

**ANNEXURE D  
SAFETY GUIDELINES  
FOR  
WATER-BASED ACTIVITIES**

# 1. Safety Guidelines for River Rafting

## Introduction

River Rafting has been a popular adventure sport over for almost 30 years. For a long time, this sport was limited to Himalayan rivers (popular destinations Rishikesh, Manali & Sikkim) because these rivers are glacier-fed and thus rafting can be done any time of the year.

In contrast, river rafting on peninsular rivers is limited to those which have large dams, from which water is released for agricultural purpose at a fixed time of the day. The small time window immediately after the water is released is utilised for River Rafting. Examples of these sites are Dandeli (Karnataka) and Kundalika (Maharashtra).

Locations like Kundalika are becoming increasingly popular because of their proximity to places like Mumbai and Pune. It is now possible for someone to experience River Rafting in a one-day trip from Mumbai. Proper safety procedures are essential for River Rafting.

## Information required for Leaders

- Activity objectives
- Names and qualification of Leadership Team, along with Leaders to Participants ratio.
- Back-up plans which can be used in emergencies
- Recommended list of documents in Chief Leader's Folder:
  - Compliance documents (registration documents, permits, etc.)
  - Personal information including medical information of participants and Leadership Team
  - Undertaking from Participants
  - Risk assessment and mitigation done for venue/area and the activity
  - Feedback forms
  - Emergency Response / Evacuation Plan
  - Critical Incident Report form
  - Medicines used report form
  - Equipment logs and equipment damage report form
  - Information related to outsourced Service Provider including copy of contract document
- Criteria of exclusion that are relevant to Adventure Activity
  - Intoxicated person
  - Person who refuses to follow safe practices
  - Person with medical issue that will pose a risk to the participant
  - Person who refuses to wear safety gear
  - Pregnant women

## Qualifications of Leaders

- Formal training
  - The River Guide must hold valid certification of competency from NIWS or a national governing body recognized by the MOT. He must also hold a Life Saving Technique (LST) certification from NIWS or an equivalent certification from respected national governing body.
  - A minimum 16 hour (2 day) First Aid and CPR (Cardio Pulmonary Resuscitation) valid certificate from a recognized National or International body and a certificate from the operator that the individual “has experience of minimum 2 years in assisting in the particular activity and is independently capable of guiding groups and carrying out rescue operations”. A WRT (White water Rescue Technician) certification is highly recommended for guides on all grade IV and above rivers.
- Certifications (check if current or lapsed)
  - Chief Leader to have current certification in First Aid & CPR from reputed organisation.
- Experience
  - Experience of leading groups on adventure activities
  - Outdoor pursuits on personal trips.
  - Handling emergencies, both medical and non-medical
- Skills
  - Ability to supervise members of Leadership Team
  - Ability to create a safe environment during the expedition; context: instructing participants on what to do and what not to do, and monitoring for safety throughout the expedition
  - Conservative approach in risk management while handling emergencies
  - Group management skills
  - Ability to be assertive when taking decisions, especially in preventing risky situations and while handling emergencies
  - Proficiency in best practices for environmental safety

## Equipment:

Mandatory Requirement - There should always be at least two crafts on the water during operation. Out of these, both can be rafts/ kayaks or a combination of one raft and a safety kayak.

- Technical equipment

Refer to relevant SOP created by Organisation for the specific activity site for selecting equipment. The SOP should contain information regarding selection, maintenance and lifespan of rafts, paddles, life jackets, kayaks etc.

- First aid kit
- Helmet for all participants as well as leaders.
- All rafts must have a safety line going all around the raft. )
- Besides, a bow-line and a stem line are also preferred.)
- Pump and Raft Repair Kit, Throw bag, Bailing bucket
- Appropriate footwear - sandals are recommended. Nobody should be allowed to be barefoot.
- Appropriate clothing - no loose or hanging apparel, jewellery or accessories.
- Cell phone with emergency contacts stored

Recommended -

- Walkie-talkie sets

## **Pre-activity actions by Leaders**

- Review of medical history of participants to ensure that preventive and curative aspects are in place (e.g., medicines in duplicate in known locations)
- Check all raft(s) and other equipment for any damage.
- Emergency backup plan

## **Service Providers**

- Chief Leader to review contract signed with outsourced Service Provider
- Chief Leader to review the qualification of all staff members of the outsourced service provider, and their ability to lead the groups on such expeditions
- Chief Leader to review respective roles and responsibilities with staff of outsourced Service Provider
- Chief Leader to ensure that all the safety guidelines and SOPs prepared for safe conduct of the expedition are clearly communicated to outsourced Service Provider and ensure implementation of the same.

## **Briefing to Participants:**

- Description of Adventure Activity
- Check any fresh health issues of the entire team
- Inherent risk in the expedition & consequences if process is not adhered to: a Leader to clearly state this to the whole group

- Responsibility of Participants towards their own safety and others 'safety: a Leader to clearly state the expectations from all in the context of safety
- Mandatory practices

For Leadership Team members: role modelling, environment-safe practices

For Participants: all instructions to be followed

- Safety precautions for management of risks

Leaders to double check every important thing

Leaders to double check all personal equipment

Rescue plan to be kept ready

Leaders to monitor the group at all times

- Participant training, if required: for such expeditions using of ice axe, sleeping bag, tent manners etc to be explained to participants during the briefing
- Policy of 'no alcohol, tobacco and drugs': Leaders to ensure that this is followed strictly by everyone in the whole group
- Leaders 'authority to stop activity when necessary: Leaders to be assertive about this when safety is involved (e.g., environmental factors, damage to equipment, uncooperative behaviour of Participants, etc.)
- Minimisation of environmental impact
- No littering
- No breaking branches of shrubs and trees
- No damage to nearby cultural structures like shrines
- Do's and Don'ts for activity as well as for emergencies
- Leader to make clear expectations from everyone in emergency situations well as for emergencies

## **Instructions for activity / operations**

All participants and leaders must wear a life jacket at all times while in the water. The life jackets must have adequate buoyancy (minimum of 6.14 kg. but preferably 9 to 10 Kg.), must meet the specification of US coast guard type III or V. Inflatable and the "keyhole" type jackets are not recommended. Guides must ensure that the life jackets are worn 'snugly' before the trip starts.

