



This learning product has been developed for Technip by CSTC Pty Ltd.

ASSESSMENT FOR BSBWHS404A

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Date of assessment submission	25/03/2015

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.
- 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. Identifying hazards	Workbook response (below)
2. Techniques, tools and processes for hazard identification	Workbook response (below)
3. Assessing and controlling risks	Workbook response (below)
4. Techniques, tools and processes for risk assessment	Workbook response (below)
5. Development, implementation and evaluation of risk control	Workbook response (below)
6. Policies, procedures, processes and systems	Workbook response (below)
7. Legislation, codes of practice and guidelines	Workbook response (below)
8. Duty holders and their duties	Workbook response (below)
9. Relevance for WHSMS	Workbook response (below)

ACTIVITIES

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

Name of workplace	Technip Construction Site - Civil Work and Working at Height
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ACTIVITY 1

Identify two (2) hazards that may occur in your workplace. For each hazard identified, find information to explain:

- a) The nature and scope of the hazard
- b) The nature and scope of the harms caused by the hazard and how they happen

Also explain:

- c) How you advise others of this information in a way that address peoples' range of abilities and backgrounds. Be sure to also consider the timeframes in which you should advise others.
- d) The techniques, tools and processes used to identify each hazard. Try to select tools appropriate for the workplace and select different tools for each hazard.

Hazard 1	Nature and scope of hazard	Harms caused and how they happen	How you advise others	Techniques, tools and processes
Noise	Energies as Hazard	Hearing lose / (a) LAeq,8h of 85 dB(A); or (b) LC,peak of 140 dB(C).	Tool box talk and HSE Induction	1.JSA : Job Safety Analysis 2.Noise Monitoring
	Source of information (e.g. website address) Work Health and Safety Regulations 2012 and WHS Act—section 19 (see regulation 9). http://www.safework.sa.gov.au	Source of information (e.g. website address) Work Health and Safety Regulations 2012 Chapter 4, Part 1 and WHS Act—section 19 (see regulation 9). Chapter 3 Part 1, risks to health and safety relating to the risk of hearing loss associated with noise. http://www.safework.sa.gov.au		
Hazard 2	Nature and scope of hazard	Harms caused and how they happen	How you advise others	Techniques, tools and processes
Gravitational	Energies as Hazards	Fall from Height / Lack of fall protection such as hard barricade and Safety Harness	Tool box talk and HSE Induction	JSA : Job Safety Analysis
	Source of information (e.g. website address)	Source of information (e.g. website address)		

	Work Health and Safety Act 2012 http://www.legislation.sa.gov.au	Work Health and Safety Regulations 2012- Chapter 4, Part 4 and WHS Act Chapter 3 Part 1, risks to health and safety associated with a fall by a person from one level to another that is reasonably likely to cause injury to the person or any other person http://www.legislation.sa.gov.au		
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Outcome for Activity 1	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 2

For the two (2) hazards identified in Activity 1:

- a) Explain how you contribute to applying the techniques, tools and processes identified
- b) Explain how you contribute to documenting the use of (and results of) hazard identification.
 - Be sure to identify the audience for the information and how you meet their ability/background requirements.
 - Also note the timeframes in which you communicate this information.

Hazard	Applying techniques, tools and processes	Contribute to documenting hazard identification
1	We implement the work permit procedure which required all work activities have to submit work permit and required JSA attached the work permit, JSA will require to explain work activities and equipment and identified hazard of each activity and control measures to reduce the risk. JSA and work permit required Foreman who know well about how to do the job and safety officer who know well about WHS regulation and Code of practice to perform together	JSA will be attached with the work permit and post at the working location
2	We implement the work permit procedure which required all work activities have to submit work permit and required JSA attached the work permit, JSA will require to explain work activities and equipment and identified hazard of each activity and control measures to reduce the risk. JSA and work permit required Foreman who know well about how to do the job and safety officer who know well about WHS regulation and Code of practice to perform together	JSA will be attached with the work permit and post at the working location

Outcome for Activity 2

- ☐ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

ACTIVITY 3

Identify two (2) risks that may exist in your workplace. For each risk identified, find information to explain:

- The nature and scope of the risk
- Risk controls that may be implemented to address the risk. Explain the time frames in which these risk control options should be implemented.

Also explain:

- Risk assessment techniques, tools and processes used for workplace hazards. Try to select tools appropriate for the workplace and select different tools for each risk.

