ISSUE DATE: 1/19/07

PROGRAM INFORMATION BULLETIN NO. P07-02

KEVIN G. STRICKLIN FROM:

Acting Administrator for Coal Mine Safety and Health

MARK E. SKILES MARK E. SKILES Director of Technical Support

Potential for the Quick Start Candle on Mine Safety Appliances SUBJECT:

> Life-Saver 60 Self-Contained Self-Rescuer to Overheat or Catch Fire on Units Manufactured from September 1, 1999 through

Saint Stall

December 31, 2004

Who needs this information?

Underground bituminous coal mine operators, miners' representatives, independent contractors, Coal Mine Safety and Health (CMS&H) enforcement and Technical Support personnel, and other interested parties need this information.

What is the purpose of this Program Information Bulletin?

This Program Information Bulletin (PIB) informs the mining industry about the recent Mine Safety Appliances (MSA) User Advisory (attachment 1) which was issued to avoid the possibility of an overheated Self-Contained Self-Rescuer (SCSR).

Information

The Life-Saver 60 SCSR contains a component known as a chlorate candle, which automatically activates when the user opens the SCSR. The candle provides an initial supply of oxygen until the chemical in the unit reacts and supplies oxygen to the user. MSA has received some reports of excessive heat, sparks, and/or fire upon activation of another MSA product which uses similar technology: a Chemox Oxygen-Generating Breathing Apparatus (OBA) used for fire fighting, typically aboard naval vessels, and not used in mining.

MSA has not received any heating or sparking reports from users concerning properly maintained Life-Saver 60 SCSRs. Although MSA considers the likelihood of overheating to be very small, MSA is recommending action to avoid the possibility of a potential overheating. The Life-Saver 60 SCSR can also be identified by the NIOSH/MSHA approval number TC-13F- 385.

Required Action

Users should remove from service all Life-Saver 60 SCSRs manufactured from September 1, 1999 through December 31, 2004. Life-Saver 60 SCSRs manufactured before September 1, 1999, are not affected by this PIB. To identify SCSRs that are affected by this PIB, users should refer to the date of manufacture, which is stamped on the closure band as *MFR mm-dd-yy*. Units stamped as *MFR 090199 through MFR 123104* should be removed from service. Users should then follow the instructions in the MSA User Advisory attached.

Due Date

Identified Life-Saver 60 SCSRs should be immediately removed from service.

What is the background for this PIB?

On November 14, 2002, NIOSH issued a Respirator User Notice (attachment 2) informing users of the MSA Life-Saver 60 Self-Contained Self-Rescuer (SCSR) that the potential for the quick start candle to become excessively hot existed on MSA Life-Saver 60 SCSRs manufactured from October 2000 to July 2002. In extreme cases, this excessive heat could cause components near the quick start candle to ignite.

MSA had received reports of excessive heat, sparks, and fire relative to OBA canisters used onboard US and Canadian naval vessels. MSA identified that the OBA quick start candle is also used on the Life-Saver 60 SCSR and reported this information to NIOSH and MSHA. However, there were no reports of overheating with the Life-Saver 60 SCSRs as of the date of the issuance of the User Notice. An MSA investigation revealed that the root cause of the overheated quick start candles was due to a higher than normal amount of iron powder present in the quick start candle that could cause the candle to become excessively hot. In 2002, MSA subsequently made changes to the candle production to ensure that the quick start candles contained the right amount of iron powder.

Due to the potential risks to the user, both NIOSH and MSHA recommended that mine operators and other employers follow the recommendations listed in MSA's 2002 User Notice, to conduct an inventory of MSA Life-Saver 60 SCSRs in their possession and identify all those units in service that were manufactured between September 2000 and July 2002. In accordance with that Notice, prompt action was recommended. Since that time, there have been additional reports of similar problems with the quick start candles on Chemox OBA devices. MSA has re-evaluated the situation, and has now extended its Advisory to include all SCSRs manufactured between September 1, 1999 through December 31, 2004. The reason MSA has revised its dates for the Life-Saver 60 is

because it issued a Chemox User Notice — earlier this year, which included specific candle lot numbers. MSA wants to be consistent with the Chemox User Notice, since both devices use the same type of quick start candle.

