

## TABLE OF CONTENTS

	Document	File Name
00	Cover page	00 1,3 dichloropropene cover
01	All comments received on the additional report	01 1,3 dichloropropene all comments
02	Reporting table all sections	02 1,3 dichloropropene rep table rev 1-1
<b>03</b>	<b>All reports from PRAPeR Expert Meetings</b>	<b>03 1,3 dichloropropene all reports.</b>
04	Evaluation table	04 1,3 dichloropropene eval table rev 2-1

## List of all reports from PRAPeR Expert Meetings

Date		Section
01 09 2009	<a href="#">PRAPeR Teleconference 15</a>	Environmental Fate and Behaviour
02 09 2009	<a href="#">PRAPeR Teleconference 16</a>	Ecotoxicology
02.09.2009	<a href="#">PRAPeR Teleconference 17</a>	Mammalian Toxicology

## REPORT OF PRAPeR EXPERT MEETING TC 15

### 1,3-DICHLOROPROPENE

Rapporteur Member State: ES

Specific comments on the active substance in the section

#### 4. Fate and behaviour in the environment

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

##### 1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

##### 2. Documents submitted for meeting:

Date	Supplier	File Name
2009-06-24	ES	1,3 dichloropropene_Addendum 4_B8_Rev_24_06_09.doc
2009-08-25	ES	1,3 dichloropropene evaluation table rev1-0 (2009-08-25).doc
August 2009	ES	1,3 dichloropropene_Addendum 4_B8_August 2009.doc
2009-07-17	ES	1,3-dichloropropene reporting table rev 1-1 (2009-07-17).doc
August 2009	ES	1,3-dichloropropene_list of endpoints_August 2009

##### 3. Documents tabled at the meeting:

Date	Supplier	File Name
None		

The conclusions of the meeting were as follows:

- 4. Data on preparations:** DAS Telone
- 5. Classification and labelling:** not discussed
- 6. Recommended restrictions/conditions for use:** none identified
- 7. Reference list:** Not discussed

<b>Areas of concern:</b> Groundwater exposure assessments for impurities 9a, 9b, 10, 11, 12, 13 not finalised and groundwater exposure assessments for the hydrolysis products of impurities 4, 5a, 6, 7 and 8b not finalised; potential long range transport of 10 of the impurities in the upper atmosphere
---

Appendix 1: Discussion table: 1,3-DICHLOROPROPENE

Appendix 2: Evaluation table

## Appendix 1: Discussion Table, 1,3-dichloropropene (Ne, In, Fu, Hb)

### 4. Fate and behaviour

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point: 4.1 RMS to provide the additional detail attached to the reporting table in relation to figure 8.6.2.1-3 in an addendum.</p> <p>See reporting table 4(1)</p>	<p>The clarifications regarding figure 8.6.2.1-3 of the additional report were provided in addendum 4 to the additional report dated August 2009 (B.8.6.2.1b)). The experts agreed that the content of these figures was now clear and legible.</p>	<p>Open point fulfilled.</p>
	<p>Data gap: 4.1 Applicant to provide an explicit description of the relationship used to describe the 3 phase partition as utilised in the DripFume model.</p> <p>See reporting table 4(1)</p>	<p>In addendum 4 (p. 3) to the additional report dated August 2009 (B.8.6.2.1a)) the RMS clarified that an explicit description of the relationship used to describe the 3 phase partition as utilised in the DripFume model had been located on page 41 of the applicants report no. GH-C 5358. The relevant equations were presented in this addendum 4.</p> <p>It was discussed how the model is taking into consideration the direct partitioning between the solid and the gas phase. This route would result in a minor loss and therefore can be considered of less importance. Additionally the omission of this route is expected to result in a more conservative exposure assessment (reduced volatilization loss and increased potential movement in the soil water).</p> <p>It seems that even if the model is quite simplistic, it is the best tool available and describes reasonably the processes.</p> <p>The experts agreed with the explanations and considered this point was fulfilled.</p>	<p>Data gap closed.</p> <p>With hindsight it is clear that this was inappropriately ascribed as a data gap in column 4 of the reporting table, as the information was clarified as having been present in the applicant's dossier provided with the resubmission application.</p>
	Data gap: 4.2	The RMS clarified that the reference is a publication of the same original report	Data gap open

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>The reference 'Computers and Electronics in Agriculture archive Volume 56 , Issue 2 (April 2007) Pages 111-119 ISSN:0168-1699 should be added to the dossier.</p> <p>See reporting table 4(1)</p>	<p>summarised in the AR. The applicant use this reference (quoted by the RMS in addendum 3 date March 2009, on p.30) to give an answer in column 3 of the reporting table. The RMS confirmed that the reference reports the same information of the original report and does not affect the results of the available data of the AR.</p> <p>It was concluded that this is a formal data gap as the reference should be added to the dossier. The expert from the RMS did not agree with the data gap and considered it not essential to finalise the assessment</p>	<p>The reference 'Computers and Electronics in Agriculture archive Volume 56, Issue 2 (April 2007) Pages 111-119 ISSN:0168-1699 should be added to the dossier.</p>
	<p>Data gap: 4.3 The references 'Simunek, J. and M. Th. van Genuchten. 1994. The CHAIN_2D Code for Simulating Two-Dimensional Movement of Water, Heat, and Multiple Solutes in Variably-Saturated Porous Media, Version 1.1. Research Report No. 136' and 'U. S. Salinity Laboratory, USDA, ARS, Riverside, California . Available from the following website: <a href="http://www.ars.usda.gov">http://www.ars.usda.gov</a></p>	<p>The RMS clarified that one of the references was quoted by himself/herself in column 3 of the reporting table under comment 4(3). The expert from the RMS is of the opinion that this reference is a manual of the model with detailed explanations on how the processes are simulated and not strictly related to 1,3-D. It was noted that the information to answer to the question on the surplus water to the soil system has not been clearly reported in the original RMS assessment It was concluded that as this is not an agreed model on fumigants at the EU level, all the relevant information to understand how the model is working should be provided. Therefore, this is a formal data gap. The expert from the RMS did not agree with the data gap and considered it not essential to finalise the assessment.</p>	<p>Data gap open The references 'Simunek, J. and M. Th. van Genuchten. 1994. The CHAIN_2D Code for Simulating Two-Dimensional Movement of Water, Heat, and Multiple Solutes in Variably-Saturated Porous Media, Version 1.1. Research Report No. 136' and 'U. S. Salinity Laboratory, USDA, ARS, Riverside, California . Available from the following website: <a href="http://www.ars.usda.gov/Services/docs.htm?docid=8914">http://www.ars.usda.gov/Services/docs.htm?docid=8914</a>' should be added to the dossier.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p><a href="#">v/Services/docs.htm?docid=8914'</a> should be added to the dossier.</p> <p>See reporting table 4(3)</p>		
	<p>Data gap: 4.4 The reference 'Aller, L et al 1997 EPA/600/2-87/035' should be added to the dossier.</p> <p>See reporting table 4(7)</p>	<p>See discussion under data gap 4.3.</p>	<p>Data gap open The reference 'Aller, L et al 1997 EPA/600/2-87/035' should be added to the dossier.</p>
	<p>Open point: 4.2 Member state experts to discuss and agree whether they consider the available surface water exposure assessment in the additional report (addendum 3) is sufficient to conclude the EU level surface water exposure assessment.</p> <p>See reporting table 4(8)</p>	<p>A SW assessment was required during the peer review EPCO 21 to cover the injection application for this fumigant. A surface water exposure assessment was performed and is summarised in Addendum 3. On p. 36 of this addendum an extrapolation of the US environmental conditions to the EU FOCUS scenarios was provided to validate the runoff simulation used for 1,3-D SW assessment. This evaluation was considered valid. Concerns were still on the description of the lateral movement of the water in the model. As these concerns are on the hydrological balance simulated in the model rather than on the specific 1,3-D assessment it was agreed that clarifications on how the hydrological processes are taken into account in the model should be provided by the RMS. Provided that clarifications that will be given by the RMS are found satisfactory by EFSA while drafting the conclusions, experts in the meeting agreed that the SW assessment can be used to finalise the risk assessment.</p>	<p>Open point fulfilled.</p> <p>New open point proposed (see below): RMS to provide in an addendum a detailed water balance description (daily water balance; proportion of precipitation moving vertically out of the soil column and lateral movement and evapotranspiration) used in the DripFume / CHAIN 2D model used in the SW assessment for 1,3-D.</p>
	<p>New open point: 4.9</p>		<p>Open point open</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>RMS to provide in an addendum a detailed water balance description (daily water balance; proportion of precipitation moving vertically out of the soil column and lateral movement and evapotranspiration) used in the DripFume / CHAIN 2D model used in the SW assessment for 1,3-D.</p>		
	<p>Open point: 4.3 EFSA to update the conclusion to indicate that for the French groundwater monitoring limited clarifications have been provided in annex 8.1 of addendum 3 but that the detail is not that which is necessary and still there is no information at all on cropping. The usefulness of the French data is therefore still compromised.</p> <p>See reporting table</p>	<p>No experts discussion was necessary.</p>	<p>Open point open EFSA to update the conclusion to indicate that for the French groundwater monitoring limited clarifications have been provided in annex 8.1 of addendum 3 but that the detail is not that which is necessary and still there is no information at all on cropping. The usefulness of the French data is therefore still compromised.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	4(18)		
	<p>Data Gap: 4.5 Information on use rate recommendations over the monitoring duration or in the preceding years to the commencement of monitoring is required for the regions monitored. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p> <p>See reporting table 4(19)</p>	<p>The RMS clarified that the information was reported in Document C of the original dossier. It was clarified that the information required is about the rate recommendations on the labels in the monitored MSs over the period of the GW monitoring. This information was provided in the revised Vol 3-B8 (June 2009) by the RMS. However, as no additional information can be taken into account at this stage of the peer review, this is a formal data gap.</p> <p>The expert from the RMS did not agree with this data gap.</p>	<p>Data gap open Information on use rate recommendations over the groundwater monitoring duration or in the preceding years to the commencement of monitoring is required for the regions monitored. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No. 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>
	<p>Open point: 4.4 RMS to update table 8.10.1.2-1 to include the units for the sales figures for Italy, France and the UK where the units are missing, in an</p>	<p>The clarifications regarding the missing units were provided by the RMS in addendum 4 to the additional report dated August 2009 (B.8.10.1.2). The experts agreed with the information provided.</p>	<p>Open point fulfilled</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>addendum, if this information is available.</p> <p>See reporting table 4(19)</p>		
	<p>Data Gap: 4.6 A groundwater exposure assessment for process impurity 13 that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p> <p>See reporting table 4(21)</p>	<p>The case for the groundwater exposure assessment could not be and was not discussed.</p> <p>However in addendum 4 to the additional report dated August 2009 (B.8.11.2.), the RMS presented QSAR calculations for impurity 13 that they had calculated using the EPIwin 3.1 software. The experts from the member states accepted that these values for impurity 13 as estimated by EPIwin 3.1 as presented in the addendum could be accepted as providing estimates for the properties listed that have the usual uncertainty associated with these QSAR approaches. For further discussion on the experts views on using these estimates in the EU exposure assessment, see the open point 4.6 of this discussion table below.</p> <p>The expert from RMS does not agree with this data gap.</p>	<p>Data gap open</p> <p>A groundwater exposure assessment for process impurity 13 that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>
	<p>Open point: 4.5 RMS to add the Atkinson calculation for process impurity 13 in an addendum.</p>	<p>The information was included by the RMS in addendum 4 to the additional report (p. 9) dated August 2009 (B.8.11.2.) under the heading: Atmospheric Oxidation (25 deg C) [AopWin v1.91]</p>	<p>Open point fulfilled.</p>



