INTERIM CHEMICAL REVIEW COMMITTEE

Third session
Geneva, 18 - 22 February 2002

Item 6 (b) of the provisional agenda

INCLUSION OF CHEMICALS IN THE INTERIM PRIOR INFORMED CONSENT PROCEDURE - REVIEW OF PROPOSALS FOR SEVERELY HAZARDOUS PESTICIDE FORMULATIONS

GRANOX TBC and SPINOX T

Note by the Secretariat

1. In line with Article 6 of the Rotterdam Convention, when the Secretariat has received a proposal for a severely hazardous pesticide formulation from a developing country, or country with economy in transition that is experiencing problems under conditions of use in its territory, and has checked that it contains the information required in part 1 of Annex IV, it forwards a summary of the information received to all Parties. The secretariat must also collect the additional information set out in part 2 of Annex IV. The Committee reviews the information provided in such proposals and the information collected by the Secretariat and, in accordance with the criteria set out in part 3 Annex IV, recommends to the Intergovernmental Negotiating Committee whether the severely hazardous pesticide formulation in question should be made subject to the interim PIC procedure and a decision guidance document drafted.

2. The Intergovernmental Negotiating Committee, in decision INC.7/6, adopted a process for drafting decision guidance documents. The process is based on that developed by the Interim Chemical Review Committee at its first session in Geneva in February 2000. An excerpt of the decision is contained in document UNEP/FAO/PIC/ICRC.3/INF3.

3. The Secretariat has received two proposals verified to meet the requirements of part 1 of Annex IV from Senegal. The original proposals were supported by a total of 89 Pesticide Incident Report forms (Part B of the proposals). The Secretariat found that 22 of the 89 forms submitted were complete and concerned incidents that reflect the uses of the two formulations as identified on the submitted labels. Based on these 22 forms two summaries were prepared and circulated in PIC Circular XIV (12 December 2001). This note contains the 22 original proposals in French and a...
4. Of the remaining 67 Pesticide Incident Report forms submitted, the Secretariat has determined that 43 did not include all of the information required. A further 13 of the Pesticide Incident Report forms were verified as containing the information required; however, the use(s) reported did not correspond to that permitted on the label and therefore they were not included in the summaries prepared for the PIC Circular. The remaining 11 Incident Report forms involved either different formulations from the ones indicated in Part A of the proposals or additional formulations mixed with those reported in Part A (Spinox T and Granox TBC) and will be the subject of separate follow-up with Senegal. All of the 89 Pesticide Incident Report forms submitted will be available to the Committee.

5. The additional information collected by the secretariat in accordance with part 2 of Annex IV, was circulated to members of the Interim Chemical Review Committee in late December 2001 and is available as an addendum to this note (UNEP/FAO/PIC/ICRC.3/17/Add1).
NOTE: p. 1 to 3 are a summary in English of the incident report forms submitted by the DNA in Senegal.

### PART A – TRANSMITTAL FORM – DESIGNATED NATIONAL AUTHORITY (DNA)

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Name of the formulation: Granox TBC</td>
</tr>
<tr>
<td>2</td>
<td>Name of the active ingredient or ingredients in the formulation: Thiram + Benomyl + Carbofuran</td>
</tr>
<tr>
<td>3</td>
<td>Relative amount of each active ingredient in the formulation: Thiram 15% + Benomyl 7% + Carbofuran 10%</td>
</tr>
<tr>
<td>4</td>
<td>Trade names and names of the producers if available: Granox TBC (producer: Senchim AG)</td>
</tr>
<tr>
<td>5</td>
<td>Type of formulation: DP (dustable powder)</td>
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<tr>
<td>6</td>
<td>Copy of the label: to follow</td>
</tr>
</tbody>
</table>

7 Common and recognized patterns of use of the formulation within the proposing Party:
- **The formulation is registered/the use is authorized in the country?** The formulation is registered in Senegal and its use is authorized.
- **Which uses are allowed in the country?** Peanut seed treatment only.
- **Existence of handling or applicator restrictions?** There are no restriction on use or application, products are only allowed for peanut seed treatment.
- **Information on the extent of use of the formulation, such as the number of registrations or production or sales quantity?** About 53,000 kg/year; used on the 6 or 7 regions producing peanut.

