

RIVER RAFTING STANDARDS

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STANDARDS AND CONDITIONS

For the issuance of a permit to conduct
a commercial river raft operation
on waters restricted pursuant
to the Boating Restriction Regulations

Short Title

1. These Standards may be cited as the RIVER RAFTING STANDARDS.

Interpretation

2. In these Standards

"Act" means the CANADA SHIPPING ACT;

"approved" means approved by the Board of Steamship Inspection;

"A.S.T.M." means the American Society for Testing and Materials;

"C.G.S.B." means the Canadian General Standards Board;

"C.S.A." means the Canadian Standards Association;

"designated provincial authority" means a person designated by a province and acceptable to the Minister as the person authorized to issue or cancel a permit relating to that province;

"guide" means a person in charge of a river raft, who meets the qualifications set forth under Schedule II of these Standards, and is in possession of a valid certificate issued by the designated provincial authority;

"Minister" means the Minister of Transport;

"permit" means a permit issued by the Minister or a designated provincial authority authorizing a person to operate a commercial river raft operation, subject to these Standards and such other special conditions as may be imposed by the Board of Steamship Inspection or designated provincial authority, in the waters described in Schedule VI.I of the BOATING RESTRICTION REGULATIONS;

"record of service" means the record of experience recorded by every candidate or qualified guide or Trip Leader as required by Schedule II of these Standards;

"small vessel lifejacket" means a lifejacket constructed and tested in accordance with the approval requirements of the SMALL VESSEL REGULATIONS, except that, for the purpose of these Standards, it shall also meet the buoyancy and performance requirements of a Standard lifejacket;

"Standard lifejacket" means a lifejacket constructed and tested in accordance with the standard set by the Canadian General Standards Board (CGSB), and entitled "Lifejackets, Inherently Buoyant, Standard Type No. 65-GP-14M";

"trip" means the passage of a raft, or more than one raft travelling in company, between one place and another place on a river or waterway;

"Trip Leader" means a person in charge of a trip who meets the qualifications set forth under Schedule II, and is in possession of a valid certificate issued by the designated provincial authority;

Equivalents

3. Notwithstanding anything contained in these Standards, the Board of Steamship Inspection may allow an alternative to any of the requirements of these Standards for any vessel or raft that is subject to these Standards.

Marking

- 3.1 a) A river raft used or operated by the permit holder shall be clearly marked with the name of the company to whom the permit was issued and a number which differentiates each pontoon of each raft from all other pontoons of rafts used or operated by the permit holder.
- b) The markings referred to in subsection (a) shall be
 - (i) in block characters and in arabic numerals which are not less than 50 millimetres high and in a colour that contrasts with their background,
 - (ii) permanently affixed to the raft, and

- (iii) situated on the outside of the pontoon so that the number is clearly visible from each side of the vessels.

Construction

4. The raft shall be of good and sound material and construction and shall be so constructed as to be capable of withstanding the weather and water conditions that may be reasonably expected in the area and at the time of operation.
5. Only inflatable rafts shall be used.
6. The materials used in the construction of the buoyancy chambers of a raft shall conform to the requirements of:
 - a) Section 13 of Schedule XVIII to the LIFE SAVING EQUIPMENT REGULATIONS;
 - b) British Standards Institution, Specification BS MA 16, Section 7; or
 - c) such other specifications as the Board of Steamship Inspection may determine are equivalent.
7. Every raft shall be so constructed that the buoyancy chambers contain in the aggregate not less than four compartments, which compartments shall:
 - a) be as nearly as practicable of equal volume;
 - b) be evenly distributed port and starboard; and
 - c) be so constructed that deflation of any one compartment will not cause the escape of air from any other compartment.
8. Every raft shall be fitted with topping-up valves to each buoyancy chamber.
9. Every raft shall have:
 - a) one painter of at least 10 metres in length; and
 - b) a line becketed around the raft, or safety straps suitable for use as handgrips.

10. Prior to the commencement of operations each year, each raft shall pass the following tests:
- a) the entire raft shall be inflated to 112.5% of its manufacturer's recommended pressure for a minimum of 30 minutes;
 - b) the pressure in each chamber shall be inflated to working pressure and allowed to stand for an additional period of 30 minutes; and
 - c) each individual chamber shall be tested with adjacent chambers deflated to ensure the structural integrity of each chamber.

Capacity

11. No raft shall be loaded with persons, goods and equipment exceeding the weight determined using the following formula:

$$C = (0.375 \times V \times 1000) - W$$

where

- C = maximum weight capacity in kilograms
- V = total buoyancy of the compartment volume of the raft in cubic metres except for additionally attached outrigger pontoons
- W = weight in kilograms of the raft and its framework and all other structures and fittings (motor and portable fuel tanks not included).

