

NEBOSH

MANAGEMENT OF HEALTH AND SAFETY

UNIT GIC1:

For: NEBOSH International General Certificate in Occupational Health and Safety

UNIT IG1:

For: NEBOSH International General Certificate in Occupational Health and Safety



Available for 24 hours

Guidance to learners

This is an open book assessment. It is **not** supervised, and you can use any learning resources, for example, your course notes, or a website. But you must **not** copy, cut and paste content from these, or any other source.

You do **not** need to reference relevant information sources in your answer to a specific question unless the question asks for it. However, you must tell us about the general sources of information you used in your assessment, for example, your course notes. You must write this in the box provided at the end of the answer sheet template.

You may only use AI-enabled assistants or tools for planning your work, for example, to help you find and summarise relevant information sources and to simplify concepts or ideas. But you must **not** use AI-generated output in any form in your assessment. This means that you must **not** copy and paste content (such as blocks of text or images) from AI-generated outputs, or use AI-generated outputs that you have rewritten in different words. Your thoughts, ideas, interpretation, analysis and words must be your own.

When you finish this assessment and submit it for marking, you are declaring that it is your own work. Claiming that work is your own when you know it is someone else's is known as malpractice. There can be severe penalties if you do this. You must **not** work with anyone else, or copy work from other people. NEBOSH uses advanced software and live interviews to help decide if it really is your own work.

The assessment begins with a scenario. You must complete a series of tasks based on this scenario. Each task will include one or more questions. Your answers to **most** of these tasks should fully or partly be based on relevant information from the scenario. Each task will clearly state if this applies.

Please attempt all tasks. The marks available are shown in brackets to the right of each question, or part of each question. This will help guide you to the amount of information you should include in your response. In general, one mark is given for each correct technical point that you clearly demonstrate. Single-word answers or lists are not likely to be enough to gain high marks.

You are **not** expected to write more than 3000 words in total.

Try to distribute your time and word count proportionately across all tasks.

You must write your answers in the answer sheet template provided.

SCENARIO

Knock on Wood (KOW) is a woodworking organisation that manufactures good quality, bespoke wooden doors for domestic and commercial clients. It works with woods such as oak and mahogany, known for their strength, durability, and resistance to wear.

KOW is a family-owned business that is well respected in the local area. It creates skilled employment opportunities for local residents and, in return, benefits from a loyal workforce with a low worker turnover rate. The organisation's premises comprises of a workshop, an office, and a rest area. The workshop is split into areas for cutting, processing, and finishing raw timber to create the final product. In the cutting area, the wood is cut into usable pieces, mainly using an industrial circular saw. The workshop has fixed windows that do not open, and is accessed through a single door.

The workforce

KOW has 90 workers in total. The management team includes an operations manager, a production manager, and a newly-appointed health and safety manager, who all report to a managing director. The remaining workforce is made up of two office-based administrators, five shift supervisors, and shift workers. Each shift usually has 25 - 28 workers, and one shift supervisor in the production area. They operate in a two-shift system consisting of early and late shifts.

Most of the shift workers have been employed by the organisation for over 20 years. These long-serving workers are experienced and well-established, but they can be resistant to changing the way they work.

Workshop visits by the management team are uncommon, as they spend most of their time in the office with the administrators. Management respect the vast knowledge and experience of the long-serving workers and, to avoid conflict, choose not to challenge them. Instead, management allow these long-serving workers to continue to work as they always have.

KOW is participating in a government-funded trainee scheme to boost employment opportunities for young people aged 18 - 25. Six months ago, as a result of the scheme, 18 trainees were employed after completing a one-year carpentry course at college. The trainees who join KOW get their first experience in a real workplace. The trainees are very enthusiastic and want to 'do the right thing'.

During their first week of employment, trainees attend an induction that includes information on machinery hazards, fire safety, and personal protective equipment (PPE). The trainees are then paired with long-serving workers to job shadow. First, they are shown how to use hand-held tools, and then they move on to use the larger machinery such as industrial saws, under close supervision.

Each of the trainees have regular, individual meetings with their shift supervisors to check on their progress. Some trainees told their shift supervisors that the long-serving workers did not appreciate the trainees' suggestions for improvements, such as eating and drinking in the rest area rather than at their workbenches. The trainees also noticed that shortcuts were taken for certain tasks, and when the long-serving workers were questioned, they would say, *"if it gets the job done quicker, why not?"*.

Three months into their employment, trainees were asked to complete a wellbeing survey about their experience of working at KOW. A common theme among the results was that the long-serving workers were not very helpful and did not answer their questions properly. The shift supervisors could see from this feedback that there was a division between the long-serving workers and the trainees. The feedback was not shared with the management team.

The issues

You joined the organisation as the health and safety manager six months ago, when the trainees started. On your first day, you were told by the operations manager that health and safety was

previously the responsibility of a carpenter who had retired. The operations manager said that the carpenter used to conduct a weekly safety tour, by walking around the site and identifying the number of equipment faults.

You tour the workshop and notice that it is covered in wood dust. The dust is in the air and collecting on surfaces, particularly around the machinery. You see workers sweeping up piles of dust using brooms, which forces the dust back into the air. You notice that several dust control measures are missing from the woodworking workshop, such as a lack of local exhaust ventilation (LEV) at machinery.

