



Construction Skills Training Centre



We are here to improve your future

BSBWHS503A

Contribute to the systematic management of
WHS risk
Workbook

For information on the courses the CSTC offer, please contact:
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Quality instruction, service, fairness and integrity - always



Our Purpose

CSTC's purpose is to ensure the building and construction industry's long term investment in the workforce through maintaining a commitment to the training and ongoing development of industry workers. CSTC encourages individuals to achieve the highest level of skill and knowledge possible in their chosen vocational area, therefore resulting in improved self esteem, personal growth, employment opportunities, safety into the workplace and quality of life.

Vision

CSTC strives to be recognised as a learning centre of excellence for vocational education and training. We are an organisation that continually strives to achieve the highest possible standards of education, training and consultancy services specific to the building, construction and other related industries.

CSTC provides training in the following areas:

- Occupational Health and Safety
- High Risk Work Licenses – Scaffolding, Dogging, Rigging, Forklift, Crane operation
- Plant Operations
- Confined Spaces
- First Aid
- Asbestos Removal
- Concreting
- Road Construction
- Bridge Construction
- Tunnel Construction
- Pipe Laying
- Trenchless Technology
- Bitumen Surfacing
- And much more!

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This learning product could only be made possible because of the dedicated CSTC team.

ASSESSMENT FOR INSERT UNIT

Student name	Lee Maskell
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)
 - **Knowledge questions:** You will be required to complete a series of questions to demonstrate your knowledge and skills.
 - **Third Party Report:** You will be required to have a third party 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
•	• Workbook response (below)
•	1. Workbook response (below)
•	2. Workbook response (below)
•	3. Workbook response (below)
•	4. Workbook response (below)
•	5. Workbook response (below)

ACTIVITIES

ACTIVITY 1

Using your organisation or an organisation you are familiar with you are required to target a single work group or department within the organisation.

Once you have identified the work group or department to be the subject of your activity you are required to consider the hazards your selected work group or department are routinely exposed to when undertaking tasks typical to their function within the organisation.

Gather the necessary information and answer the following questions:

Question 1:

Who are the work group you have selected and what types of hazards are all members of the work group routinely exposed to?

Pond Lining Workgroup

Identified Hazards in the workplace	Detail
Exposure to extreme weather conditions	heat, cold
Exposure to dust and other airborne particles	Dust
Exposure to Hazardous Substances	Chemicals, glues, resin
Exposure to high levels of noise	machinery
Worker fatigue	12 hour shifts
Manual handling	Pinches, crushes, strains, Lifting, continuous bending, kneeling, pushing, pulling,
Contact with sharp objects	Failure to service, incorrect storage, overloading
unstable ground surfaces	Working on bund slopes
Structural or Mechanical Failure of Plant & Equipment	Knives, secateurs, staple
Person struck/crushed by moving plant	Forklift, truck, franna, Light Vehicle movement, poly welder
Collision between light vehicles and heavy mobile plant	Restricted areas on top of bund
Working alone / in isolation	
Poor Housekeeping	Obstructed routes, lose objects,
Contact with hot objects	Burns from poly welder, heat gun
Contact with Venomous Snakes, Spiders & and stinging insects (ticks)	Bites , stings
Access / Egress	Into pond, walking slope of bund,
Working under influence of Drugs or Alcohol	Drugs and alcohol
Poor personal hygiene	Use of porta loos, water access
Fire and bush fire	
Exposure to workplace bullying harassment & violence	personnal
Sensitive area / ground disturbance	Environmental
Inadvertent / accidental fuel discharge / spillage	Environmental

Question 2:

What risk management information resources are available to your selected work group?

Note: Think of both internal and external resources.

