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EXECUTIVE BODY FOR THE CONVENTION ON LONG-RANGE  
TRANSBOUNDARY AIR POLLUTION

Working Group on Strategies and Review

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Geneva, 31 August– 4 September 2009  
Item 3 of the provisional agenda

OPTIONS FOR REVISING THE PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS

**PERSISTENT ORGANIC POLLUTANTS**

Report by the Co-chairs of the Task Force on Persistent Organic Pollutants

1. This report, mandated by item 1.5 of the 2009 workplan of the Convention (ECE/EB.AIR/96/Add.2) and the request by the Parties to the Protocol on Persistent Organic Pollutants (POPs) made at the twenty-sixth session of the Executive Body (ECE/EB.AIR/96, para. 31 (b)), presents the results of the seventh meeting of the Task Force on Persistent Organic Pollutants, held from 1 to 5 June 2009 in Plovdiv, Bulgaria.

2. Experts from Austria, Bulgaria, Canada, Czech Republic, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Poland, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America and the European Community participated in the meeting. Representatives from the Meteorological Synthesizing Centre-East (MSC-E) of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) attended. Representatives from Bromine Science and Environment Forum (BSEF), CropLife International, European Trifluralin Task Force, Pentachlorophenol Task  
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Force and PlasticsEurope also attended. Lancaster University (United Kingdom) was also represented. A member of the Convention secretariat was also present.

3. Ms. C. Heathwood (Canada) and Mr. J. Sliggers (Netherlands) co-chaired the meeting.
4. Mr. I. Angelov, on behalf of Mr. A. Kostadinov, Deputy Minister, Bulgarian Ministry of Environment and Water, opened the meeting and welcomed the participants.
5. The present report and other documents of the seventh meeting, as well as presentations made at the meeting, are available from the Convention's website at:  
<http://www.unece.org/env/lrtap/TaskForce/popsxg/7thmeeting.htm>

## **I. OBJECTIVES OF THE MEETING**

6. The Task Force:

(a) Conducted a technical two-track review of the five dossiers forwarded by the Executive Body on dicofol, endosulfan, hexabromocyclododecane (HBCD) pentachlorophenol and trifluralin and peer reviewed in accordance with the Generic Guidelines for the Technical Review of Dossiers on New Substances presented to the Working Group on Strategies and Review at its thirty-sixth session (EB.AIR/WG.5/2004/1, annex III) and as supplemented by the report of the Executive Body from its twenty-third session (ECE/EB.AIR/87, para. 30). The outcomes of this work are presented in chapter II below;

(b) Agreed proposals for its future priorities and workplan for 2010 (see chapter III).

## **II. PROGRESS IN THE WORK OF THE TASK FORCE**

7. The Task Force expressed its gratitude to Bulgaria for hosting the meeting and to the Netherlands for the financial support.

8. Upon request by the Executive Body, Parties had nominated experts for the peer review of the dossiers. The Task Force selected twenty one nominations from the following Parties: Austria, Canada, Croatia, Italy, Poland, Netherlands, Norway, Sweden, Switzerland, and the United States. The Task Force expressed its appreciation to the peer reviewers for their excellent work.

9. The Task Force decided that for the sake of transparency the individual review reports of the proposed substances that were prepared during this peer-review process should, in addition to

being circulated to the members of the Task Force also be made available on the Convention website, anonymously and following consultation with the peer-review experts. Subsequently, anonymous peer review reports would be posted on the website prior to Task Force meetings.

10. At the invitation of the Executive Body, the MSC-E made available additional information for the review on the potential of long-range transboundary atmospheric transport (LRAT) and the overall persistence of the proposed five substances. The overall persistence and transport distance, taking into account various processes in the main environmental compartments (air, soil, water) and intermedia exchange, provided a relevant characterization of substance persistence and LRAT in the environment. The full reports of MSC-E could be accessed from the EMEP website ([www.emep.int](http://www.emep.int)). The Task Force welcomed and took note of the results of the MSC-East modelling assessment of the proposed substances.

**A. Track A technical reviews of dicofol, endosulfan, hexabromocyclododecane, pentachlorophenol and trifluralin**

11. Track A reviews relate to elements of the dossiers that are relevant to a decision on whether a substance should be considered a POP.