You review the machinery and notice that safety issues are generally well managed, despite the machinery being outdated; for example, the saws have guarding in place to stop workers accessing the dangerous spinning blades. Emergency stops are available, as well as braking systems that slowly stop the rotating blades. In addition to pre-use checks, maintenance checks are completed weekly. If a defect is identified, the machinery is isolated and not allowed to be used. KOW require any defects to be repaired within three days. Over the past year, the percentage of repairs completed on time has been 85%. As a result of all of these measures, the number of incidents involving these machines is low.

As you look through documentation you notice that there is no evidence of managing health risks. You ask the managing director if KOW have a health and safety management system in place, or if they have any formal procedures for auditing and reporting their health and safety performance. The managing director shakes their head and says, *"No, there is no need for all of that, it's just common sense."* You are shocked, but choose not to make any comments.

You discover that, in the past five years, three long-serving workers reported breathing problems. When they went to a doctor, they were diagnosed with occupational asthma, that is likely to be caused by being exposed to a large amount of dust over a long period of time. These workers were unable to continue to work in the dusty environment and had to take early retirement.

You overhear a conversation between two shift workers discussing another worker who is on long-term sick leave. Their symptoms have become so severe that they struggle to climb stairs, walk short distances, or play with their grandchildren because of persistent wheezing and breathlessness.

Some trainees have also started coughing and wheezing. Breathlessness throughout the day has led to comments from the long-serving workers such as *"these young people are weak and cannot cope with the physical labour."*

Trainees, concerned about the amount of wood dust in the air and on the surfaces, wear surgical face masks left over from the COVID-19 pandemic. Although they learned during their college course that these are not suitable respiratory protective equipment (RPE) to use when working with wood dust, they think that it is better than not wearing any RPE at all. There are few masks available, so they are reused throughout the day and put on the shelves next to the machinery when not being worn. By the end of the day the masks are coated in dust both on the inside and the outside. The trainees try to ask the long-serving workers for suitable RPE but are told, *"Buy your own if you are that concerned, a bit of dust never killed anyone."*

The outcome

You decide to hire a contractor who has the equipment necessary to measure the level of wood dust that is generated during production at KOW. After their visit, you receive a report highlighting that the workers' exposure to wood dust significantly exceeds a level that is safe for their health. The contractor recommends the installation of an LEV system to capture and remove the wood dust as it is generated at the machines. The cost of this installation is expensive and beyond your budget allowance. You develop a proposal for the management team to convince them to approve the investment. The management team agree with your proposal and an LEV system is installed.

You want to update the safe system of work (SSOW) for the circular saw. You ask the administrator where you can find a copy of the current SSOW. After some time searching, the administrator finds a file with paper copies of three written SSOW documents, including one for a cross-cut saw. They say that this is all that exists. The administrator explains that they wrote the SSOW themselves a few years ago and filed it away for safekeeping. It has not been reviewed or updated. The front page lists a register of long-serving workers and with their signatures, signing to confirm that they had read the SSOW.

While you are writing an SSOW for the circular saw, a shift supervisor passes by the office and sees what you are working on. They tell you that, although the workers are supposed to use the braking system to slowly stop the rotating blade, they do not. Instead, they generally use the emergency stop button that immediately halts the rotating blade. Despite increasing the chance of damage to the blade, they do this as it is quicker and easier during busy production.

You conduct a review of the organisation's overall health and safety performance by gathering measurable data. Going forward, you recognise that KOW could benefit from a formal health and safety management system to help monitor and manage ongoing risks, and help prevent further incidents.

Task 1: Health and safety culture

- 1 Comment on the indicators of a negative health and safety culture at KOW before the recruitment of the trainees. (16)
- Note: You should support your answer using relevant information from the scenario.*

Task 2: Individual human factors

- 2 What individual human factors could have negatively influenced the behaviour of the following worker groups?
- (a) The trainees. (6)
- (b) The long-serving workers. (5)
- Note: You should support your answers to parts (a) and (b) using relevant information from the scenario.*

Task 3: Worker involvement

- 3 What could be done to involve *all* workers in improving health and safety standards at KOW? (13)
- Note: You should support your answer, where applicable, using relevant information from the scenario.*

Task 4: Employer's obligations

- 4 Employers have obligations under Recommendation 10 (a, b, c, d, and e) of the International Labour Organisation's (ILO's) R164 – Occupational Safety and Health Recommendation, 1981 (No. 164). (11)
- Comment on how these employer obligations may **not** have been met by management at KOW.
- Note: You should support your answer using relevant information from the scenario.*

Task 5: Identifying data used to monitor health and safety performance

- 5 What *additional* measurable data could be collected to monitor KOW's overall health and safety performance? (6)
- Note: Your answer must relate directly to the scenario.*

Task 6: Underlying causes

- 6 HSG245 describes underlying causes as unsafe acts and unsafe conditions.

What are the *underlying causes* that may have led to the long-serving workers suffering from occupational asthma? (8)

Note: Your answer must be based on the scenario only.

Task 7: Financial arguments

- 7 What *financial* arguments could you have included in the proposal for the local exhaust ventilation (LEV) system installation at KOW? (10)

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

Task 8: Implementing a safe system of work (SSOW)

- 8 What could be done to successfully implement the safe system of work for the circular saw? (10)

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

Task 9: Working within a health and safety management system

- 9 How would KOW benefit from a formal health and safety management system? (15)

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

End of assessment

Now follow the instructions on the answer sheet template about submitting your answers.

Disclaimer

The scenario is fictional. No element of the content is intended as a factual representation of any specific person, organisation, or event.