8 A clear description of incidents related to the problem, including the adverse effects and the way in which the formulation was used:
*Please see Part B for details.*

9 Any regulatory, administrative or other measure taken or intended to be taken by the proposing Party in response to such incidents:
The following regulatory or administrative measures will be taken because of many deaths (22 at least) due to the use of these two products which are in reality only one product because of similar active ingredients (concentration and formulation). These measures are directed to the services of the Ministry of Agriculture and Husbandry, responsible for the distribution of pesticides to the farmers SONACOS/SONAGRAINES, to the National Endemic Service, to the laboratory of Analytical chemistry and Toxicology (UCAD) and to the medical team of the Kolda region.

- organize sessions to “restitute” the results of the investigations to the Ministry of Health, to the Kolda Regional Development Committee, and to populations concerned.
- Inform health personnel on the risk of poisoning by pesticides, in particular during the period of field work, on the clinical symptoms and the remedies to be used in case of poisoning.
- Strengthen the poisoning surveillance system for pesticides in the regions involved including informing health personnel on the risks of poisoning related to pesticides, on the symptoms and antidotes to be used in case of poisoning and an evaluation of the recording system for health care centers in the Kolda region.
- Inform agricultural workers on the proper use of fungicides and insecticides, on the risks associated with the improper use of pesticides and provide personnel protective equipment (mask and gloves) to those handling treated seeds.
- Provide beneficiaries of seeds with protective equipment (mask and gloves) to avoid direct contact with the substances and the inhalation risk.
- Proceed to an evaluation of the problems related to the weaknesses of the health recording system in the sanitary groups of the Kolda region.
- develop a pesticides poisoning surveillance system from April to October.
- Expertise and collaboration with the laboratory of residues analysis CERES/LOCUSTOX is expected.
PART B - PESTICIDE INCIDENT REPORT FORM

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

1. Name of the formulation: Granox TBC (10 cases).
2. Name of the active ingredient or ingredients in the formulation: Thiram + Benomyl + Carbofuran.
3. Relative amount of each active ingredient in the formulation: Thiram 15% + Benomyl 7% + Carbofuran 10%.
4. Trade name and name of producer, if available: Granox TBC (producer: Senchim AG).
5. Type of formulation (check one of the following): Dustable powder (DP).
6. Attach copy of the label(s), if available.

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

7. Date of incident: (please refer to the original forms)
8. Location of incident: (please refer to the original forms)
9. Sex: 10 males Age: from 22 to 60 yrs
10. Main activity at time of exposure (check one or more of the following): peanut seed treatment.
11. Protective clothing used during application: no in all 10 cases.
12. Information on how product was being used: Field/garden in all 10 cases.

List the animals/crop(s)/stored products treated if relevant: none.

Application method: by hand in 9 cases and 1 case unknown.

Application rate (or use patterns, e.g. l/ha):
- 1 time for seed treatment and once for handling treated seed.
- 1 time in June and once for sowing
- 1 time in June
- 1 time in June for seed treatment and once in July for sowing
- 1 time in June and once for sowing
- 1 application for seed treatment and another for sowing
- 1 application in June for seed treatment and one application in July for sowing
- 1 manipulation in June for seed treatment and one in July for sowing of the treated seeds.
- 1 manipulation for seed treatment and one for sowing.
- 1 time for seed treatment in May and once for sowing in June.

Duration of the exposure period:
- 1 hour for seed treatment and 4 half-days for sowing the treated seeds;
- 1-2 hours in June for seed treatment and 3 to 4,5 days in July for sowing the treated seeds
- 3h for seed treatment and 7-8 days for sowing
- 1 hour for seed treatment and 3 to 4 days for sowing the treated seeds
- 1 to 2 hours in June and 3 to 4 days in July for sowing the treated seeds
- about 1 hour for seed treatment and 3 half-days for sowing
- 1 hour for seed treatment and 3 to 4 half-days for sowing the treated seeds.
- 0.5 hour for seed treatment and 3 to 4 half-days for sowing the treated seeds
- 0.5 hour for seed treatment and 3 half-days for sowing the treated seeds
- 1 hour for seed treatment and 3 half-days for sowing the treated seeds.

