BSBWHS409

Assist with workplace monitoring processes

ASSESSMENT FOR BSBWHS409

Student name	
Date of assessment submission	Click here to enter a date.

Trainer/Assessor's name	
Date of assessment marking	Click here to enter a date.
Outcome for unit	☐ Competent ☐ Not Yet Competent

TASK INSTRUCTIONS

- The assessment for this unit of competency consists of the following:
  - **A series of activities:** Some of these activities will require you to provide a response within this document, others will require you to gather evidence to demonstrate your knowledge and skills (overview below)
  - **Quiz:** You will be required to complete a series of questions to demonstrate your knowledge and skills.
  - **Practical task:** You will be required to have an observer attest to your knowledge and skills and sign a report to this effect.
- At times, you will be provided with a specific business context to which you must respond, otherwise it is anticipated that you will use a workplace of your choosing (your own, or hypothetical) to provide the context to the task.
- At all times, the responses in your assessment must reference **Australian** (Queensland or Federal) documentation, including legislation, regulations, codes of practice, standards and guidance publications.

ACTIVITY OVERVIEW	REQUIRED FOR SUBMISSION
1. Regulatory requirements and standards	• Workbook response (below)
2. Characteristics of agents and conditions	• Workbook response (below)
3. Communicating with others	• Workbook response (below)

ACTIVITIES

For the following activities, name a workplace that you wish to examine.

Name of workplace	McIlwain Civil Engineering

ACTIVITY 1

Identify and describe the requirements of each of the following within your chosen organisation, with regards to workplace monitoring:

a) Act
b) Regulation
c) Code of practice
d) Standard

Name of Act
WHS Act Qld 2011 Section 19
Requirements
(g)that the health of workers and the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking.

Name of Regulation
WHS Regulation Qld 2011 https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2011-0240#ch.7-pt.7.1-div.6
Requirements
Division 6 – mentions health monitoring requirements. The PCBU has a duty to provide appropriate health monitoring that is monitored by a registered medical practitioner with experience, inform of health monitoring and pay expenses for health monitoring required by the PCBU. The PCBU must also obtain and provide the report to the worker and regulator and also hold these records for at least 30 after it has been made.

Name of Code of practice
Confined Spaces https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0010/58159/Confined-spaces-COP-2011.pdf
Requirements
Requirements for monitoring in relation to confined spaces include: • managing health and safety risks associated with a confined space, including risks when entering, working in, on or near a confined space, as well as the risk of inadvertent entry • ensuring, so far as is reasonably practicable, that a worker does not enter a confined space until all the duties in relation to the confined space have been complied with (e.g. entry permit requirements) • establishing first aid and rescue procedures to be followed in the event of an emergency in the confined space. The WHS Regulation also sets out requirements for specific control measures including communication and safety monitoring, signs, isolation of connected plant and services, and controls to maintain a safe atmosphere within the confined space.

Name of Standard
Electrical Installations AS/NZ 3012:2019
Requirements
Must comply with the relevant standard listed above.

Outcome for Activity 1	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 2

a) Select one (1) chemical agent, one (1) physical agent and one (1) biological agent.
   - Identify and a condition (i.e. symptom) that would be associated with each agent.

b) Identify the characteristics of the chemical agent. You should refer to a Safety Data Sheet (SDS).

c) Explain how you would determine the area where the measurements should be taken for the agent.
   - What information would workers (and other affected parties) be able to provide?

d) Identify one (1) type of equipment that would be used to measure the agent.
   - Explain why you have selected this measuring equipment and its appropriateness for the environment, the activities being carried out and the level of risk.
   - Explain how you would calibrate, adjust and check the operability of the equipment selected. Does the equipment contain any in-built alarms?
   - Explain how the equipment is used. Be mindful of how health and safety are to be maintained and any limitations on the use and output of the equipment.
   - Identify the scale/units this equipment measures in and how results are recorded.
   - Explain how the equipment should be maintained and stored, including dismantling, cleaning and disposal requirements.

e) Determine a sampling plan/process for monitoring the agent.
   - Determine when and how the sampling will take place.
   - Identify work permits and written authorities you would need to obtain when conducting the monitoring activities.
   - Determine who is responsible for the monitoring and how you would assist with conducting the tests.

