.i.) was used?  
For multiple applications, please estimate the total amount released.  
(*circle appropriate unit*)

Total amount: \_\_\_\_\_ (L; gallons; kg; or lb)

Concentration: \_\_\_\_\_ (g a.i./L; oz a.i./gallon; g a.i./kg; or oz a.i./lbs)

### SECTION 3. Description of application

**14. Location where the formulation was used?**

Nearest village/city: Mwea

Province/state/region/district: Central Kenya \_\_\_\_\_

Country: Kenya \_\_\_\_\_

**15. Date of application(s)**

What were the date(s) (if known) the formulation was used?

Beginning: March, 2002 \_\_\_\_\_ End: May, 2002 \_\_\_\_\_

**16. Was it a single or multiple application?**

Single application

Multiple application (*please specify*)

Number of applications: **not known** \_\_\_\_\_

Approximate date of each application: \_\_\_\_\_

**17. Were any other pesticides used in the same area at the time of the incident? No**

**18. Treated area and target pest:**

c. What was the type of crop or situation treated (e.g. maize, grassland, forest, pond)? Rice

\_\_\_\_\_

d. What was the target pest (e.g. weeds in maize, locusts in grasslands, moths in forests, mosquitoes in ponds)? Golden apple snail

\_\_\_\_\_

**19. Conduct of application**

d. How was the formulation applied (method of application)?

By hand

Backpack sprayer

Tractor-mounted sprayer

Aircraft

In-furrow applicator

Hand-held sprayer

Other method (please specify): \_\_\_\_\_

e. What were the weather conditions at the time of application?

Temperature:  Hot  Warm  Cool

Sunny or cloudy: Not known \_\_\_\_\_

Rain:  Light  Medium  Heavy

Wind speed:  Light  Strong

Direction: \_\_\_\_\_

General description of conditions: \_\_\_\_\_

f. What were the weather conditions for the few days after application?

Temperature:  Hot  Warm  Cool

Sunny or cloudy: \_\_\_\_\_

Rain:  Light  Medium  Heavy

Wind speed:  Light  Strong

Direction: \_\_\_\_\_

General description of conditions: \_\_\_\_\_

20. Please provide any relevant information regarding the person applying the formulation (e.g. level of training, literacy)

#### SECTION 4. Description of the Incident

21. What was the date when the incident was first noticed?

22. Location of the incident

Was the location of the incident, the same location of the area treated? *Please indicate where the incident occurred (be as specific as possible).*

- Yes (as specified in Section 3 Question 14)
- No (please specify) Geographical coordinates, if available

Village/city: Mwea

Province/state/region/district: Central Kenya \_\_\_\_\_

Country: Kenya \_\_\_\_\_

23. Please indicate where the incident occurred and the size of the area affected, by completing all areas of the following table that apply. Please be as specific as possible; mark all boxes as appropriate:

Environment Affected	Size of area or volume affected (write a number)	Units (circle appropriate units)
<b>Land</b> <input type="checkbox"/> Home garden <input type="checkbox"/> Farm field <input type="checkbox"/> Grassland <input type="checkbox"/> Other _____		m <sup>2</sup> hectare (ha) km <sup>2</sup> acre Other (specify) _____
<b>Fresh Water</b> <input type="checkbox"/> Fish pond <input checked="" type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Lake <input type="checkbox"/> Sediments <input type="checkbox"/> Other _____		<b>Surface Area</b> m <sup>2</sup> , ha, km <sup>2</sup> , acre or Other (specify) _____  <b>Volume</b> L, m <sup>3</sup> or Other (specify) _____
<b>Salt Water</b> <input type="checkbox"/> Estuary <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Sediments <input type="checkbox"/> Other _____		<b>Surface Area</b> m <sup>2</sup> , ha, km <sup>2</sup> or Other (specify) _____  <b>Volume</b> L, m <sup>3</sup> or Other (specify) _____

**24. Please draw a rough map of the area around the incident. (Indicate scale if possible)**

*Use the box below or attach to the back of this form.*

Please include:

- f. the area affected;
- g. any nearby waterways that were, or could be, affected and the direction of water flow;
- h. location of any affected non-target organisms that were found;
- i. location where the formulation was applied;
- j. any other details which may further clarify the incident (e.g. topography, soil properties, water table).