No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Though this is additional information, the fact that the calculated atmospheric half life is above the trigger of 2 days, this makes this calculation potentially adverse.</p> <p>See reporting table 4(21)</p>	<p>The experts agreed with the calculation provided.</p>	
	<p>Data gap: 4.7 An assessment of the potential hydrolysis products of process impurities 4, 5a, 6, 7 and 8b and their potential to leach to groundwater that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active</p>	<p>No experts discussion was necessary.</p> <p>The expert from the RMS does not agree with the data gap.</p>	<p>Data gap open An assessment of the potential hydrolysis products of process impurities 4, 5a, 6, 7 and 8b and their potential to leach to groundwater that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>substances.</p> <p>See reporting table 4(22)</p>		
	<p>Open point: 4.6 Member state experts to discuss if they can accept the available QSAR estimates and the associated case for low groundwater exposure assessment for the process impurities 9a, 9b, 10, 11, 12 that will be applied at 22 to 110 g/ha.</p> <p>Note for this discussion the additional information that was provided by the notifier in the reporting table with regard to the oxiranes (9a and 9b, reactivity, half lives etc.) cannot be considered by the peer review.</p> <p>See reporting table 4(23)</p>	<p>In the additional report (Addendum 3, Table 8.11.2-2, p. 70) and in Addendum 4 (for impurity 13) the key parameters of the impurities (vapour pressure, water solubility, Koc estimates) estimated by QSAR were provided.</p> <p>The experts first discussed if they would accept the QSAR estimated values as a basis for any case in relation to low groundwater exposure. This was discussed for impurities 9a, 9b, 10, 11, 12 and 13 (for the background to adding impurity 13 see data gap 4.6, note with the addition of impurity 13 the application rate range of the impurities is 22 to 138g/ha).</p> <p>MS experts considered that for these impurities it is very likely that experimental measurements, rather than estimated data, are available and therefore it would have been more appropriate to use the measured data. If justifications on the unavailability of literature data would have been provided, the use of the estimated QSAR values could be considered for GW modelling.</p> <p>The consensus of the experts was to set a data gap for measured data (water solubility, vapour pressure, Koc, hydrolysis for impurities 9a, 9b, 10, 11, 12, 13 or other related impurities) to further validate the QSAR estimates. At the very least published information should be considered and an argumentation on how this can be extrapolated to any missing information is needed.</p> <p>The expert from the RMS did not agree with this conclusion and the related data gap.</p> <p>As the experts agreed that the QSAR estimates could not be used at this stage, they felt they could not currently accept the case made by the applicant that the leaching assessment for the active substance would cover the impurities.</p>	<p>Open point closed</p> <p>New data gap proposed (see below): Measured data (water solubility, vapour pressure, Koc, hydrolysis for impurities 9a, 9b, 10, 11, 12, 13 or other related impurities) are missing and would be needed to further validate the QSAR estimates. At the very least published information should be considered and an argumentation on how this can be extrapolated to any missing information is needed.</p>
	<p>New data gap: 4.8</p>		<p>Data gap open</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Measured data (water solubility, vapour pressure, Koc, hydrolysis for impurities 9a, 9b, 10, 11, 12, 13 or other related impurities) are missing and would be needed to further validate the QSAR estimates. At the very least published information should be considered and an argumentation on how this can be extrapolated to any missing information is needed.</p>		
	<p>Open point: 4.7 EFSA to highlight in the conclusion that there are concerns for the potential long range atmospheric transport for 10 of the process impurities that will have application rates of up to 28 to 340g/ha (including impurity 13, potentially adverse new information provided by the applicant as an</p>	<p>The RMS is arguing that there are uncertainties over this estimation of an atmospheric half life &gt; 2 days. However, the Atkinson calculation is the unique end point available and no other indications have been provided and therefore there may be the potential long range atmospheric transport for 10 of the impurities.</p> <p>The experts agreed with the open point.</p>	<p>Open point open EFSA to highlight in the conclusion that there are indications that there may be concerns on the potential long range atmospheric transport for 10 of the process impurities that will have application rates of up to 28 to 340g/ha (including impurity 13, information can be found in addendum 4 to Vol. 3 B-8).</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>attachment to column 3 of the reporting table)</p> <p>. See reporting table 4(24)</p>		
	<p>Open point: 4.8 Member State experts to discuss if they can agree the PEC soil off crop as presented in section B.9.8.2 of the additional report (addendum 5, section B.9, ecotoxicology) that was calculated with the CHAIN 2_D model based, on the information as reported in the additional report ecotoxicology section.</p> <p>See reporting table 4(26)</p>	<p>It was noted that the soil PEC in section B.9.8.2 of the additional report (addendum 5, section B.9, ecotoxicology) were from the same simulation exercise and were the same as those presented in table 8.6.2.1-7of addendum 3 annex B-8 to the DAR (i.e. the Additional report to the DAR).</p> <p>See new open point under open point 4.3 that relates to the CHAIN 2_D model. The experts agreed that provided the clarification under open point 4.3, it is considered reasonable when provided these PEC soil of crop are appropriate for use in risk assessment.</p>	<p>Open point fulfilled.</p>
	<p>New open point 4.10: RMS to check the consistency of the endpoints provided in the new formatted LoEP dated August 2009 against the version dated March 2009 (at least soilDT50s seem to be different).</p>		<p>Open point open</p>

## Appendix 2: Evaluation table

### 4. Environmental fate and behaviour

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 4 Open points: <b>8</b> Points for clarification: <b>0</b> Data gaps: <b>7</b>			Section 4 Open points: <b>4</b> Points for clarification: <b>0</b> Data gaps: <b>7</b>
	Open point: 4.1 RMS to provide the additional detail attached to the reporting table in relation to figure 8.6.2.1-3 in an addendum.  See reporting table 4(1)	The Notifier has no further comment to add.	<b>August 2009</b> ES: Figure 8.6.2.1-3 has been included in addendum 4	<u>PRAPeR TC 15 (1 September 2009)</u> Open point fulfilled
	Data gap: 4.1 Applicant to provide an explicit description of the relationship used to describe the 3 phase partition as utilised in the DripFume model.  See reporting table 4(1)	The pesticide model was modified from a generic two-dimensional finite element code CHAIN 2D, a public domain free program from the U.S. Salinity Laboratory (Simunek and van Genuchten, 1994), tailored for simulating fumigant fate and transport in the soil and volatilization into the atmosphere. Briefly, a governing equation is used for computing fumigant transport in unsaturated subsurface soil in both solution and gaseous phases. The model assumes nonequilibrium interaction between the solution and adsorbed concentrations,	<b>August 2009</b> RMS has checked again the report N°: GH-C 5358 (Masterfile:MK 42) for any evidence of these relationships and they are described in the second paragraph of the page 41 of the report. Therefore this Data Gap can be considered addressed  Additionally, RMS contacted with the corresponding author of the article published in Computers and Electronics in Agriculture 56 (2): 111-119 who confirmed that the linear phase partition was computed as:	<u>PRAPeR TC 15 (1 September 2009)</u> Data gap closed. With hindsight it is clear that this was inappropriately ascribed as a data gap in column 4 of the reporting table, as the information was clarified as having been present in the applicant's dossier provided with the resubmission application.

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p>and equilibrium interaction between the solution and gaseous concentrations. A linear relationship was used for chemical partition between the three phases. Degradation was considered in the solution and adsorbed phases, but not in the air, using a first-order decay having the same rate constant</p>	<p><math>C_g = K_h \cdot C_l</math>  <math>C_s = K_d \cdot C_l</math>  <math>C_l = C_f</math></p> <p>where <math>C_g</math> is gas phase concentration, <math>C_l</math> is liquid phase concentration, <math>C_s</math> is solid phase (adsorbed) concentration <math>C_f</math> is concentration of 1,3-D in the drip system during the time of application  <math>K_h</math> is the dimensionless Henry's constant  <math>K_d</math> is the adsorption coefficient</p> <p>This clarification has been included in the addendum 4.  <b>RMS considers this point addressed</b></p>	
	<p>Data gap: 4.2  The reference 'Computers and Electronics in Agriculture archive Volume 56 , Issue 2 (April 2007) Pages 111-119 ISSN:0168-1699 should be added to the dossier.</p> <p>See reporting table 4(1)</p>	<p>The notifier has now provided this publication reference (in electronic format) to EFSA, DG SANCO and all Member States Authorities.</p>	<p><b>August 2009</b>  Spain as RMS does not agree with this data GAP. This is a public literature reference which was used by RMS to support the assessment (see addendum 3 page 6) The article is based on the report DripFume: a Visual Basic Interface Program for simulating soil Fumigatoin by Drip irrigation  Dow Agrosience report N°: GH-C 5358 (Masterfile:MK 42) already included in the dossier  The reference has been included in the list of references at the end of the chapter. See addendum 4  <b>RMS considers this point addressed</b></p>	<p><u>PRAPeR TC 15 (1 September 2009)</u>  Data gap open  The reference 'Computers and Electronics in Agriculture archive Volume 56, Issue 2 (April 2007) Pages 111-119 ISSN:0168-1699 should be added to the dossier.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>Data gap: 4.3</p> <p>The references ‘Simunek, J. and M. Th. van Genuchten. 1994. The CHAIN_2D Code for Simulating Two-Dimensional Movement of Water, Heat, and Multiple Solutes in Variably-Saturated Porous Media, Version 1.1. Research Report No. 136’ and ‘U. S. Salinity Laboratory, USDA, ARS, Riverside, California . Available from the following website: <a href="http://www.ars.usda.gov/Services/docs.htm?docid=8914">http://www.ars.usda.gov/Services/docs.htm?docid=8914</a>’ should be added to the dossier.</p> <p>See reporting table 4(3)</p>	<p>The notifier has now provided this publication reference (in electronic format) to EFSA, DG SANCO and all Member States Authorities.</p>	<p><b>August 2009</b></p> <p>ES: Spain as RMS does not agree with this data GAP. This is the manual of the model CHAIN 2D code. It is a public reference used by RMS to clarify the concerns arisen during the Peer Review. It was mentioned in the report Wang, D., Knowles, S., Knuteson, J (2005) Report N°: GHE-P-11175 (Masterfile: K83) Annex point/reference IIIA 9.2.3/03 already evaluated in the addendum 3.</p> <p>It has been included in the list of references at the end of the chapter. See addendum 4</p> <p><b>RMS considers this point addressed</b></p>	<p><u>PRAPeR TC 15 (1 September 2009)</u></p> <p>Data gap open</p> <p>The references ‘Simunek, J. and M. Th. van Genuchten. 1994. The CHAIN_2D Code for Simulating Two-Dimensional Movement of Water, Heat, and Multiple Solutes in Variably-Saturated Porous Media, Version 1.1. Research Report No. 136’ and ‘U. S. Salinity Laboratory, USDA, ARS, Riverside, California . Available from the following website: <a href="http://www.ars.usda.gov/Services/docs.htm?docid=8914">http://www.ars.usda.gov/Services/docs.htm?docid=8914</a>’ should be added to the dossier.</p>
	<p>Data gap: 4.4</p> <p>The reference ‘Aller, L et al 1997 EPA/600/2-87/035’ should be added to the dossier.</p> <p>See reporting table 4(7)</p>	<p>The notifier has now provided this publication reference (in electronic format) to EFSA, DG SANCO and all Member States Authorities.</p>	<p><b>August 2009</b></p> <p>ES: Spain as RMS does not agree with this data GAP. This is a public reference used by RMS to clarify the concerns arisen during the Peer Review. It was mentioned in the report Hughes, G., Price, O., Humphrey R., Knowles, S. (2006). Report number: GHE-P-11388 (Masterfile MK56) Annex point reference IIA 7.4/06, IIIA 9.2.1/05 already evaluated in the addendum 3.</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u></p> <p>Data gap open</p> <p>The reference ‘Aller, L et al 1997 EPA/600/2-87/035’ should be added to the dossier.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>It has been included in the reference list at the end of the chapter. See addendum 4</p> <p><b>RMS considers this point addressed</b></p>	
	<p>Open point: 4.2 Member state experts to discuss and agree whether they consider the available surface water exposure assessment in the additional report (addendum 3) is sufficient to conclude the EU level surface water exposure assessment.</p> <p>See reporting table 4(8)</p>	<p>FOCUS<sub>sw</sub> models were not designed and deemed appropriate for such a highly volatile active due to the use practice and properties of the molecule. The lateral flow model has been independently developed by academics to best describe the behaviour of 1,3-D in the field based on field measurements and run-off has been assessed using a more extreme run-off field experiment. The notifier agrees with RMS comments in the reporting table rev 1.1.</p>	<p><b>August 2009</b> ES: This model is an alternative to evaluate the environmental fate and behaviour of fumigants and address the PEC<sub>sw</sub> calculation of fumigants. RMS conducted a FOCUS SW modelling for D scenarios with comparison purposes. The results showed the calculation made by notifier can be considered a worst case with respect the estimation of lateral flow and relevant for risk assessment. Therefore, the latter can be considered relevant for risk assessment</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point fulfilled.</p> <p>New open point proposed (see below): RMS to provide in an addendum a detailed water balance description (daily water balance; proportion of precipitation moving vertically out of the soil column and lateral movement and evapotranspiration) used in the DripFume / CHAIN 2D model used in the SW assessment for 1,3-D.</p>
	<p>New open point: 4.9 RMS to provide in an addendum a detailed water balance description (daily water balance; proportion of precipitation moving vertically out of the soil column and lateral movement and evapotranspiration) used in the DripFume / CHAIN 2D model used in the SW assessment for 1,3-D.</p>			<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point open</p>
	<p>Open point: 4.3</p>	<p>The monitoring data presented in</p>	<p><b>August 2009</b></p>	<p><u>PRAPeR TC 15 (1 September 2009)</u></p>



