

## Welding Hazards: 3M and Greenbrier Companies Case Study

### Working Together to Advance Welding Safety and Worker Protection. Benchmarking a Best Practice for Worker Comfort in Welding Equipment

As a leading supplier of transportation equipment and services to the railroad and marine industries, Greenbrier has about 10,000 manufacturing employees. A lot of those positions, like welding and grinding, come with inherent risks. That's why Dave Harvey, the Director of Environment, Health and Safety, was looking for a way to even the playing field when protecting his employees — from those in higher risk jobs to those in lower risk jobs.

Dave met with the 3M PPE Safety Solutions Team, and they helped him determine that the best way to maximize productivity and help protect welders' lungs from welding fumes and other welding hazards was an integrated respiratory protection system. Enter the 3M™ Adflo™ Powered Air Purifying Respirator (PAPR) System: a respirator with integrated hard hat, welding and faceshield, and optional hearing protection that could increase comfort, protection and confidence. The Adflo™ System wasn't just going to change how workers were protected — it was going to change the way they worked.

*“One of the differentiators for us was the level of service that 3M provided. It felt like they were trying to come up with the best solution for us rather than just selling us something.”*

**Dave Harvey**

Director of Environment, Health and Safety

Dave knew that his workers might not be open to change or trying something new, so he asked 3M to help train employees and get them comfortable using the 3M™ Adflo™ Powered Air Purifying Respirator (PAPR) System. Their responses were positive from the get-go:

- Workers really liked the range of vision the system offered in their hectic and hazardous environment
- The integration of a welding helmet with a face shield was a big hit — saving them the hassle of changing gear between tasks
- The integrated respirator was a huge deal — no fogging, more comfort, and even getting to have some facial hair were big pluses

Now Dave's crew can get into tight spaces with less equipment, raise their welding shields in certain locations without risking exposure and work more comfortably for longer periods of time. The benefits of comfort plus added eye protection did not go unnoticed — by other workers or the safety management team. More and more workers started asking for the 3M™ Adflo™ Powered Air Purifying Respirator (PAPR) System.

Greenbrier's partnership with 3M has given them the confidence of knowing they're not only meeting the requirements of respiratory protection — they are helping to create better working conditions for their employees. As a result, they have intro-






# 3M Personal Safety Division

duced 3M™ Adflo™ Powered Air Purifying Respirator (PAPR) Systems to multiple manufacturing facilities in the U.S. and Mexico. The benefit of these systems for Greenbriar has been tremendous, here's what some of their welders had to share:

*"They couldn't pay me to go back to the old way."*

**Jake Martin, Welder**

Click on the below video links or visit [3M.com/MetalworkingSafety](https://www.3m.com/MetalworkingSafety) to hear directly from Dave, Jake, Gordie and many other employees of Greenbriar on their experience with the 3M™ Adflo™ PAPRs.

<p><a href="#">Video link</a></p>  <p><b>Dave Harvey, Director EHS</b></p> <p>"With the PAPRs there's greater comfort level, and people don't get as tired by the end of the day"</p>	<p><a href="#">Video Link</a></p>  <p><b>Jake Martin, Welder</b></p> <p>"I can do multiple things with the same unit on"</p>	<p><a href="#">Video Link</a></p>  <p><b>Gordie Blair, Welder</b></p> <p>"The ability to grow a beard is very nice in my opinion"</p>
<p><a href="#">Video Link</a></p>  <p><b>Clint Allen, Welder</b></p> <p>"It's comfortable, quick and efficient. I was surprised at how light is was."</p>	<p><a href="#">Video Link</a></p>  <p><b>Alex Gradnor, Welder</b></p> <p>"The air coming into your hood pushes it into your face, so you are constantly breathing in fresh air."</p>	

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