**25. Please describe any other details, additional information or facts that are not captured elsewhere in this form that further explain the cause of the incident, how it occurred, the result and any remediation efforts (attach extra pages if required).**

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## SECTION 5. Description of adverse effects

26. Identify the non-target organism(s) adversely affected in the incident, including the number affected. Please be as specific as possible (common names and if possible scientific names) and complete as much as possible. Examples are provided in the table below.

SPECIES OF ANIMAL OR PLANT	NUMBER OR PROPORTION AFFECTED	AGE OR DEVELOPMENT STAGE (E.G. JUVENILE, LARVAL, SEEDLING)	OBSERVATIONS (E.G. ABNORMAL MORPHOLOGY OR BEHAVIOUR, TOXICOLOGICAL SYMPTOMS)	DURATION OF EFFECT (INCLUDING DATE OF DEATH OR RECOVERY)
<i>Examples</i>				
<b>Terrestrial vertebrate</b> <i>Domestic cattle</i>	10	Adults	Excessive salivating, loss of balance, lethargy.	Recovered 26 May 2002
<i>Birds – Mallard ducks</i>	40	Adults and juveniles	Disoriented, ruffled appearance, head lesions	Recovered 30 May 2002
	6	juveniles	Disoriented, lethargy	Recovered 21 May 2002
	5	juveniles	Disoriented, lethargy	Died 22 May 2002
<i>Fish</i> <i>e.g.: various species</i>	numerous	<b>All size classes</b>	Dead fish on riverbank up to 3km downstream of treatment area	<b>No information</b>
Invertebrates <i>e.g. honey bee</i>	100 colonies	Foraging during peak of flowering period	<b>Colonies dead</b>	All cases reported within 20 days post-application
<i>Vegetation</i> <i>e.g. grassland</i>	4 acres	Flowering	Wilted, yellowing	Dead patches
Fish,			Death	
Toads			Death	
snakes			Death	
Eel			Death	

27. Was there any indirect evidence of severe hazards to non-target organisms (e.g. unexpected population declines, disappearance of certain species in the incident area)?

No

Yes (*Please describe these effects*) Death of Fish and other aquatic organisms \_\_\_\_\_

28. Please provide any other relevant information such as:

- a. links between the use of the formulation (Section 4) and observed effects in non target organisms (question 26):

\_\_\_\_\_

b. any analytical measurements, if available, which confirm residues of active ingredient(s) in soil, water, air or biological tissues

- No
- Yes (attach data and source)

## SECTION 6. Management

29. What practical steps (if any) were taken at the time the incident occurred to limit or stop its further impact on the environment (excluding administrative and regulatory actions)?

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30. What steps (if any) were taken to clean up the area after the incident or to rehabilitate any species affected in the incident?

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## SECTION 7. Reporting/communication

31. Date of data collection/consultation: \_\_\_\_\_

32. Name and address of investigator/data collector:

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33. Category of investigator/data collector (e.g. environmental scientist, agricultural officer, government representative):

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34. Contact if further information needed: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**35. Has this incident been reported elsewhere?**

- No
  - Yes (*who was it reported to*)
- 

**36. Have similar incidents happened in that area before?**

- No
- Yes

If yes, were they reported?       No       Yes

***Please send the completed incident report form to the Designated National Authority.  
(Name and address of the DNA)***

**DNA- please attach all forms to Part A – Transmittal Form**

Challenges

4. Access to the information
5. Time constraints
6. Inadequate resources

**Introduction to the Severely Hazardous Pesticide Formulation Report Form  
- Human Health Incidents –**

The severely hazardous pesticide formulation report form consists of three sections:

**Introduction**, the text is intended to provide relevant background information on the Rotterdam Convention and how the information collected by the form and submitted by the Designated National Authority will be used.

**Part A** is to be completed by the Designated National Authority once he/she receives Part B from the field. It reflects the information requirements of part 1 of Annex IV of the Convention. There is some redundancy between Parts A and B of the form particularly with respect to information on product identity. It was thought that this redundancy might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

**Part B** is designed to provide “*a clear description of the incidents related to the problem, including the adverse effects and the way in which the formulation was used*” (part 1 paragraph g of Annex IV of the Convention). The form has been constructed around these points. It consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available.