12. (1) Subject to subsection (2), the number of persons on board a raft shall not exceed the number determined using the following formula:

$$N = (C - G)/75$$

where

- N = maximum number of persons
- C = maximum weight capacity in kilograms
- G = total weight in kilograms of motor, filled portable fuel tanks, gear and equipment.

- (2) There shall be sufficient space on board the raft such that all persons, except the guide, can be adequately seated.

Machinery

13. All fuel tanks shall be adequately supported and braced so as to reduce movement.
14. Where a raft is motorized, the minimum engine power shall be not less than 15 kW (20 HP).
15. The motor on every motorized raft shall be securely mounted on a transom, or a major structural member of the raft.

Equipment Requirements

16. Every raft shall carry:
 - a) one approved Standard lifejacket or one approved small vessel lifejacket meeting the buoyancy and performance requirements of a Standard Lifejacket for each person on board, in sizes suitable for all adults and all children that are on board;
 - b) a first aid kit containing, as a minimum, the following:
 - (i) adhesive bandages
 - (ii) sterile pads
 - (iii) flexible gauze bandages
 - (iv) roller bandages
 - (v) triangular bandages
 - (vi) first aid tape
 - (vii) safety pins
 - (viii) scissors
 - (ix) antiseptic
 - (x) acetylsalicylic acid tablets
 - (xi) first aid instructions;
 - c) spare means of propulsion, consisting of:
 - (i) for rafts propelled by oars, at least one spare oar and oarlock or clip per raft, or at least two spare oars and oarlocks or clips per trip,

- (ii) for rafts propelled by paddles, at least two spare paddles, or
 - (iii) for rafts propelled by motor,
 - A - at least one spare motor; or
 - B - if three or more rafts are travelling in company at least one spare motor on one raft and,
 - (I) two oars and oarlocks or clips on each of the other rafts, or,
 - (II) for rafts of 6 metres in length or less, at least eight paddles;
 - d) a buoyant heaving line of at least 20 metres in length, flexible under ordinary circumstances of wetness and temperature, attached to a buoyant quoit.
17. (1) Every raft, or every group of rafts travelling in company, shall carry:
- a) a raft repair kit in accordance with the provisions of Schedule I; and
 - b) if propelled by motor, an engine repair kit in accordance with the provisions of Schedule I.
- (2) Every raft shall carry a hand operated pump for inflating the buoyancy chambers and capable of attachment to the topping-up valves, however where more than one raft is travelling in company on a trip, no more than 2 pumps need be carried for that trip provided that the 2 pumps are not carried in the same raft.

Operational Requirements

18. Every raft travelling singly, or every group of rafts travelling in company shall be operated under the supervision of a Trip Leader certificated in accordance with the provisions of Division B of Schedule II. Such Trip Leader shall, within the previous twelve months, have completed a minimum of two trips, as indicated in the record of service, over the assigned route while in control of the type of raft to be used.

19. Under the general supervision of a Trip Leader, every raft engaged in a commercial river rafting operation shall be operated by a guide, certificated in accordance with the provisions of Division A of Schedule II, who additionally shall have had experience within the previous twelve months over the assigned route while in control of the type of raft to be used. Such experience shall be indicated in the record of service.
- 19.1 Every certificated Trip Leader and guide shall have in his possession and on his person a certificate, in the form of an identification card issued by the designated provincial authority and which certifies his qualifications while operating a raft, and shall produce the certificate for inspection on demand of a peace officer.
20. Before the commencement of any river trip, all persons to engage in the trip shall receive a warning that, because of possible rigorous or hazardous conditions which might be encountered, river rafting may not be suitable for children, the infirm and those persons whose health may be impaired under these conditions.
21. Before the commencement of any river trip, all persons to engage in the trip shall receive a safety orientation briefing which shall include:
 - a) a familiarization and warning concerning the hazards of the waters to be run;
 - b) procedures for routine operations;
 - c) general safety precautions;
 - d) the use and wearing of lifejackets;
 - e) seating assignments; and
 - f) procedures for emergencies, casualties, swamping, capsizes and man overboard.
22. At the commencement of each day's operation, each chamber of each raft shall be pressure checked at its rated working pressure, and the entire exterior of the raft shall be visually inspected.
23. Every person on a raft shall at all times wear an approved Standard lifejacket or approved small vessel lifejacket meeting the buoyancy and material requirements of a Standard lifejacket.

