

# Occupational Hygienist Written Assessment

Report: PCC OHP-03-2017(ROH): October 2017

## Marker's Report:

### Section 1:

30 Marks, 3 Candidates, Only one passed (Pass rate 33%)

- 1.1 Candidates understand the various types of non-ionising radiation, but not in most cases the source of it in the working environment or health hazards associated with each.
- 1.2 Regulations of the OHS Acts HCS determined the requirements for periodic air monitoring programmes. The candidates do not understand the difference in the recommended and/or control limit substance monitoring strategies.
- 1.3 Candidates did not read the instructions, e.g. List the generated air contaminants from the given activities, describe the health effects from each airborne contaminants and list the most appropriate exposure control measurements. Welding, sanding and spray-painting are common work activities and you should understand the above issues. Candidates also did not understand the VOC's and the controls thereof.

### Section 2:

30 Marks, 3 Candidates, Only one passed (Pass rate 33%)

- 2.1 Application of the LReq10hr and the conversion to the LReq8hr are not understood. To check HPD protection, you need to subtract the adapted attenuation from the TWA noise and that should not exceed 85dB(A).
- 2.2 Only one candidate incorrectly calculated the volume flow rate in the duct and volume of air passing through the duct.
- 2.3 Always convert the units to m<sup>3</sup> for the volume and mg for the mass when calculating dust exposure concentrations. One candidate failed this question.
- 2.4 All the candidates could calculate the mg/m<sup>3</sup> at NTP.
- 2.5 Only one candidate got the Asbestos calculation wrong. They did not use the two squares in the formula.
- 2.6 Only one candidate first calculated the area of a single field before doing the Asbestos Fibre density calculation.

### Section 3:

60 Marks, 3 Candidates, only one passed (Pass rate 33%)

- 3.1 Only one candidate was successful when answering this question. Always answer what is requested.

E.g.

- Conduct a basic Occ. Health Risk Assessment;
- Describe the exposure sampling method and procedure;
- Calculate the exposures to all constituents/elements;
- Provide recommendations on suitable exposure controls, from the assessment and sampling results.

- 3.2 Only one candidate attempted the hand arm vibration question. Always do any technical OH stressor only if you are well versed in the measurement, methodology, health effects and controls to reduce exposure.
- 3.3 Two candidates attempted this question. The implementation of a silica monitoring programme. In this question you must make it clear in your report what the statutory requirements of overexposure of silica is, the health effects, as well as the benefits the employer can expect. Silica is in Table 1 of the HCS Regulations and the DoL requires annual monitoring and reporting of the silica exposures and controls implemented.
- 3.4 Two candidates attempted this question, and both passed. Recommend that they revisit the health effects of blood-borne infections.
- 3.5 Only one candidate attempted this question on the Ergonomic design of a Laptop/Note Book workstation. However, he/she must study solutions to the issues raised.

Deon Jansen van Vuuren

Chief Examiner: SAIOH PCC

10 November 2017

As submitted by the above.