Risk 1	Nature and scope of risk	Risk controls	Techniques, tools and processes
Falling objects from scaffolding and hit worker who walk on the ground	Gravity / Falling objects	Provide toe- board for scaffolding, Provide Safety Barricade area on the ground Provide Safety Hard hat(PPE)	the Code of Practice: How to Manage Work Health and Safety Risks 1. WORK OUT HOW SEVERE THE HARM COULD BE 2.WORK OUT HOW HAZARDS MAY CAUSE HARM 3.WORK OUT THE LIKELIHOOD OF HARM OCCURRING
	Source of information (e.g. website address)	Source of information (e.g. website address)	
	Work Health and Safety Regulations 2012- Charter 4, Part 4 and WHS Act Chapter 3 Part 1, risks to health and safety associated with a fall by a person from one level to another that is reasonably likely to cause injury to the person or any other person CODE OF PRACTICE HOW TO MANAGE WORK HEALTH AND SAFETY RISKS http://www.legislation.sa.gov.au	Work Health and Safety Regulations 2012- Charter 4, Part 4 and WHS Act Chapter 3 Part 1, risks to health and safety associated with a fall by a person from one level to another that is reasonably likely to cause injury to the person or any other person CODE OF PRACTICE HOW TO MANAGE WORK HEALTH AND SAFETY RISKS http://www.legislation.sa.gov.au	
Risk 2	Nature and scope of risk	Risk controls	Techniques, tools and processes
a person being trapped by the collapse of an excavation;	Gravity / Excavation Work	all sides of the trench are adequately supported by doing 1 or more of the following: (a) shoring by shielding or other comparable means; (b) benching; (c) battering.	the Code of Practice: How to Manage Work Health and Safety Risks 1. WORK OUT HOW SEVERE THE HARM COULD BE 2.WORK OUT HOW HAZARDS MAY CAUSE HARM 3.WORK OUT THE
	Source of information (e.g. website address)	Source of information (e.g. website address)	
	Work Health and Safety Regulations 2012—1.1.2014 Chapter 6—Construction work Part 3—Duties of person conducting business or undertaking	Work Health and Safety Regulations 2012—1.1.2014 Chapter 6—Construction work Part 3—Duties of person conducting business or undertaking	

	Division 3—Excavation work http://www.legislation.sa.gov.au		LIKELIHOOD OF HARM OCCURRING
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Outcome for Activity 3	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 4

For the two (2) risks identified in Activity 3:

- a) Explain how you contribute to applying the techniques, tools and processes identified to assess the hazard
- b) Explain how you contribute to documenting the results of risk assessment
- c) Explain how the controls identified for each risk would consider the results of risk assessments

Risk	Applying techniques, tools and processes	Contribute to documenting the results of risk assessment	Consideration of results in risk control options
1	A)1. Risk Assessment 1.1 What is the harm the hazard could cause: The person who work on the ground near scaffolding could be injured by the falling objects if no falling object protection on the scaffolding 1.2 What is the likelihood of this happening: there are ten workers work on scaffolding and 20 workers work on the ground all the day 1.3. Persons at risk: All workers who work on the ground near the scaffolding 1.4 Existing control measure: Hard hat is provided to all workers on Site 1.5 Consequence : Serious injuries 1.6 Likelihood: Very likely 1.7. Outcome: High risk - Working on scaffolding shall be stop until the risk has been controlled 2. Control measures Possible control options: 2.1- Elimination : N/A 2.2- Substitution : N/A 2.3- Engineering : Provide toe-board for scaffolding , Provide safety net to prevent falling object fall to the ground 2.4-Administrative or PPE : Provide Safety Hardhat to all workers, barricade area on the ground to prevent	B)Put the results in colum A into the risk register form which indentify person inchart to take care the control measures item A 2. and duedate to complete	Indintify the Review date to ensure the control mmeasures are inplace and close-out / Sign-off the actions

	waorker access to the potential fall object area.		
2	A)1. Risk Assessment 1.1 What is the harm the hazard could cause: The person who work in the trench of excavation could be injured from being trapped by the collapse of an excavation; 1.2 What is the likelihood of this happening: there are 30 workers work in the trench of excavation all the day 1.3. Persons at risk: All workers who work in the trench of excavation 1.4 Existing control measure: Provide watchman standby on top of the trench from excavation 1.5 Consequence : Serious injuries 1.6 Likelihood: Very likely 1.7. Outcome: High risk - Working in trench of excavation shall be stop until the risk has been controlled 2. Control measures Possible control options: 2.1- Elimination : N/A 2.2- Substitution : N/A 2.3- Engineering : all sides of the trench are adequately supported by doing 1 or more of the following: (a) shoring by shielding or other comparable means; (b) benching; (c) battering. 2.4-Administrative or PPE : Provide rescue team and rescue equipment standby all the working time	B)Put the results in colum A into the risk register form which indentify person inchart to take care the control measures item A 2. and duedate to complete	Indintify the Review date to ensure the control mmeasures are inplace and close-out / Sign-off the actions