12. The Task Force arranged for a team of 16 reviewers to examine the dossiers and additional information. Reviewers worked and reported independently and agreed a summary track A report based on the individual reviews.

13. In the present report, the Task Force has employed the term “concluded” to refer to its evaluation of whether the risk profiles provided sufficient information on which to draw conclusions, rather than to indicate the Task Force’s concurrence or a new assessment of POP characteristics of the five substances.

**1. Dicofol<sup>1</sup>**

14. The Task Force concluded that the dossier contained sufficient information for screening in relation to the requirements of paragraph 1 of Executive Body decision 1998/2. It also concluded that the dossier contained sufficient information supporting the dossier’s conclusion that dicofol be considered a POP in the context of the Protocol. One expert, however, concluded that there was not sufficient information to suggest whether or not dicofol was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

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<sup>1</sup> 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol; Chemical Abstract Service (CAS) name.

15. When considering POP characteristics in terms of the guidance and indicative numerical values provided in paragraph 1 (a)–(d) of Executive Body decision 1998/2 for:

(a) Potential for LRAT: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that dicofol had the potential for LRAT by satisfying the guidance and the indicative numerical values based on vapour pressure and atmospheric half-life and qualitative information on presence in Arctic air<sup>2</sup>;

(b) Toxicity: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that dicofol had the potential to adversely affect the human health and/or the environment based on toxicity to mammals and aquatic animals;

(c) Persistence: the Task Force concluded that the risk profile provided sufficient information to support that dicofol was persistent with regards to the indicative values of Executive Body decision 1998/2 based on half-life in water at pH 5 or below. One expert noted that the persistency of dicofol would be longer if its transformation products were included in the determination of half-life in soil, sediment and water;

(d) Bioaccumulation: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that dicofol satisfied indicative values based on log Kow<sup>3</sup> and BCF (bio-concentration factor).

16. When considering the contextual information described in Executive Body decision 1998/2, paragraph 2 (a) and (b), the Task Force concluded that:

(a) Physical-chemical properties, model simulations and/or monitoring in the Arctic suggested the potential for LRAT;

(b) Based on persistence, bioaccumulation, toxicity and air monitoring data from the Arctic, there was sufficient information to suggest that the substance was likely to have significant adverse human health and/or environmental effects as a result of LRAT. One expert noted that there was insufficient information available to suggest whether or not concentrations of dicofol found in the Arctic were likely to have significant adverse human health and/or environmental effects as a result of LRAT.

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<sup>2</sup> Arctic Monitoring and Assessment Programme (AMAP) report on Arctic pollution, 2009.

<sup>3</sup> Octanol-water partitioning coefficient.

## 2. Endosulfan<sup>4</sup>

17. The Task Force concluded that the dossier contained sufficient information for screening in relation to the requirements of the Executive Body decision 1998/2 and supported the dossier's conclusion that endosulfan should be considered a POP in the context of the Protocol. One expert concluded that there was insufficient information to suggest whether or not endosulfan was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

18. When considering POP characteristics in terms of the guidance and indicative numerical values provided in paragraph 1 (a)–(d) of Executive Body decision 1998/2 for:

(a) Potential for LRAT: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that endosulfan had the potential for LRAT based on vapour pressure and half-life in air as well as monitoring data;

(b) Toxicity: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that endosulfan had the potential to adversely affect human health and the environment based on aquatic toxicity and high toxicity through oral and inhalation routes;

(c) Persistence: the Task Force concluded that endosulfan met the indicative numerical value for persistence in the environment based on half-life in soil and noted that the persistency in soil and water of several metabolites, including endosulfan sulphate, was important to be considered in addition to the parent isomers;

(d) Bioaccumulation: the Task Force concluded that the risk profile provided sufficient information to satisfy the guidance based on high aquatic toxicity, potential for bioaccumulation and biomagnification in terrestrial food webs and/or bioaccumulation of the alpha isomer in aquatic webs in the Arctic.

19. When considering the contextual information described in Executive Body decision 1998/2, paragraph 2 (a) and (b), the Task Force concluded that:

(a) Monitoring data from the Arctic regions provided sufficient evidence to indicate that endosulfan was undergoing LRAT;

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<sup>4</sup> C<sub>9</sub> H<sub>6</sub> Cl<sub>6</sub> O<sub>3</sub> S; 6,9-methano-2,4,3-benzodioxathiepin-6,7,8,9,10,10-hexachloro-1,5,5°,6,9,9-hexahydro-3-oxide (CAS chemical name).

