Summary of Chapters

NFPA 1852: Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA)

This standard establishes requirements for the selection, care, and maintenance of self-contained breathing apparatus (SCBA) as required to reduce health and safety risks associated with improper maintenance, contamination, or damage.

This standard shall specify minimum requirements for the selection, care, and maintenance of open-circuit self-contained breathing apparatus (SCBA) and combination SCBA/supplied air respirator (SAR) that are used for respiratory protection during emergency operations in environments where the atmosphere is Immediately Dangerous to Life and Health (IDLH), or could become oxygen deficient or IDLH

Chapter 4: Program Component

a. The organization shall have a written program that addresses the selection, care, maintenance and retirement of its respiratory protection apparatus.
b. The program shall have the following goals;
   i. Provide SCBA that is suitable and appropriate
   ii. Maintain SCBA in safe, usable condition
   iii. Remove from use SCBA that is unsafe and could contribute to injury or death of the user
   iv. Recondition, repair or retire SCBA
c. There must be a written procedure to record all SCBA associated activities including SOP’s for care, maintenance and testing.
d. The organization must provide SCBA users with manufacturer’s instructions.
e. Retired or contaminated beyond cleaning SCBA must be destroyed and not to be used for respiratory protection.
f. The organization must establish a quality assurance program for SCBA.
g. Program component must establish policies for training of technicians and their qualification for authorization.
h. SCBA that do not meet the requirements of NFPA 1981 Standard on Open-circuit Self-Contained Breathing Apparatus (SCBA) 1997 edition shall be retired and properly disposed of.
   i. NOTE: this equates to approximately 20 years, or four editions of the NFPA 1981 standard.
i. The organization should have a record-keeping system for the inventory, instructions, care, use, maintenance, repair and disposal.
j. On retirement, SCBA shall be destroyed.

Chapter 5: Selection
a. Risk assessment is required before purchasing SCBA
b. Upon acceptance, inspection must be done after purchase.

Chapter 6: Care

a. External surfaces of the CSBA must be cleaned to prevent disinfection according to manufacturer’s instructions.
b. Where contamination occurs, contaminated CSBA must be separated from decontaminated CSBA.
c. CSBA must be stored in their original carriers or other protective storage cases.

Chapter 7: Maintenance

a. Inspection of SCBA must be performed at the beginning of each duty period for maintenance purposes.
b. Organization must follow manufacturer’s written instructions for repairs as well as providing training on specific repair procedures
c. Periodic testing of the CSBA must be done by the organization for ensuring effective maintenance.

Hydrostatic Testing of Air Cylinders

a. The CSA standard - CSA B339-08 - Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods is the reference for Canada that deals with hydrostatic pressure testing of SCBA air cylinders.
b. CSA B339 sets out the requirements for the manufacturing, inspection, testing, marking, requalification, reheate treatment, repair, and rebuilding of cylinders, spheres, and tubes (containers) for the transportation of dangerous goods. It also sets out the requirements for new design qualification and facility registration.
c. High pressure cylinders are required to be hydrostatically tested every 5 years with the exception of composite and hoop wrapped cylinders manufactured prior to 2002 which are required to be tested every 3 years. All composite or wrapped cylinders have a 15 year service life (and are at service life end as of 2017).
d. Similar information is written in FF textbooks but in most cases it references United States Department of Transportation (DOT) requirements.