Outcome for Activity 4

- ☐ Satisfactory
- ☐ Not satisfactory

**Trainer/Assessor
comments**

ACTIVITY 5

For the two (2) risks (and associated risk controls) identified in Activity 3:

- a) Explain how you would contribute to developing and implementing a risk control plan
- b) Describe the process you would undertake to evaluate the risk controls that had been implemented

Risk	Develop and implement risk control plan	Evaluation of risk controls
1	Risk Control Plan 1.1 Provide toe-board for scaffolding / responsible by scaffolding supervisor / Due Date : January 25, 2015 1.2 Provide safety net to prevent falling object fall to the ground / responsible by scaffolding supervisor / Due Date : January 25, 2015 1.3 Provide Safety Hardhat to all workers / by Foreman / Due date : January 25, 2015 1.4 barricade area on the ground to prevent worker access to the potential fall object area. / Responsible by scaffolding supervisor / Due Date : January 25, 2015	Scheduled review date: 25 January 2011 1. Are the control measures in place? Yes - All control measures in item 1.1, 1.2, 1.3, 1.4 are in place 2. Are the controls eliminating or minimising the risk? Yes - toe-board, safety net and safety hardhat are prevent workers be injured from falling objects from scaffolding 3. Are there any new problems with the risk? No.
2	Risk Control Plan 1. Shoring the trench by shielding / Responsible by Excavation foreman / Due date : January 25, 2015 2. Provide rescue team and rescue equipment standby all the working time / Responsible by Excavation Supervisor / Due date : January 25, 2015	Scheduled review date: 25 January 2011 1. Are the control measures in place? Yes - All control measures in item 1 and 2 are in place 2. Are the controls eliminating or minimising the risk? Yes - the shielding is prevent workers be injured from being trapped by the collapse of an excavation; 3. Are there any new problems with the risk? No.

Outcome for Activity 5	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 6

Explain the requirements of your organisation regarding hazard identification, risk assessment and risk control activities by identifying the requirements found in:

- a) WHS policy
- b) WHS procedure
- c) WHS process
- d) WHS system

Explain how you comply with the requirements of these documents.

	WHS policy	WHS procedure	WHS process	WHS system
Hazard identification	Technip HSE Policy / Technip will ensure that appropriate arrangement are in place to protect the health and safety of its employees and all its business.	GWP-AP-HSE-012 : Risk Assessment & Work Execution / 7.4 Codes and Standards are the collective knowledge of many years of operating experience. As such they are focused examples of hazards and effects for a defined area or piece of equipment.	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS- item 2. STEP 1 - HOW TO IDENTIFY HAZARDS/ 1. INSPECT THE WORKPLACE 2. CONSULT YOUR WORKERS 3. REVIEW AVAILABLE INFORMATION	OHSAS 18001:2007 - Occupational health and safety management systems – Requirements, 4.3.1 Hazard identification, risk assessment and determining controls / The organization shall establish, implement and maintain a procedure(s) for the ongoing hazard identification, risk assessment, and determination of necessary controls.
How you comply	To protect the health and safety of its employees. We have to identify the hazard of all work and perform risk assessment and then to define Risk Control to reduce the risk	We will provide Codes and Standards during identification of hazard for each activities such as when we identify hazard of Excavation work we will use the CODE OF PRACTICE : EXCAVATION WORK as the reference.	1. INSPECT THE WORKPLACE Regularly walking around the workplace and observing how things are done can help me predict what could or might go wrong. Look at how people actually work, how plant and equipment is used, what chemicals are around and what they are used for, what safe or unsafe work practices exist as well as the	Establish, implement and maintain a hazard identification procedure that shall take into account: a) routine and non-routine activities; b) activities of all persons having access to the workplace (including contractors and visitors); c) human behaviour, capabilities and other human factors; d) identified hazards originating outside the workplace capable of adversely affecting the health and safety of persons under the

