

Our Ref: APPARSA-2018-02

Electrical and Mechanical Engineering Group

12 November 2018

Attn: All Amusement Ride Operators and Ride Managers

Dear Sir / Madam

REMINDER: RIDE MANAGERS' DUTIES:

- **TO BE IN SINGAPORE AND BE CONTACTABLE AT ALL TIMES WHILE AN AMUSEMENT RIDE IS IN OPERATION**
- **TO REPORT ADVERSE INCIDENTS**

Duties of Ride Managers

1. A ride manager, in relation to an amusement ride, is a person appointed under Section 16 of the Amusement Rides Safety Act (Cap 6A) (the "Act") to **oversee, manage and supervise** the **daily** routine operation and maintenance of the amusement ride. He is required to discharge the duties as specified under Section 17, 19, 34 and 54 of the Act and Regulation 21 of the Amusement Rides Safety Regulations 2011 (the "Regulations").

Ride Managers must be present in Singapore

2. In order to adequately and effectively fulfil these responsibilities, we wish to remind all operators and ride managers that the ride manager appointed must necessarily be physically present in Singapore where the amusement ride under his charge is installed and operated. Further, the ride manager should remain contactable in Singapore at all times when the amusement ride is in operation.

Maintain a roster and ensure presence in Singapore even when 1 or more Ride Manager is appointed

3. Section 16 of the Act clearly requires that the holder of an operating permit in respect of an amusement ride shall appoint at least one suitably qualified and trained person as a ride manager. Therefore, for operators who intend to continuously operate throughout the year any regulated amusement ride, we advise that at least two ride managers be appointed to cover for each other to ensure that the amusement ride is supervised at all times. In addition, as required under Regulation 16(1)(c) of the Regulations, where there is more than one ride manager appointed in respect of the amusement ride, the operator shall, in addition to any duty imposed on him under the Act, maintain a roster showing the name of each such ride manager and the days and hours during which he is on duty.

Accurate reporting of Adverse Incidents

4. Under Section 54 of the Act, the person responsible for an amusement ride and ride manager of the amusement ride are required to inform the Commissioner of Amusement Rides Safety (the "Commissioner") the occurrence of any adverse incident in respect of the amusement ride. Since the implementation of the Act on 1 July 2011, BCA has communicated to operators and ride managers the standard reporting procedure that categorises adverse incidents and follow-up actions based on the severity of the incidents. The full lists of Category 1, 2 and 3 incidents are appended in Annex A, and can be found on BCA's website at

https://www.bca.gov.sg/AmusementRideSafety/adverse_incident.html.

5. When reporting the incident, please give full and detailed particulars of the incident so that BCA can determine if you have accurately categorised the incident. Please note that submitting false or misleading information to BCA is an offence under the Act.

Category 1 incidents involving hospital or professional medical attention

6. We wish to reiterate that an adverse incident in connection with an amusement ride is classified as a Category 1 incident where the injured patron is conveyed to a hospital for treatment. This is regardless of the means via which the injured patron is ferried to the hospital, i.e. whether by an ambulance, or otherwise. Please be reminded that operators and ride managers have the duty to notify the Commissioner as soon as practicable upon the occurrence of such Category 1 incident with an incident report submitted within 24 hours.

Changes in incident category after reporting

7. Should there be changes to the injured patron's condition that the operator or ride manager becomes aware of after reporting to the Commissioner, e.g. injured patron was initially given only first aid (Category 2 incident) but subsequently conveyed to hospital (Category 1), such changes in status of the incident shall also be reported to the Commissioner as soon as practicable.

8. Please convey the contents of this circular to all relevant staff in your organisation. Thank you.

Yours faithfully



TEO ORH HAI
GROUP DIRECTOR
ELECTRICAL AND MECHANICAL ENGINEERING GROUP
for COMMISSIONER OF AMUSEMENT RIDES SAFETY



Amusement Rides Safety Act (Cap 6A)

Appointment of ride managers

16.—(1) The holder of an operating permit in respect of an amusement ride shall appoint **at least one** suitably qualified and trained person as a ride manager to **oversee, manage and supervise** the **daily** routine operation and maintenance of the amusement ride.

