

casestudy

USA

Alpha Natural Resources

With its state-of-the-art Running Right Leadership Academy, Alpha Natural Resources has helped raise the bar for safety training in the coal mining industry.

Safety is the top priority for mining companies – nothing is more important to the coal industry than ensuring people return home safely at the end of the working day. The industry understands there's no good reason not to put safety first.

Alpha Natural Resources - a member of the World Coal Association - is safety-conscious, even by these high standards. Since its introduction in 2004, the company's operating philosophy – "Running Right" – has informed everything from its safety values to more tangible elements like its management structure, embodied in the position of Vice President of Safety and Running Right.

But the most tangible expression of that philosophy is the Running Right Leadership Academy, a 136,000 square foot safety training facility opened in West Virginia, USA in June 2013.

Alpha and the companies it has acquired recognised the need for such a facility. Two external factors spurred the decision to provide it:

1. The US National Mining Association (NMA) launched the CORESafety initiative, which challenges members to achieve

zero fatalities and a 50 percent reduction in the injury rate over five years (2012–2016): the 0:50:5 Goal.

2. Alpha acquired Massey Energy, subsequently reaching an agreement with the US Government to create a safety training facility as a positive outcome following Massey's Upper Big Branch mine accident in 2010.

Alpha seized the opportunity to realise its vision of an exceptional facility, actively contribute to the 0:50:5 Goal and fulfil its public duty.

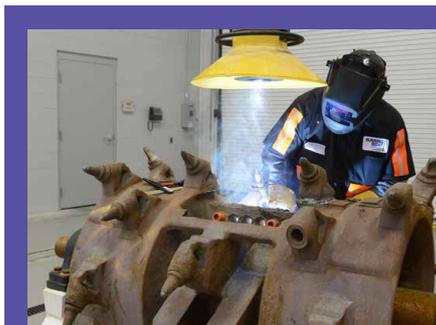
The design of the facility and its curriculum are founded on consultations with miners. Alpha also conducted site reviews and gathered knowledge from existing training centres to ensure the Academy would be the best it could be. It needed to fulfil Alpha employees' current and anticipated future needs, bolster basic job functions, and evolve to address new regulations and technology as well as remove obstacles to learning.



In practice, this means creating the most realistic possible learning environments – without any real-life risk. The Academy's virtual simulator studio lets trainees experience welding or operating heavy machinery such as continuous mining machines, roof bolters, shuttle cars and surface haul trucks while providing real-time feedback. Students practise tasks during which most injuries and fatalities occur, so trial and error isn't an option if you're learning them on the job – but at the Academy it's the norm.

Instructors are in control of every aspect of the virtual scenarios. Most are Alpha staff with decades of first-hand experience of mining environments and hazards – though external specialists are also brought in to teach specific classes such as physiology.

While simulators are ideal for familiarising trainees with particularly high-risk activities, the Academy aims to provide hands-on experience of real equipment whenever it's safe and practical.



"I believe that we'll have safer, more compliant and productive operators with this training"

Running Right Leadership Academy trainee

In the first year of operation

22,000

ALPHA STAFF EXPERIENCED THE ACADEMY



200,000

HOURS OF TRAINING TOOK PLACE



\$10,000,000

VALUE OF THOSE TRAINING HOURS IN EMPLOYEE TIME



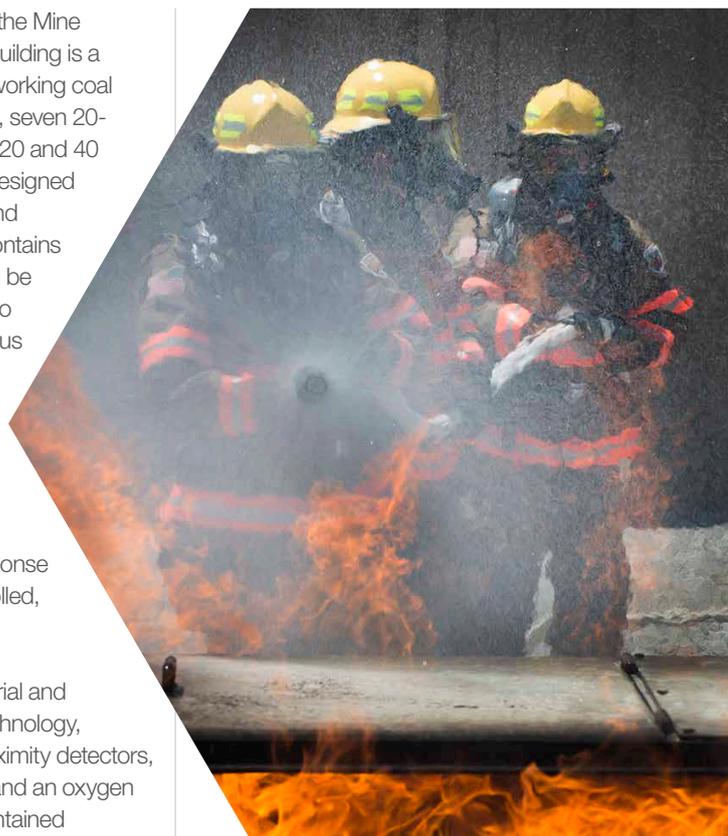
Nowhere is this clearer than in the Mine Lab. This 96,000 square foot building is a painstaking reproduction of a working coal mine, with eight 20-foot entries, seven 20-foot cross-cuts, mining cuts of 20 and 40 feet, and a ventilation system designed to recreate the air conditions and movements of a real mine. It contains fire and water hazards and can be filled with smoke or plunged into total darkness to simulate various disaster scenarios.

The mine rescue teams use it to practise live firefighting, isolating dangerous gases by blocking mine sections, and a range of other emergency response activities in a completely controlled, safe environment.

Alpha is also using the Lab to trial and showcase new mine safety technology, including air flow monitors, proximity detectors, coal dust explosibility meters, and an oxygen cascading system with self-contained breathing apparatus (SCBA). The SCBA is an improvement on the breathing equipment currently used for escaping mines, which are effectively one-use devices that can require escaping miners to expose themselves to harmful air conditions while switching an exhausted one for a fresh one. The SCBA incorporates a full-face mask similar to a firefighter's and can be refilled from a hose without being removed. This system is already in place in three Alpha mines and is being rolled out throughout the company, so having functioning SCBAs at the Academy is crucial for new recruits.

The Academy is also where all new Alpha miners receive their 'red hat training' – so called because most newly recruited miners in the USA wear red helmets until they reach a certain level of competence, so colleagues are aware of the support they may need.

As well as this essential operational training, the Academy offers professional development, including emergency medical technician (EMT) and electrical training, and engineering, management and leadership courses. The guiding principle is to connect Alpha's people more closely with their work,



enabling them to reach beyond competence towards mastery of their roles.

In its first year, the Academy has delivered more than 200,000 hours of training to nearly 22,000 Alpha staff: a commitment of \$10 million worth of employees' time.

Alpha's safety record for 2013 included the lowest on-the-job injury rate and the lowest reportable incident rate in the company's history – and not a single fatality.

Alpha's leadership sees mining as a family, with shared goals and a responsibility to share ways to achieve them – so the company is now considering making its facilities available to others to help improve safety across the industry.

Find out more

To read more about Alpha Natural Resources visit www.alphanr.com or www.anyearinreview.com

To find out more about the World Coal Association and our work, visit www.worldcoal.org or email info@worldcoal.org

