

# Topical Scientific Workshop on Soil Risk Assessment

Helsinki, 7 – 8 October, 2015

Programme

## Day 1, 7 October 2015

08:15 — 08:45 Registration of participants presenting posters  
Poster exhibition set-up

08:45 — 09:15 Registration of participants

### **Chairmen: Anu Kapanen, ECHA and José Tarazona, EFSA**

09:30 — 09:45 Introduction

09:45 — 10:00 Welcome  
[Jukka Malm, Deputy Executive Director, ECHA](#)

10:00 — 11:15 Soil Risk Assessment in the regulatory context  
[Marta Sobanska, ECHA](#)  
[Maria Arena, EFSA](#)  
[David W. Charters, US EPA](#)  
[Janet Cermak, Environment Canada](#)

11:15 — 11:45 *Coffee break, exhibition area*

11:45 — 12:15 Protection goals and conceptual models  
How science can support risk managers on what to protect?  
[Jose Tarazona, EFSA](#)

12:15 — 12:45 Overview of processes driving the exposure of chemicals in soil  
[Willie Peijnenburg, RIVM](#)

12:45 — 13:15 Laboratory and higher-tier effect tests in soil ecotoxicology:  
state-of-the-art and new developments  
[Jörg Römbke, ECT GmbH](#)

13:15 — 14:15 *Lunch, canteen*

## Day 1 (cont.), 7 October 2015

14:15 — 14:30 Introduction to the break-out groups  
[Charmaine Ajao, ECHA](#)

14:30 — 18:00 Break-out groups (16:00 — 16:30 *Coffee break*)

### 1. Problem definition and conceptual model for soil risk assessment

**Chairs:** Marc S. Greenberg (US EPA), Kees Romijn (Bayer CropScience), Janet Cermak (Environment Canada)

**Focus**

- Protection goals and ecological relevance
- Risk characterisation and environmental impact assessment
- Scientific consistency and differences within regulatory processes

**Case studies**

- 1) Making soil protection goals based on the ecosystem services concept operational in ecotoxicological risk assessments, [Gregor Ernst, Bayer CropScience AG](#)
- 2) Bioavailability based approaches for soil risk assessment of metals: Regional differences arising from distributions of soil chemical properties, [Christian Schlekot, Nickel Producers Environmental Research Association](#)

### 2. Environmental exposure and fate assessment

**Chairs:** Willie Peijnenburg (RIVM), Mark Egsmose (EFSA)

**Focus**

- Environmental fate and release patterns related to soil exposure and available tools
- Behaviour processes within soil and its contribution to the bioavailability for soil organisms exposure: distribution, quantification of exposure, formation of degradation products/metabolites, aging, leaching, bioavailability and bound residues, specificities for various groups of chemicals

**Case studies**

- 1) Practical examples on how the EFSA Guidance Document for predicting environmental concentrations of substances in soil can be used, [Mark Egsmose, EFSA and Michael Klein, Fraunhofer IME](#)
- 2) From bioavailability science to regulation of organic chemicals, [Jose Julio Ortega-Calvo, Institute of Natural resources and Agrobiolology](#)

### 3. Effect assessment

**Chairs:** Veronique Poulsen (ANSES), Paulo Sousa (Uni Coimbra)

**Focus**

- Effect assessment for soil functions, assessment of relevance and available tools
- Effects assessment for soil organisms (including plants) exposed by soil, relevant taxonomic groups acute versus chronic testing and experimental tools
- Effects assessment for soil organisms (including plants) through multiple exposure routes by soil
- Effect assessment in higher tier studies (i.e. acceptability criteria)

**Case studies**

- 1) Application of Equilibrium partitioning-based model framework for evaluating soil (and sediment) hazards of lipophilic nonpolar organic substances  
[Aaron Redman, ExxonMobil Biomedical Sciences, Inc.](#)
- 2) Assessing the risks of pesticides to soil communities using terrestrial model ecosystems, [Björn Scholz-Starke, RWTH Aachen University](#)

## Day 1 (cont.), 7 October 2015

18:00 — 18:30	Wrap-up
18:30 — 19:45	<i>Cocktail reception, lobby Marie Curie</i>

## Day 2, 8 October 2015

**Chairmen: Anu Kapanen, ECHA and José Tarazona, EFSA**

08:15 — 08:50	Registration of participants
08:50 — 09:00	Introduction
09:00 — 09:20	<b>Case study 1:</b> Critical comparison of the schemes used to assess Soil exposure under Pesticide, Biocide and REACH legislation <a href="#">Bruce Callow, Exponent International Ltd</a>
09:20 — 09:40	<b>Case study 2:</b> Application of improved scientific approaches in support of risk assessment within the European REACH and Biocides Regulations – a case study on metals <a href="#">Koen Oorts, ARCHE</a>
09:40 — 10:00	<b>Case study 3:</b> Performing soil risk assessments using aquatic hazard information only: how well can it capture all the risks? <a href="#">Michiel Claessens, Chemours</a>
10:00 — 10:20	<b>Case study 4:</b> Compilation of case studies with challenges in regulatory soil risk assessment <a href="#">Romanas Cesnaitis, ECHA</a>
10:20 — 10:40	<b>Case study 5:</b> Risk assessment for in soil organisms: future approaches and perspective <a href="#">Maria Arena, EFSA</a>
10:40 — 11:15	<i>Coffee break, K-level</i>
11:15 — 13:00	Break-out group discussions continue
13:00 — 14:00	<i>Lunch, canteen</i>
14:00 — 16:00	Presentations from the break-out groups and discussion <a href="#">Chairmen/rapporteurs of the break-out groups</a> <ol style="list-style-type: none"><li>1. Problem definition and conceptual model for soil risk assessment</li><li>2. Environmental exposure and fate assessment</li><li>3. Effect assessment</li></ol>
16:00 — 17:00	Discussion/Panel with chairmen of the break-out groups
17:00 — 17:30	Summary and conclusions
17:30 — 18:00	Poster exhibition dismantling