

Crate Stack

Risk Management Plan

School: _____ Year: _____ Dates: _____

Program: _____ Supervising Staff: _____

Activity Context

The crate stack activity is located on the activities tower on the side facing the tennis court and volleyball court. Crate stack is fun way to challenge participants in their confidence, teamwork and trust. Participants are instructed in safe use of equipment and encouraged to build a tower of crates as high as possible.

Leader to Participant Ratios

1 **Activity Facilitator** to 17 participants

For all groups with participants under 18yo:
Group is required to have a **Supervising Adult/Teacher**, provided by the group, present

Variations to ratio requirements may occur on a group by group basis.

Participation Requirements

Minimum Age: 8 years of age

Variations to participant requirement may occur on an individual client assessment.

Maximum Weight: 110kgs

Equipment

Participants are required to wear/have the following:

- Appropriate environmental protection (ie. Hat, sunglasses, t-shirts, raincoat, warm clothing)
- Enclosed footwear
- Adequate water
- mid-thigh or longer length pants for protection from harnesses
- Any personal medication required (ie, asthma, epipen etc.)

The following personal protective equipment is provided and must be worn by participants using the course:

- Full body harness
- Helmet

Activity Facilitators

Activity Facilitators are Lutanda Activity Staff or equivalent.

Activity Facilitators are trained and signed off as competent to run activity by qualified permanent Lutanda staff member.

Activity Facilitators hold current first aid and CPR certificates.

Note: Where it is not specified the management of risk is expected to be undertaken by the Activity Facilitator.

Emergency

Activity Facilitators have small First Aid Kit and Comms available throughout each session.

Large First Aid Kit available in First Aid/ PA room in main dining hall.

For minor incidents, Activity Facilitator communicates with Activity Manager or Site Manager and fills out Incident Report Form.

For major Incidents/ fatality, Activity Facilitator manages scene, performs initial First Aid and calls **000** when Activity Manager or Site Manager is not available. Activity Facilitator fills out Incident Report Form.

Yarramundi site is less than 1 hour from ambulance care. First Aid is performed in this context.

Risk Management Plan

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
Activity Specific – Risk factors specifically associated with activity at Lutanda Mt Yarramundi				
Fall from height caused by: <ul style="list-style-type: none"> • Correct belay technique not being followed • Harness not fitted correctly 	<ul style="list-style-type: none"> • Equipment protected from sharp edges with protective equipment • Equipment rated and maintained for loads well above actual load placed upon it • Participants attached to a belay line whenever they are climbing • All participants are briefed on correct belay technique • Belayers are closely monitored by Activities Facilitator at all times when a climber is off the ground and reminded of correct technique where appropriate • Activity is paused or ceased if correct belay technique is not being implemented by participants. • Minimum of 3 belayers in belay team required to belay climber • Front belayer moves behind the post to help control the rope when 	Rare	Catastrophic	Medium

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Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
	lowering participant <ul style="list-style-type: none"> • Activity Facilitator gives harness briefs and ensures harnesses are worn correctly. • Activity Facilitator conducts ABCDE checks (checking anchor, carabiners, knots, harnesses and helmets are done correctly) before each participant begins climbing the crates. 			
Impact By participant climbing - To other persons - Ground - Tower - Passing vehicles	<ul style="list-style-type: none"> • Activity Facilitator monitors belayers at all times throughout the activity, ensuring rope is kept tight at all times. • Activity Facilitator monitors for vehicles and pauses activity if a vehicle is passing. • Participants who are passing crates to the climber to wear a helmet and stand clear when crate stack is falling and participant is being lowered. • Participants instructed not to swing on the rope 	Unlikely	Minor	Low
Falling Objects (especially crates) Causing injury to bystanders; Damaging surrounding objects ie. cars	<ul style="list-style-type: none"> • Participants who are passing crates to the climber are briefed on how/where to stand if crates start to fall, and are instructed to stand clear when tower starts to fall • Climber and supporting participants are required to wear helmets at all times during tower build • Helmets required to be worn by anyone between the crate tower and the belay post • Activity Facilitator wears a helmet • Participant ensures all loose items on body are secured or removed. • Observers and other participants to be briefed on safe area to wait/watch 	Certain	Insignificant	Low
Choking caused by harness not fitted properly around shoulders	<ul style="list-style-type: none"> • Ensure shoulder straps are tightened firmly and attachment point at the back is positioned to sit between the shoulder blades as much as possible. 	Rare	Major	Low