			general state of housekeeping. 2. CONSULT YOUR WORKERS Ask workers about any health and safety problems they have encountered in doing their work and any near misses or incidents that have not been reported. Worker surveys may also be undertaken to obtain information about matters such as workplace bullying, as well as muscular aches and pains that can signal potential hazards. 3. REVIEW AVAILABLE INFORMATION Information and advice about hazards and risks relevant to particular industries and types of work is available from regulators, industry associations, unions, technical specialists and safety consultants. Manufacturers and suppliers can also provide information about hazards and safety	control of the organization within the workplace; e) hazards created in the vicinity of the workplace by work-related activities under the control of the organization; f) infrastructure, equipment and materials at the workplace, whether provided by the organization or others; g) changes or proposed changes in the organization, its activities, or materials; h) modifications to the OH&S management system, including temporary changes, and their impacts on operations, processes, and activities; i) any applicable legal obligations relating to risk assessment and implementation of necessary controls (see also the NOTE to 3.12); j) the design of work areas, processes, installations, machinery/equipment, operating procedures and work organization, including their adaptation to human capabilities.
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			precautions for specific substances (safety data sheets), plant or processes (instruction manuals). Analyse records of health monitoring, workplace incidents, near misses, worker complaints, sick leave and the results of any inspections and investigations to identify hazards. If someone has been hurt doing a particular task, then a hazard exists that could hurt someone else. These incidents need to be investigated to find the hazard that caused the injury or illness.	
Risk assessment	Every person has the right to stop the work if they consider that an HSE risk exists	GWP-AP-HSE-012 : Risk Assessment & Work Execution /12.0 The HSE, Engineering and construction Department will carry out Risk Assessments as required and publish the assessment and risk control instructions. The Heads of Departments will ensure that; ☐ The appropriate Risk Assessment is taken into	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS-Item 3.2 How to do a risk assessment / 1. WORK OUT HOW SEVERE THE HARM COULD BE 2. WORK OUT HOW HAZARDS MAY CAUSE HARM 3. WORK OUT THE LIKELIHOOD OF HARM OCCURRING	OHSAS 18001:2007 - Occupational health and safety management systems – Requirements, 4.3.1 Hazard identification, risk assessment and determining controls / The organization shall establish, implement and maintain a procedure(s) for the ongoing hazard identification, risk assessment, and determination of necessary controls

		consideration and forms the basis of a safe system of work when planning or preparing a task. ☑ The appropriate Risk Assessments are issued to individual superintendents and supervisors and that these supervisory staff employs the assessments in their work briefings, tool box talks and STARRT/ STI to alert personnel to the hazards and risks they face, and to inform them of all relevant control measures.		
How you comply	To reduce the risk, we have to define Risk control and responsible person and due date to be completed	We will conduct the Risk Assessment Workshop/Meeting by inviting all involved functions to participate in the Risk assessment workshop and then we will communicate the Risk Assessment Register to all function and induction to all workers in the toolbox talks	1. WORK OUT HOW SEVERE THE HARM COULD BE To estimate the severity of harm that could result from each hazard you should consider the following questions: What type of harm could occur (e.g. muscular strain, fatigue, burns, laceration)? How severe is the harm? Could the hazard cause death, serious injuries, illness or only minor injuries requiring first aid?	Establish, implement and maintain a risk assessment procedure that shall take into account: a) routine and non-routine activities; b) activities of all persons having access to the workplace (including contractors and visitors); c) human behaviour, capabilities and other human factors; d) identified hazards originating outside the workplace capable of adversely affecting the health and safety of persons under the control of the organization within the workplace;