Amount/level of potential exposure:
- 4 bags of 100 g (2 cases)
- 1 to 2 bags of 100 g (2 cases)
- 2 bags of 100 g (2 cases)
- 3 bags of 100 g (4 cases)

Did exposure occur to product as purchased? Yes in all 10 cases

Was more than one pesticide mixed together for application? Yes in all 10 cases (thiram, benomyl, carbofuran)

13. If more than one pesticide formulation/active ingredient was used at the same time, please respond to points i) to iv) below for each formulation/active ingredient.

   i) Was the pesticide in its original container? Yes in all 10 cases

   ii) Was the label available? Yes in all 10 cases
       If yes, was exposed individual able to read and understand label? No in all 10 cases

   iii) Does the label include the reported use? Yes in all 10 cases

   iv) Is the reported incident typical of how the formulation is generally used? Yes in all 10 cases

14. Climatic conditions under which the incident occurred: Hot and humid in all 10 cases

15. Were there other individuals involved in the same incident? Yes in all 10 cases.

16. Include any other details.

III. Description of adverse effects:

17. Individual’s reaction (check one or more of the following):
   - dyspnea, chest pain, tachycardy, coughing, rhinite, abdominal pain, vomiting
   - chest pain, tachycardy, rhinite, diaorrhea, icter
   - dyspnea, chest pain, tiredness
   - chest pain, oedema, dyspnea, chest trauma, oedema of legs
   - dyspnea, chest pain, vomiting
   - dyspnea, oedema, chest pain,
   - dyspnea, oedema, chest pain, heat in the chest and abomen
   - dyspnea, oedema, chest pain, modification of urine, dizziness
   - dyspnea, oedema, chest pain,
   - fever, dyspnea, oedema, chest pain, tachycardy, rhinite, vomiting, hallucination

18. Route of exposure (check main route or more than one if applicable)
   - mouth, skin, inhalation (6 cases)
   - skin, inhalation
   - skin, inhalation
   - mouth, skin, inhalation, eyes (2 cases)
19. How soon after starting handling the formulation were the adverse effects observed:
   - 3 months after starting handling the pesticides (5 cases)
   - a few hours
   - 3 days
   - 2.5 months after starting handling pesticides (2 cases)
   - 3.5 months

IV. Management:

20. Treatment given:
   - No in 1 case
   - Yes in 7 cases
   - Unknown in 2 cases

   First aid administered:
   - No in 1 case
   - Yes in 3 cases
   - Unknown in 6 cases

   Hospitalization:
   - No in 7 cases
   - Yes in 2 cases
   - Unknown in 1 case

NOTE: p. 1 to 4 are a summary in English of the incident report forms submitted by the DNA in Senegal.

PART A – TRANSMITTAL FORM – DESIGNATED NATIONAL AUTHORITY (DNA)