Helmets are mandatory for rafters irrespective of whether the rafting takes place through rapids or flat water. Helmet should be of plastic or carbon fibre, offering adequate protection for forehead and back of head against shocks. Such helmets have EN1385 standard, which is mandatory.

Non-swimmers should not be allowed on rapids above Grade III.

Guides/ Expedition leader must ensure that a thorough safety briefing, covering all pertinent details for a particular trip, is given before each trip. The trip leader must ensure that guests are in suitable attire (bulky clothes,

sarees, turbans, neck ties, long skirts and three piece suits are to be totally avoided).

People suffering from any serious ailments, weak heart conditions, epilepsy and expectant mothers should not be allowed on raft.

Trip must be timed in such a manner to finish it at least an hour before sunset.

Anybody who has consumed alcohol (in any form or quantity) or illicit drugs at least six hours prior to the expedition must not be allowed to get on the craft.

The river/ beach must be kept clean.

Nothing should be done to offend the local people or to harm the flora and fauna of the area.

It is mandatory for all outfitters and guides to maintain a log book. It should contain the details of the trip viz. number of boards/ passengers, river map, river geography- including gradient, rapids and its height/elevation, water level, velocity- gadgets on board, accident or untoward incidents or injuries etc. The outfitter and guide log books must be signed by the senior guide/ Expedition leader after every expedition.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices](#).

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2](#).

## **Wind up**

- Inspect equipment, pack equipment according to norms. Open all knots that are used for joining tapes or ropes on the location itself and then store the equipment.
- Equipment that needs repairs or is to be discarded should be tagged (with a note on the nature of damage) and kept separate
  
- Do not pack wet gear like ropes and harnesses
- Fill up all the documents required
- Review and feedback (Participants & Leadership Team)

Communicate to the Organisation's office any subjective feedback that has not been recorded in paperwork.

- end of guideline -

## 2. Safety Guideline for Kayaking & Sea kayaking

### Introduction

Kayaking is amongst the most popular water sports activities globally. Negotiating rapids, paddling in open water, lakes or the sea in is an exhilarating experience requiring skill and stamina. Kayaks are normally decked and paddled with two-bladed paddles by paddlers sitting inside an enclosed cockpit. Spray decks are used to minimise water into the cockpit, providing better protection for paddlers and reducing the likelihood of hypothermia on cold water rivers. Safe use of spray decks requires training.

Training in rescue procedures is required for all kayaks and techniques vary according to craft type and environment.

Since it is a dynamic sport, instructors and guides must be highly qualified and equipment used should be of the highest standard.

There are several types of kayaks:

a) Recreational kayaks: Short (about 3 m for singles) and wide, with large open cockpits. They are suited to flat, sheltered waters only.

b) Touring kayaks: 3.5 to 4.5 m in length, often have bulkheads and hatches. They are suited to open waters such as estuaries and bays, but not the open sea.

c) Sea kayaks: 4.5 to 6 m in length, with bulkheads and hatches, hands-free pump systems and other equipment and are intended for open sea conditions.

d) Whitewater kayaks: There are several types of whitewater kayaks, mainly river runner, creek and freestyle - all with spraydecks.

e) Sit on top (SOT) craft: SOT kayaks are a popular choice among recreational paddlers. Recovery after a capsize is easy; right the boat and re-board. On the other hand, paddlers are more exposed to the elements and more care is needed to minimise sunburn and hypothermia. Damaged or loose fittings and hatch covers or hull damage may allow the entry of water: these craft are not unsinkable:

i) Recreational types single and double, are fairly short and wide. Being susceptible to wind, they are suitable only for flat sheltered water.

- ii) Touring SOTs are longer and able to cope with estuary and bay conditions. They are favoured by the kayak fishing community.
- iii) Seagoing SOTs have performance and features similar to sea kayaks but without the enclosed cockpit.
- iv) Specialist SOTs for whitewater and surf use are available. On open water, tethers can prevent separation of craft and paddler after capsize. There is the danger of entanglement.
- f) Inflatable kayaks: Inflatable kayaks range from little more than toys to kayaks for use on serious whitewater.

## **Guides / Instructors**

- a) Lead instructors for water sports activities should, as a minimum, hold the following:
  - i) A minimum 16 hour (2 day) first aid certificate provided by a recognized and qualified provider including CPR (Cardio pulmonary Resuscitation).
  - ii) Qualification from a Recognized National or International body for the particular kayaking activity and a certificate from the operator that the individual “has experience of 2 years in assisting in the particular activity and is independently capable of guiding groups and carrying out rescue operations”.
  - iii) A logbook containing authenticated records of kayaking experience.
- b) Other guides accompanying the trip should be skilled to a high level in conducting the activity, rescue and life saving techniques and First Aid/C.P.R.
- c) All Instructors and Guides should have the ability to carry out the following and ensure that this is done before/ during the trip:
  - i) Ability to communicate clearly and deliver a comprehensive safety briefing before starting the activity is mandatory.
  - ii) Gauge participant’s ability to participate in kayaking activity and their ability to do the specific stretch that they are being taken on.
  - iii) Ask participants for relevant medical history.
  - iv) Check environmental conditions (weather, tide, river levels).



- v) Conduct systematic hazard management checks to ensure that hazards (sources of harm) are identified, assessed, and either eliminated, isolated or minimized on an ongoing basis.
- vi) Headcount of all participants before, during and at the end of the trip.
- vii) Be vigilant for changes in the physical or psychological state of participants.
- viii) Set an appropriate pace for the group and take rest as necessary.