(b) Significant adverse effects on the environment and/or human health based on LRAT are likely or cannot be ruled out due to the high toxicity, bioaccumulation and environmental occurrence of this substance far from its sources. One expert noted the endocrine effects and field bioaccumulation data supported this conclusion. Another expert concluded that there was insufficient information to suggest whether or not endosulfan was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

### 3. Hexabromocyclododecane<sup>5</sup>

20. The Task Force concluded that the dossier contained sufficient information for screening in relation to the requirements of the Executive Body decision 1998/2 and supported the dossier's conclusion that HBCD be considered a POP in the context of the Protocol. Two experts, however, including one from industry, concluded that there was not sufficient information to suggest whether or not HBCD was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

21. HBCD industry representatives presented outcomes of a recent POPs assessment report indicating that at present no significant adverse effects were expected on the arctic biota. The Task Force pointed out that it had not had the opportunity to review the material in advance and noted that the report had not been peer reviewed.

22. When considering POP characteristics in terms of the guidance and indicative numerical values provided in paragraph 1 (a)–(d) of Executive Body decision 1998/2 for:

(a) Potential for LRAT: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that HBCD has the potential for LRAT by satisfying the indicative numerical value and guidance for vapour pressure and the existence of monitoring data showing the substance was present in remote regions;

(b) Toxicity: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that HBCD had the potential to adversely affect the environment, based on aquatic as well as mammalian toxicity. Some Task Force members referred to other studies supporting the conclusions on mammalian toxicity<sup>6</sup>, which they agreed to make available. Based on their recent POPs assessment, an expert from industry raised

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<sup>5</sup> C<sub>12</sub>H<sub>18</sub>Br<sub>6</sub>.

<sup>6</sup> (AMAP 2009 study).

questions regarding the validity of the aquatic toxicity studies referenced in the dossier;

(c) Persistence: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that HBCD satisfied the guidance for persistence based on its presence in remote regions including in upper trophic-level animals;

(d) Bioaccumulation: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that HBCD satisfied indicative numerical values for BCF and log Kow.

23. When considering the contextual information described in Executive Body decision 1998/2, paragraph 2 (a) and (b), the Task Force concluded that:

(a) The information provided in the dossier was sufficient to suggest that HBCD is released into the environment and transported to remote regions;

(b) The information provided in the dossier was sufficient to suggest that HBCD was likely to have significant adverse human health and/or environmental effects as a result of its LRAT. One expert noted that there was insufficient toxicity information available to suggest that concentrations of HBCD found in the Arctic were likely to have significant adverse human health and/or environmental effects as a result of LRAT. Another expert, from industry, noted that their recent POPs Assessment Report concluded that HBCD levels found in Arctic biota were not likely to cause significant environmental effects.

#### **4. Pentachlorophenol<sup>7</sup>**

24. The Task Force concluded that the dossier contained sufficient information for screening pentachlorophenol (PCP) in relation to the requirements of the Executive Body decision 1998/2 and it supported the dossier's conclusion that PCP itself was not considered a POP in the context of the Protocol. However, the Task Force could not agree on whether or not the information in the dossier on the transformation products of PCP, such as pentachloroanisole (PCA) and dioxins, as well as impurities, was sufficient for considering PCP as a POP. More information would be needed to assess PCA against the POPs criteria in the Executive Body decision 1998/2, and on PCP transformation and linkages to dioxins, furans and PCA found in the environment to assess whether or not PCP should be considered as POPs in the context of the Protocol.

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<sup>7</sup> C<sub>6</sub>Cl<sub>5</sub>OH (CAS chemical name).

25. A PCP industry representative made a presentation on PCP and PCA indicating that the criteria for persistence had not been met and that the concentrations for bioaccumulation measured in Arctic biota were low.

26. When considering POP characteristics in terms of the guidance and indicative numerical values provided in paragraph 1 (a)–(d) of Executive Body decision 1998/2 for:

(a) Potential for long-range transboundary atmospheric transport: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that PCP had the potential for LRAT by satisfying the guidance and indicative values showing the substance was present in remote regions, and had a half-life in air greater than two days and vapour pressure below 1,000 Pa for all congeners;

(b) Toxicity: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that PCP had the potential to adversely affect the human health and/or the environment based on aquatic toxicity and human health concerns through dermal, inhalation and oral routes.

