

Environmental monitoring of biocides in Europe - from prioritization to measurements, November 5-6, 2012 in Berlin

PREPARATION OF A PRIORITIZATION CONCEPT FOR THE MONITORING OF BIOCIDES - REFINEMENT OF THE DATA SET USED FOR THE REGULATION OF BIOCIDES

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Goals and motivation

With the entry into force of the European Biocidal Product Directive (BPD) 98/8/EC^a in 1998 changes in the use patterns and environmental discharges of biocidal active substances are assumed. At the same time, non-inclusion decisions of substances into the positive lists of annex I or IA of the BPD change the range of active substances that are available. Currently, there is only a poor data set concerning biocides in the environment. The intended improvement of the data will enable a more realistic evaluation of the actual contamination of the environment with biocides. Additionally, the data is a precondition as well as a supportive instrument for an effective and realistic enforcement of the BPD with the following goals:

 Examination of the actual reduction of biocides in the environment
Monitoring of potentially alternative active substances Review and adjustment of risk mitigation measures • Review and adjustment of used emission scenarios



95 organizations in Germany, Austria and

Improvement of environmental protection

The preparation of a prioritization concept is necessary due to the cost-intensive monitoring and chemical analysis.

Prioritization step 1: Emission relevance

Poor data on consumption or emission of biocides in Germany. Hence, prioritization on the basis of:

- Emission relevant product types (PTs)
- Number of products with the respective active ingredient in the biocide register at Federal Institute for Occupational Safety and Health^b
- Production and/or import volumes (ESIS data base^c)
- Concurrent use as plant protection product or pharmaceuticals

Prioritization step 2: Ecotoxicological effects & bioaccumulation

- PNEC derived for aquatic organisms • Results of PEC/PNEC-assessment in the EU Doc I assessment report for one ore more scenarios > 1
- Classification as T or T+
- Bioconcentration factor (BCF) fish

Switzerland (Response rate ca. 30 %) Data for surface water available in federal states (monitoring obligations by EU WFD or German surface water ordinance (OGewV))

- Only few data for other environmental compartments
- Data often only available for active substances regulated as plant protection product or pharmaceuticals as well

> Only few data on biocides available

unterhalten bzw. wurden untersucht /ässer bzw. Flussgebietseinheit)?

sucht (soweit nicht schon oben be

unkten werden bzw. wurden die Probenahmestr

telle für andere Programme, repräsentative Messstelle, Screenir

ersucht werden: welche Organismen oder Organe werden/wurder cht (z.B. aquatisch: Muscheln, ganze Fische, Fischmuskel, Fischleber

zsmengen, Eintragspfade, BCF, Anreicherung in der Nahrungskette, secondary ng, logPow, Wasserlöslichkeit, Konzentration in der Wasserphase, Listen prioritärer mationen über spezifische Gewässer- oder Bodenbelastur

rden die Ergebnisse der Untersuchungen nach bestimmten Kriterien bewertet (z.B. im inblick auf Umweltqualitätsnormen für die untersuchten Stoffe für Biota, Sediment und

Falls Ergebnisse aus Routine-Monitorings oder Projekten in Berichten oder Publikationer Jsammen-gestellt wurden, wären wir Ihnen dankbar, wenn Sie uns diese zur Verfügung ellen könnten (möglichst als pdf-Datei).

ir danken Ihnen herzlich für Ihre Mita

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Point system/Summation





Plausibility check of the prioritization

substances (rodenticides, wood preservatives, insecticides, repellents and anti-foulings) • Check for plausibility through matching with monitoring

data from the survey or literature reports

Outlook

Follow-up project

The research project "Environmental impact of biocides: Development of the cornerstones for a monitoring program focusing on biocidal contaminations in the environment" (FKZ 3712 67 403, duration 08/2012-07/2015) focuses on:

• Examination and completion of the preliminary monitoring concept

- Development of a draft monitoring program
- Sampling, sample preparation and analysis of several substances identified as relevant monitoring candidates
- Evaluation of monitoring data and validation of prioritization concept and monitoring program

^aEU 1998a, Directive 98/8/EC of the European Parliament and of the Council on the placing on the market of biocidal products http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1998:123:0001:0063:EN:PDF ^b Biocide register at Federal Institute for Occupational Safety and Health: https://www.biozid-meldeverordnung.de/offen/ ^c ESIS (2011): European chemical Substances Information System, JRC, online database: http://esis.jrc.ec.europa.eu/ ^d Data basis EU Competent Authority Reports: https://circabc.europa.eu

This study was conducted by the Fraunhofer IME - Institute for Molecular Biology in Schmallenberg within the report "Prioritization of biocidal substances

for environmental monitoring" (FKZ 360 04 036) on behalf of the Federal Environment Agency (Germany).

A German language report is available, please contact stefanie.jaeger@uba.de.