No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>EFSA to update the conclusion to indicate that for the French groundwater monitoring limited clarifications have been provided in annex 8.1 of addendum 3 but that the detail is not that which is necessary and still there is no information at all on cropping. The usefulness of the French data is therefore still compromised.</p> <p>See reporting table 4(18)</p>	<p>Annex I was designed to show that safe use is possible given the “weight of evidence” available from 5 EU countries which include a diverse dataset of pedoclimatic conditions/soil type and use practice.</p> <p>The notifier is continuing with Ground water monitoring studies throughout the EU as part of Stewardship program for 1,3-D and to ensure that this type of data is available (post Annex 1) to enable Member State authorities to be satisfied on 1,3-D uses specific to their country uses.</p>	<p>ES: The information included in the addendum 3 updated is a summary of the soil and hydrogeology characteristics of the regions of study. It is not clear for RMS what details are still needed to clarify EFSA’s concerns.</p> <p>No data on cropping have been found in the French study. However, RMS considers that this is not essential to consider the study valid because evidence of use of 1,3-D was submitted by the notifier for the five regions monitored. See addendum 3 and addendum 4</p>	<p>Open point open</p> <p>EFSA to update the conclusion to indicate that for the French groundwater monitoring limited clarifications have been provided in annex 8.1 of addendum 3 but that the detail is not that which is necessary and still there is no information at all on cropping. The usefulness of the French data is therefore still compromised.</p>
	<p>Data Gap: 4.5</p> <p>Information on use rate recommendations over the monitoring duration or in the preceding years to the commencement of monitoring is required for the regions monitored. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>	<p>With respect the notifier provided additional information in June 2009 relating to GAP’s that were approved in each Member State along with the number of years that these approvals had been in existence.</p> <p>This was information already in the public domain and only supports the previous information provided as part of the original resubmission where a table of data on volume uses of 1,3-D by country/region/location and proximity to GW wells monitored. (see open point 4.4)</p>	<p><b>August 2009</b></p> <p>ES: Spain as RMS does not agree with this data GAP. Nothing is mentioned throughout the regulation regarding statements to clarify concerns during the Peer Review. In this case, and in order to clarify the EFSA’s concerns, notifier submitted a summary of the existing labels in European MS already included in the document C of the original dossier.</p> <p><b>Addressed</b></p>	<p><u>PRAPeR TC 15 (1 September 2009)</u></p> <p>Data gap open</p> <p>Information on use rate recommendations over the groundwater monitoring duration or in the preceding years to the commencement of monitoring is required for the regions monitored. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No. 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	See reporting table 4(19)			
	<p>Open point: 4.4 RMS to update table 8.10.1.2-1 to include the units for the sales figures for Italy, France and the UK where the the units are missing, in an adendum, if this information is available.</p> <p>See reporting table 4(19)</p>	<p>The notifier is ready to support the RMS with further information or clarification on this point if appropriate.</p>	<p><b>August 2009</b> ES: The information has been included in the addendum 4 Addressed.</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point fulfilled</p>
	<p>Data Gap: 4.6 A groundwater exposure assessment for process impurity 13 that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p> <p>See reporting table 4(21)</p>	<p>The levels of impurity 13 in DAS source of 1,3-D technical are very low at between 0.34 to 0.49 g/kg (0.03 - 0.05% w/w). The impurity 13 was not detected in any of the ten batches from the 2 sources from Kanesho. The notifier accepts that the information provided in June 09 was late in the process but it did confirm that impurity 13 would show similar volatilisation to the other impurities and will likely show similar trends to monitoring data from the other 6 monitored impurities.</p>	<p><b>August 2009</b> ES: Spain as RMS does not agree with this data GAP. Nothing is mentioned throughout the regulation regarding statements to clarify concerns during the Peer Review. Notifier states that impurity 13 is likely to behave similarly in the environment than the rest of the impurities monitored.</p> <p>RMS confirms notifier's statement by calculating the phys-chem properties of impurity 13 with EPIwin 3.1 software. (See open point 4.5) The output of the model is included in addendum 4. Addressed</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Data gap open A groundwater exposure assessment for process impurity 13 that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>
	<p>Open point: 4.5 RMS to add the Atkinson calculation for process impurity 13 in an addendum.</p>	<p>EPI suite data shows that Impurity 13 expected to behave similarly to parent and other impurities.</p>	<p><b>August 2009</b> ES: RMS has calculated the phys chem properties of impurity 13 by using EPIwin 3.1 software, in which the</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point fulfilled.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>Though this is additional information, the fact that the calculated atmospheric half life is above the trigger of 2 days, this makes this calculation potentially adverse.</p> <p>See reporting table 4(21)</p>		<p>Atkinson DT50 calculation is included The calculation was included in addendum 4 point 8.11.2</p> <p>Open point closed</p>	
	<p>Data gap: 4.7 An assessment of the potential hydrolysis products of process impurities 4, 5a, 6, 7 and 8b and their potential to leach to groundwater that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p> <p>See reporting table 4(22)</p>	<p>The submission of information of on hydrolysis products of process impurities is not a normal part of a 91/414 process. In our original resubmission we provided a rationale of why we chose the impurities we did for GW evaluation. This was based on</p> <ul style="list-style-type: none"> <li>a) these were the impurities which had a reasonable half-life in water</li> <li>b) the impurities covered the range of types of impurities found in DAS and Kanesho technicals (chloroalkanes, chloroalkenes, etc)</li> </ul> <p>None of these impurities except for 1,2-Dichloropropane was found at levels above 0.1 ppb in any of the wells that were monitored. The impurity 1,2-Dichloropropane was only found in one well (Timbaki) at levels between 0.11 and 0.25 ppb. As only the 1,2-D impurity was seen in one of the sampling with none of the other process impurities seen (including closely</p>	<p><b>August 2009</b> ES: RMS accepts notifier's statement Spain as RMS does not agree with this data GAP. Nothing is mentioned throughout the regulation regarding statements to clarify concerns during the Peer Review. In this case, notifier submitted a statement to explain the general behaviour of hydrolysis of an halogeno alkanes and oxiranes based on a background knowledge on organic chemistry and biochemistry. The RMS has included it in addendum 3 updated as it is currently request by EFSA PRAPeR Unit. See open point 4(6) Addressed</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Data gap open An assessment of the potential hydrolysis products of process impurities 4, 5a, 6, 7 and 8b and their potential to leach to groundwater that could be considered by the peer review is not available. This information was provided by the RMS in the revised Vol 3-B8 (June 2009) but in line with Commission Regulation (EC) No 33/2008 neither additional information, nor the submission of new studies can be accepted in relation to stage 2 active substances.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p>related 1,3-dichloro-propane and 1,2,2-trichloropropane both of which are present at higher levels in the 1,3-D technical product), a non-1,3-D source of 1,2-D was suggested for the presence of this impurity around the Timbaki well. 1,2-D has been used extensively in the past by other industries e.g. as a degreasing agent.</p> <p>The notifiers believe we have provided sufficient weight of evidence to demonstrate that the impurities that occur in 1,3-D technicals do not pose an environmental risk,</p>		
	<p>Open point: 4.6 Member state experts to discuss if they can accept the available QSAR estimates and the associated case for low groundwater exposure assessment for the process impurities 9a, 9b, 10, 11, 12 that will be applied at 22 to 110 g/ha.</p> <p>Note for this discussion the additional information that was provided by the notifier in the reporting table with regard to the oxiranes (9a and 9b, reactivity, half lives etc.) cannot be considered by</p>	<p>The notifier confirms that the information we provided in June 2009 on hydrolytic stability of the oxiranes (reporting table 4(22)) was from the open and well documented literature. The notifier provided the main modelling information on reactivity of oxirane impurities in report GHE-P-11692 that was provided in the original resubmission dossier.</p>	<p><b>August 2009</b> ES: Oxiranes (impurities 9a and 9b) are epoxides. In Organic Chemistry, it is well known that epoxides are very unstable, and rapidly transform to alcohols.</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point closed</p> <p>New data gap proposed (see below): Measured data (water solubility, vapour pressure, Koc, hydrolysis for impurities 9a, 9b, 10, 11, 12, 13 or other related impurities) are missing and would be needed to further validate the QSAR estimates. At the very least published information should be considered and an argumentation on how this can be extrapolated to any missing information is needed.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>the peer review.</p> <p>See reporting table 4(23)</p>			
	<p>New data gap: 4.8 Measured data (water solubility, vapour pressure, Koc, hydrolysis for impurities 9a, 9b, 10, 11, 12, 13 or other related impurities) are missing and would be needed to further validate the QSAR estimates. At the very least published information should be considered and an argumentation on how this can be extrapolated to any missing information is needed.</p>			<p><u>PRAPeR TC 15 (1 September 2009)</u> Data gap open</p>
	<p>Open point: 4.7 EFSA to highlight in the conclusion that there are concerns for the potential long range atmospheric transport for 10 of the process impurities that will have application rates of up to 28 to 340g/ha (including impurity 13, potentially adverse new information provided by the applicant as an attachment to column 3 of the reporting table) .</p>	<p>From the Atkinson calculations the potential for long range transport exists. However due to the high volatility of these compounds and considering the behaviour of the parent which is present at 1000-10000 times higher concentrations, no adverse impact is expected. Taking the worse case for air concentrations for the parent, no aquatic risk was seen. For longer range transport vapour dispersion of these volatile impurities would be infinite in the atmosphere. Air monitoring for the parent showed</p>	<p><b>August 2009</b> ES: It should be also specified that estimations with Atkinson's approach are only based on the reactivity of the molecule with OH radicals. Thus, the SETAC Pellston Workshop expressed the limitation of Atkinson approach to evaluate the long range atmospheric transport potential of chemicals. It should be taken into account that in the atmosphere there are other processes which could be influenced by other phys chem properties and limit the transport.</p>	<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point open EFSA to highlight in the conclusion that there are indications that there may be concerns on the potential long range atmospheric transport for 10 of the process impurities that will have application rates of up to 28 to 340g/ha (including impurity 13, information can be found in addendum 4 to Vol. 3 B-8).</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	See reporting table 4(24)	typical maximum off site PECair concentrations of 500 µg/m <sup>3</sup> . Impurity concentrations would be in the range 0.05 to 0.6 µg/m <sup>3</sup> just off site and significantly lower away from the treated area. Furthermore 1,3-D treatments are made on a very limited agricultural land area of the European Union.	For example, all the impurities reported are halogen alkanes of short chain (C3-C6) with a solubility > 100 mg/L, which could limit their transport in the troposphere when react with H <sub>2</sub> Ov . On the other hand, despite Atkinson's DT50, it was demonstrated that impurities 4 and 5 are rapidly hydrolysed. Finally, it is well known in Organic chemistry the instability of epoxides (impurity 9). Therefore, These properties should be taken into account in the evaluation of the potential long range atmospheric transport of the impurities	
	Open point: 4.8 Member State experts to discuss if they can agree the PEC soil off crop as presented in section B.9.8.2 of the additional report (addendum 5, section B.9, ecotoxicology) that was calculated with the CHAIN 2_D model based, on the information as reported in the additional report ecotoxicology section.  See reporting table 4(26)	Notifier agrees with RMS - - current guidance for evaluating the risk on non target plants is calculating the exposure from BBA drift values - this practice is not valid for fumigants, which are transport by diffusion - CHAIN 2_D code is an alternative to evaluate the environmental fate and behaviour of fumigants	<b>August 2009</b> ES: The current guidance for evaluating the non target plants is calculating the exposure from BBA drift values. This practice is not valid for fumigants, which are applied by injection or drip irrigation in bare soil and are transported by diffusion throughout the soil . CHAIN 2_D code is an alternative to evaluate the environmental fate and behaviour of fumigants. No comments was received regarding to the PECsoil calculation in fate section. The calculation with CHAIN_2D code is made for the top 30 cm . If the results at 0.1 m of the edge	<u>PRAPeR TC 15 (1 September 2009)</u> Open point fulfilled.

