State of West Virginia
Joe Manchin III, Governor

WV Office of Miners’ Health, Safety & Training
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TO: WV Underground Mine Operators and Affected Independent Contractors

FROM: Ron Wooten, Director OMHS&T

DATE: October 27, 2006

SUBJECT: Actions as a result of OMHST study on the Effects of Long-Term Temperature Extremes on Self-Contained Self-Rescuers (SCSRs)

On August 31, 2006 the West Virginia Office of Miners’ Health, Safety and Training (OMHST) sent a notice describing actions it was taking regarding the SCSR’s carried by its staff that had exposed long-term to temperature extremes. Since issuing that notice the office has completed a report on its findings. The report, “Effects of Long-Term Temperature Extremes on Self-Contained Self-Rescuers” can be found on our web site (www.wvminesafety.org).

The report concludes that SCSR’s exposed to the temperature extremes typically found in vehicles not only exceeds manufacturer’s warnings but may render the units incapable of supporting escape in the event of an emergency.

According to preliminary data from the first statewide SCSR inspection inventory of approximately 10,500 SCSR’s reported, there are 2,500 CSE SR-100 manufactured before August 2004 and 70 Draeger OxyK Plus’ that do not have a means of detecting exposure to excessive heat. Those SR-100s manufactured after August 2004 have a temperature sensor that changes color when it exceeds the manufacturer’s maximum temperature. The Oenco EBA-6.5’s and M-20’s have a feature that when maximum temperature is reached a pressure seal breaks and vents oxygen causing the pressure gauge to move from the green range.

The state-wide SCSR data indicates that 63 out of 4,300 SR-100s with temperature indicators and 15 out of 3,600 EBA-6.5s had been removed due to indications of temperature since the first of the year. If these numbers are indicative of handling procedures for the remainder of the state’s SCSR’s there may be other units at risk.

Operators and independent contractors should distribute this notice during their next safety meeting(s). If no routine safety meeting(s) is scheduled prior to November 15, 2006 than a special meeting(s) shall be held. A record of the meeting(s) and attendance sheet (name & certificate number) should be kept and made available for review by OMHS&T, indicating that all personnel who use SCSR’s have been briefed on this notice.
At that safety meeting handling of SCSRs should be reviewed and all users asked to review their personal handling of their SCSRs for exposure to excessive temperature. Some possible causes of exposure might include:

1. Placement near heat sources while using equipment, such as:
   a. Transfer boxes
   b. Hydraulic lines
   c. Engine exhaust, etc.

2. Storage of equipment used on the surface all or part of the time, such as:
   a. Dozers
   b. Buses
   c. Man-trips
   d. Scoops, etc.

3. Storage outside the mine in area where temperatures could exceed manufacturer’s maximum; such as:
   a. Bath houses
   b. Lamp houses
   c. Lockers, etc.

4. Storage of SCSRs in vehicles, such as:
   a. Company trucks
   b. Personal vehicles, etc.

SCSRs that are suspected by anyone of having been exposed to excessive temperature shall be withdrawn from service. A notice of the action describing the suspected circumstances of exposure, the make/model and serial number of the SCSR, and the date withdrawn for service shall be made to the Director of OMHS&T and the manufacturer contacted for determination of risk the handling circumstances have presented. If the manufacturer determines that the unit has not been affected by the described circumstances it may be returned to service with a copy of the determination forwarded to the Director of OMHS&T.

The safe care of SCSRs shall be emphasized in all future SCSR training. The message that must be communicated is that each person handling an SCSR has responsibility to ensure that it is handled as the life saving device that it is.

IF YOU DO NOT CARE FOR YOUR SCSR, IT MAY NOT BE ABLE TO CARE FOR YOU