

BSBWHS510

Contribute to implementing emergency procedures



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ASSESSMENT FOR BSBWHS510

Student name	NYAIM THU AUNG
Date of assessment submission	9/06/2017

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

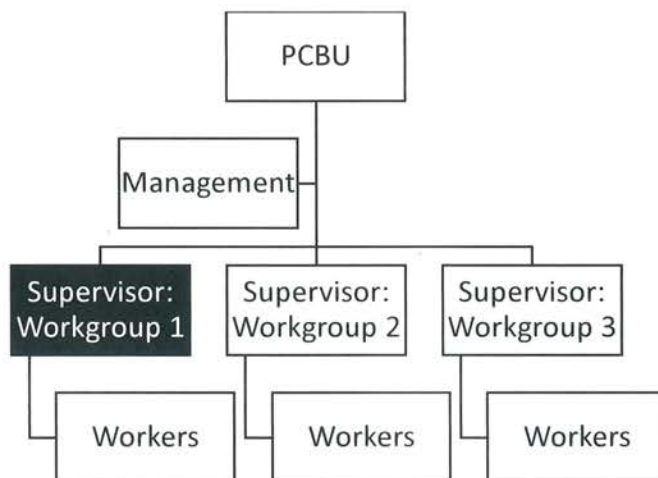
TASK INSTRUCTIONS

- 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. Identifying emergencies and initial response	Workbook response (below)
2. Risk register	Workbook response (below)
3. Plan and implement initial response	Workbook response (below)
4. Post-event activities	Workbook response (below)
5. Review emergency responses	Workbook response (below)

ACTIVITIES

For the following activities, you will assume the role of a workgroup supervisor in a workplace of your choosing (see example organisational chart below).



Name a workplace and workgroup that you are (or hypothetically are) the supervisor for:

Name of workplace	ASIAFLEX Manufacturing Plant
Workgroup	FAT (Factory Acceptance Test) Bay

ACTIVITY 1

- a) Identify one (1) emergency that would fall under each of the following emergency categories:
 - Fire evacuation
 - Security breach
 - Serious medical injury
- b) Describe one (1) hazard which may cause each of the emergencies identified.
Describe one (1) hazard which may occur during each of the emergencies identified.
- c) Identify one (1) standard that you may refer to when identifying the cause of (and advice for initial response to) each emergency.
 - Categorise each of the emergency according by colour code.
- d) Identify one (1) stakeholder who may be useful in identifying the cause of each emergency. Justify their suitability.
- e) Identify one (1) internal specialist advisor who you could liaise with to identify the cause of (and advice for initial response to) each emergency. Justify their suitability.
- f) Identify one (1) emergency agency who you could liaise with to identify and respond to each emergency.
 - Outline the requirements for liaising with an agency during reporting, arrival and in response to an emergency.
- g) Identify the impacts each emergency has on personnel, property and the environment.
- h) Identify initial response actions which could limit these impacts.
 - List the actions in order of priority.
 - Justify your responses with reference to current industry practice.

Fire evacuation
Describe emergency
Fire outbreak which requires whole Plant evacuation
Hazards (i.e. causing and during)
1. Combustible materials stored in Plant Warehouse which caused fire. 2. Failure of pressure testing equipment at FAT area due to damage by uncontrolled Fire with accidental release of high pressure test medium fluids to the surrounding areas.
Standard which may identify cause of (and response to) emergency
The project emergency preparedness and response plan. Also can refer to the safe material storage procedure.
Stakeholder who may identify cause of emergency
Fire Protection Association Australia (FPA Australia) - they are the non-profit organization expertise in this field.
Internal specialist advisor who may identify cause of (and response to) emergency
Firefighting executive from the emergency response team. They are the person who trained in fire and rescue emergency.
Emergency agency to liaise with
Local Firefighting department
Impacts on personnel, property and environment
Personnel Injury / deaths, Property damage and may cause production stopped for couple of days for investigation and rehabilitations.
Initial response actions which could limit impacts
- Train up warehouse staffs for fire protection including providing training of fire extinguisher usage, - Fire extinguishers, fire hoses and fire pumps regular inspection - Fire sprinkler systems installation and regular inspection - Emergency Drill - Maintain Good housekeeping practice in plant especially in warehouse
Security breach
Describe emergency
Terrorist attack at Plant