(c) Persistence: some Task Force members concluded that the information on PCP did not meet the criteria for persistence. Others, based on the recent MSC-East's modelling information on the overall persistence of PCP requested by the Executive Body and the intrinsic properties of the transformation products, concluded that the guidance for persistence had been met. Some Task Force members concluded that further information was required, as noted above (in para. 18).

(d) Bioaccumulation: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that PCP did not satisfy indicative values for bioaccumulation. Some Task Force members raised concerns over PCA and dioxins, which they considered would meet the criteria for bioaccumulation, however, further information was required, as noted above (in para. 18).

27. When considering the contextual information described in Executive Body decision 1998/2, paragraph 2 (a) and (b), the Task Force concluded that:

(a) The modelling and monitoring information suggested potential for LRAT, taking note that PCP and its transformation product PCA had been detected in the Arctic and globally. It was noted that there were other possible sources for PCA and PCP in the remote regions and that their relevance in relation to PCP as a source was unclear;

(b) Some Task Force members concluded that there was sufficient information to conclude that PCP was likely to have significant adverse health and/or environmental effects as a result of LRAT. Other Task Force members concluded that there was insufficient information available to make this conclusion.

## 5. Trifluralin<sup>8</sup>

28. The Task Force concluded that the dossier contained sufficient information for screening in relation to the requirements of the Executive Body decision 1998/2 and supported the dossier's conclusion that trifluralin be considered a POP in the context of the Protocol. Two experts, however, including one from industry, concluded that trifluralin did not meet the criteria for bioaccumulation. Some experts, including one from industry, concluded that there was not sufficient information to suggest whether or not trifluralin was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

29. Industry experts presented additional information regarding trifluralin supporting that at present no significant adverse effects were expected on Arctic biota.

30. When considering POP characteristics in terms of the guidance and indicative numerical values provided in paragraph 1 (a)–(d) of Executive Body decision 1998/2 for:

(a) Potential for LRAT: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that trifluralin has the potential for LRAT based on presence in Arctic air and freshwater sediments;

(b) Toxicity: the Task Force concluded that the risk profile provided sufficient information to support the dossier's conclusion that trifluralin had the potential to adversely affect the human health and/or the environment based on aquatic toxicity and its classification by the United States Environmental Protection Agency as a "possible human carcinogen";

(c) Persistence: the Task Force concluded the risk profile provided sufficient information to support that trifluralin met the indicative numerical values for persistence in the environment based on half-life in soil;

(d) Bioaccumulation: the Task Force concluded that the risk profile provided sufficient information to support that trifluralin is bioaccumulative with regard to the indicative values of the Executive Body decision 1998/2 based on BCF and log K<sub>ow</sub>. Two experts,

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<sup>8</sup> 2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)benzenamine (CAS chemical name).

including one from industry, concluded that based on the review of recent field data, trifluralin did not meet the criteria for bioaccumulation. These data would be provided to the Task Force members.

31. When considering the contextual information described in Executive Body decision 1998/2, paragraph 2 (a) and (b), the Task Force concluded that:

(a) Monitoring data from the Arctic provided sufficient evidence to indicate that trifluralin is undergoing LRAT;

(b) There was sufficient information to conclude that trifluralin was likely to have significant adverse health and/or environmental effects as a result of LRAT. Two experts, including one from industry, concluded that, based on the review of recent field data which indicated that the bioaccumulation criteria was not met, and trifluralin therefore did not meet the criteria of Executive Body decision 1998/2, paragraph 2 (b). Another expert concluded that there was insufficient information to suggest that trifluralin was likely to have significant adverse human health and/or environmental effects as a result of LRAT.

**B. Track B technical reviews of dicofol, endosulfan, hexabromocyclododecane pentachlorophenol and trifluralin**

32. Track B reviews evaluate the aspects of the dossiers concerning the extent of the release to the environment and socio-economic factors related to alternatives. Track B reviewers assessed the information in the dossiers and identified additional information needed for developing possible management strategies.

33. The Task Force arranged for a team of peer reviewers to examine track B aspects of the five dossiers and their addenda. Reviewers worked and reported independently and agreed a summary report based on the individual reviews.

