

Miller, Diane M. (CDC/NIOSH/EID)

From: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
Sent: Wednesday, June 11, 2008 12:24 AM
To: NIOSH Docket Office (CDC)
Cc: Lentz, Thomas J. (CDC/NIOSH/EID); Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
Subject: Comments for the NIOSH Control Banding Review Document -
Attachments: SK2_FIOH.pdf

To the NIOSH Docket: These comments were sent to me for transmission to the docket for the Control Banding Document. Regards,
Marilyn Fingerhut

From: "Packroff, Rolf" [mailto:packroff@baua.bund.de]
Sent: Mon 6/9/2008 8:37 AM
To: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
Cc: "Guhe, Christine"; "Johnen, Annette"; "Lotz, Gabriele"; "Tischer, Martin"
Subject: AW: Your paragraphs are needed for NIOSH Control Banding Review Document -

Dear Marilyn,

please find some suggestions on the NIOSH document concerning CB tools in Germany:

p 52 after line 17, please add the following paragraphs concerning implementation of CB in Germany:

Since 2005 the German Federal Institute for Occupational Safety and Health (BAuA) offers an "Easy-to-use workplace control scheme for hazardous substances" (EMKG) as practical guidance for workplace risk assessment in small and medium enterprises [Arndt et al., 2005]. Using easy available informations from Safety Data Sheets and workplaces the user of the scheme can derive control strategies to minimise exposure via inhalation or skin contact. EMKG is quite similar to HSE's COSHH Essentials. The main differences are some divergent allocations of R-phrases to hazard bands following a similiar Scheme for assessment of Substitutes [Geman FMLS, 2008] and a more detailed tool to assess dermal exposure [German FMLS, 2006]. Control guidance sheets for typical tasks give reference on precise control measures within the control strategy determined with the generic tool. In 2007 the generic control guidance sheets have supplemented with specific sheets for activities with chemicals in the rubber industry. Currently 36 control guidance sheets are offered on BAuA's web page with the same numbering than those from HSE (UK).

From a legal point of view the EMKG is non-binding guidance. But it is, like COSHH Essentials, well supported by legal obligations and Codes of Practice from the tri-partite Hazardous Substances Committee in Germany. In general, German legal requirements for Occupational Safety and Health follow the minimum requirements for EU member states based on Art. 137 of the EU treaty [European Union 2003]. German Hazardous Substances Ordinance is the national implementation of the corresponding EU Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work [European Union, 1998]. The Code of Practice TRGS 400 „Risk Assessment for Chemicals at the Workplace" specifies the EMKG as an easy available information for employers to carry out workplace risk assessments [German FMLS, 2008]. The control guidance sheets are accepted by the Competent Authorities in the federal states of Germany as a procedure to improve compliance with the Hazardous Substances Ordinance for substances without an OEL [German FS 2005].

Beyond this two branch-specific control banding tools in Germany should be noted: GISBAU - a well-established hazardous substances information system of the institutions for statutory accident insurance and prevention in the building trade [GISBAU, 1989], and the building blocks for workplace risk assessment of the Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Service [BGW, 2006].

In May 2008 an enhanced version of the scheme (EMKG 2.0) has been launched on the BAuA website [Kahl et al., 2008]. EMKG 2.0 additionally includes now all 300 substances with a legal OEL in Germany. For these substances the user of the scheme does not start with the classification but with the OEL, which is addressed to a corresponding hazard band. Keeping in mind the uncertainties of the scheme, two possibilities for practical implementation are offered. The first is to use the hazard group which directly relates to the target airborne concentration range which covers the OEL. In this case the employer has to improve the observance of the OEL by applying workplace measurements. The second possibility is to use the hazard band below the OEL and the corresponding control strategy. In these cases the employer can waive workplace measurements.

The expansion of EMKG 2.0 to substances with an OEL makes it compatible to future demands. EMKG can be used as a simple tool to derive exposure scenarios for substances to be registered under the EU REACH regulation by using the DNEL (derived no effect level), which is the REACH surrogate for an OEL. A more specific

EMKG-based online-tool is under current development at BAuA to help producers and importers of chemicals to fulfill the REACH requirement to derive control strategies and to recommend management measures, e. g. the corresponding guidance sheets.

[Arndt, 2005] Arndt, Rainer; Packroff, Rolf; Görner, Bettina; Guhe, Christine; Lechtenberg-Auffarth, Eva; Lotz, Gabriele; Tischer, Martin: Einfaches Maßnahmenkonzept Gefahrstoffe: Eine Handlungshilfe für die Anwendung der Gefahrstoffverordnung in Klein- und Mittelbetrieben bei Tätigkeiten mit Gefahrstoffen ohne Grenzwert, Gefahrstoffe - Reinhaltung der Luft, 65 (2005) No. 1-2, p. 13-18 (in German, English Version of EMKG 1.0 see www.baua.de/nn_18306/en/Topics-from-A-to-Z/-Hazardous-Substances/workplace-control-scheme.pdf).