Hazards	Risk Management Information Resources
<i>Abbreviations</i>	<i>SWI – Safe Work Instruction</i>
Exposure to extreme weather conditions	SWI - Personal Protective Equipment SWI - Health surveillance
Exposure to dust and other airborne particles	Business Process - Health and Hygiene Management SWI – Hazardous Substances and Dangerous Goods SWI – Personal Protective Equipment (PPE)
Exposure to Hazardous Substances	SWI - Hazardous Substances & Dangerous Goods SWI - Personal Protective Equipment (PPE) SWI - Induct personnel SWI - Develop SH&E Work Method Statements SWI - Conduct Toolbox Talks SWI - Conduct Task Observations <u>Code of Practice - How to Manage Work Health and Safety Risks</u>
Exposure to high levels of noise	SWI - Personal Protective Equipment <u>Code of Practice - Managing Noise and Preventing Hearing Loss</u>
Worker fatigue	SWI - Fatigue Management Plan Business Process- Journey management plans Business Process- – Onsite Personnel Tracking System
Manual handling	SWI - Manual Handling SWI - Induct personnel Client HSMP - Refer 12.4 Manual Tasks Business Process - Safety in Design Queensland Manual Task Code 2010. <u>Code of Practice - Hazardous Manual Tasks</u>
Contact with sharp objects	SWI - Personal Protective Equipment <u>Code of Practice - Hazardous Manual Tasks</u>
unstable ground surfaces	SWI - Working in and around Mobile Plant SWI - Managing Powered Plant <u>Code of Practice - Managing Risks of Plant in the Workplace</u>
Structural or Mechanical Failure of Plant & Equipment	SWI - Temporary Works Overview SWI - Plan Temporary Works

	SWI - Design Temporary Works SWI - Construct and Maintain Temporary Works SWI - Dismantle Complete Temporary Works
Person struck/crushed by moving plant	SWI - Managing Powered Plant SWI - Barricading and Signage SWI - Delivery and pick up of goods. SWI - Induct personnel SWI - Develop Safe Work Method Statements SWI - Conduct Toolbox Talks SWI - Conduct Task Observations
Collision between light vehicles and heavy mobile plant	SWI - Managing Powered Plant SWI - Barricading and Signage SWI - Traffic Management SWI - Working in and around Mobile Plant AS 2294 Earth moving Machinery Protective Structure
Working alone / in isolation	SWI - Induct personnel SWI - Working in Isolation APEA Vehicle specifications LCPL - First Aid requirements
Poor Housekeeping	SWI - Housekeeping SWI - Workplace Inspections
Contact with hot objects	SWI - Personal Protective Equipment (PPE) SWMS / JSA / Take 5
Contact with Venomous Snakes, Spiders & and stinging insects (ticks)	LCPL - Emergency management of snake bites LCPL - Emergency Management Plan <u>Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001</u>
Access / Egress	SWI - Barricading and Signage
Working under influence of Drugs or Alcohol	SWI - Drugs and Alcohol SWI - Fitness for Work SWI - Induct personnel
Poor personal hygiene	<u>Code of Practice - How to Manage Work Health and Safety Risks</u> <u>Code of Practice Managing the Work Environment and Facilities</u>
Fire and bush fire	
Exposure to workplace bullying harassment & violence	<u>Business Process - Workplace Bullying & Harassment.</u> <u>Business Process - Code of Conduct</u> <u>SWI - Induct personnel</u>
Sensitive area / ground disturbance	<u>Environment and Heritage Legislation Amendment Act Regulations 2007</u> <u>Environmental Protection Regulation 2008</u>
Inadvertent / accidental fuel	<u>Environment and Heritage Legislation Amendment Act</u>

discharge / spillage	<u>Regulations 2007</u>

Project:

Create a small table detailing the following:

- List of hazards the work group / department are exposed to.
- The available risk management information for the effective control of each listed hazard.
- Feedback on the effectiveness of the risk management information for instruction in the risk management process.

Note: Attach the completed table to your assessment portfolio.

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

ACTIVITY 2**Consult with others for effective risk management**

Using the same organisation referenced in Activity 1, consider the work groups and departments you consult with when undertaking the risk management process.

Project 1:

Create a table listing all the working groups or departments you consult with regarding risk management in the workplace.

For each work role or department listed detail information to address the following:

Why it is necessary to consult with this particular group regarding risk management.

What benefits are experienced as a result of effective consultation

The types of consultation methods that are used for each group in the table

Note: Attach a completed copy of the table to your assessment portfolio.

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

ACTIVITY 3

Continuing to use your chosen organisation as reference, answer the following questions:

Question 1:

What specific pieces of legislation, regulations and codes of practice apply to the work or undertakings of your chosen organisation?