Hazards (i.e. causing and during)
- Unauthorised person enter the Plant with intention of Terrorist attack. (causing) - Stampede of people while rushing out of the Plant in panic. (during)
Standard which may identify cause of (and response to) emergency
Plant security plan procedure and Project emergency preparedness and response plan.
Stakeholder who may identify cause of emergency
Security executive
Internal specialist advisor who may identify cause of (and response to) emergency
Security executive who closely liaise with local police department.
Emergency agency to liaise with
Local Police Department
Impacts on personnel, property and environment
Whole Plant operation would be stopped and workforce are afraid to work. Multiple casualties might be happened.
Initial response actions which could limit impacts
- Strict Security Check at the main entrance - Staff thumbprint verification - Security patrol - Emergency drill

Serious medical injury

Describe emergency

Hit by scaffolding plank dropped from the FAT test bay building maintenance / repair works.

Hazards (i.e. causing and during)

Insecure scaffolding plank and congested area for concurrent activities (SIMOPS) - causing

Improper handling / moving of casualty resulting in getting the casualty condition worse – during.

Standard which may identify cause of (and response to) emergency
Plant maintenance procedure, Safe Scaffolding Work plan and Plant emergency preparedness and response plan.
Stakeholder who may identify cause of emergency
Plant maintenance manager / Scaffolding supervisor
Internal specialist advisor who may identify cause of (and response to) emergency
Plant Medical doctor who can provide advice in the first aid and subsequent medical treatment / referral.
Emergency agency to liaise with
Local hospital emergency doctor at A&E (Accidents & Emergency) Department
Impacts on personnel, property and environment
Serious injury on the workers which might need to admit into hospital / or even Death. Production stopped for couple of days for investigation. Plant and Company reputation may be affected.
Initial response actions which could limit impacts
- Regulate HSE surveillance - Work site readiness review prior the new work commencement - Medevac and Medical rescue training - First Aid and Rescue equipment standby and regular inspection - Medical Emergency drill

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

ACTIVITY 2

For the three (3) emergencies identified in Activity 1, develop a risk register which outlines:

- Hazard details
- Location of hazard
- People exposed to the hazard
- Possible injuries/damages caused by the hazard
- Control measures required (including responsibility for implementation within organisation)
- Results of risk assessment

Record 1

Date of entry

7th June, 2017

Hazard details

Combustible materials in Warehouse.

Location of hazard

Warehouse of the Plant

People exposed to hazard

Warehouse workers and subsequently to all workers at whole plant.

Possible injuries/damage

Serious Burn injuries / Death.
Plant asset and production loss.

Control measures required

- Proper material storage in Warehouse in line with storage guidelines and procedures.
- Train up warehouse staffs for fire protection including providing training of fire extinguisher usage
- Fire extinguishers, fire hoses and fire pumps regular inspection
- Fire sprinkler systems installation and regular inspection
- Emergency Drill
- Maintain Good housekeeping practice in plant especially in warehouse

Risk assessment

Matrix	A: Death or permanent disability	B: Serious injury	C: Lost time injury	D: Casualty Treatment	E: First Aid
1: Very Likely	E	E	H	H	M
2: Likely	E	H	H	M	M
3: Possible	H	H	M	M	L
4: Unlikely	H	M	M	L	L
5: Very Unlikely	M	M	L	L	L

E: Extreme	H: High	M: Medium	L: Low
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Level of risk: 3 A – High

Record 2**Date of entry**7th June, 2017**Hazard details**

Unauthorised person entry into the Plant

Location of hazard

AsiaFlex Manufacturing Plant

People exposed to hazard

All Plant Staffs

Possible injuries/damage

Serious Injuries / Fatalities to personnel
 Damage to Plant and equipment

Control measures required

Security check of all vehicle and people entering the plant, staff thumbprint, turnstile, CCTV, security patrol, body scan as deemed required.

Risk assessment

Matrix	A: Death or permanent disability	B: Serious injury	C: Lost time injury	D: Casualty Treatment	E: First Aid
1: Very Likely	E	E	H	H	M
2: Likely	E	H	H	M	M
3: Possible	H	H	M	M	L
4: Unlikely	H	M	M	L	L
5: Very Unlikely	M	M	L	L	L

E: Extreme	H: High	M: Medium	L: Low
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Level of risk: 4 A – High

Record 3**Date of entry**7th June, 2017**Hazard details**

Dropped / Falling Objects

Location of hazard

Building repair and maintenance work sites in Plant

People exposed to hazard

Maintenance workers as well as workers at nearby work sites

Possible injuries/damage

Serious Injury / Death.
Reputation of Plant affected.