(2) If any ride manager appointed under subsection (1) in respect of an amusement ride for any reason vacates his appointment —

- (a) both the holder of the operating permit and the ride manager shall each, within 14 days after the vacation of the appointment, notify the Commissioner of that fact; and
- (b) the holder of the operating permit shall —
 - (i) without delay appoint under subsection (1) another ride manager to substitute the first-mentioned ride manager; and
 - (ii) within 7 days thereafter, notify the Commissioner of that substitute appointment.

(3) If a ride manager who vacates his office is the only ride manager who has been appointed in respect of the amusement ride, the holder of the operating permit shall not commence or (as the case may be) shall immediately cease the operation of the amusement ride until he has appointed a substitute ride manager under subsection (2)(b)(i) and notified the Commissioner of the substitute appointment under subsection (2)(b)(ii).

(4) If the holder of an operating permit contravenes subsection (1) or (3), he shall be guilty of an offence and shall be liable on conviction—

- (a) to a fine not exceeding \$50,000 or to imprisonment for a term not exceeding 6 months or to both; and
- (b) in respect of a continuing contravention, to an additional fine not exceeding \$500 for each day or part thereof during which the contravention continues, and if the contravention continues after the conviction, the holder of the operating permit shall be guilty of a further offence and shall be liable on conviction of this further offence to a further fine not exceeding \$1,000 for every day or part thereof during which the contravention continues after conviction.

(5) If a ride manager who has vacated his appointment contravenes subsection (2)(a), he shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 3 months or to both.

(6) If the holder of an operating permit contravenes subsection (2)(a) or (b)(ii), he shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 3 months or to both.

Duties of ride managers in respect of operation of amusement ride

17.—(1) every ride manager of an amusement ride shall —

- (a) take all reasonable steps and exercise all due diligence to oversee, manage and supervise the daily routine operation and maintenance of the amusement ride in accordance with—
 - (i) the conditions of the operating permit issued in respect of the amusement ride;
 - (ii) the prescribed requirements; and
 - (iii) any direction given by the Commissioner in respect of the operation of the amusement ride; and
- (b) carry out with such other duties as may be prescribed.

(2) If any ride manager contravenes subsection (1)(a) or (b), he shall be guilty of an offence and shall be liable on conviction —

- (a) to a fine not exceeding \$50,000 or to imprisonment for a term not exceeding 6 months or to both; and
- (b) in respect of a continuing contravention, to an additional fine not exceeding \$500 for each day or part thereof during which the contravention continues, and if the contravention continues after the conviction, the ride manager shall be guilty of a further offence and shall be liable on conviction of this further offence to a further fine not exceeding \$1,000 for every day or part thereof during which the contravention continues after conviction.

Duty to notify Commissioner of contravention of Act in relation to operation of amusement ride

19.—(1) If the holder of an operating permit or any ride manager knows or ought reasonably to know of any contravention of this Act relating to the operation of the amusement ride, it shall be the duty of such person to notify the Commissioner, as soon as practicable, of the contravention.

(2) If any person to whom subsection (1) applies contravenes that subsection, he shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 3 months or to both.

(3) It shall be a defence in any prosecution for a contravention of subsection (1) for the person charged to prove to the satisfaction of the court that he did not know and could not reasonably have discovered the contravention referred to in the charge.

Relocation of amusement ride

34.—(1) The holder of an operating permit in respect of an amusement ride that is capable of being relocated shall not relocate or cause that amusement ride to be relocated unless he has given the Commissioner notice in writing of his intention to so relocate the amusement ride —

- (a) in such form and manner as the Commissioner may require; and
- (b) of not less than the prescribed period before the date on which the relocation is to be carried out.