What is MSHA's authority for this PIB?

The Federal Mine Safety and Health Act of 1977, as amended, 30 U.S.C. §801 et seq. and 30 C.F.R. §75.1714.

Is this PIB on the Internet?

This information may be viewed on the World Wide Web by accessing MSHA's home page at (http://www.msha.gov), choosing "Compliance Info" and "Program Information Bulletins."

Who are the MSHA contact persons for this PIB?

Coal Mine Safety and Health Terry L. Bentley (202) 693-9521 E-mail: Bentley.Terry@dol.gov

Hubert Sherer (202) 693-9623 E-mail: Sherer.Hubert@dol.gov

Technical Support

Terry Hoch (412) 386-6902 E-mail: <u>Hoch.Terry@dol.gov</u>

Jeffery H. Kravitz (412) 386-6923 E-mail: <u>Kravitz.Jeffery@dol.gov</u>

Who will receive this PIB?

MSHA PPM Holders Underground Bituminous Mine Operators Miners' Representatives Independent Contractors Special Interest Groups



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

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

Important User Advisory
Life-Saver [™] 60 Self-Contained Self-Rescuer

Part Numbers 815500 and 815800

November 8, 2006

The Life-Saver 60 SCSR contains a component known as a chlorate candle, which automatically activates when the user opens the unit. The candle provides an initial supply of oxygen until the chemical in the unit reacts and starts supplying oxygen to the user. MSA has received some reports of excessive heat, sparks, and/or fire upon activation of another MSA product, not used in mining, which incorporates similar technology. Although we have received no reports of this nature with properly maintained Life-Saver 60 SCSRs and we consider the likelihood of a Life-Saver 60 SCSR overheating to be very small, we are issuing this advisory as a precaution to avoid the possibility of a unit overheating.

MSA recommends that users remove from service all Life-Saver 60 SCSRs manufactured from September 1, 1999 through December 31, 2004. Life-Saver 60 SCSRs manufactured before September 1, 1999 are not affected by this advisory. This device was not manufactured after December 2004. To identify affected units, the date of manufacture is stamped on the closure band of each unit. The date is stamped on the closure band as MFR mm-dd-yy. Units stamped as MFR 0 9 0 1 9 9 through MFR 1 2 3 1 0 4 should be removed from service.

Since MSA no longer manufactures the Life-Saver 60 or any other NIOSH/MSHA approved person-wearable SCSR, MSA can only provide reparation in the form of a credit or refund. In order to obtain a pro-rated credit or refund, each unit must be opened and the candle activated as indicated below. Once the candle is activated, remove the closure band from each unit and return the band to MSA.

Activating the Candle

After removing the Life-Saver 60 SCSR from service, take precautions to place the unit in an outdoor area free of combustible materials, in the event the unit overheats upon activation. Do not open or activate the candle underground or inside a building. Remove the rubber protective cover, then unlatch and remove the band by pulling the strap located on top of the end cap. The candle may activate at this time, which would cause the bag to start filling and the end cap to lift up.

LOCATION: RIDC Industrial Park • 121 Gamma Drive • Pittsburgh, PA 15238

Activating the Candle (cont.)

If the candle doesn't activate upon unlatching the band, remove the end cap and extend the mouthpiece to activate the candle. Note: It is possible for a vacuum to develop under the end cap due to changes in elevation, temperature, and pressure. If a vacuum developed, you must use the internal pry-hook to break the vacuum and dislodge the end cap.

Upon activating the candle, maintain a safe distance from the unit in the event that it overheats. Allow the canister to cool for 10 to 15 minutes. If you experience difficulty in removing the end cap or activating the candle, contact MSA Customer Service at 1-800-MSA-2222 for assistance.

To obtain a pro-rated credit or refund, complete the enclosed *Customer Satisfaction Credit/Refund Form* and return it along with the closure bands to MSA. If a credit is chosen, MSA will mail a certificate to you that can be used toward the purchase of MSA products through your local MSA distributor. If a refund is chosen, MSA will mail a check to you in the amount of the refund determined. The remaining components of affected Life-Saver 60 SCSRs should be disposed of according to all applicable regulations.