Control measures required

- Regulate HSE surveillance at site & SIMOPS control
- Work site readiness review prior the new work commencement
- Medevac and Medical rescue training
- First Aid and Rescue equipment standby and regular inspection
- Medical Emergency drill

Risk assessment

Matrix	A: Death or permanent disability	B: Serious injury	C: Lost time injury	D: Casualty Treatment	E: First Aid
1: Very Likely	E	E	H	H	M
2: Likely	E	H	H	M	M
3: Possible	H	H	M	M	L
4: Unlikely	H	M	M	L	L
5: Very Unlikely	M	M	L	L	L

E: Extreme	H: High	M: Medium	L: Low
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Level of risk: 3 A – High

Outcome for Activity 2

- ☐ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

ACTIVITY 3

Plan for the emergencies identified in Activity 1, through your responses to the following:

- a) Identify one (1) type of emergency equipment required for each emergency.
 - Where should such equipment be stored for easy access?
 - How often should it be checked (i.e. for cleanliness and to be serviced)?

Justify your response.
- b) Outline possible training required to effectively implement the initial responses identified.
 - List suitable parties to deliver such training (internally and externally)
- c) Explain your role in implementing initial response procedures identified.
 - Explain how you document and display actions for initial response.
 - Outline your own role in emergency response, as outlined in workplace WHS policies and procedures.

Fire evacuation

Emergency equipment

Fire extinguisher shall be located at all buildings and work sites and at least every 15 meters as well as at the access points.

Fire hose shall be at the designated fire hose hanger and connected at the designated fire hose hydrant. All fire rescue equipment must be checked every month.

Required training

Basic Firefighting training to plant staffs and, Advanced firefighting training to ERT members.

Local firefighting brigade shall be suitable party to deliver such trainings.

Your role in implementing initial response procedures

The emergency response plan, contact details and evacuation can be displayed at the entrance of the Plant, at the work site areas and HSE notice board.

My role in emergency response is to assist in people-evacuation and conduct head count at the Muster point.

Security emergency

Emergency equipment

Security scan devices such as turnstile, body scan device and thumbprint shall be located at the Plant main entrance. For security patrol scan device, it can be located at all building and work sites resting area. It must be checked every day.

Required training

Security Emergency Response training and training upon usage and maintenance of security devices.

Local police department and certified security agent shall be suitable party to deliver such trainings.

Your role in implementing initial response procedures

The emergency response plan, contact details and evacuation can be displayed at both entrance of Plant and Building reception area as well as work site HSE notice boards.

My role in emergency response is to assist in people evacuation and conduct head count at Muster point.

Serious medical injury**Emergency equipment**

First aid box and rescue stretcher must be located at the designated areas of work sites and buildings. Ambulance are standby at the in-house clinic. Paramedic equipment are ready in the ambulance. All rescue equipment must be checked every month.

Required training

Basic First Aid and CPR training to selected staffs (First Aiders and ERT members). Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS) trainings to in-house Clinic staffs.

Local certified first aider or lifesaving training institute shall be suitable party to deliver such trainings.

Your role in implementing initial response procedures

The emergency response plan, contact details and evacuation can be displayed at both entrance of Plant and Building reception area as well as work site HSE notice boards. My role in emergency response is to assist in Medical evacuation at time of Medical emergency as well as to organize and conduct Medical evacuation drill exercises on regular basis.

Outcome for Activity 3
☐ Satisfactory

☐ Not satisfactory
Trainer/Assessor comments

ACTIVITY 4

For the emergencies identified in Activity 1, identify your responses to the following:

- a) Outline one (1) action that may occur as part of the second response phase.
 - Identify the personnel who would be involved.
 - Outline how you may assist personnel involved.
- b) As part of your workgroup supervisor role, how you would contribute to the debriefing process.
 - Who should be involved in the debriefing process?
 - When should the debriefing process occur?
 - Identify three (3) aspects of the emergency response that might be considered during the debriefing process.

Evacuation emergency

Local firefighting brigade.

