Improved Emission Scenario Documents for Biocidal use of Insecticides

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Abstract
Among the 23 different product types that are covered by the Biocidal Products Directive (98/8/EC), insecticides (Product Type 18) form an import group of active substances. For this product type, several Emission Scenarios Documents have been proposed to accurately describe the use in manure and stables as well as for household and professional uses. In general, the guidance for the risk assessment of these substances is based on the Technical Guidance Documents for New and Existing substances. During the evaluation of several substances it became clear that more guidance was needed for specific uses of insecticides. ECB organised a workshop to develop additional guidance for this product type with all member states. This poster presents the outcome and major conclusions of this workshop.

Keywords
Emission Scenario Documents, Insecticides, Biocidal Products Directive

Introduction
The Biocidal Products Directive (BPD, 98/8/EC) on the placing on the market of biocidal products should evaluate over 300 active substances distributed on 23 Product Types (PT). An important class of products is PT18, which covers the biocidal use of insecticides. Currently in the EU, active substances used in insecticidal use are assessed by Rapporteur Member States (RMS). The outcome of this evaluation process is a decision on the Annex I inclusion of these active ingredients and on product authorisation.

Guidance for the Risk Assessment Evaluation is the TGD (EU, 2003). However, due to the specific use scenarios for the different products, PT-specific exposure scenarios are needed. The aim of this workshop was to get a more harmonised approach in the Emission Scenario Documents among the different EU member states for this product class.

WORKSHOP OVERVIEW

STABLES AND MANURE

HOUSEHOLD USE

Overview and Bottlenecks on PT18 ESD on "Stables and Manure"

The main targets in the ESD are the nuisance flies - house fly (Musca domestica) together with other arthropods. The ESD concept that is available provides a generic first tier model which can be further refined e.g. with new research that is going on. The main compartment that is targeted in this ESD is the soil, in addition substantial attention is given to leaching to groundwater.

The overall scenarios are based on good agricultural practices (GAP), although some parts of the ESD are not yet fully in line with this concept. Within the generic version of the ESD substantial differentiation was provided to take into account the climatic/husbandry differences within the EU. This will be important in the light of product authorisation. The "defaults" for most parameters have mainly been based on the Dutch (average) situation.

The aim of the ESD is to present realistic worst case emission scenarios that are applicable in each of the MS. It was proposed that the defaults presented in the ESD may be overwritten by the user with more locally relevant data, as is common practice in all biocide scenarios.

Overview and Bottlenecks on PT18 ESD on "household and professional uses"

This ESD is almost in a final version at the OECD level. During the workshop several specific aspects were highlighted:

- A default value for the simultaneity of treatment was proposed based on a French survey in which the frequency of insecticide uses was asked to the general public.
- A proposal was made to perform cumulative assessment by summing up the releases from household and larger buildings. It was suggested that 4 000 households and 1000 larger buildings are connected to the STP. Considering the heterogeneity of larger building dimensions, it was judged that a default size of larger building would be 5 times longer and larger than the private houses.
- A proposal was made to change the surface treated in domestic applications in a typical house. Depending on the application, the potential exposure could be estimated from the fractions of the applied active substance that might be lost to waste. It was proposed that for aquatic risk assessment only "wet" rooms cleaned with water would be considered relevant.
- A proposal was made to allow the introduction of targeted applications. More specifically for crawling insects, the "chemical barrier scenario" was introduced.
- A proposal was made to assume that wastewater and rain water end up in the STP as a mixed system, although in some member states a separation between storm and wastewater is made.

Conclusions

ECB organised a workshop in order to facilitate the evaluation process of the substances used in PT18 under the Biocidal Product Directive. General bottlenecks were discussed and solutions proposed by EU member states. The outcome of this workshop will stimulate and harmonise further evaluations of active ingredients in this review program.

Further progress in this regard can be followed on the ECB – Biocides homepage: http://ecb.jrc.it/biocides/