Work Health and Safety Act 2011

- WHS Act 2011, section 19
- WHS Act 2011, section 27
- WHS Act 2011, section 28
- WHS Act 2011, sections 20 to 26

Work Health and Safety Regulation 2011 Chapter 2 Representation and participationWork Health and Safety Regulation 2011 Chapter 3 General risk and workplace managementWork Health and Safety Regulation 2011 Chapter 3 General risk and workplace management Part 3.1 Managing risks to health and safety³⁴ Duty to identify hazardsEnvironmental Protection (Noise) Policy 2008 Part 4 Avoiding, minimising or managing noiseEnvironmental Protection(Air) Policy Part 4 Avoiding, recycling, minimising or managing air emissionsNature Conservation (Wildlife) Regulation 2006Aboriginal Cultural Heritage Act 2003AS/NZS ISO 14001:2004 Environmental Management Systems – Requirements with guidance for useCodes of Practice—How to Manage Work Health and Safety Risks, Work Health and Safety Consultation, Cooperation and CoordinationCode of Practice : Construction WorkCode of Practice: Excavation WorkCode of Practice: Managing the Risks of Plant in the WorkplaceCode of Practice: Managing Noise and preventing hearing loss at work (includes information on acoustic shock and other sources of hearing loss)**Question 2:**

Who are the internal and external stakeholders that have a bearing on the risk management processes used within your chosen organisation?

Internal:

PCBU, Officers, Workers, Others

External:

Community, Landholders, Cultural Landowners, Client, departmental bodies, Utilities

Question 3:

What are the key factors within your chosen organisation that will have an impact on the effective use of possible hazard controls?

Training / Communicating
Monitoring / Surveillance /
Supervision / Observation
Inspection / Auditing

Question 4:

In your own words, describe the practical application of the 'risk management process.'

The practical application of the 'risk management process' is a holistic system of analysing the job or task, identifying all risks and hazards related with the scope of work, assessing each risk or hazard in consultation with all stakeholders, developing methods to manage risk, control risk and continually monitor for continued improvement throughout the scope of works.

Outcome for Activity 3

☐ Satisfactory

☐ Not satisfactory



Trainer/Assessor comments

ACTIVITY 4

Select 3 hazards relevant to your chosen organisation that you believe have the potential to expose the workplace to unacceptable levels of risk.

Once you have selected the hazards answer the following questions:

Question 1:

List the 3 hazards you have chosen and provide details explaining how each hazard was identified in the workplace.

Exposure to extreme weather conditions	Location of worksite Forecast of seasons Required hours of work Location of specific workers in relation to scope of work Long periods of manual labour on black poly pond liner
Manual handling	Large Civil works program for Water Treatment Ponds with repetitive plant operation Poly lining of Water Treatment ponds Forecast large volumes poly lining required Delivered in large roles requiring placement on the site Mechanically put in place with manual roll out requiring pulling, pushing Manual cutting, joining requirements Repetitive use of small equipment Long periods of bending and work on knees
Person struck/crushed by moving plant	Workers operating in close proximity to mobile plant Tight work spaces Use of large poly pipe welder

Question 2:

What are the active characteristics of each hazard that increase its potential to cause harm in the workplace?

Exposure to extreme weather conditions	Heat Stress /stroke /Sunburn Loss of coordination Permanent Illness / Injury Dehydration Fall Injuries from slipping into Illnesses
Manual handling	Repetitive Stress Injuries Musculoskeletal Injuries
Person struck/crushed by moving plant	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality

Question 3:

What factors will determine the overall likelihood of the workforce being exposed to the listed hazards?

What factors will determine the overall likelihood of the workforce being exposed to the listed hazards?

Exposure to extreme weather conditions	Time on site / Duration of exposure Frequency of exposure Failure to plan - and competently assess the risk of extreme temperature outcomes. Supervision and team failure to recognise individual symptoms of heat stress / stroke.
Manual handling	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence Unable to get immediate assistance. No access to emergency assistance Remote location Deviation from Working alone procedures / policy
Person struck/crushed by moving plant	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence Mental and physical demands of work Work scheduling and planning Work environment conditions (Noise, heat, dust) Excessive commuting time Individual and non-work factors. Lifestyle factors

Question 4:

What factors will determine the overall consequence of workforce exposure to the listed hazards?

Exposure to extreme weather conditions	Time / Duration of exposure Frequency of exposure
Manual handling	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence
Person struck/crushed by moving plant	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence

Manual handling	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence
Person struck/crushed by moving plant	Time / Duration of exposure Frequency of exposure Probability of threat / impact/ occurrence

Project:

You are now required to complete a formal risk assessment for each of the 3 hazards you have selected.