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>of the field (191- 221 mg/kg) are compared to the worst calculation made for in-field according to the current guidelines (if 30 cm depth is considered) the initial PEC<sub>soil</sub> would be 62.8 mg/kg for an application rate of 283 kga.s/ha), they can be considered a worst case.</p> <p>This conclusion is confirmed by field dissipation studies where a limit transport of 1,3-D was observed.</p> <p>In any case if the standard procedure is followed, for the field use a buffer zone of 5 m is necessary to obtain an a safe use for NTP (<math>224 \times 0.57 / 300 = 0.4256</math> mg/kg )</p> <p>This in line with the conclusion obtained with CHAIN_2D code calculation.</p>	
	<p>New open point 4.10: RMS to check the consistency of the endpoints provided in the new formatted LoEP dated August 2009 against the version dated March 2009 (at least soilDT50s seem to be different).</p>			<p><u>PRAPeR TC 15 (1 September 2009)</u> Open point open</p>

## REPORT OF PRAPeR EXPERT MEETING TC 16

### 1,3-DICHLOROPROPENE

Rapporteur Member State: ES

Specific comments on the active substance in the section

#### 5. Ecotoxicology

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
2009-08-25	ES	1,3 dichloropropene evaluation table rev1-0 (2009-08-25).doc
August 2009	ES	1,3 dichloropropene_Addendum 6_B9_August 2009.doc
June 2009	ES	1,3-dichloropropene_additional_report_Vol1-rev_June 2009
June 2009	ES	1,3-dichloropropen_additional_report_Vol3-rev_June 2009
2009-07-17	ES	1,3-dichloropropene reporting table rev 1-1 (2009-07-17).doc
August 2009	ES	1,3-dichloropropene_list of endpoints_August 2009

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

**4. Data on preparations:** DAS Telone II,

**5. Classification and labelling:** R50/53

**8. Recommended restrictions/conditions for use:** none

**9. Reference list:** XXX

**Areas of concern:** soil non-target invertebrates. Mitigation measures are required for aquatic organism and non-target plants.

Appendix 1: Discussion table: 1,3-DICHLOROPROPENE



Appendix 2: Evaluation table

## Appendix 1: Discussion Table, 1,3-dichloropropene (ne, In, Fu, Hb)

### 5. Ecotoxicology

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point: 5.1 RMS to update LoE. The refined TER for earthworm eating bird (short-term) should be corrected to 320.</p> <p>See reporting table 5(1)</p>	<p>It was the acute TER for the earthworm eating-birds in the list of endpoint which should be corrected to 320. Residue data from the southern Europe were used to address the risk, and it should be noted in a foot note in the list of end-points.</p>	<p>Open point open RMS to update the LoE.</p>
	<p>Open point: 5.2 Member State experts should discuss the relevant long-term endpoint for mammals.</p> <p>See reporting table 5(5)</p>	<p>The Notifier proposed to use a NOAEL = 15 mg /kg bw /day. RMS did not agree with this proposal because effects in the body weight were observed after two weeks (after 49 days in the 90 dietary study) RMS prefers to use the 5 mg /kg bw /day based on body weight results of the 90 dietary study in rat.</p> <p>Experts agree with RMS in using the 5 mg/kg bw/day based on body weight as a relevant endpoint for risk assessment. Using this endpoint the long-term risk to mammals is acceptable.</p>	<p>Open point closed Experts agree with RMS in using the 5 mg/kg bw/day based on body weight as a relevant endpoint for risk assessment. Using this endpoint the long-term risk to mammals is acceptable.</p>
	<p>Open point: 5.3 Use of the field study submitted Blanckenhagen, F. (2006) should be discussed by Member State experts. E.g.: - Can the study</p>	<p>According to RMS the study gives information on wildlife mammals species exposed in the area treated with Telone II and surrounding fields and indirectly assesses to some extent the food available within the treated area. The location of the study sites was considered relevant to the GAP uses in South Europe.</p> <p>The experts agreed that the limited number of mammals captured in the study limits the general applicability of the study.</p>	<p>Open point closed The risk to mammals was addressed based on field residue studies in invertebrates, therefore this study should be considered as a support to the conclusion.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>be considered valid?</p> <ul style="list-style-type: none"> <li>- How representative is the study?</li> <li>- Is the preference for 1,3-D treated fields so low that no risk is expected?</li> </ul> <p>See reporting table 5(6)</p>	<p>The risk to mammals was addressed based on field residue studies in invertebrates, therefore this study should be considered as a support to the conclusions.</p>	
	<p>Open point: 5.4 The validity or the residue study in insects and earthworms should be discussed .by Member State experts</p> <ul style="list-style-type: none"> <li>- Is there a bias in the estimated concentration, based on a potential higher residue concentration in dead insects, which may compose a higher proportion of bird diet than expected from the residue study?</li> <li>Is reasonable to consider that birds/mammal have a bias for live arthropods/earthworms?</li> </ul>	<p>A new field study was submitted in the additional report following conclusions of the EPCO meeting. The study was done under Mediterranean conditions.</p> <p>RMS considers the study as acceptable for the risk assessment.</p> <p>To address whether the death arthropods have a higher residue level than alive insects. and to address if biases on the low side of the residue level exists due to the use of the pitfall traps as collection method, RMS would refer to the Fiser and Bower (1997) data set and Brewer et al (1997).</p> <p>RMS would like to point out that at this level of information it is impossible to conclude which residue levels are expected in death arthropods compared to living arthropods, and if alive animals in pitfall traps really show a bias in the low side of the residue level in arthropods.</p> <p>The GAP method of application is in the soil and therefore, the death invertebrates might be found mainly in the soil.</p> <p>From the collected data in the study it seems that whenever death arthropods were collected, then the max. concentration was under the limit of LOQ, for the south of Europe.</p> <p>In this case the MoA for 1,3 –D would be more as a nematicide rather than as an</p>	<p>Open point closed</p> <p>Based on the limited data available for death and alive invertebrates in this study, the experts' meeting concluded there is no base to expect a higher concentration in dead invertebrates for South Europe for this particular crop and application method.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	See reporting table 5(8)	<p>insecticide. But the application rate necessary to be an effective insecticide is unknown. This conclusion is based on the result from the ecotox studies.</p> <p>Based on the limited data available for death and alive invertebrates in this study, the experts' meeting concluded that there is no base to expect a higher concentration in dead invertebrates for South Europe for this particular crop and application method.</p>	
	<p>Open point: 5.5 Confirmation of PECsw is pending the fate expert meeting.</p> <p>See reporting table 5(13)</p>	<p>Fate meeting confirms the PECsw values.</p> <p>As PECsw are confirmed in fate section the risk to aquatic organisms is expected to be low from the intended outdoor uses of 1,3-D in South Europe</p>	<p>Open point closed</p> <p>As PECsw are confirmed in fate section the risk to aquatic organisms is expected to be low from the intended outdoor uses of 1,3-D in South Europe</p>
	<p>Open point: 5.6 Both growth rate and biomass are normally reported for algae and higher plants and the lower endpoint should be used in the aquatic risk assessment according to the Aquatic Risk Assessment Guidance Document. In the current risk assessment TER values for the parent do indicate a large margin of safety. However, for 3-chloroacrylic acid a</p>	<p>EFSA noted that additional calculations of ErC50 for Lemna exposed to 1,3-D and the two metabolites have been submitted and assessed by the RMS. However, these new information could not be taken into account based on the Regulation 33/2008. The lack of data will not affect the outcome of the aquatic risk assessment, but the data gap is maintained for formal reasons.</p>	<p>Open point closed</p> <p>New data gap proposed (see below)</p> <p>EFSA would reflect that the new information has been submitted and evaluated by the RMS but cannot be taken in to account due to Regulation 33/2008. The lack of data will not affect the outcome of the aquatic risk assessment, but the data gap is maintained for formal reasons.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>TER of 84 does not provide an extensive margin of safety. Changes in GAP uses at national level and providing the endpoint based on both growth rate and biomass may change the conclusion of the risk assessment.</p> <p>For consistency with other active substances endpoints should be provided based on both growth rate and biomass for the active substance and the two metabolites. The aquatic risk assessment should be updated accordingly (in the LoE).</p> <p>See reporting table 5(16)</p>		
	<p>New data gap: 5.1 EFSA would reflect that the new information has been submitted and evaluated by the RMS but cannot be taken in to account due to Regulation 33/2008.</p>		<p>Data gap open</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>The lack of data will not affect the outcome of the aquatic risk assessment, but the data gap is maintained for formal reasons.</p>		
	<p>Open point: 5.7 Member State experts should discuss the use of the field study by Small (2006) in the risk assessment for NTA.</p> <p>See reporting table 5(19)</p>	<p>RMS opinion is that results coming from the study can be used in the RA for the NTA, although there were some shortcomings in the study (e.g. no verification of exposure, no positive control substance). Results from the field study are in line with results of laboratory studies. RMS noted that only 1 application per year is proposed in the GAP.</p> <p>The following was noted during the discussion:</p> <ul style="list-style-type: none"> <li>- Since the residue toxicity is low, recolonisation may take place before next application.</li> <li>- The reintroduction of <i>Folsomia candida</i> after 30 days may not be estimated the potential for field recolonisation.</li> <li>- The low number of earthworms that were found in the field makes conclusions very difficult.</li> <li>- The uses of additional pesticides in the field study makes difficult to interpret the effects on soil organisms. (i.e. effects on the control earthworms ).</li> </ul> <p>As conclusions the experts agreed that the results of the study may be considered as additional information useful for conditions similar to the study conditions. The study results could no be extrapolated to all conditions.</p> <p>It is recommended to assess the statistically power of the study to validate the usefulness of the results.</p> <p>The meeting agreed on the use of the study to assess the risks to NTA and earthworms in tomato crops in the south of Europe, once the statistical power of the study is checked for a proper use of the study in RA.</p> <p>RMS statement: results of field study should be used for risk assessment in tomatoes in South of Europe. Experts raised some concerns because low numbers of arthropods and</p>	<p>Open point closed</p> <p>New data gap proposed (see below): The statically power of the study should be confirmed before the results can be used to address the risk to NTA tomato crops in the south of Europe.</p> <p>Additional data gap proposed relevant at Member state level (see below). Further data are required to address the risk to non-target arthropods for other potential uses.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
		<p>earthworms and, indicate that statistical power of study should be checked. This does not mean that the results of this study can not be used for RA in South of Europe.</p> <p>A data gap was identified to address the risk to NTA for other potentially uses at MS level.</p>	
	<p>New data gap: 5.2 The statically power of the study should be confirmed before the results can be used to address the risk to NTA tomato crops in the south of Europe.</p>		Data gap open
	<p>New data gap: 5.3 Further data are required to address the risk to non-target arthropods for other potential uses. This won't affect the EU Risk assessment but should be addressed at Member State level</p>		Data gap open
	<p>Open point: 5.8 EFSA to flag in the conclusion that washing water from cleaning tools should not be disposed into surface water.</p> <p>See reporting table 5(27)</p>		<p>Open point open EFSA to flag in the conclusion that washing water from cleaning tools should not be disposed into surface water.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point: 5.9 RMS to update the LoE. TER calculations should be provided for all aquatic organisms groups for the parent substance.</p> <p>See reporting table 5(31)</p>	<p>The RMS to update the LoE. RMS to include a footnote in the aquatic TER tables to explain the method of estimating PEC<sub>sw</sub>.</p>	<p>Open point open RMS to include a footnote in the aquatic TER tables to explain the method of estimating PEC<sub>sw</sub>.</p>



