### **Links & Literature**

Selected further information sources

## 1 Recent reports on OELs, REACH, and workers health protection

Workshop Report: The Relation between Chemical Legislation and Worker Protection Legislation – Present and in the Future under REACH, 14-15 June 2004, London

http://www.mtas.es/insht/en/research/reach\_london.pdf

REACH: Implications and Opportunities for the Practice and Profession of Occupational Hygiene – An International Workshop, 14-15 December 2005, Brussels

http://www.bohs.org/resources/res.aspx/Resource/filename/472/06\_REACH\_workshop\_Dec\_05\_final\_report.pdf

DG Employment, 2006, Setting OELs for Carcinogens, Workshop, Luxemburg, October 2006

http://ec.europa.eu/employment social/health safety/docs/summary workshop.pdf

BOHS, 2007, What does REACH really mean for occupational hygiene?, April, 18th, 2007 (workshop repart not yet available, link below for programme and possible inquiry)

http://www.bohs.org/resources/res.aspx/Resource/filename/672/REACH workshop programme.pdf

# 2 National and international OEL frameworks; DNEL methodology

Health Council of the Netherlands (Gezondheidsraad), 2002, Health-based Reassessment of Administrative Occupational Exposure Limits <a href="http://www.gr.nl/pdf.php?ID=773&p=1">http://www.gr.nl/pdf.php?ID=773&p=1</a>

HSE, 2003

Proposals to introduce a new occupational exposure limits (OEL) framework 2003 <a href="http://www.hse.gov.uk/consult/condocs/cd189.pdf">http://www.hse.gov.uk/consult/condocs/cd189.pdf</a>

Topping, M., 2001

Occupational exposure limits for chemicals Occupational and Environmental Medicine, **58**, 2001, 138-144

Walters, D.; Grodzki, K., 2006

Beyond Limits? Dealing with Chemical Risks at Work in Europe Elsevier Ltd., 2006

Wong, O., 2006

The development and regulation of occupational exposure limits in Asia Regulatory Toxicology and Pharmacology, 46, 2006, 105-106 (same source: detailed articles for single countries)

Ziegler-Skylakakis Kyriakoula European Commission, How the EU establishes exposure limits for chemicals, http://osha.europa.eu/publications/magazine/6/index 5.htm

#### 3 Default Extrapolation Factors - Scientific background, recent developments

Benignus, V.A., 2001

Quantitative cross-species extrapolation in noncancer risk assessment Regulatory Toxicology and Pharmacology, 34, 2001, 62-68

Bokkers, B.G.; Slob, W., 2005

A comparison of ratio distribution based on the NOAEL and the benchmark approach for subchronic-to-chronic extrapolation Toxicological Sciences, 85, 2005, 1033-1040

Chiu. W.: White. P.. 2006

Steady-state solutions to PBPK models their applications to risk assessment. I. Route to route extrapolation of volatile chemicals Risk Analysis, 26, 2006, 769-780

Chen, J.J.; Moon, H.; Kodell, R.L.

A probabilistic framework for non-cancer risk assessment Regulatory Toxicology and Pharmacology, 2006 Dec 11, [Epub ahead of print]

Chiu, W.A.; White, P., 2006

Steady-state solutions to PBPK models and their applications to risk assessment I: Route-to-route extrapolation of volatile chemicals Risk Analysis, 26, 2006, 769-80

Dorne, J.L.C.M.; Renwick, A.G., 2005

The refinement of uncertainty/safety factors in risk assessment by the incorporation of data on toxicokinetic variability in humans

Toxicological Sciences, 86, 2005, 20-26

Dorne, J.L.C.M.; Walton, K.; Renwick, A.G., 2005

Human variability in xenobiotic metabolism and pathway-related uncertainty factors for chemical risk assessment: a review

Food and Chemical Toxicology, 43, 2005, 203-216

Dorato, M.A.; Engelhardt, J.A., 2005

The no-observed-adverse-effect-level in drug safety evaluations: use, issues, and definition(s) Regulatory Toxicology and Pharmacology, **42**, 2005, 265-274

Falk-Filipsson, A.; Hanberg, A.; Victorin, K.; Warholm, M.; Wallen, M., 2007 Assessment factors-Applications in health risk assessment of chemicals Environmental Research, **104**, 2007, 108-127