[German FMLS, 2008] Federal Ministry for Labour and Social Affairs, Code of Practice TRGS 600 "Substitution", to be published (in German)

[German FMLS, 2006] Federal Ministry for Labour and Social Affairs, Code of Practice TRGS 401 "Dermals risk from chemicals - characterisation, assessment, management", Bundesarbeitsblatt 10 (2006) see www.baua.de/de/Themen-von-A-Z/-Gefahrstoffe/TRGS/TRGS-401.html__nnn=true (in German)

[European Union, 2003] Treaty establishing the European Communities (as amended by the Amsterdam Treaty), Article 137 http://ec.europa.eu/employment_social/equ_opp/treaty_en.html#137

[European Union, 1998] Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC), Official journal No. L 131, 05/05/98 p. 11 -23, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31998L0024:EN:HTML>

[German FMLS, 2008] Federal Ministry for Labour and Social Affairs, Code of Practice TRGS 400 „Workplace Risk Assessment for workplace use of chemicals“, Gemeinsames Ministerialblatt der Bundesministerien, 11/12(2008), p. 211 - 223, see www.baua.de/de/Themen-von-A-Z/-Gefahrstoffe/TRGS/TRGS-400.html__nnn=true (in German)

[German FS, 2005] German Federal states instruction for implementation of OSH legislation: "Guidelines on hazardous substances ordinance (LV 45, 2005)", see http://lasi.osha.de/de/gfx/publications/lasi_publications.php (in German)

[GISBAU, 1989] GISBAU - the hazardous substances information system of the institutions for statutory accident insurance and prevention in the building trade, see osha.europa.eu/good_practice/sector/-construction/construction_case_studies_2.pdf

[BGW, 2006] BGW (Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Service): building blocks for workplace risk assessment (2006), http://www.bgw-online.de/internet/generator/Navi-bgw-online/NavigationLinks/Kundenzentrum/Grundlagen_und_Forschung/Gefahrstoffe/Bausteine_zur_Gefahrdungsbeurteilung/navi.html

[Kahl et al., 2008] Kahl, A.; Johnen, A.; Guhe, C.; Packroff, R.; Lotz, G., Tischer, M., Einfaches Maßnahmenkonzept Gefahrstoffe, Version 2.0 (2008), see www.einfaches-maßnahmenkonzept-gefahrstoffe.de (in German)

p 55 line 7 - 13, to be deleted

In this chapter several activities and regulations are mixed together in an incorrect way. The corrections are implemented in the chapter proposed above and in additional remark I.

Additional Remarks to chapter 1.6

I. It may be useful to create a short new chapter "1.6.1 European Union" that gives a hint at the European Practical guidelines on Chemical agents directive 98/24/EC. In Annex II of the guidelines a CB scheme - quite similar to COSHH Essential - is recommended for risk assessment. The guidelines are addressed to the EU member states to be integrated into their national legislation, Codes of Practice or national Guidance documents, see:

http://ec.europa.eu/employment_social/-health_safety/docs/chemical_agent_en.pdf

II. In its annual report 2006 the Finnish Institute of Occupational Health refers to the launch of a national CB tool for chemical risk management called SK2, see

<http://www.ttl.fi/Internet/English/Advisory+services/Occupational+Safety/Safety+Information+Systems.htm>. (and attached print from the FIOH-Homepage)

Hoping, that my comments will help you to have an up-to-date review.

Best regards,

Rolf

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Von: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR) [mailto:maf2@CDC.GOV]

Gesendet: Sonntag, 8. Juni 2008 10:08

An: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR); Heussen, Henri; Grumbles, Tom (TG); Andrew.Garrod@hse.gsi.gov.uk; zalk1@llnl.gov; vickersc@who.int; alberto.camacho-henriquez@gtz.de; baichoo@ilo.org; Deborah.Nelson@Colorado.EDU; jonathan.krueger@unitar.org; kortume@who.int; Paul.Evans@hse.gsi.gov.uk; Niemeier, Richard W. (CDC/NIOSH/EID); szucs@ilo.org; Lentz, Thomas J. (CDC/NIOSH/EID); tempowskij@who.int; Packroff, Rolf; tomas.marques@unep.fr; WilburnS@who.int; j.zalk@comcast.net; Lentz, Thomas J. (CDC/NIOSH/EID); kalpanasrmc@vsnl.com; Rice, Faye L. (CDC/NIOSH/EID); Gillen, Matt (CDC/NIOSH/OD); skk@kosha.net; zjzhou@shmu.edu.cn; HO_Sweet_Far@mom.gov.sg; mjeebhay@cormack.uct.ac.za; Stavroula.Leka@nottingham.ac.uk

Cc: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)

Betreff: Your paragraphs are needed for NIOSH Control Banding Review Document

Wichtigkeit: Hoch

Dear Colleagues,

NIOSH has posted a Control Banding Review Document that is open for public comment until 11 June. I want to encourage you to send comments, particularly to send descriptions and citations for the recent Stoffenmanager, German, Korean, Singapore, Belgium, EU, Chinese India/GTZ chemical, nanotechnology, barrier banding, ergonomics, psychosocial, and sector specific control banding systems.