			What factors could influence the severity of harm that occurs? For example, the distance someone might fall or the concentration of a particular substance will determine the level of harm that is possible. The harm may occur immediately something goes wrong (e.g. injury from a fall) or it may take time for it to become apparent (e.g. illness from long-term exposure to a substance). How many people are exposed to the hazard and how many could be harmed in and outside your workplace? For example, a mobile crane collapse on a busy construction site has the potential to kill or injure a large number of people. Could one failure lead to other failures? For example, could the failure of your electrical supply make any control measures that rely on	e) hazards created in the vicinity of the workplace by work-related activities under the control of the organization; f) infrastructure, equipment and materials at the workplace, whether provided by the organization or others; g) changes or proposed changes in the organization, its activities, or materials; h) modifications to the OH&S management system, including temporary changes, and their impacts on operations, processes, and activities; i) any applicable legal obligations relating to risk assessment and implementation of necessary controls (see also the NOTE to 3.12); j) the design of work areas, processes, installations, machinery/equipment, operating procedures and work organization, including their adaptation to human capabilities
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			electricity ineffective? Could a small event escalate to a much larger event with more serious consequences? For example, a minor fire can get out of control quickly in the presence of large amounts of combustible materials. 2. WORK OUT HOW HAZARDS MAY CAUSE HARM In most cases, incidents occur as a result of a chain of events and a failure of one or more links in that chain. If one or more of the events can be stopped or changed, the risk may be eliminated or reduced. 3. WORK OUT THE LIKELIHOOD OF HARM OCCURRING The likelihood that someone will be harmed can be estimated by considering the following: How often is the task done? Does this make the harm more or less likely? How often are people near the hazard?	
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			How close do people get to it? Has it ever happened before, either in your workplace or somewhere else? How often?	
Risk control	In areas it operates that may lack such controls, or have controls that do not realise. Technip's internal standards, Technip will apply its own standards.	GWP-AP-HSE-012 : Risk Assessment & Work Execution / 8.5 Risk control measures in construction generally may include one or more of the following principles: 1. By choice of design, 2. By ensuring "temporary" construction situations are covered, 3. By communicating key supporting information, 4. By using and enforcing controls in perceived low-risk activities, 5. By using and enforcing controls where operational systems are released for construction work, etc.	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS-Item 4. STEP 3 – HOW TO CONTROL RISKS / Level 1 Eliminate the hazards. Level 2 Substitute the hazard with something safer Isolate the hazard from people Reduce the risks through engineering controls Level 3 Reduce exposure to the hazard using administrative actions Use personal protective equipment	OHSAS 18001:2007 - Occupational health and safety management systems – Requirements, 4.3.1 Hazard identification, risk assessment and determining controls / The organization shall establish, implement and maintain a procedure(s) for the ongoing hazard identification, risk assessment, and determination of necessary controls
How you comply	Establish Project HSE Plan to manage WHS issues in Project and everybody who work in Project shall comply with the Project HSE Plan	For number 1. to remove or reduce the exposure to the construction and precommissioning HSE risk. For example, the necessity for working at heights in bolting up structural components could be avoided or	LEVEL 1 CONTROL MEASURES The most effective control measure involves eliminating the hazard and associated risk. The best way to do this is by, firstly, not introducing the hazard into the	The organization shall ensure that the results of these assessments are considered when determining controls. When determining controls, or considering changes to existing controls, consideration shall be given to reducing the risks according to

		reduced by making more use of prefabrication or pre-assembly at ground level and lifting into position. For number 2. By ensuring “temporary” construction situations are covered For example, where construction proceeds via an intermediate stage, the design must ensure that such an intermediate stage is still safe under all foreseen conditions (e.g. weather conditions, adjacent construction activities, etc.). For number 3, By communicating key supporting information For example, where the design is based upon a particular choice of construction method (Method Statement), such information must be communicated as part of design and not left for the constructor to have to make assumptions. For number 4, By using and enforcing controls in perceived low-risk activities, we	workplace. For example, you can eliminate the risk of a fall from height by doing the work at ground level. Eliminating hazards is often cheaper and more practical to achieve at the design or planning stage of a product, process or place used for work. In these early phases, there is greater scope to design out hazards or incorporate risk control measures that are compatible with the original design and functional requirements. For example, a noisy machine could be designed and built to produce as little noise as possible, which is more effective than providing workers with personal hearing protectors. LEVEL 2 CONTROL MEASURES If it is not reasonably practicable to eliminate the hazards and associated risks, you should minimise the risks using one or	the following hierarchy: a) elimination; b) substitution; c) engineering controls; d) signage/warnings and/or administrative controls; e) personal protective equipment. The organization shall document and keep the results of identification of hazards, risk assessments and determined controls up-to-date. The organization shall ensure that the OH&S risks and determined controls are taken into account when establishing, implementing and maintaining its OH&S management system.
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		will develop Project HSE Procedure and regulation for enforcing controls For number 5, By using and enforcing controls where operational systems are released for construction work Where live systems are de-commissioned to enable construction work to proceed, details such as status of system/equipment items at handover (e.g. hydrocarbon-free, de-energized, etc.), isolation schedule, etc., should be provided. Where de-commissioning involves removal of essential systems (e.g. plant protection instrumentation, utilities, etc.), then alternative, temporary systems must be planned and implemented. All such controls form part of a permit-to work (PTW) system, which should be established with the plant OWNER.	more of the following approaches: Substitute the hazard with something safer For instance, replace solvent-based paints with water-based ones. Isolate the hazard from people This involves physically separating the source of harm from people by distance or using barriers. For instance, install guard rails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet. Use engineering controls An engineering control is a control measure that is physical in nature, including a mechanical device or process. For instance, use mechanical devices such as trolleys or hoists to move heavy loads; place guards around moving parts of machinery; install residual current	
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			devices (electrical safety switches); set work rates on a production line to reduce fatigue. LEVEL 3 CONTROL MEASURES These control measures do not control the hazard at the source. They rely on human behaviour and supervision, and used on their own, tend to be least effective in minimising risks. Two approaches to reduce risk in this way are: Use administrative controls Administrative controls are work methods or procedures that are designed to minimise exposure to a hazard. For instance, develop procedures on how to operate machinery safely, limit exposure time to a hazardous task, use signs to warn people of a hazard. Use personal protective equipment (PPE) Examples of PPE include ear muffs, respirators, face masks, hard hats, gloves, aprons	
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			and protective eyewear. PPE limits exposure to the harmful effects of a hazard but only if workers wear and use the PPE correctly.	
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Outcome for Activity 6	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 7