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
Shock loading of the ropes.	<ul style="list-style-type: none"> • Belay team instructed to keep rope taut at all times • Instructor monitors active belaying to accommodate the rope tension for participant bending forward to place crate or standing upright. 	Unlikely	Minor	Low
Rope Burn For climber or belayer	<ul style="list-style-type: none"> • Minimum of 3 belayers in belay team required to belay climber • Front belayer moves behind the post to help control the rope when lowering participant. • Belayers are instructed to belay hand over hand and not let the rope slide through their hands • Climber is instructed to not hold the rope while climbing or for support 	Rare	Minor	Low
Entanglement <ul style="list-style-type: none"> • Jewellery • Hair • Loose Clothing • Scarves etc. • Fingers 	<ul style="list-style-type: none"> • All loose clothing, jewellery and other objects that may become entangled are to be removed for the activity • Long hair is to be tied back for the activity in low pony tail or braids • Participants briefed not to hold onto rope while climbing • Belayers briefed to keep fingers away from belay post to prevent getting stuck 	Unlikely	Minor	Low
Chafing Caused by harness rubbing on skin	<ul style="list-style-type: none"> • List of appropriate clothing provided to group prior to camp • Participants asked to change into appropriate clothing prior to activity to prevent harness resting on skin • Explanation on how to fit harness comfortably is given and checked by Activity Facilitator 	Unlikely	Insignificant	Low
Participant falls Unconscious/ loss of ability.	<ul style="list-style-type: none"> • Participant can be lower to ground at any point. • First aid administered, medical attention sought. 	Rare	Moderate	Low
Inverting Where participant flips upside	<ul style="list-style-type: none"> • Proper harness fitting demonstrated, and harnesses of each participant checked prior to starting to climb 	Rare	Insignificant	Low

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
down while on course	<ul style="list-style-type: none"> Harnesses are full body harnesses Attachment point for harnesses at the back between shoulder blades prevents inverting. 			
Slipping/Tripping/ Fall/ From uneven surfaces, equipment, trip hazards, obstacles in the environment.	<ul style="list-style-type: none"> Area inspected by Activity Facilitator prior to activity and any hazards removed or mitigated eg. Sticks & rocks on the ground removed. Equipment in activity area set up in an organised manner to reduce trip hazards Crates to be stacked against tower before and after the session and between each participant's turn. 	Unlikely	Minor	Low
People – Risk factors associated with the people using the activity				
Participant Behaviour Inability or decision to not follow directions or cooperate	<ul style="list-style-type: none"> Clear behaviour expectations set at start of activity sessions Encouraging supportive environment Activity Instructor collaborates with Adult Supervisor/ teacher to maintaining adequate supervision of all participants throughout the session. Outline consequences of inappropriate behaviour Removal of individual from activity or cancellation of whole activity if safety procedures and instructions are not being followed. 	Unlikely	Major	Medium
Participant Ability Unable to complete activity due to: <ul style="list-style-type: none"> Fear / Anxiety Complacency / Overconfidence Physical Ability 	<ul style="list-style-type: none"> Activity Instructor promotes a supportive environment Participants briefed according to age, ability, experience Participation is based on meeting requirements Demonstration of understanding and/or skills must be shown prior to undertaking activity Participants are guided through activity supportively by Activity Facilitator Activities are challenge by choice - participants are positively challenged but not forced to participate in activity 	Possible	Minor	Medium