## **Equipment**

1. Kayaks (should be a good quality stable craft, able to withstand all foreseeable forces, allow for easy exit upon capsize, footrests should not allow feet to become entrapped, should not sink if swamped and appropriate for the activity).
2. Paddles (appropriate for type of kayak and the skill level of participants, should be able to withstand all forces associated with activity such as impact with rocks).
3. Helmets are mandatory for all kayaking trips taking place on a river (should be made of strong lightweight material like carbon fiber or plastic, provide protection and coverage to forehead, temple and back of the head and have a good system to absorb shock from impacts).
4. Life jackets or Personal Floatation Devices ( PFD's) ( must meet the minimum buoyancy requirement, be appropriate for the intended activity, be certified / approved by BIS (Bureau of Indian Standards), US coastguard, British Canoe Union or equivalent).
5. Throw-able rescue devices must be available for immediate use.
6. Safety Kayaks must be available in the immediate vicinity (within visual distance) for prompt rescue with personnel duly qualified to operate/ carry out rescue operations.
7. During cold weather operations wetsuits and spray jackets are recommended.
8. Instructors must all carry rescue bags, knives and whistles.
9. Each trip must carry a first aid kit.

## **Operations**

All kayaking activities must begin with a thorough safety briefing. The briefing must highlight the equipment used, do's and don'ts, demarcation of the boundary for the activity, rescue and emergency procedures. A liability waiver form clearly highlighting the risk involved must be signed by all participants prior to the commencement of the activity. Participants with any medical condition making them unfit for participation in the activity must be informed prior to the commencement of the activity and not allowed to participate.

## **Risk Mitigation**

a) Lifejackets: No kayaking activity should be undertaken without wearing a lifejacket throughout the time spent on water. The life jacket must have adequate buoyancy, should be fastened properly and checked by the instructor prior to commencement of the water sports activity. The lifejacket must be the appropriate size for the intended user.

b) Guides : No kayaking activity should be conducted without the presence of trained guide/s.

c) Only competent swimmers should participate in white water kayaking.

d) Helmets: Helmets are mandatory for white water kayaking. Helmets should be a good fit, tight so as to not move but not uncomfortable with an effective fastener to keep the helmet in place.

e) Instructor to Client Ratio: Due to the technical nature of the sport, it is advised that the company ensure the instructor to client ratio is always 1:4 in white water kayaking. There should always be at least two qualified instructors on any trip.

f) Number of Kayaks: There should be at least three kayaks for a trip to occur, no single kayak trips are allowed.

g) Alcohol/drugs during the activity and at least six hours prior to the activity is strictly prohibited.

h) Client Ability: Clients should not be taken on stretches that instructors deem above their ability level. Their fitness should be assessed and they should be taken on an appropriate stretch.

i) Sign boards: For properties/operators that have access to the water/river. Sign boards should be present besides the water/ river with rules clearly

mentioning that no water sports activity is to be undertaken unless supervised.

j) No kayaking activity should be conducted in the dark and preferably finish at least one hour before dark.

k) Age Limit:

i) Children below the age of 12 are not allowed to kayak on rapids in a river.

ii) Children 12+ can only kayak on Grade II rapids

iii) Children 14+ can kayak on Grade III rapids and above.

iv) For recreational kayaking and canoeing in lakes, the age limit is 10 years. It must be ensured that risk is mitigated by not venturing far from the shore (maximum 50 meters) and by going out in good weather conditions only.

## **SOPs And Operating Instructions**

a) All Kayaking Operators must maintain and update a Standard Operating Procedure for their operations.

b) Besides covering the methodologies that are adopted by the agency in organizing the activity, such as assessing of member's medical condition and experience, procedures for conduct of the activity, avoidance of injury, safety precautions, communication, weather, procedure for emergencies, casualty evacuation, incident and accident reporting, feedback mechanism the following must be included in the SOPs:

i) An Emergency Action Plan including rescues, evacuations and medical assistance must be in position. Staff/ guides/drivers must be trained in all aspects of the Emergency Action Plan periodically.

ii) Advertising must give a true picture of the difficulties and risk involved and clients briefed accordingly. Information about guides and their experience should be sent to the clients for multi day kayaking expeditions.

## **Documentation**

The tour operator must maintain, at the minimum the following documentation:

a) Details of all Guides and Instructors including, copies of certifications, record of experience and feedback from clients.

- b) Copies of all Permits and Permissions required for operations.
- c) Copies of identification documents, Insurance cover and details of next of kin for all participants, guides and instructors.
- d) Copy of SOP.
- e) Current list of emergency contact numbers

## **Emergencies And Rescues**

- a) Adequate first aid medical equipment must be available with the kayaking trip.
- b) Evacuation routes must identified and known to participants, guides and instructors.
- c) A detailed and documented evacuation/ emergency procedure must be available with the party along with closest available emergency services which can be called upon as required.

## **Safety Briefing**

All instructors and guides should be able to give a thorough safety briefing that covers all safety aspects and detailed instructions about a safe kayaking tour. This briefing must be clear and given in English, Hindi or the local language that passenger can understand.

## **Medical Concern**

All instructors and guides must be able to ensure that a question regarding medical issues is asked before the activity is conducted. It is recommended that heart patients, those with spinal issues, recent surgery or any other medical issue of concern, expecting mothers and under age children do not participate in the activity. It is also recommended to check for epilepsy and asthmatic patients, on extent of ailment. Asthma inhalers must be carried by clients and preferably handed over to the guide.

## **Additional Guidelines For Sea Kayaking**

### **Introduction**

Sea Kayaking is usually done in bays, estuaries or the sea close to the shore / islands using seaworthy kayaks. These kayaks normally have covered decks or can be 'sit on tops' for shorter duration paddling. In comparison with white water kayaks, sea kayaks have higher cruising speed, less

manoeuvrability, more cargo capacity, ease of straight line paddling and are comfortable for long journeys. Sea kayaking

is done for a few hours / multi day marine journeys.

## **Additional Equipment For Sea Kayaking**

a) Sea kayak with bulkheads on both

ends for floatation and waterproof compartments. For optimum visibility it is recommended to have fluorescent coloured kayaks and accessory equipment.

b) Bilge Pump.

c) Paddle float.

Other Essential Equipment (On a Multi-day Tour)

- Navigation chart / GPS/ deck compass. b) Container for drinking water and food. c) Lighter or waterproof matches.
- Sun protection cream, sunglasses and head protection.
- Emergency shelter.
- Extra clothing in a dry bag.