1. Name of the formulation: Spinox T
2. Name of the active ingredient or ingredients in the formulation: Thiram + Benomyl + Carbofuran
3. Relative amount of each active ingredient in the formulation: Thiram 15% + Benomyl 7% + Carbofuran 10%
4. Trade names and names of the producers if available: Spinox T (producer: SPIA)
5. Type of formulation: DP (dustable powder)
6. Copy of the label: see attached
7. Common and recognized patterns of use of the formulation within the proposing Party:
   - The formulation is registered/ the use is authorized in the country? The formulation is registered in Senegal and its use is authorized.
   - Which uses are allowed in the country? Peanut seed treatment only.
   - Existence of handling or applicator restrictions? There are no restriction on use or application, they are products that are only allowed for peanut seed treatment.
   - Information on the extent of use of the formulation, such as the number of registrations or production or sales quantity? About 55 000 kg/year; used on the 6 or 7 regions producing peanut.
8. A clear description of incidents related to the problem, including the adverse effects and the way in which the formulation was used:
   Please see Part B for details.
9. Any regulatory, administrative or other measure taken or intended to be taken by the proposing Party in response to such incidents:
   The following regulatory or administrative measures will be taken because of many deaths (22 at least) due to the use of these two products which are in reality only one product bacause of similar active ingredients (concentration and formulation). These measures are directed to the services of the Ministry of Agriculture and Husbandry, responsible for the distribution of pesticides to the farmers SONACOS/SONAGRAINES, to the National Endemic Service, to the laboratory of Analytical chemistry and Toxicology (UCAD) and to the medical team of the Kolda region.
   - organize sessions to “restitute” the results of the investigations to the Ministry of Health, to the
Kolda Regional Development Committee, and to populations concerned,

- Inform health personnel on the risk of poisoning by pesticides, in particular during the field working period, on the clinical symptoms and the remedies to be used in case of poisoning.
- Strengthen the poisoning surveillance system for pesticides in the regions involved including informing health personnel on the risks of poisoning related to pesticides, on the symptoms and antidotes to be used in case of poisoning and an evaluation of the recording system for health care centers in the Kolda region,
- Inform agricultural workers on the proper use of fungicides and insecticides, on the risks associated with the improper use of pesticides and provide personnel protective equipment (mask and gloves) to those handling treated seeds,
- Provide beneficiaries of seeds with protective equipment (mask and gloves) to avoid direct contact with the substances and the inhalation risk,
- Proceed to an evaluation of the problems related to the weaknesses of the health recording system in the sanitary groups of the Kolda region,
- Develop a pesticides poisoning surveillance system from April to October.
- Expertise and collaboration with the laboratory of residues analysis CERES/LOCUSTOX is expected.
## PART B - PESTICIDE INCIDENT REPORT FORM

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

1. **Name of the formulation**: *Spinox T (12 cases)*.
2. Name of the active ingredient or ingredients in the formulation: *Thiram + Benomyl + Carbofuran*.
3. Relative amount of each active ingredient in the formulation: *Thiram 15% + Benomyl 7% + Carbofuran 10%*.
4. Trade name and name of producer, if available: *Spinox T (producer: SPIA)*.
5. Type of formulation (check one of the following): *Dustable powder (DP)*.
6. Attach copy of the label(s), if available.

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

7. Date of incident: *(please refer to the original forms)*.
8. Location of incident: *(please refer to the original forms)*.
9. Sex: 10 males, one female and 1 unknown  
   Age: from 19 to 48 yrs.
10. Main activity at time of exposure *(check one or more of the following)*: peanut seed treatment.
11. Protective clothing used during application: no in all 12 cases.
12. Information on how product was being used: Field/garden in all 12 cases.

   List the animals/crop(s)/stored products treated if relevant: none.

   Application method: by hand in 11 cases and 1 case unknown.

   Application rate (or use patterns, e.g. l/ha):
   - 2 times in June for seed treatment and in July for handling treated seed.
   - 1 time in June and once in July for sowing
   - 1 time in June and once in July for seed treatment
   - 1 time in June and once for handling treated seeds
   - 2 times
   - 1 time in June for seed treatment and once for sowing
   - 1 time in June and once for handling treated seeds
   - June and July (2 to 3 times)
   - 3 times in July
   - 2 to 3 times mid-June
   - 2 to 3 times in June and 2 times in October
   - 1 time in May-June and another time for sowing