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
Activity Facilitator Unsafe practices leading to an injury to a participant caused by: <ul style="list-style-type: none"> Poor supervision and instruction by Activity Facilitator Incompetence of Instructing activity 	<ul style="list-style-type: none"> Activity Facilitators must follow Standard Operating Procedures at all times Activity Facilitators are trained and signed off as competent to run activity by qualified permanent Lutanda staff member. Formal qualifications in Outdoor Recreation and instructing activity area desired. Communication equipment available readily at activity sessions Vigilant supervision required by Activity Facilitator at all times Leader personal protective equipment and rescue equipment available at activity at all activity sessions 	Unlikely	Major	Medium
Supervising Adult Unsafe practices including: <ul style="list-style-type: none"> Poor supervision by group leaders 	<ul style="list-style-type: none"> Groups briefed on requirement to provide Supervising Adult for groups with participants under 18 years old, prior to camp and activities. Activity Facilitator will stop or cancel activity without adequate supervision from Group Leader 	Unlikely	Major	Medium
Observers Injury to... Guests or others observing activity while it is running	<ul style="list-style-type: none"> Observers not allowed to participate in activity without activity briefing Observers briefed on safe areas to view the activity and monitored by Activity Instructor. 	Unlikely	Major	Medium
Unsupervised Users Injury to... Guests on site when activity is not running; Members of public accessing camp land (unauthorised)	<ul style="list-style-type: none"> Groups briefed on not using facilitated activities without Activity Instructor Gates giving access to heights locked when not in use. Activity equipment packed and locked away after use. Signage at low ropes Instructing Unsupervised users to keep off. 	Unlikely	Major	Medium
Equipment – Risk factors associated with the equipment used for the activity				
Structure Failure Safety of the Activity tower,	<ul style="list-style-type: none"> Activities tower built by Adventure Developments, an expert provider of Adventure Activity rope and height structures. Yearly inspection 	Rare	Catastrophic	Medium

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
belay stations and anchor beam at top of climb	<p>conducted by this provider and maintenance conducted as required.</p> <ul style="list-style-type: none"> Regular inspections and required maintenance or action taken for the upkeep of the Tower, Activity Structure and anchors performed by Qualified staff and Activity Manager 			
<p>Equipment Failure Due to improper use, faulty / damaged equipment, wear and tear.</p>	<ul style="list-style-type: none"> Activity Facilitators trained in selection, use, inspection, care & maintenance of activity equipment Activity Facilitators inspect equipment prior to use by the participant each time and not used if there is an issue with the equipment – equipment reported to Activity Manager. Participants briefed on proper use and care of equipment eg avoid standing on equipment and store on tarp when not in use. All equipment clearly stored and labelled for intended activity. Equipment regularly inspected and maintained Equipment stored, maintained and retired according to manufacturer instructions and retired early if showing significant signs of wear and tear. All equipment rated for its use and used for its intended purpose. Equipment used during the session by participants are laid out on a tarp to protect from the ground and dirt. 	Rare	Major	Low
Environment – Risk factors associated with the environment including weather				
<p>Exposure to UV rays Causing sunburn</p>	<ul style="list-style-type: none"> Sun smart strategies are encouraged 	Possible	Minor	Low
<p>Exposure to Heat Causing dehydration, heat stroke etc.</p>	<ul style="list-style-type: none"> Sun smart strategies are encouraged Participants are encouraged to drink water, carry water bottles Guests are briefed on location of water filling facilities on arrival In extreme heat activities modified / cancelled and alternate activities arranged 	Unlikely	Moderate	Low
Cold / Wet Weather	<ul style="list-style-type: none"> Weather conditions regularly monitored for adverse conditions 	Rare	Moderate	Low

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
Causing hypothermia etc.	<ul style="list-style-type: none"> Participants briefed on wearing suitable protective clothing Activities modified / cancelled in torrential rainfall and/or alternate activities arranged 			
Lightning Strike	<ul style="list-style-type: none"> Weather conditions regularly monitored for adverse conditions Activities delayed / cancelled when thunder or lightning is present during session. Participants are moved to safe area indoors of under shelter. 	Rare	Catastrophic	Medium
Injury, bites or allergic reaction caused by organism	<ul style="list-style-type: none"> Groups briefed on arrival of appropriate actions for sighting/be bitten by snakes Area monitored for bees, snakes, spiders and if spotted participants notified of the hazard and managed accordingly. Prescribed medication readily available if participant is high risk eg EpiPen. Small first aid kits and radio communication readily available at each activity area, and a more comprehensive first aid kit available in the first aid room if required. Activity Facilitator administers first aid accordingly. Medical attention/ ambulance sought if required. 	Unlikely	Major	Medium
Tree or Tree branch falling on person/s	<ul style="list-style-type: none"> Regular checks of activity area carried out and appropriate maintenance performed eg. Dead tree branches removed Participants briefed on safe waiting areas and high risk areas to avoid. In high winds participants removed from under or near trees deemed high risk eg eucalyptus. 	Rare	Catastrophic	Satisfactory

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Risk Ratings

This risk assessment is measured according to the following risk ratings:

Likelihood Ratings

Likelihood is the description of the probability and frequency. The likelihood of the risks occurring as outlined in Lutanda Yarramundi risk management plans is determined after the control measures have been implemented.