## **Equipment For Guides/ Leaders:**

a) Tide/current data.

b) Spare paddle.

c) Towing system.

d) Appropriate boat repair kit/tools.

e) VHF radio or mobile phone for communication.

f) Food and drinking water. g) Appropriate First Aid kit.

## **Additional Safety Briefing And Checklist For Multiday Sea Kayaking Tours:**

Tour operators must ensure that tourist/s have an understanding about gear for the trip, weather, tide, tidal current, wind and surf conditions.

For multiday sea kayaking trips, the operator must ensure that tourists can perform:

- a) Wet exists without any support from guide.
- b) Self and assisted rescue.
- c) Launching and landing techniques.
- d) VHF radio communication.
- e) Understand various emergency signalling devices/signals.
- f) Towing another paddler in a variety of conditions.
- g) Navigation skills.
- h) Basic camping skills.

### **Briefing to keep alert for other vessels during sea kayaking trips:**

- a) Always be on the lookout for approaching vessels.
- b) Never assume that an approaching vessel has seen you.
- c) Keep clear of shipping lanes or cross in tight formation by shortest, most efficient routes, checking for clear passages.
- d) Turn away quickly if a vessel is on a collision course.
- e) Operators for multi day Sea kayaking trips must ensure that necessary rescue back up is available for the team. It can be in the form of a rescue boat or ground support team having all necessary rescue equipment and an established communication system. An Emergency Action Plan must be in position and training for the same imparted regularly.
- f) Clients must NEVER venture out alone or under the influence of alcohol/illicit drugs. Life jackets/PFD's (Personal Floatation Devices) are mandatory for sea kayaking and must be worn properly, throughout the time spent on the water.
- g) A minimum of two qualified sea kayaking guides must always accompany a sea kayaking trip. For more than ten paddlers, three guides should accompany the trip. The guides must have knowledge of tides, currents and wind / weather conditions. They must be able to give a comprehensive safety briefing and competent in performing kayak to kayak rescues and have valid FA/CPR certification.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices.](#)

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2.](#)

End of Guideline

### **3. Safety Guidelines for Snorkelling**

#### **Introduction**

Snorkelling are of two types: Shore- snorkelling and Boat-snorkeling. The first one is launched from the shore and the second from

a Boat. Snorkeling is an aquatic activity that allows people to interact with the marine world. When done correctly, it is enjoyable, fulfilling, and safe. However, a number of precautions need to be taken to ensure quality in execution.

For practical reasons, the term 'snorkeling' excludes snorkeling that occurs before or after a SCUBA dive begins or ends. It refers exclusively to swimming at the surface with a snorkel, mask and fins.

#### **Instructors/Supervisors: Basic Minimum Qualification and Experience**

**a)** Each resort/water sports center providing snorkeling activities should have atleast one lifeguard/supervisor monitoring people.

**b)** Should be undertaken only in the demarcated area

**c)** The guests on snorkeling should always be accompanied by a trained and licensed buddy called 'Guide'. It must be ensured that no guest is left unattended while on the water.

**d)** In case of 'shore-snorkeling' (launched from the shore), a fully equipped rescue boat in readiness should be anchored in the vicinity to attend any eventuality

**e)** When snorkeling is launched from a boat, besides ensuring that the guest is supervised by a Buddy, he is also constantly watched by the persons on onboard.

**f)** The Rescue boat used during snorkeling operations should be as per the stipulations provided in this Guideline.

**g)** The boat used for launching snorkeling could also be used for rescue purposes provided that it also fulfils the requirement of a Rescue Boat.

**h)** The open-water Snorkeling boat should be fitted with twin engines, each with a minimum capacity of 60 HP. The capacity of the engine is required to be higher in order to ensure that the Boat has enough power to reach ashore faster in the event of emergencies. The twin-engine boat enable to sale the persons ashore safely in the event of any engine failure.



- i)** Open-water Snorkeling boat should have onboard: Licensed boat-handler, at least 02 Certified Snorkeling Guides (it may be more depending on number of guests onboard), minimum 01 certified Life Saver, 01 'Look- out'.
- j)** The supervisor should be a strong swimmer and be trained and certified in Emergency First Response and First Aid / CPR.
- k)** It must be ensured that the 'Guide' is not under stressful condition during the activity and number of trips should be limited to a maximum of 07 trips on a particular day, when each trip is about 30 minutes or more.

### **Water Sports Center Requirements**

- a)** All Centers need to be registered with the local tourist department.
- b)** All centers should be equipped with pure emergency oxygen and have an Emergency Action Plan ready in case of snorkeling related accidents. The Emergency Action Plan should include mechanisms for:
  - i)** Search and recovery of missing swimmers.
  - ii)** Providing First Aid/CPR.
  - iii)** Transport to the nearest appropriate medical facility.
  - iv)** Reporting to the appropriate authorities (police, navy, coast guard, ministry of tourism, etc.).
- c)** All staff must be familiar with this Emergency Action Plan and be able to act appropriately.
- d)** The centers must have insurance for employees and clients.

### **Equipment Required**

#### **a) Snorkeling Equipment**

- i)** Each center that provides snorkeling activities should have a full set of equipment that matches its capacity. This includes:
  - 1)** Masks, both prescription and non- prescription.
  - 2)** Rash guards and/or wet suits.
  - 3)** Fins of all sizes.
  - 4)** Booties to go with the fins.
  - 5)** Snorkels.

**6)** Emergency signaling devices when required.

**b) Dive boats/Boats used for snorkeling**

**i)** Boats are the responsibility of the center and the crew.

**ii)** Each boat must have at least a crew of 2-3, be dedicated to swimmer safety and support swimmers in any way that they can. It is recommended that the following be present on board:

**1)** A boat driving/captain's license from the appropriate authority with significant experience.

**2)** Center staff with adequate knowledge of the snorkeling location or other person approved by the base leader.

**3)** First aid/CPR certificate.

**4)** Oxygen resuscitation and therapy certificate or PADI/DAN Oxygen Provider Course.

**5)** Life jackets for non-swimmers or emergency situations.

**iii)** The boats must be able to communicate with the center at all times using a functioning walkie-talkie, phone, radio telephone or other direct communication device.

