Mine Safety Appliances Company • P.O. Box 426 • Pittsburgh, PA 15230

Telephone: (412) 967-3000 Writers Direct Dial No.

User Notice

Life-Saver™ 60 Self-Contained Self Rescuer (SCSR)

March 4, 2002

To Users of Life-Saver 60 SCSRs:

As a result of the most recent NPTTL/NIOSH/MSHA Long Term Field Evaluation, it has been brought to our attention that some clarification is needed regarding the service life of the Life-Saver 60 SCSR (LS-60) [part numbers 815800 and 815500].

Although a man-year is commonly accepted as 2,080 hours (8 hours/shift x 5 shifts/week x 52 weeks/year), this relationship (hours to man-years) is not defined in the LS-60 instruction manual. Therefore, we are issuing this notice to inform you of the following additions to the LS-60 instructions:

> The Life-Saver 60 SCSR has a maximum service life of 10 calendar years from the date of manufacture. If the unit is continuously stored in a *static* condition, this 10 year service life applies. If the unit is stored in a *mobile* condition such that it is worn or carried or placed on face machinery, or moving or vibrating equipment, the service life is 2,600 shifts of 8 hours each (5 shifts/week x 52 weeks/year x 10 years) or 20,800 hours maximum (2,080 hours/year x 10 years).
>
> If the shifts are not 8 hours, adjustments to the service life must be made accordingly, but not exceeding a total of 20,800 hours (2,080 hours/year x 10 years) of the unit being stored in a *mobile* condition. If a unit is stored in both *static* and *mobile* conditions, the service life must be determined based on the percentage of time under each condition. Although the service life may be calculated to be less then 10 years from the date of manufacture depending on the storage conditions, the service life may never exceed a maximum of 10 years from the date of manufacture.
>
> If the use history of a unit cannot be determined, it must be assumed that the unit was carried three (3) shifts per day, everyday, since the date of manufacture. It then must be removed from service when the maximum service life of 20,800 hours is reached as defined above.
>
> See the examples below for further clarification:
>
> Example #1:
> If a unit is initially stored in a static condition for 3 years, how long can it be worn at a rate of 8 hours per shift, 5 shifts per week, and 52 weeks per year?
>
> With 30% of the service life consumed during the 3 years storage in a static condition, the remaining service life is 2,600 shifts x 70% = 1,820 shifts of 8 hours per shift, 5 shifts

per week, and 52 weeks per year. At this rate the unit could be worn for 7 years after the 3 years static storage.

Example #2:
If a unit is initially stored in a static condition for 2 years, how long can it be stored on moving equipment that is running for two 10 hour shifts per day, 5 days a week, and 52 weeks per year?

With 20% of the service life consumed during the 2-year storage in a static condition, the remaining service life is 20,800 hours x 80% = 16,640 hours.

16,640 hours ÷ 20 hours/day = 832 days

832 days ÷ 5 days/week = 166.4 weeks

166.4 weeks ÷ 52 weeks/year = 3.2 years (or 3 years and 10 weeks)

Therefore, the unit can be stored on moving equipment for a period of 3 years and 10 weeks after the initial static storage period of 2 years.

Example #3:
If a unit is initially carried for 3 years at a rate of 10 hours per shift, 5 shifts a week, and 50 weeks per year, how long can it be carried at a new rate of 4 hours per shift, 5 shifts a week, and 50 weeks a year?

10 hours/day x 5 days/week x 50 weeks/year x 3 years = 7,500 hours

After the initial period, the remaining life is 20,800 – 7,500 = 13,300 hours

The new rate is 4 hours/day x 5 days/week x 50 weeks/year = 1,000 hours/year

The remaining life calculation at the new rate is 13,300 hours ÷ 1,000 hour/year = 13.3 years; however, since the total service life cannot exceed 10 years, this unit can be carried at the new rate for 7 years.

The manual is also being revised to reflect minor updates and for consistency regarding acceptable storage positions. There are two positions allowed, not one.

Enclosed is a copy the revised instruction manual for your reference. If you have any questions or need additional manuals, please contact MSA Customer Service – Technical Support at 1-888-421-8324.