24. When a raft is approaching a rapid, the guide or Trip Leader shall advise all persons on board of the safety precautions to be observed while passing through the rapid.
25. No person on board a raft shall be allowed on outrigger pontoons when the raft is passing through a rapid.
26. All loose equipment, storage boxes and other objects that may be injurious to persons on the raft, are to be properly stowed and secured in place.
27. No alcohol or illegal drugs shall be consumed by any person on a raft when the raft is on the river.
28. At no time during a trip or stopover shall any guide or Trip Leader be impaired by alcohol or a drug.
29. The Trip Leader shall not permit any person to board a raft if that person is believed to be in a state of impairment that may be of hazard to themselves or other persons on the raft.
30. Except in an emergency situation, no raft shall be operated on any river during the hours of darkness.
31. No raft shall be refueled while persons other than a guide or Trip Leader is on board.
32. Protective headgear, of the correct size, and meeting the requirement of CSA Standard CAN3-Z262.1-M83 or equivalent, shall be worn by each person on a raft in waters where risk of head injury may exist.

Accident Reporting

33. The person to whom a permit has been issued shall as soon as possible at the termination of any trip, and by the quickest possible means, report to an officer of the Canadian Coast Guard, Ship Safety Branch, any accident or incident that involves:
 - a) loss of life;
 - b) any injury incapacitating any person for more than 24 hours or any temporary stoppage of breathing.

Special Provisions

34. The permit issued by the Minister or the designated provincial authority may contain special provisions relevant to the waters in which the river rafting operation is to be conducted.

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Note: Reference to other Standards is to the latest issue, unless otherwise specified by the authority applying this Standard.

Schedule I

Division A

Raft Repair Kit

1. The repair kit for every inflatable raft shall contain, as a minimum, the following:
 - a) patches of tube material,
 - b) cement compatible with the raft fabric,
 - c) sandpaper or roughing tool,
 - d) replacement oarlock or clip, (if applicable),
 - e) screwdriver, and
 - f) pliers.

Division B

Engine Repair Kit

2. The engine repair kit for every raft carrying an engine shall contain, as a minimum, the following:
 - a) spare propeller,
 - b) 2 spark plugs, and
 - c) an adjustable wrench.

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Schedule II

Qualifications for Guides and Trip Leaders

Division A

Guides

1. Every certificated guide shall:
 - a) be not less than 18 years of age,
 - b) have successfully completed a basic standard first aid course (16 hours) and hold a valid certificate issued by the St. John Ambulance Association or a body recognized by the Minister or the designated provincial authority.
 - c) within the three year period preceding his or her application for a guide certificate, have completed
 - (i) twenty days river running experience in control of any craft, and
 - (ii) seven river running trips on rafts under the supervision of a qualified Trip Leader.
 - d) have a basic knowledge of and ability to carry out repairs to the raft,
 - e) have a good knowledge of safety, emergency procedures, and of the hazards associated with a river rafting operation, and
 - f) if operating a motorized raft, have a basic knowledge of engine repair.

Division B

Trip Leaders

2. Every Certificated Trip Leader shall:
 - a) be a guide certificated within the two year period preceding his or her application for a Trip Leader's certificate, in accordance with Division A of this Schedule.
 - b) within the three year period preceding his or her application for a Trip Leader's certificate, have completed a minimum of twenty days river running experience as a guide qualified in accordance with Division A of this Schedule.
 - c) have a complete knowledge of the construction of a raft, and be capable of effecting repairs and replacement of parts of the raft.
3. The experience required by sub-paragraph 2(b) is in addition to the experience required in order to qualify as a guide.

Division C

Record of Service

4. Every candidate and certificated guide and Trip Leader shall maintain a record of service showing all trips completed for the purpose of qualification and of all subsequent trips.
5. The record of service shall indicate, for each trip:
 - a) the date of the trip;
 - b) the route of the trip;

- c) his employment during the trip, whether candidate guide, qualified guide, candidate Trip Leader or qualified Trip Leader;
 - d) the type of raft used on the trip, and whether the raft was propelled by oars, paddles or by motor;
 - e) the duration of the trip;
 - f) the name of the Trip Leader;
 - g) in the case of a record kept by a guide, the number of persons carried on the raft;
 - h) in the case of a record kept by a Trip Leader, the number of persons carried on the trip; and
 - i) any unusual occurrences or accidents.
6. At the completion of each trip, the record of service for every guide and Trip Leader shall be certified and signed by the person to whom the permit to operate has been given, and, in the case of candidate guides and candidate Trip Leaders, shall also be certified and signed by the supervising Trip Leader.
7. The record of service shall also indicate the date of certification in first aid and the issuing body, and shall record all subsequent re-qualifications in first aid training.
8. The record of service shall be made available upon request to the Minister or the designated provincial authority.