**iv)** The boats must have enough fuel to make trips to the snorkel sites and back, and accommodate any changes.

**v)** The boat should be equipped with two engines or have a back up engine in case of engine failure.

**vi)** The center should provide the boat with a spare tank, spare snorkeling equipment, First Aid, Oxygen Kit, a dive flag and a boat ladder that allows easy entry and exit into/from the water.

**Equipment Care and Maintenance**

**a)** Equipment should be serviced annually, and should be changed once every five years.

**b)** Equipment should be washed, dried and checked thoroughly after each use.

**SOP & Operating Instructions**

**a) Minimum qualifications for snorkelers** **i)** Swimmers wanting to snorkel must present the following:

**1)** Recent medical form stating that the person is fit to snorkel, or if the person has medical condition(s) that are contraindicated for snorkeling, then they should produce a certificate from a medical practitioner clearing them to snorkel.

**2)** Assurance that the person can swim and is comfortable in the water, and if not be willing to wear a life jacket for safety. Life jackets are compulsory for non/weak swimmers and must be checked by the instructor prior to the conduct of the activity.

### **b) Supervision of snorkeling activities**

**i)** It is essential to plan snorkeling trips – the center should be aware of any changes made to the trip plan.

**ii)** Snorkeling Guide cannot supervise more than 02 guests at a time.

### **c) Snorkeling in restricted areas**

**i)** Some parts of the Andaman & Nicobar are patrolled /controlled by the military, navy or other government branches and are off limits to swimmers. It is recommended that the centers consult with the appropriate authorities to find out about possible restrictions.

### **d) Cultural and environmental protection**

**i)** Nothing should be taken from the sea, and particularly not cultural monuments/ artifacts.

**ii)** Damaging and extracting cultural monuments is prohibited.

**iii)** Snorkelers must protect the marine environment and its inhabitants. Snorkelers should avoid damaging coral and physical contact with marine animals. Sharks should NOT be fed under any circumstances

**iv)** Activities detrimental to marine protected areas (MPAs) and protected species are prohibited:

**1)** Permits to swim/snorkel in MPAs may be required. These should be obtained before swimming in them

### **Documentation**

**a)** Each center/office must have a record of each swimmer, including:

**i)** Full name and contact information.

**ii)** Emergency contact information.

**iii)** Details of activities that they did.

**iv)** Medical form and liability release waiver.

**v)** All of this information must be kept and maintained by the company for a minimum of 5 years.

### **Risk Mitigation**

**a)** Swimmers should be thoroughly briefed before each trip. The brief should include information about safety regulations, depth limits, snorkel site characteristics, currents, entry and exit techniques, environmental considerations and potential hazards.

**b)** The use of a life jacket as a flotation device while snorkeling is mandatory.

**c)** Solitary snorkeling, in the absence of a 'buddy' or supervisor is NOT permitted.

**d)** Centres must be aware of local weather conditions and inform swimmers of special conditions at each site prior to snorkeling.

**e)** Conditions under which snorkeling is prohibited:

**i)** Extremely rough waters.

**ii)** During storms.

**f)** It is essential that snorkelers mark their presence clearly. Any boat with snorkelers operating from it must always have display signals (i.e. flags) by day or night to inform other boat users

**g)** The dive flag can be used anywhere where divers or snorkelers are diving and should always be displayed by boats when swimmers are in the water.

### **Emergency and Rescue**

**a)** All centres must have an Emergency Action Plan as mentioned in section 3(b).

**b)** All center staff must be familiar with emergency oxygen equipment, and training sessions should be provided for all staff annually.

### **Safety Briefing**

**a)** In addition to a site briefing, all swimmers should receive a safety briefing, detailing where emergency and first aid equipment are available on the boat. A boat safety briefing must also be given on boarding the boat.

**b)** This briefing should be made in addition to the site briefing.

### **Medical Concerns**

Each swimmer should fill out a medical form clearing them from conditions that preclude them from snorkeling. If they do experience these conditions, they should receive written medical clearance from a practitioner, allowing them to snorkel.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices](#).

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2](#).

End of Guideline

# 5. Guidelines for Kiteboarding

## Introduction

- Kiteboarding is a surface water sport combining aspects of wakeboarding, snowboarding, windsurfing, surfing, paragliding, skateboarding and gymnastics into one extreme sport. A kiteboarder harnesses the power of the wind with a large controllable power kite to be propelled across the water on a kiteboard similar to a wakeboard or a small surfboard, with or without footstraps or bindings. (Wikipedia)
  
- Kiteboarding is a young sport worldwide, which is gaining popularity. Kiteboarding is an individual sport & there are no 'joy rides' for novices. The sport has to be taught to students who already have prior skill for swimming in open waters. Kiteboarding operators provide lessons for beginners, Kiteboarding gear rentals to experienced riders & Kiteboarding trips for experienced riders. Since Kiteboarding is dependent on the wind conditions, the location for providing lessons should have the right conditions for teaching & practice. There have been a few incidents and no accidents in Kiteboarding in India. With precaution, awareness & strong safety standards we can maintain minimum accident & incident rate.

## Trained manpower

It is imperative that personnel responsible for conducting Kiteboarding lessons are certified Kiteboarding Instructors skilled to a high level in conducting lessons, rescue and life saving techniques, powerboat handling and First Aid / C.P.R.

## Guides/Instructors

Instructors for Kiteboarding should, as a minimum, hold the following;

- a) Qualification from a Recognized National or International body for Kiteboarding and a certificate from the operator that the individual "has experience of 3 years in assisting in the particular activity and is independently capable of teaching, assisting, leading trips and carrying out rescue operations".
- b) A logbook/e-book containing authenticated records of Kiteboarding lessons given.

- c) A valid first aid / CPR certificate provided by a recognized and qualified provider.
- d) A powerboat license certificate provided by a recognized and qualified provider.
- e) An open water lifeguard certificate provided by a recognized and qualified provider.