   Duration of the exposure period:
   - 1 hour for seed treatment and 3 to 4,5 days for sowing the treated seeds;
   - 2 hours for seed treatment and 3 to 5 half-days for sowing the treated seeds
   - 1 h for seed treatment and 3 half-days for sowing
   - 2-3 hours for seed treatment and 3 to 4 days for sowing the treated seeds
   - 0.5 hour for seed treatment and 3 half-days for sowing the treated seeds
- 0.5 hour for seed treatment and 3 half-days for sowing the treated seeds
- 1 hour for seed treatment and 2 to 3 half-days for sowing the treated seeds
- 2 to 3 hours in June and 3 to 4 half-days for sowing the treated seeds
  – 3 days
- 4 to 5 hours/day during 3 to 4 days
- 4 to 5 hours/day during 3 to 4 days
- 1 hour in May for seed treatment and 2 to 3 half-days for sowing

Amount/level of potential exposure:
- 4 bags of 100 g (2 cases)
- 1 bag of 100 g (2 cases)
- 2 bags of 100 g (3 cases)
- 3 bags of 100 g (1 case)
- 3 to 4 bags of 100 g (2 case)
- 2 to 3 bags of 100 g (1 case)
- 1 case unknown

Did exposure occur to product as purchased? Yes in all 12 cases

Was more than one pesticide mixed together for application? Yes in all 12 cases (thiram, benomyl, carbofuran)

13. If more than one pesticide formulation/active ingredient was used at the same time, please respond to points i) to iv) below for each formulation/active ingredient.

  i) Was the pesticide in its original container? Yes in all 12 cases
  ii) Was the label available? Yes in all 12 cases
     If yes, was exposed individual able to read and understand label? No in 11 cases
  iii) Does the label include the reported use? Yes in 11 cases
  iv) Is the reported incident typical of how the formulation is generally used? Yes in all 12 cases

14. Climatic conditions under which the incident occurred: Hot and humid in all 12 cases

15. Were there other individuals involved in the same incident? Yes in all 12 cases.

16. Include any other details.

### III. Description of adverse effects:

17. Individual’s reaction (check one or more of the following):
- fever, dyspnea, oedema, tachycardy, coughing, rhinitis, abdominal pain, modification of urine
- fever, shiver, oedema, chest pain, coughing, dizziness, insomnia, headache
- fever, shiver, oedema, abdominal pain
- dyspnea, oedema, chest pain, abdominal pain, diaorrhea, modification of urine
- dyspnea, chest pain, abdominal pain
- dyspnea, oedema, chest pain, rhinitis, modification of urine, anorexia, gastric pain
- fever, dyspnea, chest pain, tachycardy, coughing, rhinitis, modification of urine, pain in left arm
- fever, shiver, dyspnea, oedema, chest pain, tachycardy, modification of urine, insomnia
- dyspnea, oedema, chest pain, tachycardy
- shiver, dyspnea, oedema, chest pain
18. Route of exposure (check main route or more than one if applicable)
- mouth, skin, inhalation (7 cases)
- skin, inhalation (4 cases)
- mouth, inhalation (1 case)

19. How soon after starting handling the formulation were the adverse effects observed:
- 3 months after starting handling the pesticides (2 cases)
- 3 months and a half (2 cases)
- 1 to 2 weeks
- 2.5 months (2 cases)
- 3 to 4 weeks
- 4 months (3 cases)
- 2 days
- 1.5 months after starting handling pesticides (2 cases)

### IV. Management:

<table>
<thead>
<tr>
<th>20. Treatment given:</th>
<th>No in 1 case</th>
<th>Yes in 9 cases</th>
<th>Unknown in 2 cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>First aid administered:</td>
<td>No in 1 case</td>
<td>Yes in 2 cases</td>
<td>Unknown in 9 cases</td>
</tr>
<tr>
<td>Hospitalization:</td>
<td>No in 7 cases</td>
<td>Yes in 2 cases</td>
<td>Unknown in 3 cases</td>
</tr>
</tbody>
</table>
SPINOX T

Thiram 15%
Benomyl 7%
Carbofuran 10%

SHELLED PEANUT SEED TREATMENT

DOSAGE:

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

PRECAUTIONS

SINOX 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.      (SEE ICON)    S.P.I.A.

LOUGA Plant 65 Avenue Faidherbe
Industrial Zone B.P. 1806-Dakar
B.P.02