Note: Attach a completed copy of the formal risk assessment to your assessment portfolio.

Outcome for Activity 4	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 5

You are now required to create an 'Action Plan' detailing how each of the 3 hazards used in the previous activity will be controlled to reduce risk to the workforce.

Your 'Action Plan' must include:

The list of hazards.

Hazard I.D/ management tools available for the routine assessment and control of hazards.

List of available and suitable control measures for the management of hazards and how each control is to be implemented.

Key performance indicators you will set to determine effectiveness of hazard identification, control and monitoring systems

Note: The completed action plan must be attached to your assessment portfolio.

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

ACTIVITY 6

You are now required to develop a risk register for the 3 hazards specified in the previous activity.

The risk register must include:

- List of hazards
- List of work group exposed to each hazard.
- Primary risk scores (use an approved risk matrix template)
- Available control methods
- Residual risk scores
- Control method review timeframes
- Persons responsible for the reviewing of control effectiveness.

Note: The completed risk register must be attached to your assessment portfolio

Outcome for Activity 6	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

	Identified Hazards in the work site
1	Exposure to extreme weather conditions
2	Exposure to dust and other airborne particles
3	Exposure to Hazardous Substances
4	Exposure to high levels of noise
5	Worker fatigue
6	Manual handling
7	Contact with sharp objects
8	unstable ground surfaces
9	Structural or Mechanical Failure of Plant & Equipment
10	Person struck/crushed by moving plant
11	Collision between light vehicles and heavy mobile plant
12	Working alone / in isolation
13	Poor Housekeeping
14	Contact with hot objects
15	Contact with Venomous Snakes, Spiders & and stinging insects (ticks)
16	Access / Egress
17	Working under influence of Drugs or Alcohol
18	Poor personal hygiene

Ponds Construction - Hazard Assessment - Activity 1

Compiled by: Lee Maskell

Item	Hazards Identified	Harm/Effect	Controls / Risk Management Information	Project Controls
				Feedback on the effectiveness of the risk management information for instruction in the risk management process.
1	Exposure to extreme weather conditions	Heat Stress /stroke /Sunburn Loss of coordination Permanent Illness / Injury Dehydration Fall Injuries from slipping into Illnesses	SWI - Personal Protective Equipment SWI - Health surveillance	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Toolbox Talks, Daily Pre Start , Take 5 Auditing
2	Exposure to dust and other airborne particles	Respiratory Illness Skin Irritation Eye injury / irritation Illness requiring medical attention Long term health effects	Business Process - Health and Hygiene Management SWI – Hazardous Substances and Dangerous Goods SWI – Personal Protective Equipment (PPE)	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Toolbox Talks, Daily Pre Start , Take 5 Visible dust monitoring by the site supervisor Air quality monitoring
3	Exposure to Hazardous Substances	Burns Respiratory Illness Eye injury/irritation Nausea Internal Burns Skin irritation First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality	SWI - Hazardous Substances & Dangerous Goods SWI - Personal Protective Equipment (PPE) SWI - Induct personnel SWI - Develop SH&E Work Method Statements SWI - Conduct Toolbox Talks SWI - Conduct Task Observations Code of Practice - How to Manage Work Health and Safety Risks	Pre-start and Toolbox meetings Site Induction / Task and behavioural observations, inspections Auditing lead indicators / plant compliance / training
4	Exposure to high levels of noise	headaches / short and long term hearing damage / industrial deafness	SWI - Personal Protective Equipment SWI - Health surveillance	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Toolbox Talks, Daily Pre Start
5	Worker fatigue	Psychological damage / injury Lack of concentration leading to injury Work related stress Poor workforce moral	SWI - Fatigue Management Plan Business process- Journey management plans	Induction - controls and process Monitoring and surveillance Toolbox Talks, Daily Pre Starts, journey management plans Auditing
6	Manual handling	Repetitive Stress Injuries Musculoskeletal Injuries	SWI - Manual Handling SWI - Induct personnel Business Process - Safety in Design Queensland Manual Task Code 2010. Client HSMP - Refer 12.4 Manual Tasks. Code of Practice - Hazardous Manual Tasks	Pre-employment Medicals Plant pre-acceptance inspection, Plant Risk Assessment Use mechanical aids, Limit duration of task Pre-start and Toolbox meetings Site Induction / Task and behavioural observations, inspections Auditing lead indicators / plant compliance / training
7	Contact with sharp objects	Cuts, Bruises, Lacerations. Penetrating injuries Injury requiring medical treatment Injury requiring first aid	SWI – Personal Protective Equipment	Induction - controls and process Monitoring and surveillance Toolbox Talks, Daily Pre Starts, journey management plans Training, Auditing

