

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

From: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
Sent: Thursday, June 12, 2008 2:52 PM
To: NIOSH Docket Office (CDC)
Cc: jacques.malchaire@uclouvain.be
Subject: 138 Comments on NIOSH Control Banding Review Document
Attachments: Malchaire SOBANE strategy chemical agents.doc; jacques_malchaire.vcf

To the NIOSH Docket: Please include this information in the review of the control banding document. Thanks so much, Marilyn

From: Malchaire [mailto:jacques.malchaire@uclouvain.be]
Sent: Wed 6/11/2008 9:58 AM
To: Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
Subject: Re: Your paragraphs are needed for NIOSH Control Banding Review Document

*Dear Marilyn,
Thanks a lot for your email and your invitation to contribute to the document of NIOSH
as the deadline is today, I will send directly the document to them but here it is in order for you to join it to your comments if you wish to do so
By the way, I am the author of the idea and the philosophy of this strategy, and I have been assisted by many people in Belgium to develop the documents

You referred me kindly to several people to whom I sent the SOBANE documents but who, unfortunately, did never recontact me !
We finally developed a SOBANE document concerning the psychosocial aspects of work and it would be interesting to compare it to the document prepared by **Stavroula Leka.
I am translating it in English and will send it to you if you are interested
Best regards
Jacques

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Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR) wrote:
> Thank you Paul. Hello Jacques! I would like to include a paragraph and
> citation in the document about SOBANE if you feel that is suitable?
> Thanks so much, Marilyn
>
> *From:* Paul.Evans@hse.gsi.gov.uk [mailto:Paul.Evans@hse.gsi.gov.uk]
> *Sent:* Mon 6/9/2008 9:41 AM
> *To:* malchaire@hytr.ucl.ac.be
> *Cc:* Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR)
> *Subject:* FW: Your paragraphs are needed for NIOSH Control Banding
> Review Document
>
> Jacques,
> I hope you are well. Marilyn Fingerhut has asked me to forward this

> message (please see below).

> Regards,

> Paul

> Paul Evans

> HM Principal Specialist Inspector (Occupational Hygiene)

> Chemical Risk Management Unit

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> <http://www.coshh-essentials.org.uk/>

>

> *From:* Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR) [mailto:maf2@cdc.gov]

> *Sent:* 08 June 2008 09:08

> *To:* Fingerhut, Marilyn (CDC/NIOSH/OD) (CTR); Heussen, Henri;

> Grumbles, Tom (TG); Andrew Garrod; 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; Niemeier, Richard W. (CDC/NIOSH/EID);

> szucs@ilo.org; Lentz, Thomas J. (CDC/NIOSH/EID); tempowski@who.int;

> packroff@baua.bund.de; 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)

> *Subject:* Your paragraphs are needed for NIOSH Control Banding Review

> Document

> *Importance:* High

>

> 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

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>
 > *****

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The SOBANE risk management strategy applied to chemical agents

Malchaire J.B.

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Introduction

The SOBANE strategy rests on several basic principles

1. The competences available in occupational health (OH) are complementary, from the workers to the experts.
2. The OH resources are very limited and must be used rationally.
3. The workers must be actors of their own OH and no longer the assisted
4. All OH problems are linked and long lasting solutions to, say, a problem of chemical agents can not be reached if other problems are neglected: the approach must be "global".
5. Prevention is more than compliance: the aim is to reach the best possible stage for the employees and the company.
6. Evaluation and quantification are not absolute prerequisites to undertake action to improve the working environment.
7. Methods must be designed for the small and medium-sized companies taking into account the technical means and the internal competencies.

The SOBANE strategy of risk management

SOBANE (*Screening, Observation, Analysis, Expertise*) is a strategy for risk prevention in four levels, developed with the aim of approaching gradually the work situations in small as well as large companies, to coordinate the cooperation between workers, management, internal and external Occupational Health (OH) practitioners and to arrive to adequate risk prevention faster and more cost-effectively.

These four levels are:

- **Screening:** the risk factors are detected and obvious solutions are implemented.
- **Observation:** the remaining problems are studied more in details, risk factor per risk factor, and the reasons and the solutions are discussed in details.
- **Analysis:** when necessary, an OH practitioner is called upon to carry out appropriate measurements to develop specific solutions.
- **Expertise:** in very sophisticated and rare cases, the assistance of an expert is essential to solve a particular problem.