## Appendix 2: Evaluation table

### 5. Ecotoxicology

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 5 Open points: <b>9</b> Points for clarification: <b>0</b> Data gaps: <b>0</b>			Section 5 Open points: <b>3</b> Points for clarification: <b>0</b> Data gaps: <b>3</b>
	Open point: 5.1 RMS to update LoE. The refined TER for earthworm eating bird (short-term) should be corrected to 320.  See reporting table 5(1)	The Notifier has no further comment to add.	<b>August 2009</b> LoEP from march.2009_rev_24.06.09 has been checked, and the refined TER for earthworm eating bird (short-term) is > 2800 instead of 320.  Not changes have been made.  In more detail, for birds: LC <sub>50</sub> st > 1264 mg/kg bw/d ETE = 0.44 TER = > 1264/0.44 = > 2800  <b>Open point closed.</b>	<u>PRAPeR TC 16 (2 September 2009)</u> Open point open RMS to update the LoE.
	Open point: 5.2 Member State experts should discuss the relevant long-term end point for mammals.  See reporting table 5(5)	The Notifier believes this point requires clarification and that the ecologically relevant NOEL, based on short-term effects on body weight, should be 15 mg/kg/day.  A NOEL of 15 mg/kg/day is supported	<b>August 2009:</b> Background information regarding to relevant NOEL to be used for risk assessment on mammals is depicted in Addendum 5_B9_ECOTOX_ADDITIONAL	<u>PRAPeR TC 16 (2 September 2009)</u> Open point closed Experts agree with RMS in using the 5 mg/kg bw/day based on body weight as a relevant endpoint for risk assessment. Using this endpoint the long-term risk to

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p>by the available information provided in the Notifiers resubmission document and Section B.9.3.1 of the DAR (See attached supporting information, this information has been removed for procedural reasons).</p>	<p>REPORT_1-3D_MARCH 2009_24_06_09, pages 43-46. In summary, <b><u>Notifier proposal: the ecologically relevant NOEL, based on short-term effects on body weight (less of two weeks), should be 15 mg/kg/day.</u></b></p> <p>The results of different studies (14-day, 90-day and 2-year) have been considered together, and the effect on body weight considered with respect to an appropriate environmentally relevant exposure period for wild mammals to 1,3-D. Thus, the NOEL of 15 mg/kg/day was established. This endpoint take into account the potential duration for exposure to 1,3-D for wild mammals (less than 2 weeks), or the ability of mammals to recover any body weight loss quickly even after feeding at significantly higher exposures (100 mg/kgbw/day).</p> <p><b>RMS does not agree with notifier proposal because effects in body weight can be detected late (after two weeks).</b></p> <p>Effects in body weight after two weeks are observed in the rat 90-day oral study (Haut et al., 1993, summarized</p>	<p>mammals is acceptable.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>in the DAR). Thus, effects on body weight were detected after 49 days exposure to 5 and 15 mg/kg<sub>bw</sub>/day in males. Effects at 50 and 100 mg/kg<sub>bw</sub>/day were detected in males within 7 days of exposure. Females were less affected, with no effects even after 90 days at 5 mg/kg<sub>bw</sub>/day, and effects at 15 mg/kg<sub>bw</sub>/day only detected after 84 days.</p> <p><b><u>RMS proposal is to use for refinement the relevant NOAEL 5 mg/kg bw/d.</u></b> This endpoints was based on the results from 90d-oral exposure study (Haul et al, 1993) in rat.</p> <p>Thus, the no-observed-adverse-effect level (NOAEL) for male rats and the no-observed effect level (NOEL) for female rats based on body weight was determined to be 5 mg Telone II/kg body weight/day.</p> <p>This endpoint was based on body weight change as ecological relevant endpoint and, it may have some relevance to breeding success of wild mammals e.g. establishing breeding site, pairing and mating. This proposal is in line with EFSA opinion (EFSA Journal (2006) 344, 1-22). Specifically, for endpoints such as changes in body</p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>weight, the PPR Panel recommended to evaluate the endpoint for the exposure period relevant to the ecotoxicological assessment. Furthermore, in the opinion it is stated that a way to refine the risk is by considering an endpoint from a study with a short period of exposure such as the 28-d or 90-day exposure study. Having in mind that for intended uses of 1,3-D in field long-term exposure it is not expected, and therefore endpoints from a study with shorter period of exposure should be suitable option for refinement.</p> <p>For transparency, the information provided by the notifier in this table and further discussions are included in addendum VI_ECOTOX_ADDITIONAL REPORT_1-3D_AUGUST 2009.</p> <p><b>RMS would like to indicate that using both endpoints the out-put of long term risk assessment for mammals will not change.</b></p> <p><b>Open point closed.</b></p>	
	Open point: 5.3	The scenario evaluated is fully	<b>August 2009:</b>	<u>PRAPeR TC 16 (2 September 2009)</u>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>Use of the field study submitted Blanckenhagen, F. (2006) should be discussed by Member State experts. E.g:</p> <ul style="list-style-type: none"> <li>- Can the study be considered valid?</li> <li>- How representative is the study?</li> <li>- Is the preference for 1,3-D treated fields so low that no risk is expected?</li> </ul> <p>See reporting table 5(6)</p>	<p>representative of the Annex I GAP for fruiting vegetables. The study clearly illustrates that small mammal activity on Telone treated fields is reduced due to the pre- and post-injection agricultural operations, and that potential for in-field exposure is therefore negligible. The study illustrates that, in reality, small mammals will not feed exclusively on treated fields (i.e. PT ≠ 1) for periods sufficient to affect growth (i.e. 6 weeks or more; See comment to Open Point 5.2), are not appropriate.</p>	<p>Addressing the questions raised in the open point 5.3:</p> <p><b><u>Can the study be considered valid?</u></b> A summary of the study is depicted in Addendum 5_B9_ECOTOX_ADDITIONAL REPORT_1-3D_MARCH 2009_24_06_09, pages 49-54.</p> <p>Rapporteur member state has been re-evaluated the study in terms of usefulness. All this information has been summarized in addendum VI_ECOTOX_ADDITIONAL REPORT_1-3D_AGUST 2009.</p> <p>In summary,</p> <p><u>Usefulness</u>, the study gives information about wildlife mammals species exposed in the area treated with Telone II and surrounding fields, and indirectly assess in some extent the food available within the treated area. This is an important question that was a reason of concern in the first-tier assessment.</p> <p>The endpoint of study was to determine species and abundance of small mammals on Telone treated fields compared to adjacent habitats</p>	<p>Open point closed</p> <p>The risk to mammals was addressed based on field residue studies in invertebrates, therefore this study should be considered as a support to the conclusion.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>before and after, and subsequent to tomatoes planting.</p> <p>The study shows that, as not crop plants are grown at the time of Telone II treatment, the species potentially feeding on the treated field are omnivores (e.g. <i>Apodemus</i>) and insectivores (e.g. shrews) as was expected for tomato crops.</p> <p>Furthermore, the study shows that small mammals will not feed exclusively from the treated area during long-term periods, due to depletion in food availability (e.g. not plants) and agronomic operations (e.g. injection, soil sealed, and crop planting after 14 days).</p> <p><b>Under RMS opinion the study contain useful information in identifying wildlife mammals species that can be exposed to 1,3-D residues. Relevant species are insectivorous and omnivores mammals.</b></p> <p><u>How representative is the study?</u></p> <p>The type of ecosystem is relevant for the local situation, thus the study focused on fields which were due to be planted with a fruiting vegetable crop and with representative surrounding habitats of South Europe. The study is</p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>performed in the intended crop (tomatoes). Four field trial areas were selected for the study. The adjacent trapping areas are diverse, representing different ecosystems (woodland, grassland strip, tree plantation, narrow row of trees). The product of concern is applied at the maximum doses rate (190L/ha), and the method of application is by injection (relevant for actual situation, GAP).</p> <p><b>RMS agrees with notifier, and would like to point out that the scenario evaluated is fully representative of the Annex I GAP for fruiting vegetables in South European conditions for 1,3-D.</b></p> <p><u>Is the preference for 1,3-D treated fields is low that not risk is expected?</u></p> <p>RMS would like to point out that for outdoor uses, the application of 1,3-D is injected into the soil profile, typically at a depth of 15 - 20 cm, followed by capping to help seal the soil to maximise efficacy and minimise volatile losses. Typically, the soil is then harrowed to “open” the soil before the crop is planted, with a minimum</p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>interval between soil treatment and crop planting of 14 days. This interval between treatment and crop planting is necessary because 1,3-D is phytotoxic at the high initial soil concentrations achieved immediately following injection.</p> <p>In this scenario, after telone application is expected that the presence of wildlife in Telone treated bare soil is reduced due to the pre- and post-injection agricultural operations, and the low levels of food available in bare soil.</p> <p>Therefore, the potential for in-field exposure for mammals is low (PT lower than 1). This assumption is confirmed in the field study submitted Blanckenhagen, F. (2006).</p> <p><b>Under RMS opinion the preference of mammals for 1,3-D treated field is expected to be low, and therefore the potential risk associated for wildlife mammals with the use of 1,3-D should be acceptable.</b></p> <p><b>Open point closed.</b></p>	
	Open point: 5.4	The Notifier agrees with the comments	<b>August 2009:</b>	<u>PRAPeR TC 16 (2 September 2009)</u>