I could assist training arrangement and equipment inspection for improvement if necessary

Security emergency

Local police department and certified security agent.

I could assist in deliver the finding or important message in toolbox talk to all workforce and always liaise with the security patrol for any security issues.

Serious medical injury

Local certified first aider or lifesaving training institute.

I could arrange and inspect the medical equipment to ensure it is always sufficient and in good condition. I could also arrange and select the first aider to be, undergo the necessary trainings.

Your contribution to debriefing process

The debriefing should be conducted as soon as possible after the emergency situation has been settled or emergency exercise / drill has been completed. It shall be attended by all members of the emergency control organisation and any other key personnel such as representatives of attending emergency services.

The debriefing may be conducted by the Chief Warden or independent advisor. The three aspects of emergency response that might be considered during the debriefing process are accessibility of emergency equipment, communication among the emergency response team including rescue team and human and physical resources capability.

Outcome for Activity 4

- ☐ Satisfactory
☐ Not satisfactory

Trainer/Assessor comments

ACTIVITY 5

It is very important to monitor emergency responses, address deficiencies and identify areas for improvement.

- a) Identify ways in which you might monitor emergency responses (including personnel response and equipment) for efficiency, timeliness and effectiveness.
 - Why should stakeholders be consulted to assist with monitoring?
 - In what ways might you collect information from the stakeholders?
 - What advice might you seek from specialist advisors and emergency agencies?
- b) Who might you report the results of any monitoring to?
- c) Identify one (1) possible area that a workplace might need to improve upon in their emergency response.
 - Provide recommendations to address this area.
- d) Identify one (1) possible area that you, in your role as a workgroup supervisor, might need to improve upon in your emergency response.
 - Provide recommendations to address this area.
- e) Outline the requirements of Commonwealth and state or territory WHS Acts and regulations with regards to:
 - Implementation of emergency procedures
 - Cessation of work
- f) Outline the recommendations of a code of practice with regards to the implementation of emergency procedures.
- g) Identify and briefly one form of guidance material (from the regulator) with regards to the implementation of emergency procedures.

	Response
a)	To monitor emergency responses for efficiency, timeliness and effectiveness can be conducted in reviewing emergency management plan, initial response procedures, equipment checklist and reports, investigation reports, surveys and questionnaires, and audit of the emergency management processes and system. Management commitment is a key requirement of any effective emergency response. Therefore, they are the person to be consulted in monitoring. Other than that, specialist advisors such as Occupational Doctor and fire fighter can be also consulted for improvement in term of the emergency services and response.
b)	The monitoring result shall be reported to all levels of the organization from the lowest level ranking worker to the CEO. The participation at all levels of the organization likely to be a culture of trust and value placed on WHS outcomes and a resulting informed culture. With an informed culture, those that make decisions are able to make effective ones.
c)	Emergency evacuation route shall be clearly identified and marked to ensure the workers are aware the evacuation route. Therefore, they can evacuate the dangerous area at the shortest time.
d)	To ensure the new recruited workers aware the emergency response plan in the plant. This information can be delivered to them via toolbox talk and familiarise the working area condition including emergency contact at the workplace. This can also be done during welcome induction to new recruits, in liaising with Human Resource Department.
e)	These requirements are summarized in 'Emergency Plans Fact Sheet' which can be downloaded from http://www.safeworkaustralia.gov.au/ This fact sheet provides general guidance for persons conducting a business or undertaking (PCBUs) and workers on preparing and maintaining general emergency plans for fixed workplaces under regulation 43 of the Work Health and Safety (WHS) Regulations.