(2) Upon receiving a notice under subsection (1), the Commissioner may, by notice in writing —

- (a) require the holder of the operating permit to furnish, within the time specified in the notice, such further information concerning the relocation of the amusement ride as the Commissioner may specify before the relocation works are carried out;
- (b) impose such conditions or give such directions as the Commissioner thinks fit subject to which the relocation works are to be carried out; or
- (c) if the Commissioner is of the opinion that the premises to which the amusement ride is to be relocated are unsafe or unsuitable for the operation of the amusement ride, prohibit the relocation of the amusement ride.

(3) If the holder of the operating permit —

- (a) contravenes subsection (1); or
- (b) fails to comply with any requirement of the Commissioner under subsection (2)(a) or with any condition, direction or prohibition that is imposed, given or made by the Commissioner under subsection (2)(b) or (c) (as the case may be),

he shall be guilty of an offence and shall be liable on conviction —

- (i) to a fine not exceeding \$50,000 or to imprisonment for a term not exceeding 6 months or to both; and
- (ii) in respect of a continuing contravention or failure to comply, to an additional fine not exceeding \$500 for each day or part thereof during which the contravention or failure to comply continues,

and if the contravention or failure to comply continues after the conviction, the holder of the operating permit shall be guilty of a further offence and shall be liable on conviction of this further offence to a further fine not exceeding \$1,000 for every day or part thereof during which the contravention or failure to comply continues after conviction.

(4) The holder of the operating permit shall ensure that no relocation works are carried out in respect of an amusement ride except under the supervision of —

- (a) the ride manager of the amusement ride; or
- (b) in the case of a major amusement ride, a qualified person.

(5) It shall be the duty of —

- (a) the holder of the operating permit;
- (b) any person who is directly engaged in the carrying out of the relocation works; and
- (c) the ride manager or qualified person (as the case may be) supervising the relocation works,

to ensure that the relocation works are at all times carried out in accordance with —

- (i) where applicable, the design and specifications and the proposed installation method and programme, as authorised by the installation permit that has been issued in respect of the amusement ride;
- (ii) the prescribed requirements; and
- (iii) any condition imposed or direction given by the Commissioner under subsection (2) in respect of the relocation works.

(6) Where, in relation to the relocation of an amusement ride, the Commissioner is of the opinion that —

- (a) any of the requirements under subsection (4) or (5) has not been or is not being complied with; or
- (b) the relocation works are dangerous or liable to pose a danger to persons who are employed in connection with the relocation works, or who are using or operating, or in the vicinity of, the amusement ride,

the Commissioner may direct the holder of the operating permit in respect of the amusement ride or the person directly engaged in carrying out the relocation works to —

- (i) cease the relocation works or part thereof, either immediately or within such time as may be specified by the Commissioner; and
- (ii) where necessary, take, at the expense of the person to whom the direction is given, such remedial measures as the Commissioner may require,

and such relocation works or part thereof, as the case may be, shall not be resumed without the consent in writing of the Commissioner.

(7) The Commissioner may, upon an application made by the holder of the operating permit in such form and manner as the Commissioner may require, grant his consent for the relocation works or any part thereof to resume if he is satisfied that any such relocation works or part thereof, if allowed to resume —

- (a) will comply with the requirements under subsections (4) and (5); and
- (b) will not pose a danger to any person.

(8) Upon the completion of the relocation of an amusement ride —

- (a) the ride manager or qualified person who supervised the relocation works shall inspect the amusement ride and issue a certificate stating that, in the opinion of the ride manager or qualified person (as the case may be) —

- (i) the relocation works have been properly carried out in accordance with —
 - (A) where applicable, the design and specifications and the proposed installation method and programme, as authorised by the installation permit that has been issued in respect of the amusement ride;
 - (B) the prescribed requirements; and
 - (C) any condition imposed or direction given by the Commissioner under subsection (2) in respect of the relocation works; and
- (ii) the amusement ride, as relocated —
 - (A) conforms to the prescribed requirements; and
 - (B) is in a safe working condition and fit for operation; and

- (b) the holder of the operating permit —
 - (i) shall, in the case only of a major amusement ride, apply for and obtain from the Commissioner of Civil Defence, in accordance with section 36, a certificate of compliance in respect of the fire and rescue management system of the amusement ride; and
 - (ii) shall not, in any case, resume operation of the amusement ride unless he has, in accordance with the prescribed requirements, submitted to the Commissioner the certificate issued by the ride manager or qualified person (as the case may be) under paragraph (a).

