

Dragon Raiders Ltd

Dragon Raiders Activity Park, Gwynfryn Lodge, Llanystumdwy, Criccieth, LL52 0LR

Location: Quad bike route

Title : Quad Bikes	Date of Assessment : 12/07/2019	Risk Assessor : Paul Good
Risk Assessment Reference : RA03	People involved in making this assessment : Paul Good	
Task/ Process : Quad Bikes	People at Risk : Employees, Members of the Public, Children & Young Persons	

Hazard : Participants Not knowing task at hand, risks, activity area, vehicle, terrain.
Control Measures:
1. Induction of activity participants to site prior to commencing by trained instructor before using the equipment (DO's & DON'T'S). Only use set tracks which the instructor feels the participants are capable of handling. Brief the participants on the location and purpose of the safety waiting area.
2. Ensure all processes are in place including communication protocols, schedule calls, signed disclaimer by participant or consenting adult before trek, ensure that all hair is fastened back, hooded jackets are tucked in and that nothing is dangling.
3. Pre-start checks of ATV. Participants must complete a driving test on the training track prior to commencement of tour. Instructor to brief the group prior to commencing the session on steering left and right, the riding position and good technique.
4. No participant to operate ATV/Quad bike while under the influence of alcohol or drugs (including prescription medication that may inhibit judgment/reaction times).
5. Check and adhere to the manufacturer's minimum age recommendations for your ATV; information may be displayed on the machine and in operator manuals.
6. Safe speed always enforced at 10mph for all tracks - Child, junior and adult. Children's vehicles are restricted to no more than 10m MPH max.
7. Suitable and appropriate PPE (mandatory requirements): BSI approved helmets issued and must be worn, eye protection, long sleeved shirt, long pants, enclosed shoes/boots.
8. Participant who do not adhere to site rules as outlined in the induction will be asked to leave. e.g. participants who 'hang back' from the group and do not adhere to the 4 metre rule and speed up and abuse the throttle.
9. Full-time instructors first aid trained.
10. Instructors to ensure participants approach vehicles from the side and do not operate controls when first mounting the vehicle.
11. Instructor to control access to the track Instructor to ensure that there is only one vehicle in the change over area at one time.
12. No passengers are permitted on the ATV.
13. If participants hit a traffic cone they must stop the quad bike immediately and must not use the throttle forward to get out free of the traffic cone and must reverse. Indicating to other participants of your actions.

Hazard : Driving Vehicle in unfamiliar or varied terrain. Ascending and descending gradients, traversing slopes crossing ditches ruts and water - tipping of ATV resulting in head, crush and impact injuries.
Control Measures:
1. Supervision by instruction. Continually assess the terrain and risks, turn around or seek alternative route if the path becomes or looks unsafe. Instructors to monitor track conditions and suspend or cancel sessions when conditions become unsafe.

2. Monitor speed, drive within limitation of tracks/terrain, ATV/Quad bike capabilities and operator experience. Participants speed to be regulated by instructor.
3. Only complete what the least experienced member in the group can handle.
4. Maintain distance of at least four metres between ATV/Quad bikes and do not tailgate.
5. Slow down for cornering or approaching traffic / pedestrians / animals, and avoid sharp and erratic turns.
6. DO NOT ride ATV/Quad bike up steep slopes.
7. Ensure the hand brakes are applied before dismounting. If dismounting on slopes or near cliffs, dismount on up-hill side, turn off ATV/Quad bike and leave in gear and apply hand brakes.
8. Do not operate on side slopes on an angle, rather drive straight up or down inclines (must not exceed 22 degrees).
9. Do not continue any water crossings which may damage or flood the ATV.
10. One direction of travel at all times.
11. When riding across a slope, keep your weight on the uphill side of the ATV.
12. When going downhill, slide your weight backwards, select a low gear and use engine braking, reducing the need to use the brakes.
13. When going uphill, move your weight forwards and maintain a steady speed.
14. All participants must adhere the designated tracks as instructed and must not deviate. All traffic cones indicate a warning of potential danger including trees, tree stumps, boulders and uneven grounds and must be interfered with.

Hazard : Towing and or recovery Tipping of ATV resulting in head, crush and impact injuries.

Control Measures:

1. Recovery only to be undertaken by trainee instructor. If ATV is in a unsatisfactory condition DO NOT USE.
2. Phone or radio always carried by instructor for communicating.
3. Don't operate ATV/Quad bike, towing vehicle or move trailer while under the influence of alcohol or drugs (including prescription medication that may inhibit judgment/reaction times).
4. Select suitable trailer for chosen ATV/Quad bike, must be in good working order, with suitable roadworthy tyres.
5. Take extra care when loading onto trailers that have high axle clearance.
6. Use low gear, avoid wet slippery conditions during loading where possible.
7. Use good condition ratchet straps (minimum rated - 1,000 kg) to secure the machines onto the trailers. A minimum of 4 tie-down points is recommended.
8. Ensure ramps are compatible with trailer and weight of ATV/Quad bike, being securely in place/stable before loading/unloading bike.
9. Loading ramps need to be carried in trailer 'at all times' while ATV is being transported.
10. Correct posture when handling bikes, avoid strain injuries.
11. Clear area when loading/unloading.

Hazard : Collisions Minor to major injury due to collision, accident or debris, crushing injury from vehicle tipping.