If you have any questions regarding this advisory, please contact MSA Customer Service at 1-800-MSA-2222. MSA regrets any inconvenience that this situation may cause; however, we trust that you will accept our indicated measures to address this potential safety concern.

Very truly yours,

Charles J. Seibel, Jr.

Manager of Product Safety

PPL06008-03



$\frac{Customer\ Satisfaction\ Credit/Refund\ Form}{Life\text{-}Saver}^{\tiny{\mathsf{TM}}}\ 60\ SCSR}$

Please provide the information below and check the applicable credit or refund boxes:

Date of manu	<u>facture</u>	Quantity	Product Credit	Cash Refund
090199 – 0801	01		□ \$240.00 / unit	□ \$150.00 / unit
080201 - 080203			□ \$360.00 / unit	□ \$225.00 / unit
080303 – 123104			□ \$480.00 / unit	□ \$275.00 / unit
Total bands returned				
Company				
Address				
Phone		Fax*		Date
Name				
Signature				

Return the completed form with the closure bands from <u>all</u> affected Life-Saver 60 SCSRs to MSA at the address below. <u>DO NOT return the SCSR.</u>

MSA LS-60 Dept. 121 Gamma Drive Pittsburgh, PA 15238

(Recipient's telephone: 800-672-2222)

If shipping from within the U.S., ship via UPS using account No. 3X21R7.

If shipping from outside the U.S., include a copy of the shipping receipt in the document sleeve of the package or mail separately (with identification) to MSA at the above address and MSA will provide reimbursement.

Questions? Please call MSA Customer Service at 1-800-MSA-2222.

Attachment #2

NIOSH Respirator User Notices

November 14, 2002

SUBJECT: Potential for the Quick Start Candle on MSA Life-Saver 60 Self-Contained Self-Rescuer (SCSR) to Overheat or Catch Fire on Units Manufactured from October 2000 to July 2002

The National Institute for Occupational Safety and Health (NIOSH or the Institute) and the Mine Safety and Health Administration (MSHA) wish to inform users of the MSA Life-Saver 60 Self-Contained Self-Rescuer (SCSR) that the potential for the quick start candle to become excessively hot may exist on MSA Life Saver 60 SCSRs manufactured from October 2000 to July 2002. In extreme cases, this excessive heat may cause components near the quick start candle to ignite. The MSA Life-Saver 60 SCSRs may be further identified by the NIOSH/MSHA approval number TC-13F-385.

MSA received reports of excessive heat, sparks, and fire on oxygen-generating breathing apparatus (OBA) canisters used by navies. MSA identified that the OBA quick start candle is also used on the Life-Saver 60 SCSR and reported this information to NIOSH and MSHA. However, there have been no reports of overheating with the Life-Saver 60 SCSRs to date. An MSA investigation revealed that the root cause of the overheated quick start candles is due to a higher than normal amount of iron powder present in the quick start candle that can cause the candle to become excessively hot. MSA has made changes to the candle production and now has additional test requirements to ensure that the quick start candles contain the right amount of iron powder.

Due to the potential risks to the user, both NIOSH and MSHA recommend that mine operators and other employers follow the recommendations listed in MSA's User Notice (pdf format) to conduct an inventory of MSA Life-Saver 60 SCSRs in their possession and identify all those units in service that were manufactured between September 2000 and July 2002. In accordance with that Notice, action should be taken promptly. The following guidance for identifying affected units was obtained from the MSA user notice:

Life-Saver 60 SCSRs manufactured between September 2000 and July 2002 are easily identified with a serial number. The serial numbers of the units in question range from 14573 through 15661. Units within this range were shipped to customers between September 2000 through July 2002. The serial number is stamped on the metal band of each unit. Page 2 - Respirators Users Notice

Additional information may be obtained from MSHA, Jeff Kravitz at 412-386-6923, or Monty Christo at 202-693-9527, or NIOSH, Siva Hota at 412-386-6731.

Sincerely yours,

Acting Chief Respirator Branch National Personal Protective Technology Laboratory