Ponds Construction - Hazard Assessment - Activity 1

Compiled by: Lee Maskell

Item	Hazards Identified	Harm/Effect	Controls / Risk Management Information	Project Controls
				Feedback on the effectiveness of the risk management information for instruction in the risk management process.
8	unstable ground surfaces	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality Damage to plant & Equipment	SWI - Working in and around Mobile Plant SWI - Managing Powered Plant	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, plant pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment Training and verification Auditing
9	Structural or Mechanical Failure of Plant & Equipment	Injuries requiring First Aid Injuries requiring medical attention Fatality Damage to equipment	SWI - Temporary Works Overview SWI - Plan Temporary Works SWI - Design Temporary Works LCPL- SWI - Construct and Maintain Temporary Works LCPL- SWI - Dismantle Complete Temporary Works	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment Training and verification Auditing
10	Person struck/crushed by moving plant	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality	LCPL - SWI - Managing Powered Plant LCPL - SWI - Barricading and Signage LCPL - SWI - Delivery and pick up of goods. LCPL - SWI - Induct personnel LCPL - SWI - Develop SH&E Work Method Statements LCPL - SWI - Conduct Toolbox Talks LCPL - SWI - Conduct Task Observations	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment, vehicl movement plans Training and verification Auditing
11	Collision between light vehicles and heavy mobile plant	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality Damage to plant & Equipment	LCPL - SWI - Working in and around Mobile Plant	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment, vehicle movement plans, seperation Training and verification Auditing
12	Working alone / in isolation	Delayed treatment. Potential for the individuals condition to deteriorate. Possible threat to life escalated.	SWI - Induct personnel SWI Working in Isolation APEA Vehicle specifications Company Process - First Aid requirements	Pre-employment medicals No working alone policy Buddy system Communication, UHF Inductions Contractor SWMS Site Inspections Pre-start and Toolbox Meetings Paramedic based at Condabri Central
13	Poor Housekeeping	Slips and trips Head Injuries Hand Injuries Eye injuries Cuts, bruises	SWI - Housekeeping SWI - Workplace Inspections	Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5 Task and Behavioural observations, Inspections Training Auditing
14	Contact with hot objects	Burns,	SWI - Manual Handling SWI - Induct personnel Business Process - Safety in Design Queensland Manual Task Code 2010. Client HSMP - Refer 12.4 Manual Tasks. Code of Practice - Hazardous Manual Tasks	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment, Seperation Training and verification Auditing
15	Contact with Venomous Snakes, Spiders & and stinging insects (ticks)	Sweating at bite site Muscle weakness Nausea and vomiting Diarrhoea Fatality	Company Process -Emergency management of snake bites Company Process - Emergency Management Plan	Training Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5 Task and Behavioural observations, Inspections, Segregation Auditing