34. It was noted that the dossiers contained varying degrees of information for the track B reviews.

35. The Task Force acknowledged that many of the reviewers had gone beyond their assigned task indicating gaps in the existing knowledge and identifying new information that had not been included in the dossiers. The Task Force agreed that this additional information from the peer review experts would be useful in developing possible management strategies for the substances.

36. The Task Force noted that chemical identity of dicofol, endosulfan and HBCD may need to be considered in developing potential management strategies, paying particular attention to

their isomers.

37. The Task Force noted, furthermore, that impurities and transformation products may need to be considered in developing potential management strategies for dicofol, HBCD and PCP.

38. For each substance, the report below describes information on: (a) the quality of the dossier; (b) current and historic use; (c) production/use/emissions; and (d) socio-economic factors related to alternatives.

## **1. Dicofol**

39. The Task Force concluded that the dossier provided an adequate basis for further discussion on a potential management strategy for dicofol, although supplementary information was needed for several aspects of a socio-economic evaluation of various risk management actions. Furthermore, in proceeding with the potential management actions, alternatives to candidate substances would need to be considered in accordance with Executive Body decision 1998/2.

40. The Task Force noted that dicofol was used worldwide as a miticide on a number of crops, e.g. beans, grapes, citrus, cucurbits, tomatoes, apple, cotton and ornamentals.

41. The dossier provided information on the production, use and emissions in the United Nations Economic Commission for Europe (UNECE) region over the period until 2008 and presented reported data. The information was considered sufficient to provide an overview of the situation of production, use and emissions in the UNECE region. In addition, some global information was presented. The dossier also gave information on dichlorodiphenyltrichloroethane (DDT) contamination (possibly 10 to 34 per cent) of the dicofol that was still in use worldwide. The Task Force noted that in the UNECE region, dicofol was usually refined (DDT less than 0.1 per cent). Moreover, due to bans and restrictions in some countries, the use of dicofol was decreasing.

42. In the European Union (EU) Member countries, the use of dicofol was no longer authorized. In Canada, a phasing-out of dicofol has been decided. The Task Force noted that the dossier provided very little information on alternatives for dicofol or techniques to reduce emissions. In addition to an assessment of alternatives, any future evaluations should also take into account the issue of managing the resistance of mites.

## **2. Endosulfan**

43. The Task Force concluded that overall the dossier provided a basis for further discussion on potential management strategy on endosulfan, although supplementary information was needed for several aspects of a socio-economic evaluation of various risk management actions. Furthermore, in proceeding with the potential management actions, alternatives to candidate substances would need to be considered in accordance with Executive Body decision 1998/2.

44. The Task Force noted that endosulfan was used as an insecticide and miticide on a wide variety of food crops and non-food applications, such as tobacco, cotton, wood preservation and forestry.

45. The dossier contained information on the production, use, and emissions of endosulfan and on levels of endosulfan in the environment. Reported data were presented, but they covered only the period up to the year 2000. The lack of data for the EU could be explained as use has declined and was foreseen to end by 2007. Recent data about remaining use in South-Eastern Europe and Eastern Europe, Caucasus and Central Asia were lacking. For future consideration, additional information was expected for the United States and Canada. The design of a potential risk mitigation strategy would benefit from more details about the other uses of endosulfan.

46. The dossier provided information about the regulatory status of endosulfan in the UNECE region and beyond. Endosulfan was banned in several countries, which suggested that alternatives were available and effective in these countries. The dossier gave very limited information about cost-benefits of the alternatives to endosulfan. The magnitude of the benefits and the costs of any risk management strategy was likely to vary across crops and regions depending on insect pest populations and the availability of adequate insect control methods. It was noted that an important point of future consideration could be longer-term costs of reducing or eliminating the use of endosulfan, particularly in managing insecticide resistance.

## **3. Hexabromocyclododecane**

47. The Task Force concluded that overall the dossier provided initial elements for a potential management strategy of HBCD, although supplementary information was needed for several aspects of a socio-economic evaluation of various risk management actions. Furthermore, in proceeding with the potential management actions, alternatives to candidate substances would need to be considered in accordance with Executive Body decision 1998/2.

48. The Task Force noted that HBCD was currently a brominated flame retardant most commonly used in polystyrene foam in construction materials and packaging. Other current uses

of HBCD included additives in plastics for electrical and electronic parts, as well as a textile-coating ingredient.

