Occupational hygiene, risk and human health

Examination Question 2001

One of the ingredients used in "biological" detergents is an enzyme powder, which has been classified as a "respiratory sensitiser". Describe:

- a) what is meant by this term, and why such substances are of particular concern
- b) how you would carry out personal sampling to measure worker exposure to the dust
- c) the measures you would advise management to implement on the detergent packing line.

Resit Examination Question 2001

Workers in a woodworking shop are exposed to hard wood dust, a human carcinogen and respiratory sensitiser, during various operations, including hand sanding. Describe:

- 1. how you would carry out sampling to assess worker exposure to the dust
- 2. the types of measures you would recommend to control exposure to the dust during sanding operations if exposure was significant.

Examination Question 2002

Raw materials for a rubber manufacturing process are weighed out and poured into tubs before being transferred to a mixer. This is undertaken manually by two workers. Some of the materials are supplied in 25 kg bags, which are cut open and the contents emptied directly into the tubs. Minor ingredients are stored in bins and the powders are scooped out into a weigh pan and then poured into the tubs.

- a) Give a brief description of how you would carry out a survey to help you to decide whether the operators' exposures to the dust were significant
- b) Assuming that this is the case, give an outline of the measures you would recommend to management to improve control.