Score	Description	Broad description of frequency	Time framed description of frequency
1	Rare	The event may occur, but only in highly exceptional circumstances	Not expected to occur for years
2	Unlikely	Could occur at some time	Expected to occur at least annually
3	Possible	Might occur at some time	Expected to occur at least monthly
4	Likely	Will probably occur in most circumstances	Expected to occur at least weekly
5	Almost certain	Is expected to occur in most circumstances	Expected to occur at least daily

Consequence Ratings

The outcome of an event or situation expressed qualitatively or quantitatively, being the human impact, damage to infrastructure, disruption to public or financial loss.

Score	Description	Injury or impact details
1	Insignificant	Little or no injury requiring no medical attention; Minimal impact on environment; Insignificant adjustments to program; Insignificant damage to property, normal wear; Some difficulty in retaining competent staff; Expected running costs incurred
2	Minor	Minor injuries requiring first aid / some medical attention; Minor impact to plants / animals, no disruption to ecosystems; Rescheduling / replacement of program activities to client satisfaction; Damage requiring small repairs, low cost; Some difficulty in attracting, developing, resourcing and retaining competent staff; Minor costs incurred (<\$250)
3	Moderate	Serious injuries requiring hospitalisation / ongoing medical attention; Ecosystem / landscape self repairs within 12mo; Significant disruption / cancellation of program events; Damage requiring moderate repairs or replacement, moderate cost; Significant difficulty in attracting, developing, resourcing and retaining competent staff; Moderate costs incurred (<\$1,000)
4	Major	Injuries that are life threatening or causing long term disability; Ecosystem / landscape self repairs within 36mo; Program disruption causing loss of program; Damage requiring high cost/projects for repair/replacement; Guest experience and program is majorly affected by lack of competent staff; Major costs incurred (<\$15,000)
5	Catastrophic	Fatality; Irrecoverable loss of ecosystem / landscape; Program disruption causing broad loss of reputation; Massive damage, significant replacement of infrastructure required; Programs unable to be fulfilled due to lack of competent staff; Massive costs incurred (>\$15,000)

The consequence of an incident occurring may vary greatly depending on the individual circumstances of each incident.

Example – A student trips and falls – a detailed analysis of falls might show that although falls occur weekly, more serious injuries from falls only occur once or twice a year. In the main most of the other falls have relatively minor outcomes. Therefore the incident could be scored either according to the severity of the actual outcome, or according to the most likely or typical outcome for that type of incident.

Both approaches are valid, however to ensure consistency Lutanda Mt Yarramundi has adopted an approach to record the most likely or typical outcome for all incidents.

Risk Rating Matrix

All identified risks are recorded in the following risk matrix according to likelihood and consequence. The purpose of this matrix is to provide a snapshot of all identified risks and establish the level of risk to determine if further treatment is required.

Likelihood	Consequences				
	1 - Insignificant	2 - Minor	3 - Moderate	4 - Major	5 - Catastrophic
1 - Rare	1	2	3 Exposure to cold	4 Harness trauma, equipment failure	5 Fall from height, lightning strike, structure failure
2 - Unlikely	2	4 Falling object, injury from environment, chafing	6 Entanglement, exposure to heat	8 Injury to observers, unsupervised persons, participant behavior, unsafe activity facilitator, participant ability, group leader, allergic reaction	10
3 - Possible	3	6 Slipping, cuts, impact injury, rope burn, inverting, UV exposure	9	12	15
4 - Likely	4	8	12	16	20
5 - Almost certain	5	10	15	20	25

Risk Treatment

1-4 Low Risk

- Risk does not generally need to be managed any further (current controls are adequate), however the risk needs to be monitored for changes in circumstances and current control effectiveness.
- Risk generally may be accepted.

5-9 Medium Risk

- Risk needs to be regularly monitored for any changes and control/treatment effectiveness.
- Risk may be accepted after consideration.

10 -14 High Risk

- Risk is unacceptable, risks must be further treated or removed to bring rating to medium
- Risks are to be re-assessed by Activities Manager

15+ Extreme Risk

- Unacceptable risk, urgent attention is required to treat or remove risks
- Management to consider elimination of activity

Original Risk Assessment Conducted by: *Jemima Robinson, Activities and Hosting Manager, Mt Victoria* Date: 27th January 2016

Reviewed:

V1: January 2017

V2: November, 2018 by *Amanda Bennett, Activities Manager, Yarramundi*

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