

Monthly Meeting 14th March 2011

Presentation: HSE On-line Tool for Respiratory Protective Equipment (RPE) Selection

Bob Rajan, HM Principal Inspector.

Due to the unavoidable absence of the Construction Chairman, Gerry Mulholland, the Secretary, Andy Chappell introduced the speaker, Bob Rajan, whom he had known for many years. Andy continued by saying that Bob was an Occupational Health specialist with the HSE and had been heavily involved in the DERM project on skincare, with the Safety Groups UK. Andy added that today's presentation was linked to another initiative on RPE selection, launched by the British Safety Industry Federation (BSIF) last year and that their campaign packs were on the free leaflet table.



**Bob Rajan
HM Principal Inspector**

Bob started his presentation by commenting on a past HSE Health priority on addressing skincare, which the SGUK DERM project targeted. Now, he said, the priority was moving to include the use of Respiratory Protective Equipment (RPE) that, again, was being strongly backed by SGUK and BSIF. He added that something like £300M of RPE was being used annually and it was estimated that something like 50% of this was being wasted. This meant that companies, given average net profits, must increase their gross turnover by three times the wastage figure to maintain profitability! That should give companies a very strong motivation, he continued, to prevent wastage by: -

- Correct selection of RPE
- Proper maintenance of RPE, and
- Correct use by trained operatives.

This led to the BSIF Initiative, "Clean Air – Take Care" and the HSE drive for Face-fit Testing to overcome the crude approach to wearing RPE. Just like protective clothing, RPE must fit correctly if the desired level of protection was to be achieved. Failure to do this, Bob warned, had cost 15 lives in one year, because of the use of incorrect RPE in confined spaces! He reinforced this message with a medical DVD presentation, which included a worker's reflection on his failure to use RPE.

Bob then opened the RPE Selector Programme, which had the crucial warning in the first line to “Choose the correct RPE for your task, as a last line for respiratory protection”. A timely reminder about the hierarchy of risk control that is the basis for best practice in risk management! The tool is formatted in seven pages, to guide the user through the seven stages of the process. Page 1 outlines the information used by the tool about: -

- the work area
- the substance to be protected from
- the task and worker who is to be protected

It also includes a caution NOT to use the tool for Emergency escape or rescue, radioactive or biological agents, or underwater work! More guidance on the selection, use, maintenance and storage is given on Page 2, together with additional reminders about the risk control process and when RPE is likely to be needed.

Moving on to Page 3, the user is prompted to say whether the work is in a confined space, or lacking oxygen, if there is a risk of sudden release of substance and if it might be flammable? There is also a very helpful number of weblinks on this page to other sites where the user might seek profession advice, such as BOHS, IOSH, BSIF, IIRSM and SGUK. At this stage, the tool will probably advise the user to select Breathing Apparatus, if the work is in a confined space, before advising to continue using the selector.

Page 4 then gives advice on how to use safety data sheets and even distinguishes between the correct method under CHIP or CLP Regulations so that the transition through the changeover can be completed. It also gives guidance on how to treat “Process Generated” substances that, of course, do not have safety data sheets and includes a special approach for mercury! The progression to the Pages 5a, 5b, 5c or Page 6, has a distinct link at the bottom of Page 4.

For the sake of demonstration, Bob chose to proceed to Page 5c for a process-generated substance from welding of stainless steel. This entailed selecting the correct task to tick and also deciding whether large (measured in tonnes or m³), or medium (kilogrammes or litres) were evolved. This allowed progression to Page 6, which required information on: -

- whether precise communications were needed for safety reasons
Yes/No
- if the energy needed for the task is Heavy/Medium/Light
Tick which
- if the time wearing RPE before a break is >1 hour/<1 hour
Tick which

Page 7 is a printout of the input data and a pictorial recommendation of suitable RPE, with additional distinction between a good face fit for the

wearer and 'Other' wearers. Bob concluded by saying that this tool was designed to give employers a much better return on their investments as well as giving workers a much higher level of health protection!

Several members asked to clarify several points and Bob was able to show that the answers appeared on the various pages of the selector tool, which showed that it had been carefully designed, even to accommodation of imminent new legislation! As there were no more questions, the Secretary closed the meeting and asked the members to join him in thanking Bob for his excellent presentation in the normal manner.