Gaylor, D.W.; Kodell, R.L., 2002

A procedure for developing risk-based reference doses Regulatory Toxicology and Pharmacology, **35**, 2002, 137-141

GDCh-Advisory Committee on Existing Chemicals (BUA), 2004

Safety Factors in the Toxicologic Assessment of Chemicals. Assessment Basis, Extrapolation Concepts and Practical Procedures, BUA Report 244 S. Hirzel Stuttgart, 2004

Gundert-Remy, U.; Sonich-Mullin, C.; IPCS Uncertainty and Variability Planning Workgroup and Drafting Group, 2002

The use of toxicokinetic and toxicodynamic data in risk assessment: an international perspective The Science of the Total Environment, **288**, 2002, 3-11

Hattis, D.; Baird, S.; Goble, R., 2002

A straw man proposal for a quantitative definition of the RfD Drug and Chemical Toxicology, **25**, 2002, 403-436

Jarabek, A.M.; Asgharian, B.; Miller, F.J., 2005

Risk Analysis, 26, 2006, 1031-1043

Dosimetric adsustments for interspecies extrapolation of inhaled poorly soluble particles (PSP) Inhalation Toxicology, **17**, 2005, 317-334

Kalberlah, F.; Schneider, K.; Schuhmacher-Wolz, U., 2003 Uncertainty in toxicological risk assessment for non-carcinogenic health effects Regulatory Toxicology and Pharmacology, **37**, 2003, 92-104

Kuljus, K.; von Rosen, D.; Sand, S.; Victorin, K., 2006
Comparing experimental designs for benchmark dose calculations for continuous endpoints

Kodell, R.L.; Chen, J.J.; Delongchamp, R.R.; Young, J.F., 2006 Hierarchical models for probabilistic dose-response assessment Regulatory Toxicology and Pharmacology, 45, 2006, 265-272

Lutz. W.K.. 2002

Differences in individual susceptibility to toxic effects of chemicals determine the dose-response relationship and consequences of setting exposure standards

Toxicology Letters, **126**, 2002, 155-158

Matthews, E.J.; Kruhlak, N.L.; Benz, R.D.; Contrera, J.F., 2004

Assessment of the health effects of chemicals in humans: I. QSAR estimation of the maximum recommended therapeutic dose (MRTD) and no effect level (NOEL) of organic chemicals based on clinical trial data

Current Drug Discovery Technologies, 1, 2004, 61-76

Meek, M.E.; Renwick, A.; Ohanian, E.; Dourson, M.; Lake, B.; Naumann, B.D.; Vu, V., 2002 Guidelines for application of chemical-specific adjustment factors in dose/concentration-response assessment

Toxicology, 181-182, 2002, 115-120

Nong, A.; Krishnan, K., 2007

Estimation of interindividual pharmacokinetic variability factor for inhaled volatile organic chemicals using a probability-bounds approach

Regulatory Toxicology and Pharmacology, 2007 Feb 4, [Epub ahead of print]

Pelekis, M.; Nicolich, M.J.; Gauthier, J.S., 2003

Probabilistic framework for the estimation of the adult and child toxicokinetic intrapsecies uncertainty factors

Risk Analysis, 23, 2003, 1239-1255

Rennen, M.A.J.; Bouwman, T.; Wilschut, A.; Bessems, J.G.M.; de Heer, C., 2004 Oral-to-inhalation route extrapolation in occupational health risk assessment: a critical assessment Regulatory Toxicology and Pharmacology, **39**, 2004, 5-11

RIVM, Rijksinstituut voor Volksgezondheid en Milieu, Bilthoven, Netherlands, 2001 Factsheets for the (eco)toxicological riks assessment strategy of the National Institute of Public Health and the Environment, RIVM-report 601 516 007 <a href="http://www.mnp.nl/bibliotheek/rapporten/601516007.pdf">http://www.mnp.nl/bibliotheek/rapporten/601516007.pdf</a>

Schneider, K.; Oltmanns, J.; Hassauer, M., 2004

Allometric principles for interspecies extrapolation in toxicological risk assessment - empirical investigations