49. The dossier provided information on the EU production volumes and global consumption and use of HBCD. Reported data were mainly based on estimates. The data on production and use covered the period until 2001. Data on more recent levels of consumption and production would be needed, in particular since the phasing-out of other flame retardants in 2001, HBCD consumption and production levels could have changed. Information on emissions of HBCD was provided. Several sources of emissions were quantified, based on measurements and estimates. Point sources identified were production sites of HBCD and downstream production sites for its uses. Other sources identified but not quantified included diffuse releases from materials during service life and waste management.

50. The Task Force noted that HBCD was not currently regulated; however, the EU and some UNECE countries were in the process of assessing risks and exploring management options. The Task Force noted that the dossier did not contain sufficient information in order to assess the socio-economic impacts of potential management strategies. In particular, the dossier provided limited information on the availability and costs and benefits of the alternatives. Some substitutes and alternative strategies, however, had been identified but not evaluated with regard to possible negative environmental and human health implications as well as their efficacy.

#### **4. Pentachlorophenol**

51. The Task Force concluded that overall the dossier provided a good basis for a potential management strategy of PCP although supplementary information was needed for several aspects of a socio-economic evaluation of various risk management actions. Furthermore, in proceeding with potential management actions, alternatives to candidate substances would need to be considered in accordance with Executive Body decision 1998/2.

52. The Task Force noted that PCP was a biocide. The substance and its derivatives were mainly used as a wood preservative.

53. The dossier provided information on the global production and use with a special focus on the United States. Reported data were presented for the United States and the EU. Also, some global data on production were given. Most information concerned the period up to 2000. For the EU, information about the period until 2008 was also given. The information on emissions to the environment was mainly based on estimates. Reported information on emissions to the environment from the prevailing use in utility poles in the United States and Canada was lacking. This emission source consisted of emissions during service life (estimated to be 2 per cent

yearly) and emissions after service life (secondary use of poles or waste disposal). It was noted that PCP was a source of dioxins and furans and hexachlorobenzene.

54. Regulations to limit or even ban some uses of PCP have been established in the EU member countries, Norway, Switzerland, Canada and in the United States. The dossier contained much information on alternatives for the prevailing use of PCPs as a wood preservative in utility poles. Possible alternatives (substitutes for wooden poles or alternative wood preservatives) were elaborated in detail. Information on costs and benefits of alternatives versus the use of PCPs was provided.

## **5. Trifluralin**

55. The Task Force concluded that the dossier provided limited information on production, use and emissions. In addition, significant gaps in information would need to be addressed in order to conduct a socio-economic evaluation of potential risk management actions. Furthermore, in proceeding with the potential management actions, alternatives to candidate substances would need to be considered in accordance with Executive Body decision 1998/2.

56. The Task Force noted that Trifluralin was used worldwide on a number of crops including soybeans, oilseed rape, sunflower, cotton and cereals.

57. The dossier provided some information on global production and use and more specific data on production and use in North America and the EU. Limited data were presented, but much of it seemed to be estimates, and covered only the period up to the year 2005, although use data were generally older. Based on downward trends in usage in the United States and bans in Norway, Sweden and Denmark, global production had probably fallen considerably in the last 10–15 years. It was likely that a large volume of trifluralin was continuing to be used worldwide.

58. Based on the fact that the use of trifluralin had been banned in several EU countries, it can be concluded that alternatives for the use of trifluralin were available for many crops. The substance was banned in the EU in 2009; however, it was pointed out that alternatives had not been identified for all crops. An expert from the industry noted that industry had applied for re-authorization and use of trifluralin within the EU Member States. A decision was anticipated towards the end of 2009 or in early 2010. The dossier provided no information about alternatives for trifluralin or on their cost-benefits.

### **III. PRIORITY-SETTING AND 2010 DRAFT WORKPLAN**

59. The Task Force proposed items for its 2010 draft workplan as follows:

(a) To initiate new track A and track B reviews of dossiers as requested by the Executive Body;

(b) To continue work on track B reviews of dicofol, endosulfan, hexabromocyclododecane, pentachlorophenol and/or trifluralin substances if directed by the Executive Body, including, inter alia, gathering new information through a questionnaire;

(c) To carry out any other work as requested by the Executive Body;

(d) To hold its eighth meeting in 2010 (date and venue to be decided).

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