Explain the requirements of your organisation regarding hazard identification, risk assessment and risk control activities by identifying the requirements found in:

- a) WHS Acts
- b) WHS Regulations
- c) Codes of practice
- d) Guidelines

Explain how you comply with the requirements of these documents.

	WHS Acts	WHS Regulations	Codes of practice	Guidelines
Hazard identification	Work Health and Safety Act 2011 / Part 5 Consultation, representation and participation/ 49 When consultation is required Consultation under this division is required in relation to the following health and safety matters— (a) when identifying hazards and assessing risks to health and safety arising from the work carried out or to be carried out by the business or undertaking;	Work Health and Safety Regulations / Chapter 3—General risk and workplace management / Part 1—Managing risks to health and safety / 34 Duty to identify hazards , A duty holder, in managing risks to health and safety, must identify reasonably foreseeable hazards that could give rise to risks to health and safety.	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS- item 2. STEP 1 - HOW TO IDENTIFY HAZARDS/ 1. INSPECT THE WORKPLACE 2. CONSULT YOUR WORKERS 3. REVIEW AVAILABLE INFORMATION	GUIDANCE ON THE INTERPRETATION OF WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS / Information about the hazards of a chemical should be available from the label or Safety Data Sheet (SDS) for most substances or mixtures
How you comply	Conduct Hazard identification workshop or meeting with all people involved with the job to identify the hazard	To conduct hazard identification for all work activities of the organization and record into Risk register	1. INSPECT THE WORKPLACE Regularly walking around the workplace and observing how things are done can help me predict what could or might go wrong. Look at how people actually work, how plant and equipment is used, what chemicals are	Asking for SDS - Safety Data Sheet from Vender every times and use SDS as reference with conduct the hazard identification for activities related to chemical or substance

			around and what they are used for, what safe or unsafe work practices exist as well as the general state of housekeeping. 2. CONSULT YOUR WORKERS Ask workers about any health and safety problems they have encountered in doing their work and any near misses or incidents that have not been reported. Worker surveys may also be undertaken to obtain information about matters such as workplace bullying, as well as muscular aches and pains that can signal potential hazards. 3. REVIEW AVAILABLE INFORMATION Information and advice about hazards and risks relevant to particular industries and types of work is available from regulators, industry associations, unions, technical specialists and safety consultants.	
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			Manufacturers and suppliers can also provide information about hazards and safety precautions for specific substances (safety data sheets), plant or processes (instruction manuals). Analyse records of health monitoring, workplace incidents, near misses, worker complaints, sick leave and the results of any inspections and investigations to identify hazards. If someone has been hurt doing a particular task, then a hazard exists that could hurt someone else. These incidents need to be investigated to find the hazard that caused the injury or illness.	
Risk assessment	Work Health and Safety Act 2011 / Part 2 Health and safety duties / 17 Management of risks, A duty imposed on a person to ensure health and safety requires the person— (a) to eliminate risks to health and safety, so far as is	Work Health and Safety Regulations /Chapter 4— Hazardous work Part 3—Confined spaces Division 2—Duties of designer, manufacturer, importer, supplier, installer and constructor of plant or structure/ A person conducting a	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS-Item 3.2 How to do a risk assessment / 1. WORK OUT HOW SEVERE THE HARM COULD BE 2. WORK OUT HOW HAZARDS	GUIDANCE ON THE INTERPRETATION OF WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS / 5.9 Airborne particulates : Airborne contaminants that can be inhaled directly