	Regulation (43) Duty to prepare, maintain and implement emergency plan (1) A person conducting a business or undertaking at a workplace must ensure that an emergency plan is prepared for the workplace, that provides for the following: (a) emergency procedures, including: (i) an effective response to an emergency; and (ii) evacuation procedures; and (iii) notifying emergency service organisations at the earliest opportunity; and (iv) medical treatment and assistance; and (v) effective communication between the person authorised by the person conducting the business or undertaking to coordinate the emergency response and all persons at the workplace; (b) testing of the emergency procedures, including the frequency of testing; (c) information, training and instruction to relevant workers in relation to implementing the emergency procedures. (2) A person conducting a business or undertaking at a workplace must maintain the emergency plan for the workplace so that it remains effective. (3) For the purposes of sub regulations (1) and (2), the person conducting the business or undertaking must consider all relevant matters including: (a) the nature of the work being carried out at the workplace; and (b) the nature of the hazards at the workplace; and (c) the size and location of the workplace; and (d) the number and composition of the workers and other persons at the workplace. (4) A person conducting a business or undertaking at a workplace must implement the emergency plan for the workplace in the event of an emergency.
f)	As per defined in section 5.8 of GUIDE FOR MAJOR HAZARD FACILITIES EMERGENCY PLANS (March 2012); The operator (PCBU) must immediately implement the emergency plan if: (i) a major incident occurs in the course of the operation of the Facility (ii) an event occurs that could reasonably be expected to lead to a major incident. Recommendations for contents / components of an Emergency Response Plan procedure are defined in Schedule 16.
g)	GUIDE FOR MAJOR HAZARD FACILITIES EMERGENCY PLANS (March 2012) is a good guidance material which can be downloaded from; http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/mhfemergencyplans

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

QUIZ

QUESTIONS	CORRECT
1. Which of the following are emergency prevention controls typically installed in a workplace? Select all that apply. ☒ Emergency alerting systems ☒ Emergency protection systems ☒ Smoke alarms, fire alarms and fire extinguishers ☐ Canary birds to detect gas ☐ Safety wear ☒ Security systems	☐
2. What information must you provide when calling emergency services (000) and upon their arrival? Select all that apply. ☒ The service requested (Police, Fire or Ambulance) ☒ Address or location of emergency ☐ The number and exact location of smoke alarms ☒ A description of the emergency	☐
3. Safety representatives and WHS regulators have the power to direct workers to cease work immediately if an immediate danger to WHS exists. ☒ True ☐ False	☐
4. It is optional to check and account for people during an evacuation. ☐ True ☒ False	☐
5. What is the biggest benefit in issuing instructions in an authoritative manner during emergencies? Select the most appropriate response. ☐ So that people in neighbouring buildings can hear you ☒ So that people obey the instruction given ☐ So that people in the bathroom hear the instructions ☐ So that people are scared	☐
6. Who might appropriately deliver training regarding initial emergency response? Select all that apply. ☐ Internal Health and Safety Representatives ☐ Fire fighters ☐ First aid trainers ☒ Registered Training Organisations	☐

7. Debriefing and reports are part of the initial response procedures. ☐ True ☒ False	☐
8. Which of the following are appropriate ways to document and display actions for initial response? Select all that apply. ☒ Evacuation map ☒ Emergency plan ☐ Labelling every door and window with a number ☐ Having a phone book at every entrance	☐

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

ZEN SUNDAR GURUNG
QHSE Manager
Safety Division

PRACTICAL TASK

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

TASKS	VERIFIED
A. Consult with other workers, specialist advisors (e.g. Trainer/Assessor) and emergency services (e.g. personally/via website) to identify: - Potential fire hazards/emergencies within the workplace - Actions to be taken by workers and others, according to internal/external WHS information	☒
B. Conduct a safety audit of the work area: - Identify resources available and required for immediate response (including evacuation maps) - Check emergency equipment to ensure serviceability, accessibility, cleanliness and correct location	☒
C. Document potential emergencies and their causes in a risk register, identifying: - Possible injuries/damage - Required control measures (including training needs and responsibility for implementation within organisation) - Risk assessment results	☒
D. Respond to a fire emergency/drill: - Providing information needs to emergency response personnel during reporting, arrival and in response to emergency - Checking and accounting for people during an evacuation	☒
E. Show leadership in contributing to the debrief after fire emergency/drill: - Monitor responses to emergency for efficiency and timeliness - List hazards arising from evacuation - Identify areas for organisational and personnel improvements - Document and verbally present results to appropriate persons (e.g. PCBU, Trainer/Assessor)	☒
Name of observer	Zen Sundar Gurung
Role of observer (Confirm their suitability to sign)	☐ Trainer/Assessor ☒ Other (specify): APAC Subsea HSES Manager
Phone number of observer	+603 2116 7742
Email address of observer	zensg@technip.com
Signature of observer	 ZEN SUNDAR GURUNG QHSE Manager Subsea Division
Date	9/06/2017
Comments	Dr. Nyaim has been working at HSE management level for years and has involved in implementing and evaluating Emergency procedures.

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