Facility Guidelines and standards

PREAMBLE

The Facilities Rules are intended to provide the best possible environment for competitive use and training. These Rules are not intended to govern issues related to the general public. It is the responsibility of the owner or controller of a facility to provide supervision of activities of the public.

POOL SANITATION

In order to protect the health and safety of persons using swimming pools for the purposes of recreation, training and competition, the CMAS draws attention to deficiencies, which may exist in swimming pools as a result of non-observance of medical and sanitary principles and requirements. Diseases of the skin, respiratory and intestinal systems can often be avoided by adopting proper sanitary measures. It is not enough to be sanitary, however, as pool water must also meet aesthetic requirements.

Recommended bacteriological and chemical criteria for water in swimming pools:

Colony count at 21 ± 0.5°C (69.8 ± 0.9°F): 100/ml - - 24h-48h-72h, Colony count at 37 ± 0.5°C (98.6 ± 0.9°F): 100/ml - - 24h-48h,

Coliform count at 37 ± 0.5°C (98.6 ± 0.9°F): untraceable in 100 ml after 24-48h.

Presumptive E.Coli at 37 ± 0.5°C (98.6 ± 0.9°F): untraceable in 100 ml after 24-48h.

Pseudomonas Aeruginosa at 37 ± 0.5°C (98.6 ± 0.9°F): untraceable in 100 ml after 24-48h.

Membrane filtration shall be used. After filtration preserve the filter for 2-4 hours in Trypticase-soy-agar at 37°C (98.6°F).

Afterwards the filter shall be transferred into a culture medium with restrictive influence.

AUTOMATIC OFFICIATING EQUIPMENT

The minimum installation: Please refer to World Tournament Director for system requirements, also a back up system of stop watches for game and penalty timing will need to be provided

SWIMMING POOLS

The playing area shall be a swimming pool or part thereof. The playing area shall be 12m-15m wide and 21m-25m long, provided that the minimum playing area is 300 square metres.

The pool bottom must be flat or gently sloping with a maximum gradient of 1 to 20. The depth of the water shall be between 2m and 3.65, with a ± 10% allowance with

the approval of the world tournament director. Pools shallower than 2m must be considered fast and safe by the world tournament director. The end lines must be of a solid nature, i.e. pool walls

A side line may either be a pool wall or sturdy barrier. The barrier should have a minimum height of 300 mm

It is also desirable to have a moveable bulkhead of the types used in short course swimming to be placed at the 25 metre point of the swimming pool.

Dimensional Tolerances.

+ or – 50mm

Depth -A minimum depth of 2.00 metes to a maximum depth of 3.65 meters

Walls

The pool must have 4 solid walls and the maximum radius of 50 mm where the side wall and bottom of the pool intersect. A 90 degree right angle at this junction is preferred

Lane Ropes

N/A

Starting Platforms N/A

Water Temperature shall be 26° - 28°. During competition the water in the pool must be kept at a constant level, with no appreciable movement. In order to observe health regulations in force in most countries, inflow and outflow is permissible as long as no appreciable current or turbulence is created.

Lighting - Light intensity over 80% of the surface area of the pool shall not be less than 600 lux

Court Markings – Refer to the CMAS rules for Underwater hockey

AUTOMATIC OFFICIATING EQUIPMENT

Starting devices

Refer world tournament director Guide lines and standards CD

Touch panels for Automatic Equipment

NA

SOUND EQUIPMENT AND PRESENTATION STANDARDS

The sound equipment should include, at minimum:

Amplifier-mixer system;

A cassette deck and back up units;

High quality microphones and microphone stations for announcements and ceremonies;

Good quality air speakers of size, number and placement to obtain uniform clear sound to both the field of competition area and audience;

UW speakers for clear and uniform underwater sound above all interfering noise and at levels acceptable to the competitors;

Isolation and impedance matching transformer systems for the UW speakers if speakers with metallic shells are used;

Sound volume (decibel) meter for monitoring music sound levels;

Patch cords for interconnecting equipment properly, speaker extension lines adequate for placing speakers for optimal sound distribution;

Fusing systems as needed to protect speakers and other equipment;

Grounding lines to ensure safe grounding of all equipment;

Safety materials to minimize potential of injury to person or equipment from stepping on or tripping over electrical or speaker lines.;

A stopwatch;

Tools and meters as needed for initial special hookups and emergency repairs.

Systems for communication between officials and sound desk;

A system for monitoring underwater sound continuously.

Video Equipment

For the underwater filming of a hockey match the following items are required;

- 3 in water cameras, 2 of them fixed and 1 moveable, operator controlled
- 1 surface mounted camera, operator controlled.
- Mixing and recording control room.
- Recording equipment to record to DVD and Video, capable of copying to PAL, NTSC and SEACAM formats.
- 5 monitors to broadcast games to spectators around the pool deck
- Commentators monitor with pa access

Miscellaneous items

- Anti doping control rooms
- Media room with fax, phone and data point facilities
- First aid equipment
- Life guards
- Secure teams equipment areas
- Office area with fax, phone and data point
- Goal trays as per CMAS underwater hockey rules
- Grand stands for public viewing
- Secure Referees change area