NEBOSH

Do – Controlling workplace health issues (International)

UNIT ID2:

For: NEBOSH International Diploma for Occupational Health and Safety Management Professionals

nebosh

General note about this sample assessment

Please note that this is a *sample* assessment, designed to be illustrative of the tasks learners will face. It is therefore ***not*** a complete paper; the scenario is much shorter and it does **not** contain as many tasks as a live paper will have. A full paper will have 300 marks available.

This sample also uses supporting documents. We would provide supporting documents (or give references to them, if readily available from authoritative internet sources) and expect learners to be able to select and use relevant information from them.

Scenario extract

You work for an organisation that manufactures specialist paint products. These paints are made by mixing many different raw materials together in large (25,000 litre) cylindrical mix tanks. One of the main products, Saxum 42, contains a high proportion of Raw Material A (RMA), which is supplied in 25kg plastic sacks. To add RMA to the Saxum 42 mix, a worker stands on a platform and rests a sack over the lip of an open hatch at the top of the mix tank. Using a knife, they cut open the end of the sack and empty the contents into the tank. The empty sacks are piled up at the end of the platform before removal to large waste containers outside the building.

There is a local exhaust ventilation (LEV) hood directly above the hatch and you have seen that sometimes if the worker loses their grip on the nearly empty sacks, these sacks can get sucked up into the hood. It can be difficult to tell whether this affects the LEV performance because the workplace is quite noisy, with lots of other manufacturing operations going on close by. Workers wear thick rubber gloves, cotton overalls and rubber boots. Workers also wear 'dust masks' because the LEV can end up creating a lot of turbulence and sucking RMA upwards towards the worker's upper body.

When it is time for a break, workers take off their gloves and dust masks and leave these close to their workstation, before making their way to a rest room (a room used for relaxing during work breaks) which is located close to the offices. During a typical shift they get two breaks, and most workers use this rest room to make hot drinks and eat food they have brought in. Some workers like to go off site and buy their lunch at a local café, bringing it back to the rest room, where they can sit down at the chairs and tables provided and enjoy their food.

Outside of the break times, the rest room is also used for training sessions and as a first aid room. Workers receive induction training and twice a year a toolbox talk.

Recently, a health and safety consultant was asked to review the Saxum 42 manufacturing process to determine if this is compliant with sections 6.4.1 and 6.5 of the International Labour Organisation (ILO) Code of Practice '*Safety in the Use of Chemicals at Work*' or requires improvement. Part of this review included making some static air monitoring measurements in the area of the platform where the worker stands.

The report produced made a number of recommendations which include:

Option 1: Adding RMA using an enclosed screw-feeder from a bulk storage container.
Option 2: Replacing RMA with Raw Material B (RMB), (which is a concentrated slurry version of RMA) and using a dedicated pipeline or flexible hose from a separate bulk container.

All recommendations in the consultant's report are currently being reviewed by the management team.

Supporting documents:

- Supporting document 1 (ID2) – Excerpt from Safety Data Sheet: Raw Material A (RMA)
- Supporting document 2 – Air Monitoring Information from the Saxum 42 manufacturing process
- Supporting document 3 – Supplier information about the dust mask currently used
- Supporting document 4 – Shift Handover Checklist
- Supporting document 5 – Excerpt from LEV Examination and Test Report.

Task 1: Use and control of substances hazardous to health

1 Based on the scenario and relevant supporting documents, evaluate the existing arrangements used for the addition of RMA to the Saxum 42 mix tank against the control measures set out in sections 6.4.1 and 6.5 of the International Labour Organisation (ILO) Code of Practice '*Safety in the Use of Chemicals at Work*'. **(45)**

Note: *You should support your answer, where applicable, using relevant information from the scenario.*

Task 2: Workplace exposure limits

2 As part of the review of the Saxum 42 manufacturing process, the health and safety consultant made some **static** air monitoring measurements in the area of the working platform.

Using relevant supporting documents:

i) Calculate any relevant Time Weighted Average (TWA) concentrations **(10)**
ii) Comment on whether a consultant could determine if a WEL is exceeded from the air monitoring undertaken **(10)**
iii) Comment on the significance of, **and** the conclusions that could be drawn from, these static air monitoring results. **(25)**

Note: *You should support your answer, where applicable, using relevant information from the scenario. You do not need to provide a description of the methods and equipment used to undertake any monitoring.*

Task 3: Merits and Limitations of Options in the H&S Consultant's report

3 The recent health and safety consultant's report reviewing compliance with sections 6.4.1 and 6.5 of the ILO Code of Practice '*Safety in the Use of Chemicals at Work*' during the Saxum 42 manufacturing process has made a number of recommendations which included:

Option 1:
Adding RMA using an enclosed screw-feeder from a bulk storage container.

Option 2:
Replacing RMA with Raw Material B (RMB), (which is a concentrated slurry version of RMA) and using a dedicated pipeline or flexible hose from a separate bulk container.

Based on the scenario and relevant supporting documents, discuss the merits and limitations of these two options. **(25)**

Note: *You should support your answer, where applicable, using relevant information from the scenario.*

The above are just a range of questions we might ask. Alternative/additional questions could also explore the issues of LEV performance, manual handling, noise etc. in an integrated way.