Land-borne inflatable device operating requirements

Bouncy castles, inflatable slides et cetera
Operators of land-borne inflatable amusement devices (‘LBI’) offering rides to the public whether free of charge or for payment of a fee must meet the conditions set out below.

Background
WorkSafe New Zealand (WorkSafe) has responded to a number of incidents involving land-borne inflatable amusement devices that have resulted in injuries to members of the public, some of which have been serious.
These incidents are not isolated to any particular area or particular devices.

Note: LBIs are not currently defined as an Amusement Device in regulations and therefore are not required to be registered. However by design and intent of their use they provide amusement for members of the public.

Duties owed by owners of an LBI
As an operator of a LBI you have the following duties under the Health and Safety at Work Act 2015 (‘the Act’).
Operators of LBIs are to comply, as a minimum, with Sections 30 and 36 of the Act.
Section 30 applies if you are a pCBU:
1. A duty imposed on a person by or under this Act requires the person:
a. to eliminate risks to health and safety, so far as is reasonably practicable; and
b. if it is not reasonably practicable to eliminate risks to health and safety, to minimise those risks so far as is reasonably practicable.

Section 36 applies:
2. A pCBU must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking

In this Act, reasonably practicable, in relation to a duty of a pCBU means that which is, or was, at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters.
Taking all practicable steps

At a practical level, taking 'all practicable steps' means thinking about the ways that someone could be harmed (hazards) and doing what is reasonably practicable to ensure the safety of that person.

You are expected to understand those things that your industry knows about. You have to do what is ‘reasonable’, which means that you have to do what a reasonable and prudent person would do in the same situation. It is an objective standard determined by the standards and practices of the industry and society generally.

Whether a step is reasonable takes into account:

- how seriously someone could be harmed
- how likely the harm is
- how much is known about how to prevent it
- the availability and cost of safeguards.

Some of the practicable steps that a land-borne amusement device owner could take (though the steps are not limited to those listed below) are:

- Ensuring that your LBI complies with Australian Standard 3533.4.1 – 2005 Land-Borne Inflatable Devices.
- Undertake hazard and risk assessments: identifying site specific hazards (such as the terrain you are setting the ride up on) and other hazards. Determining how best to control those hazards:
  - eliminate the hazard if this is possible
  - if you cannot eliminate then isolate the hazard
  - finally, if you cannot eliminate or isolate then you must minimize the hazard.
- Ensure that all employees or persons operating the LBI are competent to operate the device.

WorkSafe’s expectations for conforming to AS3533.4.1 are as follows:

Control and supervision issues for inflatable devices

Manufacturer requirements:

- structural integrity
- stability
- ground suitability
- safety from falling
- access
- egress
- services and facilities
- maximum number of participants (load)
- participant minimum height
- participant maximum height
- participant maximum weight
- approved blower system (minimum number required)
- minimum number of fully trained and authorised on-duty operators
- approved tether system (minimum and maximum number of appropriately rated anchorage points and method)
- maximum specified wind speed/gusts
- accurate anemometer on site
- inspections (assembly, daily, annual, other) – all results logged
- supervision as per AS 3533.4.1
- operation as per AS 3533.4.1
- incident/accident reporting procedures and register kept for this
- all electric leads and plugs safely covered and secured to avoid any form of contact
- electrical supply to be via residual current protection device(s) or isolating transformer(s) – all electrical leads to be certified
- controlled rate of deflation
- minimum and maximum inflation air pressure and means of monitoring.

Activity controls including:

- admitting patrons to the inflatable in a controlled and safe manner, keeping the entrance free from obstruction at all times
- separation of larger or more boisterous users from smaller or more timid ones
- prevention of patrons from climbing or hanging on the containing walls
- prevention of inappropriate activities (eg somersaults and rough play)
- restrictions on the consumption of food, drink, gum
- the enforcement of correct riding position on slides
- how to attract the attention of the patrons
- in the case of slides, controlling spacing of patrons to avoid any collisions
- assisting patrons from the inflatable in a controlled and safe manner.

All operators are expected to be able to produce on request evidence to show that their inflatable device(s) meets the standard. Labels on devices asserting compliance without substantiating documentary evidence are unlikely to be acceptable.

Any operator of an LBI where an Inspector is satisfied that the operation of the device or the device itself is unsafe (likely to cause serious harm) they can issue a Prohibition Notice. A Prohibition Notice would prohibit the use of the LBI until such time as it is proven to be safe.
Responsibilities of event organisers

Event Organisers (are stakeholders and therefore) have responsibility for ensuring that all activities are compliant under the relevant sections of the Health and Safety at Work Act 2015.

Only operators who can provide evidence to event organisers that land-borne inflatable amusement devices meet the requirements of Australian Standard 3533.4.1 should be allowed to operate.

Responsibilities of owner/operators

WorkSafe has the expectation that operators will conduct hazard identification and risk assessment at each location prior to operation.

Site specific hazard identification would likely include but not be limited to terrain, weather and age and expected numbers of participants.

Information on safe use and manufacturer guidance is often supplied with the device at point of sale and should be referred to prior to operation. If an operations manual is not available from the manufacturer then a CPEng may be engaged to prepare a suitable document.

When will it take effect

The requirements outlined in this advisory will take effect immediately from the date of issue.