Name of chemical agent
BP Premium Unleaded Petrol
Condition of agent
Risks include: extremely flammable, may cause cancer, may cause heritable genetic damage, possible risk of harm to unborn child, may cause lung damage if swallowed, irritating to skin, vapours may cause drowsiness and dizziness, toxic to aquatic organisms (taken from Chemwatch SDS)

Name of physical agent
Noise
Condition of agent
Repeated exposures to loud **noise can lead to** permanent tinnitus **and**/or hearing loss. Loud **noise can** create physical **and** psychological stress, reduce productivity, interfere with communication **and** concentration, **and** contribute to **workplace** accidents **and** injuries by making it difficult to hear warning signals.

Name of biological agent
Bacteria
Condition of agent
A good example of this is the current outbreak of Coronavirus. If good hygiene is not practiced, the bacteria which causes the virus can easily spread from one person to another causing illness, with the possibility of fatality.

Chemical agent

Characteristics

Use: Fuel for spark ignition engines. NOT for aviation use.

This chemical is extremely flammable. First Aid measures include (taken from chemwatch SDS):

- Eye contact: immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Skin contact: Risks include: extremely flammable, may cause cancer, may cause heritable genetic damage, possible risk of harm to unborn child, may cause lung damage if swallowed, irritating to skin, vapours may cause drowsiness and dizziness, toxic to aquatic organisms (taken from Chemwatch SDS)
- Inhalation: Get medical attention immediately. If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If exposure to vapour, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.
- Ingestion: Get medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Area for measurement

Labourers will be the main types of people using this chemical, although general site inspections include a section on chemicals which requires a physical check, there is also a High Risk Work Audit which is carried out monthly which goes into more depth on the storage, control measures and available information including segregation charts, first aid and SDS access.

Taken from Chemwatch SDS:

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store and use only in equipment/containers designed for use with this product. Do not remove warning labels from containers. Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapour concentrations of less than 1% of the lower flammability limit and an oxygen concentration of at least 20% volume. Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks.

When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Measuring equipment
- Segregated areas - If required to be carried on a vehicle, it must be upright and strapped in to prevent pillage or loose items - Washing down the area after use or if a spill occurs (spill kits are available if necessary) - All chemicals to be labelled clearly and be in the SDS - Information sheets are provided with these, also included in site specific toolbox talks
Sampling plan/process
Workers are instructed on the use and storage for unleaded petrol, there are also toolbox talks, information posters with how-to guides, in house training for re-fuelling and records that are kept by the company.

Outcome for Activity 2	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 3

a) Which individuals and parties might you consult when identifying agents and conditions in the workplace?
b) Who might you consult with when collecting information and data about the requirements, nature and purpose of the monitoring?
c) Describe a situation where you might need to seek expert advice, due to limits in your own expertise and/or available equipment.
d) When interpreting and evaluating results you have collected, why should you compare them against a recognised standard?
   - Are there any limitations with exposure standards?
e) Explain how you might assist with preparing reports on the monitoring process and ensure that regulatory requirements have been met.
   - What would be the purpose of the report?
   - Who would be included in the target audience?
   - How should the information be presented (e.g. to show trends)?
   - How soon should information be presented? Justify your response.
   - Explain how the results and records would be stored, allowing for easy retrieval.
   - Explain how you would consider others' privacy in the delivery and secure storage of the results.

	Response
a)	The HSE Advisor, Safety Committee, Health & Safety Representatives from subcontractors.
b)	HSE Advisor, content expert, in regards to BP Unleaded Petrol supplier which would be a BP representative that comes out to site for monitoring when required.
c)	A new chemical may be coming to site which has not been utilised previously and the monitoring process is completely new to all who will be exposed to it. A content expert (third party) should be consulted to come to and explain the monitoring requirements as well as conduct audits, generating and supplying reports and further recommendations – regular audits and monitoring will assist in the prevention of incidents occurring around the chemical.
d)	Comparing collected results against standards after interpretation and evaluation ensures that any trends are being recognised. This is also ensuring that it's meeting the 'baseline'.
e)	WHS Regulations Qld 2011 states: 375 Duty to provide health monitoring report to worker The person conducting a business or undertaking who commissioned health monitoring for a worker must give a copy of the health monitoring report to the worker as soon as practicable after the person obtains the report. 377 Duty to provide health monitoring report to relevant persons conducting business or undertakings The person who commissioned health monitoring for a worker under section 368 must give a copy of the health monitoring report to all other persons conducting businesses or undertakings who have a duty to provide health monitoring for the worker as soon as practicable after obtaining the report.