Ponds Construction - Hazard Assessment - Activity 1

Compiled by: Lee Maskell

Item	Hazards Identified	Harm/Effect	Controls / Risk Management Information	Project Controls
				Feedback on the effectiveness of the risk management information for instruction in the risk management process.
16	Access / Egress	Injury to site personnel Disruption to site works	SWI - Manual Handling SWI - Induct personnel Business Process - Safety in Design	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Plant pre-acceptance inspections, Plant Risk Assessment, Training and verification Auditing
17	Working under influence of Drugs or Alcohol	Lack concentration leading to injury Impaired judgement Injuries requiring First Aid Injuries requiring medical attention Lost Time Injury Fatality / multiple fatalities Disruption to site works	SWI - Drugs and Alcohol SWI - Fitness for Work SWI - Induct personnel	Induction - Processes and controls Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Task and Behavioural observations, Inspections Auditing
18	Poor personal hygiene	Potential for spread of contagious diseases (Outbreak) to other project teams. Workforce downtime due to sickness. Significant medical treatment required	Company Process - Emergency Evacuation Plan Company Process - Crisis and Emergency Management	Induction - Processes and controls Monitoring and surveillance Site Inspections / auditing / surveys Toolbox Talks, Daily Pre Start , Take 5, Plant Pre starts Behavioural observations, Inspections
19	Fire and bush fire	Heightened potential for Heat stress within the workforce. Danger of burns and smoke inhalation by the adjacent workforce.	Company Process - Emergency Evacuation Plan	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Toolbox Talks, Daily Pre Start, Take 5 Audits
20	Exposure to workplace bullying harassment & violence	Unreasonable behaviour directed towards someone Unwelcome conduct Verbal abuse Assault Spreading rumours about someone Name calling Practical jokes Sexual harassment	Business Process - Workplace Bullying & Harassment. Business Process - Code of Conduct SWI - Induct personnel	Induction - Processes and controls Monitoring and surveillance Site Inspections / auditing / surveys Toolbox Talks, Daily Pre Start
21	Sensitive area / ground disturbance	Potential for damage to flora / fauna habitats and possible underground services. Human error factor.	Environment and Heritage Legislation Amendment Act Regulations 2007 Environmental Protection Regulation 2008	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Inspections, Segregation Site Inspections / auditing
22	Inadvertent / accidental fuel discharge / spillage	Unconscious dispersal of a Class 2 noxious weed to other areas of the project. Additional workload i.e. re-work to remove the transferred weeds	Environment and Heritage Legislation Amendment Act Regulations 2007 Environmental Protection Regulation 2008	Induction - Processes and controls Monitoring and surveillance Task and Behavioural observations, Inspections, Segregation Site Inspections / auditing

Ponds Construction - Consultation - Activity 2

	Workgroup Consultation	Purpose for consultation	Benefits of consultation	Consultation methods
1	Community groups	Personal and Environmental interest Local knowledge.	Ensure all relevant stakeholders are heard. Gain understanding of values, vision, expectation. improve people's understanding of risks and the risk management processes	Discussion groups and workshops Advisory committee Liaison Officers Survey / newsletter
2	Utility Services	Community and Environmental interest. Local knowledge. Legal and Financial interest	Brainstorming with stakeholders with relevant knowledge and experience. Ensure all relevant stakeholders are heard.	Web based consultation Written consultation Meetings
3	Department Lands and Transport	Community and Environmental interest. Local knowledge. Legal and Financial interest	Brainstorming with stakeholders with relevant knowledge and experience. Ensure all relevant stakeholders are heard.	Web based consultation Written consultation Meetings
4	Environmental Dept	Environmental interest Legal and Financial identification of risks On task, on site, on location Experts in specific field	Brainstorming with stakeholders with relevant knowledge and experience. Ensure all relevant stakeholders are heard.	Web based consultation Written Inspections Auditing
5	Cultural Heritage	Cultural and Environmental interest. Local knowledge.	Brainstorming with stakeholders with relevant knowledge and experience. Ensure all relevant stakeholders are heard.	Discussion groups and workshops Liaison Officers / Cultural Officers
6	Engineering	Experts in activity	brainstorming with stakeholders with relevant knowledge and experience	Onsite discussion groups Inspections Auditing
7	Civil	On task, on site, on location Experts in specific field	ensure all relevant stakeholders are heard. Ensure all are clear on their roles and responsibilities. Assist to identify risks and hazards	Onsite discussion groups Toolbox Talks, Pre Starts
8	Pond Liners	On task, on site, on location Experts in specific field	ensure all relevant stakeholders are heard. Ensure all are clear on their roles and responsibilities. Assist to identify risks and hazards	Onsite discussion groups Toolbox Talks, Pre Starts
9	Pipelines	On task, on site, on location Experts in specific field	ensure all relevant stakeholders are heard. Ensure all are clear on their roles and responsibilities. Assist to identify risks and hazards	Onsite discussion groups Toolbox Talks, Pre Starts
10	Client	Legal and Financial interest	Ensure all relevant stakeholders concerns and feedback is heard. Gain understanding of values, vision, expectation of the client. improve clients understanding of risks and the risk management processes. Inform client of financial and legislative requirements Deliver feedback from above.	Meetings Onsite discussion groups Workshops

