



Issue Date: October 20, 2010

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Subject: CSE SR 100 Self-Contained Self-Rescuer

RESPIRATOR USER NOTICE

The National Institute for Occupational Safety and Health (NIOSH), in conjunction with the Mine Safety and Health Administration (MSHA), has opened an investigation on the performance of the oxygen starter assembly on CSE Corporation's SR 100 self-contained self-rescuer (SCSR). There is a problem with the functioning of some oxygen starter assemblies in the CSE SR 100 which is designed to furnish breathing air to miners in the case of a mine emergency.

CSE has performed a failure analysis on the oxygen starter used in the SR 100 and believes the problem is related to manufacturing tolerances in the pipe thread and the application of the sealant used in assembling the oxygen starter. As a result, some oxygen starter assemblies could leak. CSE has entered into a voluntary stop sale of the SR 100. Therefore, replacement devices for the SR 100 are not currently available from CSE.

CSE estimates the problem occurs in less than 1% of new units. NIOSH and MSHA have not verified that estimate. However, if the failure rate is less than 1%, the availability of a second SCSR to the miner will provide an acceptable level of safety in the event of an oxygen starter failure pending a resolution of the problem. Extra SCSRs have been required in underground coal mines since the passage of the 2006 MINER Act. NIOSH and MSHA posted a Respirator User Notice on June 23, 2010, (<http://www.cdc.gov/niosh/npptl/usernotices/pdfs/CSEUserNot06232010.pdf>) notifying miners that they should immediately obtain another SCSR if they encounter any difficulty with the operation of an SCSR. This advice also applies if there is a failure of the oxygen starter.

The failure rate of the oxygen starter is not well-characterized in the field-deployed units. NIOSH and MSHA feel it is necessary to accurately determine this failure rate within the population of field-deployed units. At the completion of this analysis, NIOSH and MSHA will evaluate the data from the field audit and offer additional guidance based on the results of the testing.

NIOSH has developed a Sampling Plan for the CSE SR 100s to verify the failure rate of the SR 100 oxygen starter in field-deployed units. The plan employs standard quality control statistics to assure that a large enough sample is used to accurately determine how often an oxygen starter assembly might be expected to fail. On October 4, 2010, NIOSH, in cooperation with MSHA, began collecting a representative sample of SR 100 units from the population deployed in underground coal mines. Depending on the test results, this sample could be as large

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as 500 units. Collection is expected to be complete by mid-December, 2010. Testing of these units for performance of the oxygen starter is expected to start as early as October 2010, and the testing is expected to be complete by December 29, 2010.

At the conclusion of this evaluation, the results will be made public. The details of the sampling plan and the test protocol are available on the NIOSH NPPTL website at <http://www.cdc.gov/niosh/npptl/usernotices/pdfs/CSEsamplingPlan09292010.pdf>.