No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>The validity or the residue study in insects and earthworms should be discussed .by Member State experts</p> <p>- Is there a bias in the estimated concentration, based on a potential higher residue concentration in dead insects, which may compose a higher proportion of bird diet than expected from the residue study?</p> <p>Is reasonable to consider that birds/mammal have a bias for live arthropods/earthworms?</p> <p>See reporting table 5(8)</p>	<p>of the RMS, in the reporting table rev 1.1, point 5(8), and has no further comment to add.</p>	<p>For transparency, comments coming from notifier and RMS comments added in this evaluation table have been summarized in addendum VI_ECOTOX_ADDITIONAL REPORT_1-3D_AGUST 2009.</p> <p><u>Field residue study Small (2007)</u> A summary and evaluation of study is depicted in Addendum 5_B9_ECOTOX_ADDITIONAL REPORT_1-3D_MARCH 2009_24_06_09, pages 16-22.</p> <p>EPCO expert's meeting considered that a new study representative for the supported GAP (spring/summer applications under Mediterranean conditions) was needed. Therefore, a further field study (Small, 2007) has been conducted, in which residue levels of 1,3-D in arthropods and earthworms were determined following use of 1,3-D at 224 kg a.s./ha under Mediterranean conditions.</p> <p><b>Under RMS opinion the study (Small, 2007) should be considered acceptable for risk assessment. The study is considered as a realistic study representative of agriculture sites of the South of Europe where</b></p>	<p>Open point closed</p> <p>Based on the limited data available for death and alive invertebrates in this study, the experts' meeting concluded there is no base to expect a higher concentration in dead invertebrates for South Europe for this particular crop and application method.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p><b>Telone is applied.</b></p> <p><u>Addressing the questions raised in the open point 5.4:</u></p> <ul style="list-style-type: none"> <li>- <u>Is there a bias in the estimated concentration, based on a potential higher residue concentration in dead insects, which may compose a higher proportion of bird diet than expected from the residue study?</u></li> </ul> <p>In the study pitfall traps were used to collect arthropods. This technique is the most practical method to collect ground dwelling arthropods. They have of course the disadvantage of collecting only active and moving individuals, but, on the other hand, pitfall traps are the only method to selectively collect only arthropods.</p> <p>To improve the sampling protocol, if dead arthropods were seen the personnel collected them. According to Appendix 5, the number of death arthropods was low, and therefore residue levels in most of the sites sampled accounted mostly for alive arthropods. Maximum residue levels for arthropods were 1.52 mg/kg. This value was used for risk assessment and not unacceptable risk was expected.</p> <p>To address if death arthropods has high level of residues, and address if bias on</p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>the low side due to the use of pitfall traps as collection method, RMS would like to refer to Fischer and Bower (1997) data set on arthropod residues and Brewer et al (1997) (Appendix II in Sanco 4145/2000). In Brewer's study residues for both adult insects (3.3 mg/kg) and larvae (2.1 mg/kg) were below the average of the Fischer and Bowers data set (5.1 mg/kg).</p> <p>This finding is inconsistent with the potential concern that Fischer and Bowers data are biased on the low side due to the use of pitfall traps as collection method.</p> <p>RMS would like to point out that limited information is available to conclude how much residue levels is expected in death arthropods compare to live arthropods, and if pitfall traps protocol is really bias in the low side.</p> <p><u>Is reasonable to consider that birds/mammal have a bias for live arthropods/earthworms?</u></p> <p>It is an important question from an academic point of view, and that may have a potential impact in risk assessment of birds and mammals.</p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>But, in the current guidance document on risk assessment for birds and mammals, SANCO/4145/2000 this question is not addressed specifically.</p> <p>Reference to this question is made in appendix 28 of EFSA opinion (birds and mammals risk assessment, 2008). Unfortunately, limited information is available and specifically addresses the impact of insecticides (e.g. spray applications), therefore extrapolation to other pesticides and application types increases the uncertainties. RMS would like to point out that the type of application of 1,3-D is not comparable to conventional spray applications.</p> <p>For transparency, a copy of appendix 28 is inserted below:  <b><i>Knock down samples during application</i></b>  <i>It can be assumed for insecticides (and other pesticides with insecticidal side effects like some fungicides) the highest initial residue loading occurs on those arthropods which are killed during or immediately after application of the product. These individuals are normally missed during the sample events for foliage dwelling arthropods (because they are already dead and have fallen on the ground) and will not be found in pitfall</i></p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p><i>traps (because they can no longer move). <b>It is unclear to what extent those arthropods are used as food items by birds and mammals. At least some reports can be found in the scientific literature describing the uptake of dead and/or moribund arthropods by birds.</b> Thus, in principle this scenario should not be overlooked and a respective sample of those arthropods affected directly from the product application should be obtained <b>whenever possible.</b></i></p> <p>RMS would like to point out:</p> <ul style="list-style-type: none"> <li>• It is unclear to what extent death arthropods are used as food items by birds and mammals.</li> <li>• The use of 1,3-D as a soil fumigant in all crops is limited to small areas of agricultural land within the EU (estimated to be less than 70,000 ha/year), while fruiting vegetables represent approximately one third of these uses and are concentrated in the south (Mediterranean countries). Approximately 60% of all uses in EU Member States are by injection to open fields, and the remainder by drip irrigation for indoor crops. The single</li> </ul>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>application per year to a relatively small land area across the EU, of which a significant proportion is under cover, is important when considering the potential magnitude, duration and scale of any risks to non-target organisms from the high label use rates and intentional temporary soil sterilisation effects.</p> <ul style="list-style-type: none"> <li>• The applicants stated that only the use as nematicide will be supported in the EU review programme.</li> <li>• Outdoor applications to open fields by soil injection as Telone Injected and sealing by compaction (not spraying), and therefore low levels of residue should be expected.</li> <li>• In the field study submitted (Small, 2007), residue levels used for risk assessment of 1,3-D account for dead/alive arthropods/earthworms residues. Death arthropods/earthworms were collected when seen it. At this level of information it is not possible to know if dead arthropods/earthworms have more 1,3-D residues because</li> </ul>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>for analytical purposes samples were combined in order to get enough sampling to conduct the analysis. Due to low number of animals and its level of residues (1,3-D) analysed it is unlikely that birds and mammals have a higher proportion of residues coming from dead insects in the diet.</p> <p><u>Impact on risk assessment</u> To address uncertainties on risk assessment calculations, and to account for higher levels on death arthropods it is assumed 5 times more of residue levels (Estimated residue levels 7.50 mg/kg ). Using this theoretical residue levels acceptable acute and short-term risk to birds is expected. Also, acute risk to mammals is acceptable.</p> <p>Residue levels expected in earthworms are lower, therefore risk calculations for birds/mammals eating insects covers potential risk in birds/mammals eating earthworms.</p> <p><b>Open point closed.</b></p>	
	Open point: 5.5 Confirmation of PECsw is	Notifier has no comment.	<b>August 2009</b> If PECsw are confirmed in fate section	<u>PRAPeR TC 16 (2 September 2009)</u> Open point closed

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>pending the fate expert meeting.</p> <p>See reporting table 5(13)</p>		<p>the risk to aquatic organisms is expected to be low from the intended outdoor uses of 1,3-D in South Europe.</p>	<p>As PECsw are confirmed in fate section the risk to aquatic organisms is expected to be low from the intended outdoor uses of 1,3-D in South Europe</p>
	<p>Open point: 5.6 Both growth rate and biomass are normally reported for algae and higher plants and the lower endpoint should be used in the aquatic risk assessment according to the Aquatic Risk Assessment Guidance Document. In the current risk assessment TER values for the parent do indicate a large margin of safety. However, for 3-chloroacrylic acid a TER of 84 does not provide an extensive margin of safety. Changes in GAP uses at national level and providing the endpoint based on both growth rate and biomass may change the conclusion of the risk assessment. For consistency with other active substances endpoints should be provided based on both growth rate and biomass for the active substance and the two metabolites. The aquatic risk assessment</p>	<p>Notifier will provide the estimated EbC50 (area under the curve), EyC50 (based on final frond number) and ErC50 (growth rate based on frond number) as requested.</p>	<p><b>August 2009:</b> Notifier has provided endpoints for aquatic plants based on growth rate, biomass, and yield. This information has been included in Addendum 6_B9_ECOTOX_ADDITIONAL_REPORT_1-3D_AGUST_2009.</p> <p>The lowest endpoint has been used for aquatic risk assessment. The lowest end-points are: 13.6 mg/L (EbC50) for 1,3-D; 0.454 mg/L (EC50) for 3-CAA; 0.26 mg/L (EC50) for 3-CACA.</p> <p>The only change that results from this is that the lowest end-point for 1,3-D changes from 14.56 mg/L to 13.6 mg/L - this is not significantly different and will have no impact on the risk assessments. For the alcohol and acid metabolites, the lowest calculated end-points are essentially the same as those previously used by the RMS for the risk assessments.</p> <p>The outcome of aquatic risk assessment for aquatic plants did not change.</p> <p>The aquatic risk assessment has been updated in the LoE and in the</p>	<p><u>PRAPeR TC 16 (2 September 2009)</u> Open point closed</p> <p>New data gap proposed (see below) EFSA would reflect that the new information has been submitted and evaluated by the RMS but cannot be taken in to account due to Regulation 33/2008. The lack of data will not affect the outcome of the aquatic risk assessment, but the data gap is maintained for formal reasons.</p>



No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>should be updated accordingly (in the LoE).</p> <p>See reporting table 5(16)</p>		<p>Addendum 5_B9_ECOTOX_ADDITIONAL REPORT_1-3D_AGUST_2009, pages 12-19.</p> <p><b>Open point closed.</b></p>	
	<p>New data gap: 5.1 EFSA would reflect that the new information has been submitted and evaluated by the RMS but cannot be taken in to account due to Regulation 33/2008. The lack of data will not affect the outcome of the aquatic risk assessment, but the data gap is maintained for formal reasons.</p>			<p><u>PRAPeR TC 16 (2 September 2009)</u> Data gap open</p>
	<p>Open point: 5.7 Member State experts should discuss the use of the field study by Small (2006) in the risk assessment for NTA.</p> <p>See reporting table 5(19)</p>	<p>The scenario evaluated was fully representative of the Annex I GAP for fruiting vegetables and represented a typical injection application scenario for Telone.</p> <p>The report documents that the injection of Telone took place under GLP inspection (page 6), the injection equipment was calibrated prior to use (page 22), and the measured application rate was 199.34 L/ha (page 13).</p> <p>. All other aspects of the study were conducted in GLP compliant facilities</p>	<p><b>August 2009:</b> A summary and evaluation of study is depicted in Addendum 5_B9_ECOTOX_ADDITIONAL REPORT_1-3D_MARCH 2009_24_06_09, pages 59-71.</p> <p>RMS opinion is that results coming from this study can be used for risk assessment besides some shortcomings of the study can be highlighted. A shortcoming of the study was that concentrations of the compound in the soil are not measured, so it is not clear the actual</p>	<p><u>PRAPeR TC 16 (2 September 2009)</u> Open point closed</p> <p>New data gap proposed (see below): The static power of the study should be confirmed before the results can be used to address the risk to NTA tomato crops in the south of Europe.</p> <p>Additional data gap proposed relevant at Member state level (see below). Further data are required to address the risk to non-target arthropods for other</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p>and were subject to all the normal procedures of record keeping, calibrations and SOP compliance required by GLP. Key phases were audited by an independent GLP auditor as was the final report. It is the notifier opinion that the study is suitable for risk assessment, has been conducted under realistic conditions for an exception product and if of the same high quality as all other fully compliant GLP studies.</p> <p>The experimental constraints associated with this type of application method should not be underestimated (i.e. specialist application equipment, in furrow injection at 25-30 cm depth, soil closing with a roller immediately after application, operator safety considerations (during application and for post-injection sampling). This type of application is not comparable to conventional spray applications and the same expectations regarding analytical confirmation of soil concentrations or use of toxic standards cannot be applied.</p>	<p>exposure in the study. Also not positive control was used. These shortcomings can be explained by the experimental constraints associated with type of application that is not comparable to conventional spray application.</p> <p>RMS agrees with notifier that scenario evaluated was fully representative of the Annex I GAP for fruiting vegetables and represented a typical injection application scenario for Telone.</p> <p>In the field study, not statistical significant effects were observed for macroarthopods and microarthopods investigated in Telone II treated and untreated plots at any of the post-treatment sampling intervals for an application rate of 224 kg as/ha.</p> <p>However, effects on earthworms were observed. These effects on earthworms were transient, lasting less than 6 months, with no difference in earthworm abundance between treated and untreated plots detected at 6, 9 or 12 months post-treatment.</p> <p>Results from the field study on arthropods are in line with results from risk assessment based on lab studies. The extended laboratory studies</p>	<p>potential uses.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>indicated that soils treated with single application of Telone II at 329 kg a.s./ha may pose a high risk to some soil dwelling arthropods, as indicated by the study with <i>Folsomia candida</i>. The application rate evaluated in this study was 1.5-fold higher than that proposed for Telone II, and so is expected to be an overestimate of the likely risk to soil organisms.</p> <p>Nevertheless, the studies with all species of arthropods tested indicated that 1,3-D has low residual toxicity. Observed effects 1 day after treatment (DAT) were below 30% for <i>H. aculeifer</i>, <i>P. cupreus</i>, <i>A. bilineata</i> and <i>Pardosa</i> spp. 1 DAT 78% effect on mortality was observed for <i>F. candida</i>. No adverse effects of Telone II treated soil were observed when <i>F. candida</i> was introduced 22 days after treatment of the soil. Therefore, it is expected that for those species affected during soil treatment, recolonization will be possible within a short period following treatment.</p> <p>Furthermore, <b>according to intended uses of telone only 1 application per year is proposed. Full recovery of soil non target arthropods and earthworms is expected before next application. If uncertainties</b></p>	

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p><b>remaining may be this should be flagged at member state level.</b></p> <p><b>Open point closed.</b></p>	
	<p>New data gap: 5.2 The statically power of the study should be confirmed before the results can be used to address the risk to NTA tomato crops in the south of Europe.</p>			<p><u>PRAPeR TC 16 (2 September 2009)</u> Data gap open</p>
	<p>New data gap: 5.3 Further data are required to address the risk to non-target arthropods for other potential uses. This won't affect the EU Risk assessment but should be addressed at Member State level</p>			<p><u>PRAPeR TC 16 (2 September 2009)</u> Data gap open</p>
	<p>Open point: 5.8 EFSA to flag in the conclusion that washing water from cleaning tools should not be disposed into surface water.</p> <p>See reporting table 5(27)</p>	<p>The Notifier has no further comment to add.</p>	<p><b>August 2009:</b> not further comment</p>	<p><u>PRAPeR TC 16 (2 September 2009)</u> Open point open EFSA to flag in the conclusion that washing water from cleaning tools should not be disposed into surface water.</p>
	<p>Open point: 5.9 RMS to update the LoE. TER calculations should be provided for all aquatic</p>	<p>The Notifier has no further comment to add.</p>	<p><b>August 2009:</b> RMS has been checked LoEP for active substance and TER calculations are provided for all aquatic organisms,</p>	<p><u>PRAPeR TC 16 (2 September 2009)</u> Open point open RMS to include a footnote in the aquatic TER tables to explain the method of</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	organisms groups for the parent substance.  See reporting table 5(31)		selecting the more sensitive species of each group.  New endpoints and TER calculations from open point 5.6 have been updated in the LoEP.  <b>Open point closed</b>	estimating PECsw.