Ponds Construction - Action Plan - Activity 5

Compiled by: Lee Maskell

Item	Hazards Identified	Harm/Effect	Controls / Risk Management Information	Project Controls	Key Performance Indicators for effectiveness of control
1	Exposure to extreme weather conditions	Heat Stress /stroke /Sunburn Loss of coordination Permanent Illness / Injury Dehydration Fall Injuries from slipping into Illnesses	SWI - Personal Protective Equipment SWI - Health surveillance	Site Induction - Processes and controls Monitoring and surveillance Heat Stress and Thermal workload monitoring Task and Behavioural observations, workplace inspections Toolbox Talks, Daily Pre Start , Take 5 Trained Heat Stress Champions monitoring and recording daily - issuing of hydration suppliments - neck cooling aids - ice and sufficient drinking water Heat Stress Training. Mist Fans / Shade marquees on site / Scheduled shade breaks. Personal Protective Equipment / sunblock / lip balm Pre-start - daily reinforcement of Heat Management Controls. Toolbox topic on Heat Stress Man agent controls. Large Umbrellas. Posters developed with examples and reminders. SWMS shall ensure Heat Management controls are addressed.	Auditing for Inductions / Training compliance HSE KPI Commitment Schedule Weekly Monthly auditing for lead and lag indicators
6	Manual handling	Repetitive Stress Injuries Musculoskeletal Injuries	SWI - Manual Handling SWI - Induct personnel Business Process - Safety in Design Queensland Manual Task Code 2010. Client HSMP - Refer 12.4 Manual Tasks. Code of Practice - Hazardous Manual Tasks	Pre-employment medical . Plant pre-acceptance inspection / Plant Risk Assessment. Use mechanical aids / Use lighter tools. Limit duration of task. Training in Manual Handling techniques. All manual tasks within the scope of work to be identified, a risk assessment conducted and controls implemented . A register shall hold the manual tasks and controls and be available for review as required. Task rotation shall be practised. Develop materials posters etc to illustrate correct methodology for lifting. Pre Start "warm up" exercises for teams / Training in warm ups Task observations / behavioural Observations / inspections. Pre-start - daily reinforcement requirement.	People & Capabilities management Pre-employment Medicals Daily Pre starts for plant and mobile plant Auditing for Mobile Plant and Machinery Monitoring hours Assurance Auditing for Training / Induction Weekly Monthly auditing for lead and lag indicators
10	Person struck/crushed by moving plant	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality	SWI - Managing Powered Plant SWI - Barricading and Signage SWI - Delivery and pick up of goods. SWI - Induct personnel SWI - Develop SH&E Work Method Statements SWI - Conduct Toolbox Talks SWI - Conduct Task Observations	Induction - Processes and controls Controlled entry to site (i.e. authorised personnel only) Site Signage. Plant pre-acceptance inspections / Plant Risk Assessment / Plant Daily Pre starts vehicle movement plans / haul roads Training and verification of operator competency SWMS Exclusion zones / Spotters Radio communication / Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5, Task and Behavioural observations, Inspections Vehicles fitted with audible alarms and flashing lights	People & Capabilities management Pre-employment Medicals Auditing for mobile plant and machinery Auditing for personnel competencies and training Auditing for workers logged and fatigue Assurance Auditing for Training / Induction Weekly Monthly auditing for lead and lag indicators

