[Luxfer Gas Cylinders position concerning life extension of DOT-CFFC carbon composite cylinders by means of Modal Acoustic Emission (MAE) requalification](http://www.luxfercylinders.com/press-releases/luxfer-gas-cylinders-position-concerning-life-exte)



On April 21, 2017, the U.S. Department of Transportation’s (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) announced that it had “issued a special permit to authorize the extension of the 15-year service of certain carbon fiber reinforced aluminum-lined cylinders (DOT-CFFC) that are used in self-contained breathing apparatuses by firefighters and first responders.” The PHMSA website states that under this new Special Permit 16320, issued to Digital Wave Corporation, “cylinder life can be extended an additional 15 years through the use of Modal Acoustic Emissions (MAE) testing . . . in five-year increments. . . .”

Luxfer Gas Cylinders, the world’s largest manufacturer of carbon composite cylinders used in self-contained breathing apparatuses (SCBA), has not been involved with this new life-extension program. Luxfer 15-year SCBA cylinders are designed and approved in the U.S. (Special Permit 10915) and Canada for a 15-year service life, and Luxfer accordingly issues a 15-year warranty for the full service life of each cylinder it manufactures. Since 1995, Luxfer has made more than 10 million carbon composite SCBA cylinders, which have an exceptional safety record. Over the years, Luxfer has conducted a significant amount of testing over and above standard requirements to ensure that Luxfer cylinders can stand up to demanding firefighting environments for a 15-year period.

The special permit issued to Digital Wave specifically requires that the original special permit marking of each cylinder requalified by means of MAE testing be covered and replaced with “DOT-SP-16320.” Luxfer cannot accept responsibility or liability for use of Luxfer-manufactured cylinders beyond the 15-year service life for which they were designed, nor does the Luxfer cylinder warranty extend beyond 15 years.

**30-year Luxfer SCBA cylinders already available**

Since 2008, Luxfer has manufactured and sold carbon composite SCBA cylinders with a 30-year design life under its LCX®-EL (Extra Life) brand. These cylinders are heavier and have thicker liners and more composite reinforcement than Luxfer 15-year designs as this is needed to meet performance requirements of the 30-year DOT special permit, as well as international standards for cylinders with a 30-year life.