## Report of PRAPeR Expert MEETING TC 17

### 1,3-DICHLOROPROPENE

Rapporteur Member State: ES

Specific comments on the active substance in the section

#### 2. Mammalian Toxicology

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
25/08/2009	ES	1,3_dichloropropene_evaluation_table_rev1-0_(2009-08-25).doc
17/07/2009	ES	1,3-dichloropropene_reporting_table_rev_1-1_(2009-07-17).doc
August 2009	ES	1,3-dichloropropene_list_of_endpoints_August_2009.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

- Data on preparations:** TELONE DRIP (EF-1478), TELONE INJECTED (XRM-5048)
- Classification and labelling:** T, R24/25; Xn, R20, R65; Xi, R36/37/38; R43
- Recommended restrictions/conditions for use:**
- Reference List:** not discussed

<b>Areas of concern:</b>
--------------------------

Appendix 1: Discussion table: 1,3-dichloropropene

Appendix 2: Evaluation table

## Appendix 1: Discussion Table, 1,3-dichloropropene (Ne, In, Fu, Hb)

### 2. Mammalian toxicology

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point: 2.1 The toxicological properties of the new technical specifications for 1, 3-D technical as proposed in the addendum 3 to the Annex C (March 2009), including toxicological consideration of the several impurities present and the compliance to the batches tested in the mammalian toxicity data package, to be discussed by the experts.</p> <p>See reporting table 2(6)</p>	<p>The toxicological assessment of most impurities is confined to acute toxicity. Mutagenic potential of several impurities specified above 0.1% has not been investigated, especially impurities 8a, 8b, 8c which were not present in batch TSN101035, the only batch used in genotoxicity studies whose analytical profile was provided.</p> <p>QSAR Screening (DEREK analysis) for impurities 8a, 8b and 8c shows several structural alerts: mutagenicity, carcinogenicity, hepatotoxicity, nephrotoxicity.</p> <p>The only toxicological information submitted with respect to the impurities 8a, 8b and 8c was estimates of rat oral LD<sub>50</sub> values made using the commercially available, statistically-based, QSAR computer model TOPKAT™.</p> <p>Furthermore, the section on physical chemical properties asked whether taking into account the high amount applied, there was a concern for the polychlorinated impurities. The comparison with the former proposed specification and with the batches tested in the mammalian toxicology data package is missing.</p> <p>RMS presented the relevance of the impurities in the addendum 4 to volume 3 and concluded that they were not relevant. For the impurities found above 1 g/kg, there is the possibility to ask the notifier to produce a purer technical material for the future.</p> <p>The experts discussed if the toxicological information available on the three new impurities (8a, 8b and 8c, Kanesho specification) is sufficient to decide on their toxicological relevance as they were not tested. Mutagenicity is the main concern with these impurities. The experts consider that it would be more appropriate to test the new technical material containing these new impurities than each impurity separately.</p> <p>There are two specifications, one from Dow and one from Kanesho. They are different in terms of impurity profile and should be considered separately. Only the Kanesho specification presents a concern over the 3 impurities mentioned above. However the Dow specification should also be compared with the batches tested in</p>	<p>Open point still open: Further mutagenicity testing is needed for the Kanesho source. For both sources, comparison and compliance of the specification with the toxicological batches should be demonstrated.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
		<p>the dossier, as other impurities are found in levels higher than 1 g/kg.</p> <p>The RMS clarified that, at present, there is no information available on the impurity profile of the toxicological batches, as the studies are old.</p> <p>Therefore both specifications should be considered for additional information on mutagenicity.</p> <p>An analytical profile of one batch used in genotoxicity testing is available from the Dow notifier. According to the RMS, only a few impurities are mentioned in this batch as reported in the volume 4 of the DAR. The experts compared these impurities and concluded that they were comparable to the Dow specification as proposed in the additional report.</p> <p>This does not solve completely the uncertainties, mainly remembering the high level of active substance used in the fields. We can not conclude on all the other (but mutagenicity) toxicological properties of the technical specification.</p> <p>In summary:</p> <p>For the Kanesho specification, further genotoxicity testing according to the guidance document on relevant impurities is needed.</p> <p>For Dow and Kanesho a confirmation is requested on the compliance of new specifications to the batches tested in tox.</p> <p>It was noted that if this will not be available, the companies will have anyhow to show that the new specification is toxicologically acceptable (either through studies on single impurities or on the representative batches, or through modelling, etc...)</p>	
	<p>Open point: 2.2 The ADI of 1,3-D to be confirmed by the experts The ARfD of 1,3-D to be confirmed by the experts</p> <p>See reporting table 2(12)</p>	<p>EPCO 23 (May 2005) agreed an ADI of 0.0125 mg/kg bw/day based on the NOAEL of 2-year study in rats (2.5 mg/kg bw/day) and a safety factor of 200, to ensure an appropriate margin of safety (1000) between ADI and irreversible effects. These irreversible effects were noted in rats at the dose of 12.5 mg/kg bw/day and in mice at 101 mg/kg bw/day.</p> <p>It was highlighted that the higher safety factor was not dependent of the classification but on the presence of severe (or not) effects found. The reason for no classification decision by ECB was considered by the experts as reported in the reporting table 2(4). Some experts did not agree completely with this decision, this is a borderline</p>	<p>Open point fulfilled: The SF to use for ADI calculation is 100; the ADI is 0.025 mg/kg bw/day; the ARfD value was confirmed as 0.2 mg/kg bw/day</p>



No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
		<p>situation. The nature of the effects was still considered as well as their relevance for humans. Some doubts about the mechanism behind the tumour formation were highlighted.</p> <p>The LOAEL for tumour formation is not clearly 12.5 mg/kg bw/day where hyperplasia was observed, but probably a higher level.</p> <p>The need to continue to apply a higher safety factor was discussed in depth.</p> <p>The majority of experts agreed to lower the safety factor to 100, the RMS and one MS proposed to keep the 200 SF.</p> <p>From the EFSA conclusion 2006: the ARfD was set at 0.2 mg/kg bw based on the NOAEL of 20 mg/kg bw/day from a 2-week dog study and a safety factor of 100.</p> <p>The ARfD was confirmed by the experts.</p>	
	<p>Open point: 2.3 The AOEL of 1,3-D to be confirmed by the experts, in particular taking into account the derivation of the inhalatory AOEL in humans: the method has to be agreed on by the experts</p> <p>See reporting table 2(13)</p>	<p>In EPCO 23 (May 2005), the systemic AOEL of 0.1 mg/kg bw/day (which would correspond to a dose of 0.1 ppm) was agreed. However, the RMS was asked to recalculate the inhalatory AOEL based on the systemic AOEL. The RMS presented this in addendum III (Sept. 2005), which has not been peer reviewed.</p> <p>The RMS proposed two different calculations to establish the AOEL:</p> <p>1: <math>AOEL = NOAEL / SF</math>.</p> <p>2: Convert an inhalatory value in rat in an inhalatory value in human according to:</p> $ppm(h) = ppm(rat) * \frac{resp\ rate\ (rat) * t\ (rat)}{resp\ rate\ (h) * t\ (h)}$ <p>t*: time of exposure.</p> <p>The need to consider the difference in respiration rate between the rat and humans was discussed, whether it is justified to convert the AOEL value derived from the rat into an AOEL based on the human respiration rate.</p> <p>The majority of expert was in favour to consider the first option: considering the rat results without considering a conversion rate for humans.</p> <p>The resulting AOEC is then 0.45 mg/m<sup>3</sup> (0.1 ppm).</p> <p>After the TC, comments on the appropriateness of the approach to be taken were</p>	<p>Open point fulfilled: The AOEC is 0.45 mg/m<sup>3</sup> (0.1 ppm)</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
		<p>received: following the approach n. 1, the fact that the rat has a higher respiration rate than humans is dismissed, and scientifically the second option is more appropriate. However, compared to what provided by the RMS, the calculation was proposed not to take into account the rat respiration rate (as the available AOEL in the list of end point is already expressing an internal dose in rat), only the human respiration rate, to calculate from an internal value to an external value.</p> <p>External inhalatory AOEL (mg/L) = 0.1 mg/kg bw/day (=internal AOEL in LoEP) / human respiration rate x exposure duration</p> $= 0.1 / 17.5 \text{ L/kg bw/hr} \times 8 \text{ hr}$ $= 7 \times 10^{-4} \text{ mg/L}$ $= 0.7 \text{ mg/m}^3 \text{ (instead of } 0.87 \text{ mg/m}^3\text{)}$ <p>This is the calculation for a 70 kg person, for a 60 kg person the AOEL would be 0.6 mg/m<sup>3</sup>.</p>	
	<p>Open point: 2.4 The operator, worker and bystander exposure to 1,3-D to be discussed and confirmed by the experts. In particular with regard to:</p> <ul style="list-style-type: none"> <li>Operator: The need of determining dermal exposure to 1,3-D during the proposed intended uses (drip irrigation in greenhouses and soil injection in greenhouses and fields)</li> <li>Need of PPE to limit the exposure below the proposed AOEL</li> <li>Field studies presented</li> </ul>	<p><u>1.- Application by drip irrigation in greenhouses:</u></p> <p>Operator: The RMS considered only the inhalation exposure for operator exposure. Some MS indicated that the dermal exposure should be considered as well for the mixing and loading operations. However the dermal exposure was considered by the experts of no concern as it is a limited/transient exposure route.</p> <p>Worker re-entry: A minimum re-entry time for southern MSs in the GAP table states 14 days (from the notifier). Field data are available showing that at day 3 after application the measured concentration is 0.22 mg/m<sup>3</sup> (below the AOEC), whereas in another study the concentration is below the AOEC after 6 days.</p> <p>Bystander exposure: Bystander exposure outside the greenhouse was considered. A minimal distance of 5 m from the greenhouse is proposed by one MS for bystanders. One out of several measurements at 3 m outside the greenhouse showed a higher value than the</p>	<p>Open point still open: RMS to recalculate the whole risk assessment for operator, worker and bystander exposure considering the new AOEC and eventually consider a higher percentile from the field studies.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<ul style="list-style-type: none"> <li>• Re-entry: Appropriateness of the presented assessment Need of re-entry interval? Need of environmental monitoring assessment? Field studies presented</li> <li>• Bystanders: Is bystander exposure foreseen in such a scenario?</li> </ul> <p>See reporting table 2(17)</p>	<p>AOEC. Risk mitigating measures could be proposed to minimize the risk for bystanders, as allowing the application only to professional operators, or limit the access of bystanders near the treated areas.</p> <p>2.- <u>Application with soil injection (outdoor and greenhouse applications):</u> Operator exposure is based again on field measurements. This was accepted by the experts.</p> <p>Table 6.14.4-3 of addendum III to volume III was discussed. Atmospheric concentrations were found above the AOEC. However the use of RPE lowers the values below the AOEC. As the AOEC was lowered, these values should be re-calculated with the new AOEC. If there is time, it would be useful to add a column to the table 6.14.4-3 giving the % of AOEC when RPE is used.</p> <p>The protection (RPE) should be protective as to 95% of the inhalation exposure (as proposed by the RMS in the addendum III to volume III).</p> <p>Worker exposure (following what is reported in the DAR) indicates the operator that, at 14 days removes the plastic sheets: there is the need to recalculate the exposure considering the new AOEC and the use or not of RPE.</p> <p>Some concerns were raised by the experts on the reliability of the few field measurements with huge standard deviations (see table 6.14.4-2 of the addendum III). This will be highlighted in the EFSA conclusion that the whole risk assessment is based on mean air concentration with these drawbacks. The use of a 75<sup>th</sup> (or higher) percentile might be more appropriate.</p> <p>The MS proposed to re-calculate the risk assessment with this approach; the appropriate percentile should be agreed on. The experts could not reach an agreement on the percentage that would be appropriate for the data available, it will be up to the RMS to propose and calculate this new approach. It was highlighted however that unfortunately, the results won't have the possibility to be peer-reviewed due to time constraints.</p> <p>For workers and bystanders, no concern was raised.</p>	