1. Level 1, Screening

At the level 1, a guide (called Déparis: DÉpistage PArticipatif des RISques) is used for the participative screening of all the risks in the work situation. It is devised to be used by the workers and their management during a 2-h meeting, in order to take stock as objectively as possible of the work situation that are the only ones to know intimately.

It is presented in the form of 18 tables, approaching 18 aspects of the work situation: 1. Operating areas; 2. Technical organization between workplaces; 3. Work sites; 4. Risks of accident; 5. Controls and signals; 6. Tools and work material; 7. Repetitive work; 8. Handling operations; 9. Mental load; 10. Lighting; 11. Noise; 12. Thermal environment; 13. Chemical and biological agents; 14. Vibration; 15. Work relationships between workers; 16. Local and general social environment; 17. Work content; 18. Psychosocial environment

The objective at this level is only to identify the main problems and solve immediately the simple ones, such as a hole in the ground, a container containing a solvent and left abandoned, a computer screen turned towards a window...

2. Level 2, Observation

When a problem of, say, noise, pollution, postures... is recognized at the *Screening* level, it must be studied more in details.

Guides have been prepared for the workers and their technical staff (with the cooperation of an internal OH practitioner when available), again to discuss, in a 2-h meeting, this problem more in depth and identify possible prevention solutions.

The *Observation* guide for chemical agents (9 pages) considered sequentially the following points:

1. Description of the work situation: sketch ; identification of the areas where chemicals are used or emitted; identification of the workplaces ; identification of the potentially exposed people : why is it organized in this way? What could be done to organize it better.
2. Inventory of the chemicals with collection of the occupational hygiene and safety information for each one of them:
3. Review of the labeling and signposting
4. Possibilities of elimination of the dangerous chemicals
5. Ways of reducing the exposure
6. Safety during handling operations
7. Review of the general or local ventilation
8. Review of the occupational hygiene measures
9. Review of the personal protective equipments (PPE)
10. Review of the way chemical are stored
11. Protection against fire or explosion hazards and emergency plans
12. Waste management
13. Training and information
14. Medical supervision
15. Synthesis: assessment of the work situation as a whole:
 - Who does what and when, by priorities
 - Assessment of the future situation
 - Need for an *Analysis*, level 3, urgency and objectives.
 - Measures to be taken in the short run

3. Level 3, Analysis

If the problem remains after the *Screening* and *Observation* levels, or if the OH practitioner who supervises the use of the strategy thinks it is needed, an *Analysis* is performed with the assistance of OH practitioner who has the necessary qualification, tools and techniques. The points considered in the *Analysis* guide (8 pages) are the same as at the *Observation* level, but at a much higher technical level

1. Description of the work situation
2. Inventory of the chemicals
3. Labeling of the chemicals and signposting in the buildings
4. Elimination and substitution of the dangerous substances
5. Reduction of the exposure
6. Safety during handling
7. Ventilation
8. Personal protective equipments (PPE)
9. Storage
10. Management of waste
11. Measures in the case of accident, incident or emergency
12. Training and information
13. Medical supervision
14. Measures of prevention specific to certain activities
15. Evaluation of the current and residual risks
16. Synthesis

- Who does what and when, by priorities
- Residual risk after prevention
- Need for a level 4, *Expertise* on what and for what purpose?

4. Level 4, Expertise

Finally, for particularly complex problems, an expert can be called in to design or improve a more sophisticated solution.

Validation

Guides of *Observation* and *Analysis* of the SOBANE strategy have been developed in 15 risk domains: 1:Social facilities; 2:Safety (accidents, falls...); 3:Machines and hand tools; 4:Electricity; 5:Fire and explosion; 6:Lighting; 7:Work on VDUs; 8:Noise; 9:Thermal environment; 10:Chemical agents; 11:Biological agents; 12:Musculoskeletal disorders; 13:Whole body vibration; 14:Hand-arm Vibration; 15: psychosocial aspects of work.

All have been validated in 10 SMEs of various industrial sectors. It was readily understood, accepted and used and proved to be efficient in improving the working conditions, in increasing the use of PPE and the adoption of adequate work procedures

Many documents are available in English and can be downloaded from the websites www.sobane.be and www.deparisnet.be.

The Control Banding documents are mentioned and used as technical sources of information at the *Analysis* level of the SOBANE guide.