Very truly yours,

Charles J. Seibel, Jr.
Manager of Product Safety

Enclosure
PPL01037-02

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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March 4, 2002

RESPIRATOR USERS NOTICE

SUBJECT: Potential Reduction to Service Life for MSA Life-Saver 60 SCSR's

The National Institute for Occupational Safety and Health (NIOSH or the Institute) jointly with the Mine Safety and Health Administration (MSHA) wish to inform users of the Mine Safety Appliance Company (MSA) Life-Saver 60, 60-minute self-contained self-rescuer (SCSR) (approval number TC-13F-0385) of MSA's revised definition of the Service Life Plan for the MSA Life-Saver 60 SCSR. Some currently deployed Life-Saver 60 SCSRs may need to be removed from service as soon as 29 months from their manufacturing date as a result of this revision.

During ongoing NIOSH/MSHA Long Term Field Evaluations, visual signs of potassium superoxide (KO_2) were observed in the mouthpiece of one MSA Life-Saver 60 SCSR and detected in the breathing tubes of five additional Life-Saver 60 SCSRs. The presence of KO_2 in the mouthpiece or breathing tube is not detectable prior to opening and donning the SCSR. The Institute and MSHA consider the presence of KO_2 dust in the mouthpiece and breathing tube to be a potential risk to the user since the KO_2 dust could potentially be inhaled by the user. This could cause the user to abandon the SCSR due to coughing or other adverse reactions to the KO_2 dust.

As a result of the investigation and findings noted herein, Mine Safety Appliance Company has proposed the following clarifications regarding the definition of service life for all Life-Saver 60 SCSR (LS-60) [part numbers 815800 and 815500]:

> "Although a man-year is commonly accepted as 2,080 hours (8 hours/shift x 5 shifts/week x 52 weeks/year), this relationship (hours to man-years) is not defined in the LS-60 instruction manual. Therefore, MSA is issuing a User's Notice to inform users of the following additions to the LS-60 instructions:
>
> The Life-Saver 60 SCSR has a maximum service life of 10 calendar years from the date of manufacture. If the unit is continuously stored in a *static* condition, this 10 year service life applies. If the unit is stored in a *mobile* condition such that it is worn or carried or placed on face machinery, or moving or vibrating equipment, the service life is 2,600 shifts of 8 hours each (5 shifts/week x 52 weeks/year x 10 years) or 20,800 hours maximum (2,080 hours/year x 10 years).
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> If the shifts are not 8 hours, adjustments to the service life must be made accordingly, but not

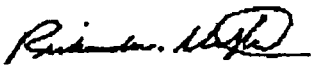
exceeding a total of 20, 800 hours (2,080 hours/year x 10 years) of the unit being stored in a *mobile* condition. If a unit is stored in both *static* and *mobile* conditions, the service life must be determined based on the percentage of time under each condition. Although the service life may be calculated to be less then 10 years from the date of manufacture depending on the storage conditions, the service life may never exceed a maximum of 10 years from the date of manufacture."

NIOSH and MSHA wish to inform users that the shortest service life for a Life-Saver 60 SCSR could be calculated to be two (2) years and five (5) months (twenty-nine (29) calendar months) from the manufacturing date, assuming the SCSR was carried or stored in a mobile condition 24 hours per day, 7 days a week, 52 weeks a year, to reach the maximum 20,800 hours. Both agencies agree that if a unit is stored in a static condition the service life would be 10 calendar years from the manufacturing date.

Due to the potential risks to the user, both NIOSH and MSHA recommend that all MSA Life-Saver 60s be examined and the definitions proposed by MSA be immediately applied to all currently deployed units. The definitions will also apply to those Life-Saver 60 units deployed in the future. Please note that units having exceeded the maximum service life time as defined by MSA are considered to be outside the conditions of approval, and are therefore not in approved condition. MSHA inspectors will work with mine operators to determine the service life of those units where the history of deployment is unknown. The Life-Saver 60 instruction manual is also being revised by MSA to reflect minor updates for consistency regarding the only two acceptable storage positions (unit orientation).

Additional information may be obtained from MSHA, Jeff Kravitz at 412-386-6923, or NIOSH, Lynn Rethi at 412-386-6686.

Sincerely yours,



Richard W. Metzler
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