## Appendix 2: Evaluation table

### 6. Mammalian toxicology

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 2 Open points: <b>4</b> Points for clarification: <b>0</b> Data gaps: <b>0</b>			Section 2 Open points: <b>4</b> Points for clarification: <b>0</b> Data gaps: <b>0</b>
	Open point: 2.1 The toxicological properties of the new technical specifications for 1, 3-D technical as proposed in the addendum 3 to the Annex C (March 2009), including toxicological consideration of the several impurities present and the compliance to the batches tested in the mammalian toxicity data package, to be discussed by the experts.  See reporting table 2(6)	The DAS material does not contain impurities 8a and 8b above 1 g/kg (range is 0.01 to 0.27 g/kg, or 0.001 to 0.027% w/w).	<b>August 2009</b> Regarding the impurities, with the available information provided by notifier and from the results of the calculations according to the FAO Manual, we concluded that the impurities which may occur in 1,3-dichloropropene products do not contribute toward the potential toxicity of these products. Nevertheless, according to a MS comment (point 2 (6)), several structural alerts (Mutagenicity, carcinogenicity, hepatotoxicity, nephrotoxicity) for some impurities (8a,8b,8c) showed by the QSAR Screening (DEREK analysis) had not been considered in the risk assessment. For these reasons, regarding the impurities, there are four key points: - Is the information provided sufficient to establish its toxicological relevance? and - what is the most correct approach	<u>PRAPeR TC 17 (2 September 2009)</u> Open point still open: Further mutagenicity testing is needed for the Kanesho source. For both sources, comparison and compliance of the specification with the toxicological batches should be demonstrated.

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			<p>taken to calculate the (additional) hazard by impurities?                      - The need of application the new refined manufacture method proposed by DAS, that achieved technical material with no impurities above 0.1%                      - The application of mitigation measures to reduce the hazard until this method becomes fully operational. These four issues should be discussed by the experts</p>	
	<p>Open point: 2.2                      The ADI of 1,3-D to be confirmed by the experts                      The ARfD of 1,3-D to be confirmed by the experts                       See reporting table 2(12)</p>	<p>The statement that an extra 2X safety factor was applied to the LOEL for tumours per se, giving a 1000X safety factor for the ADI against this end point, is correct. However, the use of an extra safety factor against liver tumours in rats that were not statistically identified and which were not deemed sufficient to trigger cancer classification in the EU seems overly conservative and should be removed</p>	<p><b>August 2009</b>                      1.3 D induced benign tumors in 3 or 6 studies, with presence of preneoplastic lesion, lack of a clear mechanism to explain the tumor formation, a likely DNA toxicity and structural analogy to known carcinogens; with respect to genotoxicity the results suggested that 1.3 D could be an in vivo genotoxic agent for somatic cells due to findings of DNA fragmentations, but not a mutagenic agent.                      EPCO 23 agreed an ADI=0.0125 based on NOAEL of 2-year study in rats (2,5 mg/kg/day) and a safety factor of 200, to ensure an appropriate margin of safety (1000) between ADI and irreversible effects. These irreversible effects were noted in rats at dose of 12.5 mg/kg/day and in mice at 101 mg/kg/day.                      Irrespective of the classification reached in ECB, the irreversible effects</p>	<p><u>PRAPeR TC 17 (2 September 2009)</u>                      Open point fulfilled:                      The SF to use for ADI calculation is 100;                      the ADI is 0.025 mg/kg bw/day;                      the ARfD value was confirmed as 0.2 mg/kg bw/day</p>

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
			occurred, thus the ADI agreed in EPCO ensures sufficient margin for both effects.	
	<p>Open point: 2.3 The AOEL of 1,3-D to be confirmed by the experts, in particular taking into account the derivation of the inhalatory AOEL in humans: the method has to be agreed on by the experts</p> <p>See reporting table 2(13)</p>	<p>The notifier supports the second option proposed by the RMS to calculate AOEL for 1,3-D because it avoids unnecessary route-to-route extrapolation by using inhalation toxicity to calculate an inhalation AOEL, i.e.  <i>"2: Convert an inhalatory value in rat to an inhalatory value in human according to:</i>  <math display="block">ppm(h) = ppm(rat) * \frac{resp\ rate\ (rat)}{resp\ rate\ (h)} * t</math> <i>(h)</i>  <i>t*: time of exposure.</i></p> <p>- <i>time of exposure human (according draft Technical Guidance Document ECB Nov 2005, humans work : 8 hr/day and 5 days/week),</i></p> <p>- <i>respiratory rate (human during effort: 10 m<sup>3</sup>/8 hr = 17.5 L/Kg bw/hr (according internat. occupational exposure limit setting practice) and 45 L/Kg bw/hr for rat in accordance the AOEL Guidance).</i></p> <p>Then :</p> $ppm(h) = 0.1 * \frac{45\ L/Kg\ bw/hr}{5} * 6\ hr$ <p><u>5:</u></p>	<p><b>August 2009</b>            In EFSA conclusion page 15 stated that "The NOAEL for <u>systemic chronic toxicity</u> was considered to be 20 ppm" but it does not imply that this value is the correct to select the AOEL.            RMS does not understand why notifier considers more appropriate an inhalatory NOAEL from a <u>chronic study to select an AOEL</u>, when an inhalatory short term study (with a NOAEL established) is available and was accepted.            As was established in DAR (point B 6.10.2.3), agreed in EPCO 23 (point 2.5) and appeared in Addendum 3 Sept 2005, the lowest relevant <b>inhalation NOAEL</b> is 10 ppm from the 13-weeks inhalation study in rat.            A SF of 100 was considered and different calculations to establish the AOEL can be performed (point 2(13)):</p> <p>1: AOEL = NOAEL / FS.            Then: AOEL = 10 ppm / 100 = <b>0.1 ppm = 0.45 mg/m<sup>3</sup></b></p>	<p><u>PRAPeR TC 17 (2 September 2009)</u>            Open point fulfilled:            The AOEL is 0.45 mg/m<sup>3</sup> (0.1 ppm)</p>

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p style="text-align: right;"><i>17.5 L/Kg bw/hr * 8 hr * 5</i></p> <p><i>5</i> <i>= 0.19 ppm = 0.87 mg/m<sup>3</sup></i> “</p> <p>However, the correct <b>short-term</b> inhalation NOEL to use is not 10 ppm from the 90-day rat study but 20 ppm from the chronic rat study (EFSA Conclusion, page 15). Therefore, the correct inhalation AOEL is <b>1.8 mg/m<sup>3</sup></b></p>	<p>2: Convert an inhalatory value in rat in an inhalatory value in human. Then: AOEL ppm(h) = = 0.1 * <u>45 L/Kg bw/hr</u> * <u>6 hr</u> * <u>5</u> : <i>17.5 L/Kg bw/hr * 8 hr * 5</i> <b>= 0.19 ppm = 0.87 mg/m<sup>3</sup></b></p>	
	<p>Open point: 2.4 The operator, worker and bystander exposure to 1,3-D to be discussed and confirmed by the experts. In particular with regard to:</p> <ul style="list-style-type: none"> <li>• Operator: The need of determining dermal exposure to 1,3-D during the proposed intended uses (drip irrigation in greenhouses and soil injection in greenhouses and fields)</li> <li>Need of PPE to limit the exposure below the proposed AOEL</li> <li>Field studies presented</li> <li>• Re-entry: Appropriateness of the presented assessment</li> </ul>	<p>It is not clear to the notifier why the issue of OPEX is being raised again when it was not listed as a critical area of concern or data gap in the EFSA review report. Nevertheless the key points about the protected uses of the drip irrigation EC product are:-</p> <ol style="list-style-type: none"> <li>1. Dermal application is not a major factor as operator only has to place a tube into a drum. There is no exposure during application as the operator will always be remote from the glasshouse where the application is taking place. The risk assessment in the dossier does not cover accidents or spillages and of course it is recognised that in such cases then special emergency procedures and PPE equipment may apply.</li> <li>2. After the application in greenhouses it is not normal for</li> </ol>	<p><b>August 2009</b></p> <p>1) Operator: Taking into account the 1,3-D physico-chemical properties and the mode of application in field/greenhouse, dermal exposure of 1,3-D is not anticipated. Moreover, field studies corroborated that inhalation was considered the main route of exposure.</p> <p>We do not consider necessary to asses dermal exposure in mixing/loading and application of 1,3-D. By one hand, the European models cannot provide with appropriate estimations and by the other hand, specific 1,3-D field studies proved that dermal exposure was negligible.</p> <p>However, we find that dermal exposure can occur, therefore, it is important to focus on what PPEs are necessary to avoid excessive exposure when incidental tasks appear.</p>	<p><u>PRAPeR TC 17 (2 September 2009)</u></p> <p>Open point still open: RMS to recalculate the whole risk assessment for operator, worker and bystander exposure considering the new AOEC and eventually consider a higher percentile from the field studies.</p>

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	<p>Need of re-entry interval? Need of environmental monitoring assessment? Field studies presented</p> <ul style="list-style-type: none"> <li>• Bystanders: Is bystander exposure foreseen in such a scenario?</li> </ul> <p>See reporting table 2(17)</p>	<p>people to re-enter until it is time for planting – normally at least 3 weeks after application. The notifier accepts that good Stewardship practices of adding notices to prevent accidental re-entry should always be used. The notifier has proposed that if re-entry is required between 0 and 7 days after application then respirators with organic filters should be worn,</p> <p>3. Prohibition of bystanders immediately outside the greenhouse is not required as there is no expectation that an incidental bystander would be one metre from the greenhouse for 8 hours. 1,3-D was monitored immediately (one meter) outside the greenhouse. The value of 1.4 mg/m<sup>3</sup> relates to a 4 hour interval, when considered in conjunction with the second 4 hour concentration of 0.16 mg/m<sup>3</sup>, the 8 hour average concentration is 0.78 mg/m<sup>3</sup>. The next 8 hour period ( 4 to 12 hours) average concentration is 0.3 mg/m<sup>3</sup></p> <p>For field uses of injection product the key points are:-</p> <p>4. The 1,3-D in drums is transferred to farmers bulk tank by pump and closed transfer system and so the</p>	<p>2) Re-entry. Since levels of 1,3-D are high during the first week after exposure, we coincide with Notifier in highlighting the risks associated in re-entry within this period. As PPE is necessary, we consider that the Experts must agree on whether the certified masks and gloves can provide sufficient protection against temporary high levels of 1,3-D.</p> <p>3) We find that a realistic evaluation of bystander exposure showed that no risk is expected after 1,3-D application in open field or greenhouses.</p> <p>In those places (greenhouses) where bystanders are expected to pass near a recently applied 1,3-D greenhouse, it would be useful to discuss what measures may be applied.</p>	



No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		<p>likelihood of dermal contact during routine application is minimal. The risk assessment in the dossier does not cover accidents or spillages and of course it is recognised that in such cases then special emergency procedures and PPE equipment may apply. Good stewardship practices that the notifier has put into place with extensive operator training programmes also covers best practices and PPE needs when maintaining of application equipment.</p> <p>The notifier believes that all of the concerns that have been raised under this open point can be dealt with by an appropriate risk management review at Member State level. i.e. <b>by ensuring effective Product Stewardship programs are in place</b> in each Member State where 1,3-D has been approved. The notifier has developed and implemented improved training programs for Operators and Distributors throughout Europe and we are ready to accept that providing Member States with specific evidence of such programs should be a condition of any future Annex III product approval for a soil fumigant. The notifier recognises that continued</p>		

No.	<u>Column A</u> Conclusions from the Reporting Table	<u>Column B</u> Comments from the notifier / applicant	<u>Column C</u> Rapporteur Member State comments on the notifier / applicant comments	<u>Column D</u> Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		high investment in human health and environmental Stewardship programs are a key part of any soil fumigant future approvals and uses.		

