



# REACH & ARBO-RI&E chemische stoffen

Doublures?
Toegevoegde waarde?
Einde vd chemische Arbeidshygiene?

**Theo Scheffers** 

Royal Haskoning, Chemicals Management Group

### Agenda







Royal Haskoning (1)



REACH (4)



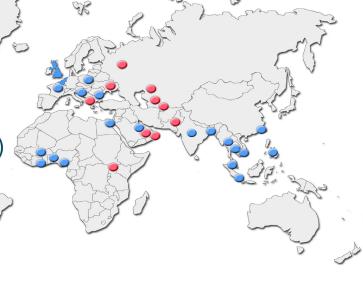
IH Exposure Scenarios (6)

### Royal Haskoning: Profile





- established in 1881
- independent and professional
- a worldwide network of knowledge, offices and clients
- 3,000 professionals (architects & engineers)
- Environment (150)
- Chemicals Management (20)
  - Database EaSI-pro (5)
  - Regulatory Affairs (3)
  - Environment (3)
  - External Safety (3)
  - Industrial Hygiene & Safety (4)



Offices

Project offices

### Agenda







Royal Haskoning (1)



REACH (4)



IH Exposure Scenarios (6)

### The aim of REACh





- EU chemical industry must:
  - manage chemicals risks and
  - produce and provide users in the supply chain adequate "Instruction leaflets" for all (30.000) chemicals produced or imported over 1 ton/year.
- Restriction & authorization (POP,WBP, CRM, PBT, vBvP)

#### The core of REACh:

- Exposure Scenarios
- Risk Characterization



### **EU treaty & Quality of life**





Product safety VI.95



Environmental Compartments: Workers protection: XI 137 Community health XIII.152 Environment XIX.174 ev





#### AH en EU wetgeving



Produkten VI.95

Machines (geluid, trilingen, ergonomie etc.)

Biocides, Voedsel, Geneesmiddelen

Compartimenten Milieu XIX.174 ev Volksgezondheid XIII.152

Chemische stoffen (REACh)/ Arbeidplaats XI 137

thinking in all dimensions

## ROYAL HASKONING

#### Overlap REACh & Arbo chemie?



- Ja
  - Vanaf 2011:SDS stoffen (GHS) + Exposure Scenarios
- Nee:
  - Tot 2019,
  - Voor < 10 t/y stoffen
  - Legio Uitzonderingen (Polymeren, intermediates, Naturals, R&D, unintentionals [KBR&Rotten], food, cosmetics, biocides etc.)
  - OEL=DNEL + wetenschappelijke weging
  - Combinaties

### **Prepare for REACH**





- Substances?
- 2. Producer, importer or downstream user?
- 3. Preregistration (2008)
- 4. Consortia
- 5. Exposure scenarios (haz & >10 t/y per m/i)
  - Use & risk management measures
  - **DNEL/PNEC**
  - Risk characterization & Compliance
- 6. Chemical Safety Report & SDS

### Agenda









REACH (4)



IH Exposure Scenarios (6)





#### Non exposure scenario agents

list of M/I substances



**SDS** 

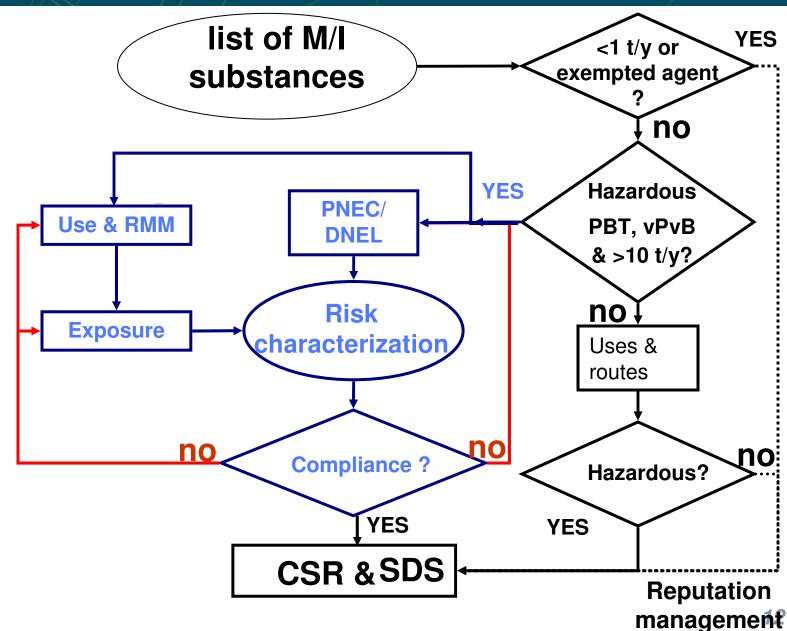
**YES** <1 t/y orexempted agent no Hazardous PBT, vPvB & > 10 t/y?no Uses & routes Hazardous? **YES** Reputation management



#### **Exposure scenarios & Risk Characterisation**







# ROYAL HASKONING

#### **Exposure Scenario. What is it?**



- The manufacturer/importer's description of:
  - manufacturing and intended use downstream
  - the life-cycle
  - Control of exposure of humans & environment



#### **Exposure Scenario approaches**



- By substance
- By a categories of substances (similarities)
- By a product (eg paint)



#### **Exposure Assessment can include:**



- Worker protection legislation based info (RI&E)
- Exposure databases (100.000 NL measurements)
- Health Hazard Surveys
- Exposure based occupational cohort studies.
- Ease/Coshh based "one substance" modelling:
  - Eusis (REACh version)
  - Ecetoc Tiered Risk Assessment
  - CEMAS
  - Stoffenmanager.eu
- TRGS440 ordering of substances in categories or products
  - DOHSBase Compare



#### **Technical Guidance Document on ES**



Non "good industrial hygiene practice" based Exposure Scenarios:

- Real time exposure data inferior to simple conservative modelling
- Hazard overestimation (DNEL assessment factors)

Risk Characterization ->100% non-compliance

- A Bureaucratic exercise
- Invalid for worker protection

Reason to follow REACH Exposure Scenarios developments carefully



### Thank you!



### t.scheffers@royalhaskoning.com