## **Equipment**

- a) LEI/FOIL depower capable & water launch Kites with adequate stock in a variety of Kite sizes to cater to current wind conditions.
- b) Kite-Bars to match kite sizes with short lines for teaching & long lines for experienced riders.
- c) Kite-Boards with adjustable foot straps for beginners without board leashes.
- d) Harnesses with safety leash & helmets in various sizes to fit customers.
- e) An anemometer to check wind strength before commencing lessons.
- f) Trainer Kites with two lines for beach training
- g) Life jackets or Personal Floatation Devices (PFD's) (must meet the minimum buoyancy requirement, be appropriate for the intended activity, be certified/ approved by ISI, US coastguard, British Canoe Union or equivalent)
- h) If training in open waters, it should be ensured that boats for safety / rescue should be available in the immediate vicinity (within visual distance) for prompt deployment with personnel duly qualified to operate/ carry out rescue operations.

## **Inspection & Maintenance Procedures**

- a) Inspections and maintenance require a sound knowledge of the system and equipment and therefore must be carried out by qualified personnel. As a minimum the inspector must be a qualified guide/instructor. Basic inspections must be carried out before every use with complete and detailed inspections carried out on a regular basis in accordance with their operational procedures and risk assessments.
- b) Communication devices must be carried by Kite Instructors, helpers & rescue boat at all times.

## **Operations**

- a) A thorough weather check for current session has to be conducted & displayed before commencing any activity.
- b) All Kiteboarding activities must begin with a thorough safety briefing. The briefing must highlight the equipment used, do's and don't's, demarcation of the boundary for the activity, rescue and emergency procedures & current weather conditions. All participants must sign a liability waiver form, clearly highlighting the risk involved, prior to the commencement of the activity. Participants with any medical condition making them unfit for participation in the activity must be informed prior to the commencement of the activity and not allowed to participate.
- c) Lessons should only be given to students who have prior skill of swimming in open waters.
- d) The Kiteboarding instructor should do the first pre-flight check & launch any kite for lessons or rentals.
- e) Kite rentals should only be given to experienced independent riders who can ride upwind.
- f) Kite trips should only be organized for experienced independent riders who can ride upwind.
- g) Kite lessons, rentals or trips cannot be conducted in offshore wind conditions unless accompanied by a safety boat. In this case, the safety boat must be on the water prior to commencement of lessons & the availability of a backup boat for safety / rescue must be available in the immediate vicinity (within visual distance) for prompt deployment with personnel duly qualified to operate/ carry out rescue operations if training in open waters.

### **Risk Mitigation**

- a) Lifejackets: No kiteboarding activity should be undertaken without wearing a lifejacket/buoyancy aid throughout the time spent in water. The life jacket/buoyancy aid must have adequate buoyancy, should be fastened properly and checked by the instructor prior to commencement of the activity. The lifejacket must be of the appropriate size for the intended user.
- b) Lifeguards: No Kiteboarding activity should be conducted without the presence of trained lifeguard/s & instructors.
- c) Alcohol/ drugs during the activity and at least six hours prior to the activity is strictly prohibited.
- d) Sign boards: With rules clearly mentioning that no kiteboarding activity is to be undertaken unless supervised.
- e) No Kiteboarding activity should be conducted in the dark and preferably finish an hour before dark.



## **SOP's and operating instructions**

- a) All Kiteboarding Operators must maintain and update a Standard Operating Procedure for their operations.
- b) Besides covering the methodologies that are adopted by the agency in organizing the activity, such as assessing of members medical condition and experience, procedures for conducting the activity, avoidance of injury, safety precautions, communication, weather, procedure for emergencies, casualty evacuation, incident and accident reporting, feedback mechanism the following must be included in the SOPs:
- c) An Emergency Action Plan should be in position and advance arrangements must be known for medical help. Advance arrangements must also be made for evacuation assistance in case of an emergency.
- d) Advertising must give a true picture of all the difficulties and dangers involved, and avoid promising the impossible. All students should be sensitised that Kiteboarding is a sport, which has to be learned under the guidance of a qualified instructor.

## **Documentation**

The Kiteboarding operator must maintain, at the minimum the following documentation:

- a) Details of all Instructors including copies of certifications, record of experience and feedback from clients.
- b) Copies of all Permits and Permissions required for operations.
- c) Copies of identification documents, emergency contact details of next of kin for all participants & instructors.
- d) Copy of SOP.
- e) Current list of emergency contact numbers

## **Emergencies and rescues**

- a) Adequate first aid medical equipment must be available with the party.
- b) Evacuation routes must be identified and known to participants, guides and instructors.
- c) A detailed and documented evacuation/ Emergency Action Plan must be available with the party along with closest available emergency services, which can be called upon as required.

## **Safety briefing**

A thorough & documented safety briefing must be given including:

- a) Equipment Safety System
- b) Surrounding Environmental Awareness
- c) Hazards at location
- d) Minimum fitness requirement for the sport
- e) All the points to be conveyed during a safety briefing must be listed for instructor reference at all times
- f) Instructor should collect information about the participants during the safety briefing

## **Medical concerns**

- a) Instructor must ensure that the participant can swim in open waters comfortably
- b) Instructor must ensure that the participant is medically fit to learn the sport or participate in a trip
- c) A signed declaration from the participant is essential if there is any suspicion of prior injuries or medical concerns.
- d) Those with a weak heart condition, epilepsy, spinal issues, recent surgery or any other medical condition of concern should not be taken for kiteboarding. Expecting mothers should avoid kiteboarding.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices](#).

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2](#).

End of Guideline

## **5. Guidelines for River Cruising**

### **Introduction**

The activity of river cruises is to navigate a navigable river, in a small sized cruise ship to experience activities and visit destinations located along the banks of the river. The ships offer facilities and amenities of starred hotels along with safaris and excursions being undertaken from the vessel. As the adventure activity is water based, strict adherence to guidelines is required to make the activity safe, secure and ensure that there is no possibility of accidents during the navigation for both guests and crew.

### **Guides/Instructors**

The operations of the river cruise ship can be broadly divided into three heads of Navigation, Tourism and Hospitality.

Navigation is headed by the Master of the Ship who needs to be a licensed and qualified First Class Master rank. He is normally supported by a qualified and licensed Second Class Master. The ship normally has a Licensed Engine Driver who also doubles up as the engineer on-board and is supported by a Second Class Engine Operator. These are all clearly defined roles in the Inland Vessel operations statutory laws.