## **SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM: HUMAN HEALTH INCIDENTS**

### **INTRODUCTION**

#### **1. Purpose of this form**

The Severely Hazardous Pesticide Formulation (SHPF) Report form was developed to facilitate the identification of candidate formulations for inclusion in the Rotterdam Convention. The Convention provides a mechanism for countries to decide whether or not they wish to receive future shipments of such pesticide formulations and for ensuring compliance with these decisions by exporting countries.

#### **2. What is the Rotterdam Convention?**

The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade promotes a shared responsibility between importing and exporting parties in the international trade of certain hazardous chemicals. It gives importing countries the power to decide which chemicals they want to receive and to exclude those they cannot manage safely. The Convention includes provisions for developing countries and countries with economy in transition, that are experiencing problems with severely hazardous pesticide formulations under conditions of use, to identify the formulations as candidates for inclusion in the Convention. Further information on the operation of the Rotterdam Convention may be found at [www.pic.int](http://www.pic.int).

#### **3. What is the severely hazardous pesticide formulation report form?**

This form consists of two parts Part A and Part B. Part A (Transmittal Form) is to be used by the Designated National Authority (DNA) to transmit an incident report form to the Secretariat. Part B (Pesticide Incident Report Form) has been developed to collect the information required by the Convention, that is a clear description of the incidents related to the use of a severely hazardous pesticide formulation, including the adverse effects and the way in which the formulation was used. Part B of the form consists of a series of closed questions or checklist that captures the basic information needed with options for including additional information where it is available. It is fully compatible with programs collecting quantitative information on pesticide poisonings in support of epidemiological studies or national programmes concerning the reporting of adverse effects associated with pesticide use. The format has been developed so that it might be widely used by States, aid agencies, intergovernmental organizations and non-governmental organizations etc., in reporting on pesticide incidents. If there are other formats available that meet the information requirements of Parts 1 and 3, Annex IV of the Convention, they may also be used in preparing a submission and forwarded through the DNA to the Secretariat together with Part A of the SHPF form. There is some redundancy between Parts A and B of this form. It was thought that this might help countries to consolidate responses by using Part A of the form to report on more than one incident for the same formulation.

#### **4. What happens to the completed form?**

Once Part B- Incident report form has been completed to the extent possible based on the information available, it should be forwarded to the DNA. The DNA is to coordinate the completion of Part A-Transmittal form and forward the entire document to the Secretariat. The Secretariat is required to collect additional information including physico-chemical and toxicological properties of the pesticide formulation, information on incidents related to the formulation in other States, the existence of handling or applicator restrictions in other states and risk and/or hazard evaluations where available. This information along with the completed form is reviewed by the Chemical Review Committee (CRC). The CRC will decide whether or not to recommend the inclusion of the pesticide formulation in the Rotterdam Convention.

Your cooperation in completing this form and your contribution for the identification of severely hazardous pesticide formulations posing problems under conditions of use is greatly appreciated. If you have any questions or comments relating to the completion of this form please contact the Secretariat at the address below.

**Food and Agriculture Organization of  
the United Nations (FAO)**

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**SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM  
HUMAN HEALTH INCIDENTS**

<p><b>PART A - TRANSMITTAL FORM DESIGNATED NATIONAL AUTHORITY</b></p>
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Information required from a Designated National Authority	
<b>1</b>	<b>Name of the formulation: Hitox Ultra</b> .....
<b>2</b>	<b>Type of formulation (for example EC, WP, DP, GR, TB): Dustable Powder</b> .....
<b>3</b>	<b>Trade name and name of producer, if available: HITOX T</b> .....
<b>4</b>	<b>Name of the active ingredient or ingredients in the formulation:</b> Maneb , Isofenphos and Carbofuran
<b>5</b>	<b>Relative amount of each active ingredient in the formulation:</b> Maneb (15%), Isofenphos (10%), Carbofuran (20%)
<b>6</b>	<b>Attach copy of the label(s), if available (or describe the key aspects of the label: language, etc.).</b>
<b>7</b>	<p><b>Common and recognized patterns of use of the formulation within the country –</b></p> <ul style="list-style-type: none"> <li>➤ the formulation is registered / permitted for use in the country? YES</li> <li>➤ what uses are permitted? Peanut seed treatment only.</li> <li>➤ are there any handling or applicator restrictions specified as a condition of registration; There are no handling restrictions.</li> <li>➤ information on the extent of use of the formulation, such as the number of registrations or production or sales quantity (indicate the source of information); About 55,000kg/year; used on the 6 or 7 regions where peanuts are cultivated</li> <li>➤ other information on how the formulation is commonly/typically used in the country</li> </ul> <p>“Farmers peel peanuts before sowing using hands and mouth. Peanuts may be treated again shortly before peeling. Farmers use a sowing-machine to scatter peanut seeds on the ground which causes exposure through inhalation and by contact when they fill the containers or mix the grains with the pesticide, as no protective measures (gloves or masks) are taken. People handling the powder are said to inhale much of the product when filling the seeding machine, depending on the direction of the wind. Sowing takes from 5 to 10 days, depending on the composition of the land to cultivate, and lasts from May to July.”</p>
<b>8</b>	<p>A clear description of incidents(s) related to the problem, including adverse effects and the way in which the formulation was used (for example <i>Part B pesticide incident report form identifies key elements and appropriate level of detail</i>). Other report formats which may exist at the national level may also be used, provided they contain comparable information.</p> <p>It appears that the incidents are most probably related to carbamate poisoning. Carbamates are being distributed together with the peanut seeds to farmers. The scheme of free distribution of seeds and pesticides was expanded, leading to an over-consumption of the products. This lead to an increased exposure of people handling the seeders that is the young males as well as a small proportion of</p>

