

CHALLENGE MACHINES – RISK ASSESSMENTDescription of Activity

The ride consists of Komatsu PC14 excavators operated by members of the public. The aim of the ride is to use the arm of the machine to hook a duck from the pond, or to knock down skittles. Children of 110cm in height can use the ride unaccompanied. Children of 80cm to 110cm in height can use the ride while seated on an adults lap. Children of less than 80cm height are not able to use the ride. Marshals will measure heights using a height marker “stick”. There is no requirement for visitors to this ride to wear PPE including footwear.

RISK ASSESSMENT

	Description of Hazard	Assessment of Risk	Control Measures	Residual Risk
1.	Machine contact with visitors/staff.	Medium	Secure safety barriers will be in place. Slew lock pins fitted and locked in place. Marshals will escort visitors to and from the machines. Marshals must isolate the controls before entering the working area of the machine. No tracking of the machines is permitted. Under no circumstances will visitors to the ride be allowed in front of the machine near to the skittles or duck ponds.	Low
2.	Machine contact with other machines/static objects.	Medium	No tracking of the machines is permitted. Track lever locks are fitted. Some contact between machines is possible but not such that injury can be caused.	Low

	Description of Hazard	Assessment of Risk	Control Measures	Residual Risk
3.	Injury resulting from falling while climbing onto or off the machine.	Medium	Visitors climbing on or off must be overseen by the marshal and assisted where required. Visitors must enter/exit the machine facing the machine and must not jump off. Ground conditions will be monitored for slip/trip hazards.	Low
4.	Falling from moving machine.	Low	Machines are static and no tracking is permitted. Seat belts will be worn and correctly adjusted.	Low
5.	Bumped heads or whiplash injury caused by sudden or violent movement.	Medium	Machines are static and no tracking is permitted. Correctly fastened seatbelts must be worn. Main boom stops are in place to limit the movement of the machine arm. Machines will be run at low revs so that it stalls under excessive load.	Low
6.	Overturning.	Low	Operational areas will be continually monitored to ensure that machines are kept level and safe. Machines are static and no tracking is permitted. Slew lock pins are fitted and locked in place.	Low
7.	Accident resulting from defect or breakdown of the vehicle.	Low	If a defect is suspected then the machine must be stopped immediately and the problem reported to a Diggerland senior manager. A competent person in accordance with manufacturers recommendations must carry out maintenance of the machine.	Low

MARSHAL TRAINING AND SUPERVISION

- The Marshal must read and understand the Risk assessment.
- The Marshal must be placed in the care of, and instructed by a competent Marshal for a minimum of one day.
- The Marshal must become familiar with the machine and practice driving it before taking any visitors on the ride.
- A senior manager will monitor this training and an assessment of his/her competence will be made.
- Training records will be updated.
- Senior managers will continue to monitor the operation of the ride on a regular basis throughout each day and remind marshals of correct procedures where appropriate.

DAILY CHECKS AND MAINTENANCE

- Daily maintenance must be carried out in accordance with the manufacturers machine manual by a competent person.
- Daily checks must be carried out in accordance with the "Daily Check Sheet" by a senior manager.

Written by: Mark Robson Diggerland Safety and Engineering Manager 10/02/06