

Welcome



Introduction

Safety Innovations for Miners

Because our family has a long history of working in mines, we're committed to developing new technologies for miner safety. Three generations have followed Alexander Shearer into mining since the early 1900s, when he arrived from Scotland and went into the coal fields of West Virginia.

As we've worked alongside miners, our experiences have contributed to our innovations in air-quality monitoring and self-contained self-rescue devices (SCSRs). Listening to miners, and then creating products that meet their needs, is what we do.

Thanks for placing your trust in CSE. We'll keep doing our best to live up to it.



Scott Shearer
President and CEO
CSE Corporation

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Getting to Know the CSE SCSR

As a user of the CSE self-contained self-rescuer (SCSR), you should know all about it. This manual describes:

- ▶ How the CSE SCSR operates
- ▶ How to inspect it
- ▶ How to use it
- ▶ How to conduct SCSR training classes
- ▶ What training should cover

It also includes:

- ▶ A training DVD created especially to support the CSE SCSR system.
- ▶ Contact information for your local CSE representative and for CSE corporate headquarters.

How to Use This Manual

Save this book, and get to know it. It's filled with practical information from industry professionals like yourself, and from our own engineering and training specialists.

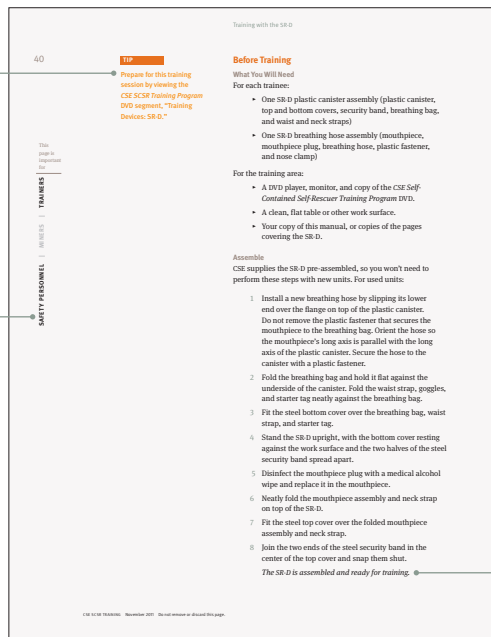
- ▶ Store it where you can find it quickly when you need it.
- ▶ Keep it together. If you remove the DVD or any other materials, put them back when you're finished. You can file future CSE product updates and technical bulletins here, too. Call your local CSE representative if you need replacement materials or a complete new manual.
- ▶ Watch the DVD. It supports and clarifies everything you'll read here. Even if you're not being trained or conducting classes, it will improve your SCSR expertise.
- ▶ Look for navigation markers. On most pages you'll see features designed to help you find out what you need to know.

Useful ideas

Notes under a TIP bar give you suggestions that can make your job easier.

Who needs to know

Each page tells you who (Miners, Trainers, Safety Personnel, SCSR Inspectors, Training Officers, Company Owners and Operators) has the most to gain from reading it.



What to look for

Lines set in *italics* tell you what you may see, hear, or feel.

What You Should Know About Federal SCSR Safety Regulations

Summary

Under the law, you have five areas of responsibility:

- ▶ Ready access
- ▶ Storage
- ▶ Training
- ▶ Inspection
- ▶ Reporting

Ready Access

Everyone who enters an underground mine must have ready access to an hour of breathable air for emergency use. In practice, this means that every worker must carry an SCSR at all times.

- ▶ If a worker finds that carrying or wearing an SCSR is hazardous, he or she must keep it readily accessible and no more than 25 feet out of arm's reach.
- ▶ In some cases, you must obtain MSHA permission to allow separation between the worker and his or her SCSR. Ask your state or federal inspector for guidance in any situation that might separate a worker from his or her SCSR.