	<p>women working in peanut fields. Furthermore, many of the new farm workers were not used to handle the toxic product, they may have over-estimated the quantity of pesticides necessary to fill-in the seeder. There is no good awareness raising programme for farm workers regarding the hazard posed by these products, and precautionary measures associated with the use of pesticides, for instance washing the hands, wearing masks and gloves, applying pesticides against the wind.</p> <p>A total of 20 incidents were reported by country X. The incidents occurred in September 2000 in several small villages.</p> <p>Persons injured were male, aged 45. The incidents occurred when farmers treated peanut seeds. Protective clothing was not worn as it was not available. The product was for use in the field. No animals were treated. The product was applied manually at the rate of 4 bags of 100g for 40 kg of peanuts Exposure to the pesticide occurred for about 1 hour during treatment of the seeds, and again for 3 to 4 days when sowing the treated seeds.</p> <p>The pesticide was packaged in its original, properly labelled container, but the farmers were illiterate. The label reported that the pesticide is authorised for treatment of peanut seeds. The reported incidents are typical of the way in which the formulation is used. The incident occurred under hot and very humid climatic conditions.</p> <p><u>Adverse effects:</u> Dizziness, nausea, salivation, and vomiting,</p> <p>further reported were: headache, impairment of visual acuity,</p> <p>some severe cases: miosis, non-reactive pupils, dyspnoea, respiratory depression, convulsions</p>
9	<p>Any regulatory, administrative or other measure taken, or intended to be taken, by the proposing Party in response to such incidents.</p> <p>The country has to enforce the policy for distribution of the pesticides through awareness raising program for farm workers</p>

**Date, signature of DNA and official seal:**

**PLEASE RETURN THE COMPLETED FORM TO:**

**Secretariat for the Rotterdam Convention  
Food and Agriculture Organization of  
the United Nations (FAO)**  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39 06) 5705 2188  
Fax: (+39 06) 5705 3224  
E-mail: [pic@fao.org](mailto:pic@fao.org)

**OR**

**Secretariat for the Rotterdam Convention  
United Nations Environment Programme  
(UNEP)**  
11-13, Chemin des Anémones  
CH – 1219 Châtelaine-Geneva, Switzerland  
Tel: (+41 22) 917 8296  
Fax: (+41 22) 917 8082  
E-mail: [pic@pic.int](mailto:pic@pic.int)

**Label of pesticide formulation**

**HITOX T**

**Maneb 15%**

**Isofenphos 10%**

**Carbofuran 20%**

**SHELLED PEANUT SEED TREATMENT**

DOSAGE:

- 1 bag of 100g for
- 25 kg oil peanuts
- 40 kg mouth peanuts

PRECAUTIONS

HITOX is a toxic compound that requires the following precautions:

Store out of reach from children and animals.

If you do not have gloves, wrap your hands in plastic bags prior to mixing. Avoid handling this product where there are open wounds or cuts on hands.

Do not drink, or smoke or eat during application.

Avoid to breath the dust during the mixing, apply with the back to the wind.

