#### Bulletin 01-07 (Updated 11 April 2007)

Check Criteria for portable fire extinguishers

This Transport Canada, Office of Boating Safety Pacific PCCC bulletin is issued under the authority of the Regional Manager Boating Safety, Transport Canada in order to provide clarity and direction to PCCC checkers. The information in this bulletin provides additional and updated information to the TC PCCC manual. Any questions or enquires concerning this bulletin or any other particulars of the TC PCCC program are to be directed to Boating Safety Officer Mike Mitchell, Officer Primary Interest Transport Canada Pleasure Craft Courtesy Check Program.

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#### Small Vessel Regulations:

**5.** (1) Any lifejacket, lifebuoy, personal flotation device, bailer, fire extinguisher or pyrotechnic distress signal referred to in Part II, IV or V that must be carried on a small vessel in accordance with these Regulations shall meet the applicable standards set out in Schedule III or any other standards that provide a level of safety that is equivalent to or higher than that of those standards.

### <u>Check Criteria included in this bulletin shall be considered as an amendment to page 64 of the PCCC manual.</u>

The fire extinguisher being checked shall be deemed void of its approval if the following criteria are not met:

- Fire extinguishers must be approved by either:
  - Board of Steamship Inspection (Transport Canada);
  - Underwriters Laboratories (ULC) (manufactured in Canada);
  - British Board of Trade for Marine Use (manufactured in the United Kingdom);
  - United States Coast Guard approved for Marine Use.
- ➤ Required number of extinguishers, classification and locations meet the requirements of the Small Vessel Regulations;
- Tank (cylinder) of the extinguisher is not corroded and in good condition;
- ➤ Pull pin and tamper seal, are not missing and in good order; Annual maintenance tag not missing and has not expired (current within the last 12 months);
- ➤ Visual indicator (pressure gauge) shows that the extinguisher is fully charged; in the event that no gauge is present an annual maintenance tag must be present; Shake the extinguisher gently to feel for the flow of the agent inside (Dry Chemical only, NOT Carbon Dioxide (C02));
- ➤ Hose, nozzle/horn are not missing, not cracked and in good condition;
- ➤ Valve assembly must be free from corrosion (perfect working condition); Must be hydrostatically tested in accordance with the National Fire Protection Association (NFPA) 10 'Standard for Portable Fire Extinguishers' with label or stamp in place (see below);
- A Portable Dry Chemical Fire extinguisher, which meets all of the above check criteria, (must have a pressure gauge showing fully charged) but is missing an annual maintenance tag, may be accepted at the checkers discretion if the boater states that the extinguisher has been serviced within the last 12 months. The checker will note this statement in the comments box of the PCCC form.

#### **Annual Maintenance Tag**

The annual maintenance tag attests that a qualified person has serviced the fire extinguisher according to NFPA 10. This maintenance tag is valid for 12 months from the date of the service. This tag is most common means of confirming this maintenance but is easily removed accidentally. This is why the checker has the discretion to accept the extinguisher (with a pressure gauge showing the extinguisher fully charged (in the green) if the owner states that the extinguisher has been recently serviced and all of the other check criteria are met. Non-rechargeable or non-refillable extinguishers require this annual maintenance.

### <u>Hydrostatic Test</u> <u>Information concerning Hydrostatic Tests shall be considered as an amendment to page 64 of the PCCC manual.</u>

**CO2 portable fire extinguishers** are high-pressure cylinders and must be hydrostatically tested <u>every</u> 5 years from the date of manufacture. This permanent test stamp is found by checking the upper area of the cylinder. There may be many date stamps so be sure to check for the most current date. Co2 extinguishers are manufactured of steel or aluminum.

Dry chemical portable fire extinguishers made of brass; aluminum or mild steel must be hydrostatically tested <u>every</u> 12 years from the date of manufacture. (Includes chrome plated). This test is confirmed by checking for a hydrostatic test label that is affix to cylinder (tank); this label is not easily removed. Non-rechargeable or non-refillable extinguishers must be removed from use 12 years after the date of manufacture, as they cannot be hydrostatically tested.

Dry chemical fire extinguishers made of Stainless Steel must be hydrostatically tested every 5 years from the date of manufacture. (This type of extinguisher is not common and should not be mistaken for a chrome-plated model).

**Halon portable fire extinguishers** must be hydrostatically tested <u>every</u> 12 years from the date of manufacture. There is no 6-year internal maintenance requirement.

#### **Carbon Dioxide Fire Extinguishers (Co2)**

The PCCC program allows for the acceptance of Co2 fire extinguishers if the annual maintenance tag is missing and if the owner states that the extinguisher has been recently serviced. It is strongly recommended that this discretion **not be used**, as this type of extinguisher does not have a pressure gauge. The checker has no means to verify that the extinguisher is full and may result in the extinguisher not operating correctly. The requirement for a 5-year hydrostatic test may determine a serious safety defect of the cylinder (tank), which may cause a serious injury or death to the person who discharges the extinguisher.

#### <u>Portable Dry Chemical Fire Extinguisher 6 year Internal Maintenance</u> Requirements

The PCCC program does not specifically reference the NFPA Standard 10 requirements that portable dry chemical fire extinguisher be subject to a 6-year internal maintenance. Every six years from the date of manufacture, the extinguisher must be emptied and is subject to a full internal inspection and applicable

maintenance procedures. It is not uncommon to find a defect during this service, which may negatively impact the operation of the fire extinguisher.

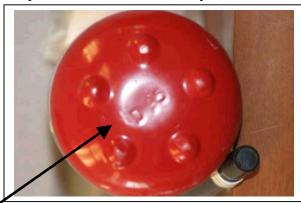
This information has been included in this bulletin as it may be useful for determining if the extinguisher has been recently serviced. The verification of service tag is found around the neck of the extinguisher cylinder (tank), which indicates the month and year of the service. Additionally there is a sticker label attached to the cylinder, which will give the month and year of the service. This tag and label are not easily removed. Non-rechargeable or non-refillable extinguishers are not required to have this internal maintenance.

#### **Halon Portable Fire Extinguishers**:

Halon extinguishers have an annual maintenance and 12-year hydrostatic test requirement; therefore if a halon extinguisher is checked and found to require a hydrostatic test it cannot be accepted as per the TC Ship Safety Bulletin 655373. The hydrostatic test requires the refilling and recharging, which is not permitted for halon extinguishers onboard all ships in Canada as of Jan 1/04.

#### TC Ship Safety Bulletin 655373

Refill or recharging of portable halon fire extinguishers on board all ships in Canada is prohibited effective January 1, 2004.



Dry Chemical fire extinguisher manufacture date stamped on bottom of dry chemical cylinder. 95 (1995)

> Verification of service tag verifying the 6-year internal maintenance of a dry chemical extinguisher. Month and year will be noted.



Combination 6-year internal maintenance and 12 year hydrostatic test label. This label is found in addition to the verification of service tag.



Pull pin and tamper seal shown on valve assembly.

Dry chemical fire extinguisher pressure gauge showing the extinguisher to be fully charged (in the green).

A fire extinguisher annual maintenance tag shown with month and year.

Label indicates the types of fire that the extinguisher is classified for.



Date of manufacture may be found on the label and not the tank cylinder. ULC approval and fire rating classification



Verification of Service tag has been included by the service company to confirm that the cylinder was taken apart to complete the hydrostatic test.

Co2 fire extinguisher that shows a 5-year hydrostatic test stamp. The first two numbers refer to the month, the next three numbers are the technician's number and the last two numbers are the year. I.e. Hydrostatic test completed on Oct 06. 1017506