(9) Where —

- (a) a person to whom a direction has been given by the Commissioner under subsection (6) —
 - (i) fails to comply with the direction; or
 - (ii) resumes the relocation works without the consent in writing of the Commissioner; or
- (b) the holder of an operating permit, in contravention of subsection (8)(b)(ii), resumes the operation of an amusement ride without the consent in writing of the Commissioner,

he shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding 12 months or to both.

Reporting of adverse incidents

54.—(1) The person responsible for an amusement ride and the ride manager of the amusement ride shall, as soon as practicable upon the occurrence of any adverse incident in respect of the amusement ride, inform the Commissioner of such occurrence.

(2) Where the Commissioner receives any information under subsection (1) or becomes aware of the occurrence of any adverse incident in respect of an amusement ride through any other means, the Commissioner may —

- (a) direct the person responsible for the amusement ride to immediately close or cordon off the amusement ride and take such measures as the Commissioner may specify to —
 - (i) safely and expeditiously rescue and evacuate all patrons and other persons who are on the amusement ride;
 - (ii) protect the safety of persons who are in the vicinity of the amusement ride; and
 - (iii) otherwise address the adverse incident; and

- (b) by notice in writing require the person responsible for the amusement ride to investigate into the adverse incident and submit a report of his findings and recommendations to the Commissioner within such time as the Commissioner may specify.
- (3) The Commissioner may also in any notice given under subsection (2)(b) require the person responsible for the amusement ride to submit to the Commissioner in such form and manner and within such time and for such period as the Commissioner may specify, a report containing such information as the Commissioner may require concerning —
- (a) the measures that the person responsible for the amusement ride has taken pursuant to the direction given to him under subsection (2)(a);
 - (b) the results of the measures so taken; and
 - (c) any other matter as the Commissioner thinks necessary or relevant in the circumstances.
- (4) The Commissioner may give a direction under subsection (2)(a) in writing or in such other form or manner as he thinks fit in the circumstances of the case.
- (5) Any person who —
- (a) contravenes subsection (1); or
 - (b) fails to comply with —
 - (i) any direction given to him under subsection (2)(a); or
 - (ii) any notice given to him under subsection (2)(b), shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$50,000 or to imprisonment for a term not exceeding 6 months or to both.

Amusement Rides Safety Regulations 2011

Duties of operators of amusement rides

16.—(1) The operator of an amusement ride shall, in addition to any duty imposed on him under the Act —

(c) where there is **more than one ride manager appointed** in respect of the amusement ride, **maintain a roster** showing the name of each such ride manager and the days and hours during which he is on duty;

Duties of ride managers

21.—(1) For the purposes of section 17(1)(b) of the Act, every ride manager appointed in respect of an amusement ride shall —