Wash carefully all the tools that have been used for mixing.

Never eat treated seeds even if they have been rinsed or if they are without skin

Net weight

100 g.

SEVERELY HAZARDOUS PESTICIDE FORMULATION REPORT FORM  
HUMAN HEALTH INCIDENTS

**PART B - PESTICIDE INCIDENT REPORT FORM**

*This form should be completed for each individual exposed in a given incident - Where an incident involves more than one formulation please complete Section I and question 13 for each.*

**I. Product identity: What formulation was used when the incident took place.**

1. **Name of the formulation: Hitox Ultra** .....
2. **Type of formulation (check one of the following):**  
 Emulsifiable Conc. (EC)       Wettable Powder (WP)       Dustable powder (DP)  
 Water Soluble Powder (SP)       Ultra Low Volume (ULV)       Tablet (TB)  
 Granular (GR)       other, please specify: .....
3. **Trade name and name of producer, if available: HITOX T**  
.....
4. **Name of the active ingredient(s) in the formulation: Maneb , Isofenphos and Carbofuran**  
.....
5. **Relative amount of each active ingredient in the formulation: Maneb (15%), Isofenphos (10%), Carbofuran (20%)**  
.....
6. **Attach copy of the label(s), if available.**

**II. Description of the incident: How the formulation was used.**

7. **Date of incident: (MM/DD/YYYY):** September, 2000.....
8. **Location of incident:** village/city: NYAKIBIMBILI/.....  
province/state/region: MOROGORO .....  
country: X.....
9. **Person exposed (identity should be checked and recorded before submission of the form)**  
Sex:                      X male       female       age: 45 YEARS .....  
If age unknown:       child (<14 yrs)       adolescent (14-19 yrs)       adult (>19 yrs)
10. **Main activity at time of exposure (check one or more of the following):**

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> application in field | <input checked="" type="checkbox"/> mixing/loading  | <input type="checkbox"/> veterinary therapy |
| <input type="checkbox"/> household application           | <input type="checkbox"/> vector control application | <input type="checkbox"/> human therapy      |
| <input type="checkbox"/> re-entry to treated field       | <input type="checkbox"/> other, please specify:     |   |

**11. Was protective clothing used during application?**  no  yes

If no, please explain why: It was not available.....

If yes, briefly describe (check one or more of the following):

- |  |                                      |  |                                     |
|--|--------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> gloves                      | <input type="checkbox"/> overalls    | <input type="checkbox"/> eye glasses       | <input type="checkbox"/> respirator |
| <input type="checkbox"/> face mask                   | <input type="checkbox"/> boots/shoes | <input type="checkbox"/> long-sleeve shirt | <input type="checkbox"/> long pants |
| <input type="checkbox"/> other, please specify:..... |                                      |  |                                     |

**12. Information on how product was being used:**

(a) Location of exposure/incident (*field, garden, greenhouse, house, etc.*): Field

.....

(b) List the animals/crop(s)/stored products treated if relevant: Peanuts

.....

(c) Application method: (*How product was used e.g. hand, bucket & brush, soil injection, spray (backpack, tractor mounted,etc), drip irrigation, aerial (helicopter, plane etc.)*): Sowing machine

.....

(d) Dose applied/concentration (*or amount of pesticide applied*): 4 bags of 100g for 40kg of peanuts

.....

(e) Duration of the exposure period:

hours  ½ day  day  other (specify): one hour during treatment of the seeds and 3 to 4 days when sowing the treated seeds .....

**13. If more than one pesticide formulation was used at the same time, please respond to points i) to iv) below for each formulation. (see also Part I Product Identity)**

i) Was the pesticide in its original container?  no  yes

ii) Was the label available?  no  yes

If yes, was exposed individual able to read and understand label?  no  yes

iii) Does the label include the reported use?  no  yes

If no, describe how the use reported above differs from that recommended on the label (*use a separate page if necessary*): .....



*medical*

*paramedical*

*non-medical*

If non-medical, then specify type of person (*applicator, formulator, vendor, extension worker, manager, etc.*): Extension workers .....

**25. Contact if further information is needed:** Tel: .....  
Fax: ..... E.mail: .....

**26. Has this incident been reported elsewhere?**  No  Yes  
If yes, where: News papers .....

**Send the completed incident report form to the Designated National Authority.  
(Name and address of the DNA)**