	reasonably practicable; and (b) if it is not reasonably practicable to eliminate risks to health and safety, to minimise those risks so far as is reasonably practicable.	business or undertaking must ensure that a risk assessment is conducted by a competent person for the purposes of subregulation	MAY CAUSE HARM 3. WORK OUT THE LIKELIHOOD OF HARM OCCURRING	can be classified on the basis of their physical properties either as gases, vapours or particulate matter. Airborne particulates consist of discrete particles and may be further characterised as dusts, fumes, smokes or mists, depending on the nature of the particle and its size. Definitions for each of these terms are given in the Glossary. In common usage, the terms 'dust' and 'particulates' are often used interchangeably. The factors which determine the degree of hazard associated with a specific airborne particulate are: the type of particulate involved and its biological effect the concentration of airborne particulates in the breathing zone of the worker the size of particles
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				present in the breathing zone the duration of exposure (possibly in years).
How you comply	Conduct risk assessment to ensuring health and safety, taking into account and weighing up all relevant matters including— (a) the likelihood of the hazard or the risk concerned occurring; and (b) the degree of harm that might result from the hazard or the risk; and (c) what the person concerned knows, or ought reasonably to know, about— (i) the hazard or the risk; and (ii) ways of eliminating or minimising the risk; and (d) the availability and suitability of ways to eliminate or minimise the risk; and (e) after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.	Conduct risk assessment to ensuring health and safety, taking into account and weighing up all relevant matters including— (a) the likelihood of the hazard or the risk concerned occurring; and (b) the degree of harm that might result from the hazard or the risk; and (c) what the person concerned knows, or ought reasonably to know, about— (i) the hazard or the risk; and (ii) ways of eliminating or minimising the risk; and (d) the availability and suitability of ways to eliminate or minimise the risk; and (e) after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.	1. WORK OUT HOW SEVERE THE HARM COULD BE To estimate the severity of harm that could result from each hazard you should consider the following questions: What type of harm could occur (e.g. muscular strain, fatigue, burns, laceration)? How severe is the harm? Could the hazard cause death, serious injuries, illness or only minor injuries requiring first aid? What factors could influence the severity of harm that occurs? For example, the distance someone might fall or the concentration of a particular substance will determine the level of harm that is possible. The harm may occur immediately something goes wrong (e.g. injury from a fall) or it may take	For the risk assessment about Airborne particulates, we will conduct airborne particulate monitoring to evaluate both of Particle equivalent aerodynamic diameter (μm) and Inhalable Convention (per cent) for serverity part

			time for it to become apparent (e.g. illness from long-term exposure to a substance). How many people are exposed to the hazard and how many could be harmed in and outside your workplace? For example, a mobile crane collapse on a busy construction site has the potential to kill or injure a large number of people. Could one failure lead to other failures? For example, could the failure of your electrical supply make any control measures that rely on electricity ineffective? Could a small event escalate to a much larger event with more serious consequences? For example, a minor fire can get out of control quickly in the presence of large amounts of combustible materials. 2. WORK OUT HOW HAZARDS MAY CAUSE HARM	
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			In most cases, incidents occur as a result of a chain of events and a failure of one or more links in that chain. If one or more of the events can be stopped or changed, the risk may be eliminated or reduced. 3. WORK OUT THE LIKELIHOOD OF HARM OCCURRING The likelihood that someone will be harmed can be estimated by considering the following: How often is the task done? Does this make the harm more or less likely? How often are people near the hazard? How close do people get to it? Has it ever happened before, either in your workplace or somewhere else? How often?	
Risk control	Work Health and Safety Act 2011 / Part 2 Health and safety duties / 2) The person with management or control of a workplace must ensure, so far as is reasonably practicable, that the workplace,	Work Health and Safety Regulations General risk and workplace management— Chapter 3 Managing risks to health and safety— Part 1 36—Hierarchy of control measures	CODE OF PRACTICE : HOW TO MANAGE WORK HEALTH AND SAFETY RISKS-Item 4. STEP 3 – HOW TO CONTROL RISKS / Level 1 Eliminate the hazards. Level 2	GUIDANCE ON THE INTERPRETATION OF WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS / 8-HOUR TIME WEIGHTED

	the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person.	(2) A duty holder, in minimising risks to health and safety, must implement risk control measures in accordance with this regulation.	Substitute the hazard with something safer Isolate the hazard from people Reduce the risks through engineering controls Level 3 Reduce exposure to the hazard using administrative actions Use personal protective equipment	AVERAGE (TWA) EXPOSURE STANDARD : Eight hour time-weighted average exposure standards are the average airborne concentration of a particular substance that is permitted over an eight-hour working day, and a 5 day working week. These are the most common types of exposure standards.
How you comply	Conduct Risk assessment and define control measures of each risk and responsible person and due date to complete the control measures and then implement the control measure, followup, audit and corrective/preventive actions	Conduct Risk assessment and define control measures of each risk and responsible person and due date to complete the control measures and then implement the control measure, followup, audit and corrective/preventive actions	LEVEL 1 CONTROL MEASURES The most effective control measure involves eliminating the hazard and associated risk. The best way to do this is by, firstly, not introducing the hazard into the workplace. For example, you can eliminate the risk of a fall from height by doing the work at ground level. Eliminating hazards is often cheaper and more practical to achieve at the design or planning stage of a product, process or place used for work. In	Establish work permit system to ensure no one work over 8 hours per day and 5 days per week in risk area of AIRBORNE CONTAMINANTS