- (a) before the amusement ride is open for use by members of the public each day, ensure that —
 - (i) a thorough inspection of the amusement ride is carried out in accordance with the operations manual of the amusement ride; and
 - (ii) the amusement ride is in a safe working condition;
 - (b) notwithstanding the requirements specified in the operations manual of the amusement ride, ensure that the inspection of the amusement ride carried out under sub-paragraph (a) includes checks on the structure, mechanical and electrical systems, seats and chassis, controls, safety devices, patron restraints, drives and such other parts of the amusement ride that are necessary for the safety of patrons using the amusement ride;
 - (c) ensure that only persons who have been sufficiently trained to operate the amusement ride are permitted to operate the amusement ride;
 - (d) ensure that no person is permitted to operate the amusement ride or assist in the operation of the amusement ride unless such person has been properly instructed on his role in the operation of the amusement ride, the risks to which he may be exposed, the measures that he has to take and the emergency procedures that he has to follow in the event of an adverse incident occurring in respect of the amusement ride;
 - (e) ensure that the amusement ride is operated at all times in accordance with the operational procedures referred to in regulation 16(1)(e);
 - (f) keep and maintain an operational log book in such form as the Commissioner may require, which shall be updated daily, containing the following information concerning the operation of the amusement ride:
 - (i) the dates on which the amusement ride is in operation;
 - (ii) the names and duties of the persons engaged in the operation of the amusement ride;
 - (iii) the operating hours of the amusement ride;
 - (iv) the inspections that are carried out on the amusement ride in accordance with the recommendation of the designer or manufacturer of the amusement ride or any qualified person appointed under section 6(2)(a) or 24(2)(a) of the Act or regulation 14(2)(a) in respect of the amusement ride;
 - (v) details of every inspection of the amusement ride carried out under sub-paragraph (a);
 - (vi) details of any adverse incident occurring in respect of the amusement ride and the measures taken for the purposes of addressing such adverse incident;
 - (vii) details of any practice carried out for the taking of measures to address any occurrence of an adverse incident in respect of the amusement ride;
 - (viii) such other information as the Commissioner may require;
 - (g) take all reasonable measures and precautions to ensure that any patron using the amusement ride does not take with him or on his person any item that is likely to prejudice the safe operation of the amusement ride or the safety of other patrons using the amusement ride; and
 - (h) take all reasonable measures and precautions to ensure that the following persons are not allowed to use the amusement ride:
 - (i) any person who appears to be under the influence of alcohol, drugs or any intoxicating substance;
 - (ii) any person who appears to be suffering from a contagious disease;
 - (iii) any person who appears to be suffering from any physical or mental condition and whose presence on the amusement ride is likely to prejudice the safety of that person or the safety of other patrons using the amusement ride; and
 - (iv) any person who is prohibited from using the amusement ride by virtue of any notice displayed under regulation 16(4).
- (2) In performing his duties under section 17 of the Act in relation to the maintenance of the amusement ride, the ride manager shall —
- (a) keep and maintain a written schedule for the periodic maintenance, in accordance with the maintenance requirements referred to in regulation 16(1)(d)(i) or (ii), of all parts of the amusement ride, stating the intervals between inspections, lubrication, adjustments, replacements and any other works as recommended or

- required by the designer or manufacturer of the amusement ride, by any qualified person appointed under section 6(2)(a) or 24(2)(a) of the Act or regulation 14(2)(a) in respect of the amusement ride or by the Commissioner;*
- (b) ensure that the periodic maintenance of the amusement ride is carried out in accordance with the recommendation or requirement as referred to in regulation 16(1)(d)(i) or (ii) and keep and maintain a written schedule for the carrying out of such periodic maintenance, stating the intervals between each occasion on which the components of the amusement ride are to be inspected, lubricated, adjusted or replaced, or on which any other work is to be carried out on the amusement ride in connection with such periodic maintenance; and*
 - (c) keep and maintain a maintenance log book in such form as the Commissioner may require, which shall contain —*
 - (i) a record of —*
 - (A) the periodic inspections of, and the carrying out of any maintenance work on, the amusement ride; and*
 - (B) the servicing, repair or replacement of any component of the amusement ride (including a statement of the condition of such component); and*
 - (ii) a report of any test carried out on any component of the amusement ride.*
- (3) Where required by the Commissioner, the ride manager shall make available for inspection by the Commissioner or any enforcement officer —*
- (a) any operational log book referred to in paragraph (1)(f);*
 - (b) any maintenance log book referred to in paragraph (2)(c); and*
 - (c) any other document that relates or is relevant to the daily routine operation or maintenance of the amusement ride.*

Annex A**➤ Category 1**

Inform the relevant authorities immediately by telephone when there is an adverse incident under Category 1. The ride should be shut down immediately and an incident report must be submitted within 24 hours.