Regulatory Toxicology and Pharmacology, 39, 2004, 334-347

Schneider, K.; Schuhmacher-Wolz, U.; Hassauer, M.; Darschnik, S.; Elmshäuser, E.; Mosbach-Schulz, O., 2006

A probabilistic effect assessment model for hazardous substances at the workplace Regulatory Toxicology and Pharmacology, **44**, 2006, 172-181

Schoeny, R., 2007

USEPA's risk assessment practice: default assumptions, uncertainty factors Human and Ecological Risk Assessment, **13**, 2007, 70-76

Walton, K.; Dorne, J.L.C.M.; Renwick, A.G., 2004

Species-specific uncertainty factors for compounds eliminated principally by renal excretion in humans

Food and Chemical Toxicology, 42, 2004, 261-274

Walton, K.; Dorne, J.L.; Renwick, A.G., 2001

Uncertainty factors for chemical risk assessment: interspecies differences in the in vivo pharmacokinetic and metabolism of human CYP1A2 substrates Food and Chemical Toxicology, **39**, 2001, 667-680

### 4 Risk management at the workplace

Balsat, A.; De Graeve, J.; Mairiaux, P., 2003

A Structured Strategy for Assessing Chemical Risks, Suitable for Small and Medium-sized Enterprises

Annals of Occupational Hygiene, 47, 2003, 549-556

BAuA, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (Federal Institute for Occupational Safety and Health), 2006

Easy-to-use workplace control scheme for hazardous substances, A practical guide for the application of the German Hazardous Substances Ordinance by small and medium sizes enterprises working with hazardous substances without workplace limit values <a href="http://www.baua.de/nn\_18306/sid\_48EFB5D6554F09BC441A7330464A056E/nsc\_true/en/Topics-from-A-to-Z/Hazardous-Substances/workplace-control-scheme.pdf">http://www.baua.de/nn\_18306/sid\_48EFB5D6554F09BC441A7330464A056E/nsc\_true/en/Topics-from-A-to-Z/Hazardous-Substances/workplace-control-scheme.pdf</a>

European Agency for Safety and Health at Work, 2007 Occupational Exposure Limits. What are Occupational Exposure Limits? http://osha.europa.eu/good\_practice/risks/ds/oel/

Jones, R.M.; Nicas, M., 2006

Evaluation of COSHH Essentials for vapor degreasing and bag filling operations

Annals of Occupational Hygiene, 50, 2006, 137-147

Jones, R.M.; Nicas, M, 2006

Margins of safety provided by COSHH essentials and the ILO Chemical Control Toolkit Annals of Occupational Hygiene, **50**, 2006, 149-156

Kromhout, H., 2002

Design of measurement strategies for workplace exposures Occupational and Environmental Medicine, **59**, 2002, 349-354

Ogden, T.L., 2002

Occupational Exposure Limits - Britain Tries Again Annals of Occupational Hygiene, **46**, 2002, 435-437

Rühl, R.; Lechtenberg-Aussarth, E.; Hamm, G., 2002

The development of process-specific risk assessment and control in Germany Annals of Occupational Hygiene, **46**, 2002, 119-125

Tischer, M.; Bredendiek-Kamper, S.; Poppek, U., 2003

Evaluation of the HSE COSHH Essentials exposure predictive model on the basis of BAuA field studies and existing substances exposure data Annals of Occupational Hygiene, **47**, 2003, 557-569

Verma, D.K.; Purdham, J.T.; Roels, H.A., 2002

Translating evidence about occupational conditions into strategies for prevention Occupational and Environmental Medicine, **59**, 2002, 205-214

#### VDI 2262 Blatt 4:2006-03

Workplace air - Reduction of exposure to air pollutants - Capture of air pollutants, 2006-03

Walding, Marianne, Swedish Work Environment Authority, 2005

Impact assessment for the Provisions on Occupational Exposure Limit Values and Measures against Air Contaminants, AFS 2005:17

http://www.av.se/dokument/inenglish/reports/2006 10.pdf

Work environment authority, Sweden, 2006

Chemicals control in the workplace – Limiting chemical hazards at work <a href="http://www.av.se/dokument/inenglish/books/h228eng.pdf">http://www.av.se/dokument/inenglish/books/h228eng.pdf</a>