	- The purpose of the report is to clearly show the trends that have been recognised and to ensure that these records are kept accordingly. - The target audience are the workers and the safety committee - The information should be presented in a report which includes a graph where trends can be recognised clearly – a bar graph is a great option for this - As soon as practicably possible General reports are stored on the intranet and should be available via toolbox talks, posters, information sheets and guides. However, of there is any information in regards to medical assessment / monitoring in relation to personnel – these records should be kept either in a locked cupboard with limited access (if hardcopies) or on the internal system in a locked folder which also has limited access to ensure confidentiality is kept.

Outcome for Activity 3	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

QUIZ

QUESTIONS	CORRECT
1. Match the following agents and conditions by placing the corresponding agent number next to each condition.	☐

Label	Agent
1	Biological agents
2	Electricity
3	Fibres, dusts and particulates
4	Fumes, mists, gases and vapours
5	Heat and humidity
6	Light
7	Noise
8	Radiation, including ionising, non-ionising and laser
9	Vibration

Label (1 – 9)	Condition
7	May result in hearing damage. Measured in dB(A).
3	One example is asbestosis.
1	Includes insects and bacteria. May result in bacterial infection.
5	May result in rashes and cramps. Meters measure in ^{0}C and %, respectively.
8	May result in cancer. Measured in becquerel (Bq).
9	May result in sprains and strains. Velocity can be measured in mm/s. Frequency can be measured in Hz.
2	May result in burns and shock. Measured in volts.
4	May result in respiratory problems. Can be measured using a monitor which measures in ppm (parts per million).
6	May result in UV burns to skin or eye damage.

2. When determining the area where measurements are to be taken, which of the following should be taken into consideration? Select all that apply. ☐

- ☒ Movements of people
- ☒ Tasks or activities occurring the in the workplace
- ☒ When work is undertaken and when lunch time is
- ☒ Whether the equipment emits something (e.g. light and sound)

3. In which circumstances may you be required to consult with another party during the monitoring process? Select all that apply. ☐

- ☒ When determining the agent and/or condition to be monitored
- ☒ For advice on which equipment to select
- ☒ When recording readings
- ☒ To determine the nature of the problem

4. Which of the following information and data must be presented to relevant parties? Select all that apply. ☒ Interpretation of results ☒ The process undertaken ☐ Information about equipment that was not used ☒ Effects for workers and the workplace	☐
5. If it is discovered during the monitoring process that a worker is exposed to serious risk due to an uncontrolled leakage of a substance, the PCBU can choose to control the leakage, rather than notifying the WHS regulator. ☐ True ☒ False	☐

Outcome for Quiz	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

PRACTICAL TASK

You are required to have a suitable observer verify your ability to complete the following tasks. These tasks may be simulated or real.

TASKS	VERIFIED
A. Consult with others to form sampling process/plan. Identify: • Agent to be measured • Characteristics of agent • Measurement equipment to be used • The area where measurements are to be taken • Factors that may impact on sampling (e.g. movements of people and equipment, tasks or activities being undertaken, number of persons occupying the area).	☐
B. Work with others to assist with monitoring process: • Calibrate monitoring equipment and select appropriate scale • Safely use equipment to collect information/data and record readings • Dismantle, clean and store equipment and parts.	☐
C. Prepare an electronic written report on the monitoring process: • Present information and data clearly and logically • Interpret and evaluate results against a recognised standard • Use appropriate units of measurement, logarithmic scales, decimals and order of magnitude.	☐

Name of observer	
Role of observer (Confirm their suitability to sign)	☐ Trainer/Assessor ☐ Other (specify):
Phone number of observer	
Email address of observer	
Signature of observer	
Date	Click here to enter a date.
Comments	

Outcome for Practical Task	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	