Ponds Construction - Risk Register - Activity 6

Item No.	Risk Title	Cause	Harm/Effect	Primary			Company Controls	Project Controls	Legal Register	Residual Risk			workgroup	Risk Owner	Control Method review time frames
	hazard			C	P	Rating	controls	Controls		C	P	Rating	workgroup exposure		review time frames
	Exposure to extreme weather conditions (Temperatures between 20-45oC)	Failure to plan - and competently assess the risk of extreme temperature outcomes. Supervision and team failure to recognise individual symptoms of heat stress / stroke.	Heat Stress /stroke /Sunburn Loss of coordination Permanent Illness / Injury Dehydration Fall Injuries from slipping into illnesses	4	2	15	SWI - Personal Protective Equipment SWI - Health surveillance	Site Induction - Processes and controls Monitoring and surveillance Heat Stress and Thermal workload monitoring Task and Behavioural observations, workplace inspections Toolbox Talks, Daily Pre Start , Take 5 Trained Heat Stress Champions monitoring and recording daily - issuing of hydration suppliments - neck cooling aids - ice and sufficient drinking water Heat Stress Training. Mist Fans / Shade marquees on site / Scheduled shade breaks. Personal Protective Equipment / sunblock / lip balm Pre-start - daily reinforcement of Heat Management Controls. Toolbox topic on Heat Stress Man agent controls. Posters developed with examples and reminders. SWMS shall ensure Heat Management controls are addressed. Large Umbrellas.	<u>Work Health and Safety Act 2011</u> <u>Work Health and Safety Regulation 2011 Chapter 3 General risk and workplace management</u> <u>Part 3.1 Managing risks to health and safety34 Duty to identify hazards</u>	4	1	14	Civil labourers Mobile Plant Operators Concrete Form Workers Pond liners Poly Welders	PCBU, Officers, Workers, Other	Daily / Weekly / Monthly
	Manual handling	"Handling of heavy materials Use of heavy tools and equipment Sustained awkward posture Inadequate training Deliberate disregard for Manual handling guidelines Repetitive / sustained actions"	Repetitive Stress Injuries Musculoskeletal Injuries	3	2	12	SWI - Manual Handling SWI - Induct personnel Business Process - Safety in Design Queensland Manual Task Code 2010. Client HSMP - Refer 12.4 Manual Tasks. Code of Practice - Hazardous Manual Tasks	Pre-employment medical . Plant pre-acceptance inspection / Plant Risk Assessment. Use mechanical aids / Use lighter tools. Limit duration of task. Training in Manual Handling techniques. All manual tasks within the scope of work to be identified, a risk assessment conducted and controls implemented . A register shall hold the manual tasks and controls and be available for review as required. Task rotation shall be practised. Develop materials posters etc to illustrate correct methodology for lifting. Pre Start "warm up" exercises for teams / Training in warm ups Task observations / behavioural Observations / inspections. Pre-start - daily reinforcement requirement.	<u>Queensland Manual Task Code 2010.</u> <u>Client Process - HSMP - Refer 12.4 Manual Tasks.</u>	2	1	6	Civil labourers Mobile Plant Operators Concrete Form Workers Pond liners Poly Welders	PCBU, Officers, Workers, Other	Daily / Weekly / Monthly
	Persons struck/crushed by moving plant	Proximity to Operating plant Proximity to moving plant Runaway/uncontrolled plant items Failure to manage plant risk through procurement, PRA, maintenance and prestart Failure to separate people and plant	Impact/Crushing injuries First Aid Injury Injury requiring medical treatment Lost Time Injury Permanent injury Fatality	5	2	21	SWI - Managing Powered Plant SWI - Barricading and Signage SWI - Delivery and pick up of goods. SWI - Induct personnel SWI - Develop SH&E Work Method Statements SWI - Conduct Toolbox Talks SWI - Conduct Task Observations	Induction - Processes and controls Controlled entry to site (i.e. authorised personnel only) Site Signage. Plant pre-acceptance inspections / Plant Risk Assessment / Plant Daily Pre starts vehicle movement plans / haul roads Training and verification of operator competency SWMS Exclusion zones / Spotters Radio communication / Monitoring and surveillance Toolbox Talks, Daily Pre Start , Take 5.	<u>Code of Practice : Construction Work</u> <u>Code of Practice: Excavation Work</u> <u>Code of Practice: Managing the Risks of Plant in the Workplace</u>	1	5	16	Civil labourers Mobile Plant Operators Concrete Form Workers Pond liners Poly Welders Engineers / Surveyors	PCBU, Officers, Workers, Other	Daily / Weekly / Monthly

RISK MATRIX

PROBABILITY	Threat can be expected to occur. 75-99%	Almost Certain	5	10	18	23	25
	Threat will quite commonly occur. 50-75%	Likely	4	9	17	20	24
	Threat may occur occasionally. 25-50%	Possible	3	8	13	19	22
	Threat could infrequently occur. 10-25%	Unlikely	2	7	12	15	21
	Threat may occur in exceptional circumstances. 0-10%	Rare	1	6	11	14	16
			Negligible	Minor	Moderate	Major	Substantial
			Class 3 (slight injury, First Aid)	Class 3 (minor injury, medical treatment required)	Class 2 (lost time injury)	Class 1 (permanent injury)	Class 1 (fatal incident)
			CONSEQUENCE				

Extreme Threat (23-25) Very High Threat (17-22) High Threat (12-16) Moderate Threat (8-11) Low Threat (1-7)