### **Equipment**

The equipment in this case is the ship itself and this needs to be built as per the marine ship building laws in the country. These laws are clearly laid out and are monitored by the respective state govts Inland Waterways Authorities that are located in the states where there are navigable rivers like Kerala, Assam, West Bengal, Bihar and UP. For a more international quality rating, the design and construction of the ship could be under the survey and approval control of a ship classification society like the Indian Register of Ships, Lloyds, etc. Under these bodies the ship's design and every stage of construction including the quality of welding etc is inspected by qualified surveyors who are then legally bound for certifying the quality of the ship.

In case of any mishap, if the reason is found to be low quality of construction, then the surveyor of the construction of the ship is held criminally responsible. Even the equipment and machines while under construction in the manufacturing plant of the original equipment manufacturer are inspected at each stage by the surveyors of the class certification society who certify the ship.

## **Inspection & Maintenance Procedures**

The class certification society and the state waterways authority do annual inspections to certify the ship and give a fitness certificate to the vessel. Every five years the ship has to be dry docked if operating in fresh water and if operating in saltwater, it is dry docked every two years to ensure that the submerged parts of the ship are thoroughly inspected by both bodies.

## **SOP's and operating instructions**

The operations of the navigation part of the cruise ship is as per the operating system set out by the First Class Master of the ship and for the engines and machines, by the L.C. Driver who acts as the chief engineer. These are listed in the daily log book and each machine is regularly maintained and overhauled at periodic intervals. This forms part of the annual inspection by the class certification society and the statutory authority of the state.

## **Documentation**

The survey reports and licensing of the operations by both the class certification society and the state statutory authority are part and parcel of the main documentation process.

## **Risk Mitigation**

The insurance of the ship, crew and guests along with, the initial design and construction supervisions, regular annual maintenance inspections and the appointment of qualified crew members forms part of the risk mitigation process. The river cruise operator has to ensure that all shore excursions are carried out as per ATOAI safety guidelines.

## **Emergencies and rescues**

The ships are equipped as per rules set by the statutory and class certification processes, have FFA (Fire Fighting Appliances) and LSA (Life Saving Apparatuses). These systems and the training of the crew which is part of the licensing process are more than adequate to cater for any emergency/rescues. Being a river cruise ship, they are close to land and the challenges are far less as compared to vessels in the sea.

## **Safety Briefing**

A comprehensive safety briefing must be given on boarding the vessel where all emergency drills are explained / demonstrated. Pictorial demonstrations,

usage of life vests, muster stations for boarding lifeboats etc must be explained in detail.

## **Medical Concerns**

Most of the river cruise ships carry a senior nursing attendant who is a highly qualified first responder. Further, being river cruise ships with access to road heads at frequent intervals, both land ambulances and helicopters can be arranged in case of an evacuation.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices](#).

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2](#).

End of Guideline

## 6. Guideline for Scuba Diving

SCUBA (Self contained underwater breathing apparatus) diving is an aquatic activity that allows people to interact with the marine world. When done correctly, it is enjoyable, fulfilling, and safe. However, a number of precautions need to be taken to ensure quality in execution.

For the purpose of this Guideline, the term 'diving' here is used to describe recreational diving only. Commercial and military divers and other occupational divers must adhere to these regulations when participating in their own activities.

### **DIVE INSTRUCTORS AND DIVE MASTERS: BASIC MINIMUM QUALIFICATIONS AND EXPERIENCE**

1. Each SCUBA diving center must have at least one dive instructor and one dive master.
2. The Dive Instructor must have a valid instructional license from a recognized national/international diving institute/ association (NIWS/PADI, NAUI, CMAS, etc.).
3. The Dive Master must have an up-to-date and valid license.
4. Only a dive instructor may impart teaching & training and certify students in courses, whereas, Dive Master to play assisting role. Under no circumstances should the Dive Master be permitted to impart training.
5. Dive center must ensure that it has adequate number of Instructors in place proportionate to number of activities it proposes to conduct, as well as the dive equipments as per its inventory.
6. The Dive Centers offering 'fun dives/ try dives should have minimum 01 Site supervisor (EFR certified preferably a Life Saver), 01 certified Instructor, 02 certified Dive Masters, 01 EFR certified preferably a Life Saver and support staff (Boat-boys) as per requirement.
7. All Dive Centers must have its own website as per the standards and all activities that it offers should be furnished on it thereof. The fees for each type of activity, its duration, eligibility, broad contents for each course etc. must also be uploaded for the information of the Guest/trainees
8. Irrespective of the type of activity- try/ fun dive or training course, all participants should be given class-room session as per the stipulated course contents; and it shall be mandatory of part of the Dive Center to ensure the same.

# **EQUIPMENT REQUIRED**

## **Diving Equipment**

Each dive center should have a full set of equipment that matches its capacity. These include:

- 1) Air and/or nitrox cylinders (appropriately marked and labeled).
- 2) Buoyancy Control Devices (BCDs) in various sizes approved for recreational diving and with oral and low pressure inflators. The BCD should be maintained according to manufacturer instructions.
- 3) Regulators approved for recreational diving by the manufacturer and maintained according to manufacturer guidelines. These should have submersible pressure gauges and alternate air sources.
- 4) Masks, fins, snorkels, wet suits approved for recreational diving and maintained according to manufacturer guidelines.
- 5) Weights and weight belts.
- 6) Dive computers that provides depth, time and decompression readings for all dive center staff.
- 7) Dive tables must be available for divers to work out their dives manually.
- 8) Emergency signaling device – reflective inflatable surface balloon (surface marker buoy) and whistle.
- 9) Underwater flashlights suitable for night diving.

## **Dive boats**

All dive centers offering boat-diving must have Dive Boat as per stipulation and as per following:

1. It must be custom-made to suit the requirement of diving- number of passengers/capacity; chambers for placing of the filled cylinders, all essential safety, rescue and recovery gears and equipments- First Aid kit, Emergency Oxygen cylinder etc.
2. The Hull designed in a manner that it has sufficient space to administer First Aid, CPR etc. to the victim.
3. The boat should be equipped with two engines of minimum 60 HP each; or it should have a back-up engine in case of engine failure.