Control Measures:

1. Instructors to ensure that participants continue to wear correctly fitted helmets with visor, overalls and appropriate footwear whilst on session.
2. Instructor to brief participants in all correct driving position prior to commencing session.
3. Instructors must not stand on the track where they may be hit by moving vehicle.
4. Instructor to perform a visual check on the track to remove any debris.
5. Once a week a head instructor to perform a check on the track to remove any debris.
6. Phone or radio always carried by instructor for communicating.
7. In the event that someone is seriously injured, DO NOT move the individual, leave the ATV switched on and dial 999 immediately. All instructors are first aid trained.
8. In the event of collision all participants are advised during the induction where possible to disengage from the vehicle, allowing sufficient distance from the vehicle from possibly tipping over onto them.

Hazard : Equipment Minor to major injury e.g. burns, crush and impact injuries.

Control Measures:

1. Hot Engine Parts - Instructor to check all guards are in place, regular vehicle checks to be carried out. Supervise participants climbing on and off vehicles to ensure they do not touch engine parts and instructor to ensure that when inspecting equipment are wearing PPE.
2. Body Parts trapped in vehicle - Instructor to supervise participants climbing on and off vehicles to ensure they do not touch engine parts and to ensure that all hair is fastened back, all hooded jackets are tucked in and that nothing is dangling.
3. Equipment misuses - Vehicles to be locked and keys to be kept in safe location whilst not in use. Only qualified staff to access the vehicles.
4. Brake Failure - Instructor to check prior to session as to the brakes working correctly, must not be used if the brakes are not working correctly.
5. Accelerator Sticking - Instructor to check prior to session that the accelerator is working correctly, a 7 point check carried out daily before use and vehicles must not be used if the accelerator is not working correctly.
6. Daily safety checklist must be carried out before use and vehicles.

Hazard : Lone working Injury, accident, inability to summon help.

Control Measures:

1. Mobile phone / 2 way radio always carried by member of staff.
2. Always tell someone where you are going to be working and when you would expect to return.
3. Time sheet to be completed at the start and end of each day.
4. Work in pair when possible.

Hazard : Weather conditions Adverse weather causing hypothermia, heat stroke, sunburn, struck by lightning and riding off track or into another.

Control Measures:

1. Cold and Wet - Instructor to make sure participants have suitable clothing prior to activity. Instructors to be wearing appropriate clothing in order to run the session safely.
2. Sun - Instructor must make the participants aware of dangers relating to sun i.e. Heat stroke and Sunburn.
3. Lightning and Storms - Instructor not to run session in any serious storm. If caught in a Lightning storm the instructor must cease the session and seek appropriate shelter.
4. Poor Visibility - Instructors to monitor track conditions and suspend or cancel sessions when conditions become unsafe. Instructors to ensure that the whole track is visible at all times.

Hazard : Refuelling Risk of fire or explosion. Vapour can cause irritation of the eyes, nose and throat and exposure to high concentrations can cause dizziness and unconsciousness

Control Measures:

1. Petrol to be stored in approved Jerry can container.
2. Fuel container stored in locked unit.
3. All vehicle refuelling to carried out at the start of the day by an instructor and not at the track. Engine must be cold to touch.
4. Filling to be done using pouring funnel or spout by trained operators only in designated "Safe" area. Ensure correct lifting technique for fuel containers.
5. Appropriate fire extinguishers must be available in decanting area.
6. Decant refuel only in designated ventilated area, ensure other vehicles are switched off and no use mobile phones during decanting.
7. Do not over-fill tank.
8. All spillages to be covered with sand.
9. No smoking and no naked lights in the vicinity.
10. Ensure that filler caps are securely in place and not leaking.
11. If clothing is splashed, change it immediately.
12. Containers should be securely fastened to prevent them falling over and returned to the secure unit.
13. Never use the mouth to siphon fuel.
14. No more than 50 litres petrol is being stored in secure unit.

Hazard : Tyre repair Injury from inappropriate manual handling ATV/Quad bike jacking techniques - tyre over inflation.

Control Measures:

1. Avoid over inflation – check manufactures recommendations.
2. Use correct tubeless repair kit.
3. Repair/plug tyre on ATV/Quad bike whenever possible, to prevent need for jacking and tyre handling.
4. Only jack ATV/Quad bike on even surfaces with engine off and park brake engaged.

5. Carry a can of Quick Fix Sealant (or similar) to seal puncture and re-inflate tyre until it is able to be repaired properly.

Hazard : Fire Death, burns, fire, breathing difficulties.

Control Measures:

1. Regularly check for build-up of vegetable matter around moving and heat areas on ATV/Quad bike; e.g. exhaust pipe, engine, gear box.
2. Use available fire extinguisher if required.
3. Ensure fire extinguisher is carried at all times.

Hazard : Clean-up and maintenance Invasive weeds, grass and mud - Limit the useful life of ATV/Quad bike could compromise safety for other participants.

Control Measures:

1. Thoroughly wash, blow with air compressor or wipe/brush down ATV/Quad bike.
2. Ensure all grasses, salt residue, mud, etc., is removed from under the ATV/Quad bike.
3. Check and refill fluid levels, oil and fuel.
4. Clean or replace air filter.
5. Organise to have any damage fixed or replaced.
6. Check brakes and throttle.

Hazard : Walking around site Terrain – unstable rocks, loose surface, muddy or sandy conditions - Slips, trips, falls, sprains, bruising, abrasions.

Control Measures:

1. Appropriate footwear and clothing (PPE).
2. Awareness – planning, communication processes in place.
3. Drinking water in ATV/Quad bike.
4. First aid kit in ATV/Quad bike and / or with participant (PPE).

Documents Associated with this Risk Assessment:

Review Date : 12/07/2020

Reviewer : Paul Good