			these early phases, there is greater scope to design out hazards or incorporate risk control measures that are compatible with the original design and functional requirements. For example, a noisy machine could be designed and built to produce as little noise as possible, which is more effective than providing workers with personal hearing protectors. LEVEL 2 CONTROL MEASURES If it is not reasonably practicable to eliminate the hazards and associated risks, you should minimise the risks using one or more of the following approaches: Substitute the hazard with something safer For instance, replace solvent-based paints with water-based ones. Isolate the hazard from people	
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			This involves physically separating the source of harm from people by distance or using barriers. For instance, install guard rails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet. Use engineering controls An engineering control is a control measure that is physical in nature, including a mechanical device or process. For instance, use mechanical devices such as trolleys or hoists to move heavy loads; place guards around moving parts of machinery; install residual current devices (electrical safety switches); set work rates on a production line to reduce fatigue. LEVEL 3 CONTROL MEASURES These control measures do not control the hazard at the source. They rely on human	
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			behaviour and supervision, and used on their own, tend to be least effective in minimising risks. Two approaches to reduce risk in this way are: Use administrative controls Administrative controls are work methods or procedures that are designed to minimise exposure to a hazard. For instance, develop procedures on how to operate machinery safely, limit exposure time to a hazardous task, use signs to warn people of a hazard. Use personal protective equipment (PPE) Examples of PPE include ear muffs, respirators, face masks, hard hats, gloves, aprons and protective eyewear. PPE limits exposure to the harmful effects of a hazard but only if workers wear and use the PPE correctly.	
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Outcome for Activity 7

- ☐ Satisfactory
- ☐ Not satisfactory

**Trainer/Assessor
comments**

ACTIVITY 8

Identify two (2) parties who hold a duty within your workplace regarding hazards and risk control.

- Explain what they are obliged to do under the legislation
- Name the Act and relevant section of WHS legislation which imposes this obligation

	Name of individual or party	Obligations	Relevant section of WHS legislation
1	EDC Craker Project- Construction work	- consult with the designer of the whole or any part of the structure about how to ensure that risks to health and safety arising from the design during the construction work, include giving the designer any information that the person who commissions the construction work has in relation to the hazards and risks at the workplace where the construction work is to be carried out - to manage risks associated with the carrying out of construction work - the workplace is secured from unauthorised access. - Prepared a safe work method statement for High risk construction work	- Work Health and Safety Act 2011 / Work Health and Safety Regulations 2011, Part 6.2, items 294- Person who commissions work must consult with designer - Work Health and Safety Act 2011 / Work Health and Safety Regulations 2011, Part 6.3, items 297 Management of risks to health and safety - items 298 Security of workplace - items 299 Safe work method statement required for high risk construction work
2	Pipeline Project - Recoating pipe (Excavation work)	- manage risks to health and safety associated with excavation work - The risks this clause applies to include the following: - a person falling into an excavation, - a person being trapped by the collapse of an excavation, - a person working in an excavation being struck by a falling thing, - a person working in an excavation being exposed to an airborne contaminant. - the work area is secured from unauthorised access - minimise the risk to any person arising from the collapse of the trench by ensuring that all sides of the trench are adequately supported by doing 1 or more of the following: - shoring by shielding or other comparable means, - benching, - battering.	-- Work Health and Safety Act 2011 / Work Health and Safety Regulations 2011, Part 6.2, Division 3 Excavation work, items 305 Management of risks to health and safety associated with excavation work - items 306 Additional controls—trenches

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Outcome for Activity 8	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 9

Explain how the following fit into, and are addressed in a WHS management system (WHSMS):

- a) Hazard identification
- b) Risk assessment
- c) Risk control

Aspect	Place in WHSMS
Hazard identification	develop Project WHS Procedure to define all project activities shall be indentified hazard into JSA from as attached in the procedure
Risk assessment	develop Project Risk assessment procedure to define criteria how to perfrom risk assessment and perfrom Project Risk Register
Risk control	As Project Risk Register we define control measure and responsible person including duedate, then we followup all risk control shall be closed

Outcome for Activity 9	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

Outcome for On-line Quiz	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	