4. The Boat must have a registration as per M.S Act/ I.V Act and its hull must be of IRS approved or as approved by another competent authority thereof. The Boat should be subject to annual re- registration and only such boats should be used for operations.
5. The boat must have valid insurance coverage as the Law- boat, passengers etc.
6. The boat should be handled by a master who is licensed and hold valid certificate in Boat-handling and Life Saving Techniques.
7. Besides the Instructors and Dive Masters, at least one person who is duly certified Life Saving Techniques must onboard on the Dive Boat during the entire period of operations.
8. While onboard, it is mandatory that everybody wear PFD of appropriate size.
9. The diving shall be undertaken only at designated sites, where all precautions as per the standards and stipulations including demarcation of the site with buoys etc.

## **EQUIPMENT CARE AND MAINTENANCE**

1. If a dive center professionally fills compressed air into cylinders, they are not to fill cylinders that have not been hydrostatically pressure tested in the last five years. Dive center employees must be made aware of this.
2. Equipment and compressors should be serviced annually, and it is imperative that compressors have their oil changed frequently so that air quality is maintained.
3. All equipment must be washed, dried and checked thoroughly after each dive.

## **SOP'S & OPERATING INSTRUCTIONS**

### **Minimum qualifications for recreational divers**

A diver wanting to dive recreationally must present the following documents to the dive center:

- 1) Dive certification card from a recognized agency that allows a person to dive in open water.
- 2) Log book validating open water diving experience.



- 3) Recent medical form stating that the person is fit to SCUBA dive, or if the person has medical condition(s) that are contraindicated for diving, then they should produce a certificate from a medical practitioner clearing them to dive.
- 4) Completed diver registration form (can be completed at dive center).

### **Supervision of diving activities**

1. All diving training and certification has to be done exclusively by SCUBA diving Instructors, who may be assisted by assistant instructors or Dive Masters as per the standard.
2. All dive instructors must be in active teaching status with their dive training agency, and the agency with which the dive center is affiliated.
3. If a SCUBA diver is certified, and cannot show proof that s/he has dived in the last 12 months, that diver is required to do a 'refresher' course, covering the essential SCUBA diving skills.
4. It is essential to plan dives – dive centers must be aware of any changes to the dive plan of the dive boat and the divers.
5. A dive instructor or dive master cannot guide more than 5 divers in the water at a given time.

### **Discover SCUBA Diving**

1. A Discover SCUBA Dive (DSD) is provided to a client who is not a certified SCUBA diver.
2. This activity **MUST** be done in the presence of a dive instructor or a dive master.
3. The ratio of instructor or DM to client must be 1:1; i.e. at any given time, an instructor or DM cannot guide more than one diver during a DSD.
4. The maximum allowed depth for a DSD should not be more than 12 meters.

### **Diving in restricted areas**

Some parts of the Andaman & Nicobar are patrolled/controlled by the military, navy or other government branches and are off limits to divers. It is recommended that dive centers consult with the appropriate authorities to find out about possible restrictions.

### **Cultural and environmental protection**

1. Nothing should be taken from the sea, and particularly not cultural monuments/ artifacts.
2. Damaging and extracting cultural monuments is prohibited.

3. Divers must protect the marine environment and its inhabitants. Divers should avoid damaging coral and physical contact with marine animals. Sharks should NOT be fed under any circumstances.
4. Activities detrimental to marine protected areas (MPAs) and protected species are prohibited:
  - Permits to dive in MPAs may be required. These should be obtained before diving in them.

## **DOCUMENTATION**

Each dive center/office must have a record of each diver, including:

1. Full name and contact information.
2. Emergency contact information.
3. Details of dives/courses that they did (including duration, depth, surface intervals).
4. All of this information must be kept and maintained by the dive company for a minimum of 7 years.

## **RISK MITIGATION**

1. Dive center staff must thoroughly brief divers prior to every dive. The brief should include information about safety regulations, depth limits, dive site characteristics, currents, entry and exit techniques, environmental considerations and potential hazards.
2. After each dive, a safety stop must be made for at least 3 minutes at 5 meters. Divers must commence their safety stop with a tank pressure not less than 50 bar.
3. The use of a buoyancy control device (BCD) is absolutely mandatory for all diving activities.
4. Solitary diving, in the absence of a dive master or dive instructor is NOT allowed under any circumstances.
5. Dive Centers must be aware of local weather conditions and inform divers of special conditions at each dive site prior to the dive.
6. Conditions under which diving is prohibited:
  - Dives deeper than 30 meters.
  - Dives less than 12 hours before a flight.
7. It is essential that divers mark their presence clearly. Any boat with divers operating from it must always have display signals (i.e. flags) by day or night to inform other boat users.
8. The dive flag can be used anywhere where divers are diving and should always be displayed by dive boats when divers are in the water. The dive

flag is used to signal to boats, jet skis and others in the vicinity that divers are below, and that they should approach with caution.

## **EMERGENCIES & RESCUES**

1. All dive centers must have an Emergency Action Plan as mentioned in section 3(b).
2. All dive center staff must be familiar with emergency oxygen equipment, and training sessions should be provided for all staff annually.

## **SAFETY BRIEFING**

1. In addition to a comprehensive dive briefing, all diver should receive a safety briefing, detailing where emergency and first aid equipment are available on the boat. A safety briefing about the boat must also be given after boarding the boat.
2. This briefing should be made in addition to the dive briefing.

## **MEDICAL CONCERNS**

1. Each diver should fill out a medical form clearing them from conditions that preclude them from diving. If they do experience these conditions, they should receive written medical clearance from a medical practitioner, allowing them to dive.
2. These medical concerns are listed in the medical statement provided by the SCUBA diving center's certifying agency.

**Environment-friendly Practices** - Refer to the [Guidelines for 'Leave Minimum Impact' practices.](#)

**First aid kit** - Indicative list of items for [First-aid kit are given in Appendix 2.](#)

End of Document