This will enable NIOSH to have an up to the minute review document.

In order to make it easier for you, I have attached my comments, which identify some of you and your systems by name. **If you could provide a paragraph and citations for insertion into the document** either to me or directly to NIOSH, it will help to make the NIOSH document truly reflective of the global situation with control banding.

You will find links to the NIOSH document and information how to send comments electronically at:

<http://www.cdc.gov/niosh/review/public/138/>

To quickly see what my comments and the NIOSH document contain about your various systems, I suggest you use the search option provided with the opened document.

I cannot remember who is the author of SOBANE for Belgium...Jacques...? If you know, please forward this email to him.

Best regards,

Marilyn



Finnish Institute of Occupational Health

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Main page: Organization: Centres of Expertise: Work Environment Development: Tool for Occupational Exposure Scenarios

Tool for preliminary risk assessment and exposure scenarios for chemical safety and REACH

Finnish Institute of Occupational Health has developed a computer-based tool for the screening of health risk caused by chemicals. The tool is partly based on the British Standard BS 8800. Risks are classified according to the level of exposure and the severity of the harm potential harm (as given in the R-phrases).

The tool presented herein classifies the risk of an exposure to a certain chemical and recommends risk management measures to reduce the risk. The software tool is based on method and data definition that are available here. Because assessment of chemical risks at work-places is difficult we wanted to create a simple and reliable assessment and management tool, by which the chemical safety could be improved especially in small and medium-sized enterprises. This tool can also be used, when FIOH is taking up consultancy tasks in helping industry to comply with the requirements of REACH regulation.

The basic features of the tool

Our intention was to develop a tool for preliminary risk assessment at the workplace level. The tool

- Includes most important observable exposure parameters.
- Advises the user on risk reduction measures that are derived from the exposure data given by the user.
- Is simple enough to enable members of the workplace safety organisation or OHS personnel to accomplish a preliminary risk assessment by observing the work on the basis of their knowledge on occupational hygiene and the Safety Data Sheet of the chemical.



- Enables the preliminary exposure scenarios as described in the REACH Implementation Project (RIP 3.2-1a. WP1).
- Supports the documentation of the risk management and provide an updated risk assessment, when risk management actions have been taken.

The files which describe the method and the data definition are the following:

- **First page of the questionnaire form (pdf):** A similar text is also in the first screen of the programme. In there information which identify the user, the chemical and the description of the work task are given. The free text part can be used e.g. to indicate the duration and frequency of the work and the amount of the chemical used, when relevant.
- **Questionnaire with instructions (pdf):** The questionnaire of our model is based on the experiences from the EU Existing Chemicals Programme, more notably user experience of EASE, EUSES and some other modelling tools as well as some occupational hygiene studies made by FIOH. Furthermore, the model was developed in collaboration with experts of occupational hygiene. The answers to these 12 questions determine the level of exposure.
- **Bridging rules (pdf):** Bridging rules are applied, when series of answers are converted to a level of risk. Depending on the combination, the level of the exposure is low, moderate or high. This conversion happens automatically after the questionnaire of the programme has been filled in.
- **Hazard categories (pdf):** Each R-phrases is assigned to one of the categories, which are applied when the level of risk is determined.
- **Risk matrix (pdf):** Is used for determination of risk level based on the principles set in the BS 8800. Here the level of the exposure and the hazard category are combined to derive an estimate of the level of the risk.
- **Risk reduction measures (pdf):** The selection of the measures proposed is based on the answers given and the risk level determined. When the Answer given by the user is the one in the second column of this table, the programme suggests the risk management measure given in the third column.
- **Other risk management measures (pdf):** The user is reminded of these possible risk management measures independent of the risk level indicated by the programme. Two first measures, i.e. minimising the time of the exposure and decreasing the amount of amount chemical used will often apply. They were not taken for the standard set of 12 questions, because for several hazard categories i.e. sensitisation, corrosion, and carcinogenicity these measures are not the most effective ones, and more importantly because these determinant/parameters of exposure do not help to make a distinction between the levels of the risk.
- **Results of the testing and reproducibility study (pdf).** Results of the testing; i.e. the

answers and the risk levels, when 42 chemicals in 9 companies (downstream users, DUs) were assessed with this tool. The current version of the model was finalised after a testing round in nine work-places representing various branches of industry.

For more information, please contact: Milja Mäkinen.

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Updated 4.4.2007 Juha Tuovila