Area	Category 1 Incidents	Authority To Inform
Death	<p>Death occurring in connection with the ride (such as object flying off or falling from the ride).</p> <p>Death of employee or agent while installing, testing, maintaining or operating the ride.</p>	SCDF, Police & BCA (MOM for death or injury of employee)
Medium to serious ride-related injuries	Injury occurring in connection with the ride that requires hospitalisation or treatment by medical professionals.	
Evacuation using reach equipment	Static evacuation using height rescue equipment such as boom lifts or rappelling.	
Fire	Any occurrence of fire on the ride or within the boundary of the ride including the spread of smoke or any other harmful emission arising from such fire.	
Failure of ride	<p>Failures where safe operation of the ride are compromised. E.g.:</p> <ul style="list-style-type: none"> ▪ Cracks at load bearing parts ▪ Cracks in welds ▪ Any ground settlement ▪ Movement or deflection beyond design ▪ Breakage of lay wires or strands beyond those allowed by standards and manufacturer's recommendation ▪ Kinks, or other damages that affect the strength of haulage rope ▪ Physical damage or failure of bungee cord during operation ▪ Failure of any load-bearing bolt ▪ Dents or bends at truss elements ▪ Any drive system, control and safety devices 	BCA
Derailment	Derailment / detachment from track or hauling system of any patron carrying unit, such as roller-stocks, capsules or seats.	
Collision	Collision of cars with one another or with other structures (other than where such collision is intended such as bumper cars), resulting in major damage to the cars such as dislodgement, bending or breakage of parts or components.	

Restraint system failure during operation, testing or inspection	Passenger protection system – ride restraint failure during operation, testing or inspection.	
--	---	--

➤ **Category 2**

For Category 2 adverse incidents, you are required to inform BCA immediately and an incident report should be submitted within 24 hours.

Area	Category 2 Incidents	Authority To Inform
Minor ride-related injuries	Localised scrapes or superficial cuts, nose or ear bleed, sprains and injuries needing only first aid treatment.	BCA
Collision	Collision that results only in minor damage of vehicles such as dents.	
Unintended ride stoppage	Any unintended ride stoppage of more than 10 min with patrons on board the ride. This stoppage can be due to inclement weather, equipment malfunction or any other factor.	
Contact with safety device during use of bungee device	Any contact by a patron with a safety device during the patron's use of a bungee device, other than in the course of normal operation of, or normal disembarkation from, the bungee device.	

Note: Any ride-related injury to employee(s) using or operating, or in the vicinity of, the ride is a reportable incident. The severity shall be classified as Category 1 for medium to serious ride-related injuries or Category 2 for minor ride-related injuries.

The following examples aim to provide clearer guidelines pertaining to ride-related injuries. Please note that this is not an exhaustive list.

- a. *Reportable ride-related injuries sustained by employees of an amusement ride - Examples include injuries sustained while the employee is performing testing or demonstration of the ride. Injuries sustained by employees due to slips or falls while they are in the process of carrying out maintenance works of the amusement ride will not be classified as reportable incident(s).*
- b. *Other reportable ride-related injuries – Examples include:-*
 - i. *injuries sustained by a person caused by an object dislodged from a patron who is taking the ride or from any part of the ride;*
 - ii. *injuries sustained by a patron who is disembarking from a ride due to a ride evacuation at any location of the ride; and*
 - iii. *injuries sustained by a patron due to slips or falls while he/she is in a queue line for an amusement ride.*

➤ **Category 3**

Any other adverse incidents not listed under Category 1 or 2 shall be classified under Category 3. Category 3 incidents shall be reported to BCA within seven (calendar) days of occurrence via an incident report.

Examples include:

- *Vomiting or nausea experienced by the patron*
- *Loss of electrical power to the facility*
- *Evacuation without using reach equipment. This evacuation can be conducted while the ride is still in operation i.e. off loading patrons from the ride via path provided for evacuation access.*
- *Evacuation at the normal discharge location (egress) of the ride*
- *Other malfunctions of the amusement ride*