Further, in an emergency, no worker should have to travel more than 30 minutes to reach an additional SCSR. You must provide additional SCSRs:

- ▶ At the job site: Every worker who commonly spends more than half of the shift at a fixed location must have ready access to one SCSR in addition to the SCSR he or she carries. This means that you must provide a minimum of two SCSRs per worker.
- ▶ On mobile equipment: Every mantrip or other piece of mobile equipment that carries workers into or out of the mine must carry one additional SCSR per passenger.
- ▶ Along travel routes: Every worker (such as a pumper or examiner) who commonly spends less than one half of the shift at a fixed location must have ready access to additional SCSRs stored along normal travel routes.
- ▶ In escapeways: Every worker must have access to caches of additional SCSRs spaced along escapeways so that, under emergency conditions, it will take no more than 30 minutes to travel from one cache to the next.

See MSHA regulations for guidance.

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Storage

MSHA requires you to store SCSRs at specified locations along escapeways and travel routes in approved storage units or approved hardened rooms, and on mobile equipment. Storage units must meet MSHA standards and be readily accessible and conspicuous. It's your responsibility to:

- ▶ Mark every storage location with a reflective sign reading "SCSRs" or "Self-rescuers."
- ▶ Post reflective directional signs leading to every storage location.
- ▶ Show all storage locations on mine maps.
- ▶ Mark every storage unit *on mobile equipment* with a reflective sign reading "SCSRs" or "Self-rescuers."

See MSHA regulations for guidance.

Training

You must provide quarterly and annual SCSR safety training for every worker who enters an underground mine.

Quarterly: Four times a year, every worker must undergo hands-on training that includes:

- ▶ Donning the SCSR
- ▶ Using the SCSR (starting it and controlling physical exertion)
- ▶ Changeover from one SCSR to another
- ▶ SCSR care and daily inspection
- ▶ The location, quantity, and models of SCSRs stored in the mine

Annual: At least once a year, every worker must undergo hands-on training that includes practice with an expectation training unit (such as the CSE SR-T or SR-MP) that simulates actual SCSR breathing resistance and heat.

See MSHA regulations for guidance.

Inspection

Workers must visually inspect their assigned SCSRs daily. Mine operators must inspect all SCSRs quarterly.

Daily: Workers must inspect their SCSRs at the beginning of each shift. With CSE SCSRs, they should follow CSE instructions for daily inspections.

Quarterly: You must assign specially trained personnel to conduct inspections every 90 days. With CSE SCSRs, they should follow CSE instructions for quarterly inspections.

See MSHA regulations for guidance.

Reporting

MSHA requires you to maintain records and submit reports of SCSR training, inspection, and inventory.

- ▶ **Training:** You must maintain training records and keep them available for MSHA review.
- ▶ **Inspection:** You must maintain, and keep available for MSHA review, written certification that SCSR inspections were completed, including records of corrective actions taken.
- ▶ **Inventory:** At the end of every quarter, you must send MSHA an inventory that records the manufacturer, model, date of manufacture, and serial number of every SCSR at your mine. You must:
 - ▶ Report inventory changes in the quarter during which they occur.
 - ▶ Report defects, performance issues, or malfunctions in individual SCSRs.
 - ▶ Retain SCSRs with defects, performance issues, or malfunctions for 60 days after you submit your report.

See MSHA regulations for guidance.

Disclaimer

The Mine Safety and Health Administration (MSHA) strictly regulates self-contained self-rescuers (SCSRs). Be sure your company is in compliance by consulting the Federal Register and *Title 30, Mineral Resources*, of the U.S. Code of Federal Regulations for complete MSHA regulations, guidelines, and definitions.

CSE Does Not Offer Legal Advice

We provide this summary only to help make you aware of the general scope of MSHA regulations for SCSRs. CSE is not responsible for any loss, injury, or damage caused by errors, omissions, or misunderstandings, or by any part of this summary that does not reflect changes that occur after its publication.

This Summary is Informational

It does not replace your obligation to become familiar with MSHA regulations. Mine operators and SCSR users assume full responsibility for complying with the law. Consult your state's regulations as well. Both federal and state requirements change often, so keep up to date on the law.



CSE Corporation

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You Always Have Backup

If you need more information, just ask the CSE team. Call 800-245-2224 or 412-856-9200, or contact us at csecorporation.com/contact-us. We'll be glad to hear from you, and we'll get you the facts as quickly as possible.