



Weatherford®

*Pipeline &
Specialty
Services*

Mining

Fire Prevention, Suppression or Control with On-Site Membrane Generated Nitrogen

Fire Prevention, suppression or control is not to be taken lightly in a mining environment—and neither should your choice of a service company to rely on in the event of a thermal emergency.

Taking the necessary steps to design our equipment and train our personnel positions Weatherford as the leading provider of on-site generated membrane nitrogen service for safe control and suppression of underground mine fires and for prevention applications in maintaining an oxygen-depleted zone.

We have the largest fleet of portable on-site nitrogen production units (NPUs) worldwide for ready availability and a timely and rapid response. These temporary nitrogen plants have been deployed to remote locations (including elevations up to 10,000 ft) and have performed during the harshest of weather conditions. Weatherford NPUs are available skid mounted, trailer mounted or containerized and are designed for immediate mobilization.

Your experience and knowledge of your mine's characteristics are key to helping us quickly review your requirements, determine the most appropriate and cost-effective equipment for the situation, and send it to your location at a moment's notice.



Trailer-Mounted Nitrogen Generation Equipment

The New Generation Service CompanySM

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Weatherford Advantages

- Safe and effective process
- Quick response and logistical readiness
- Reliable equipment and personnel
- Free and infinite nitrogen source

NPUs generate nitrogen on site, from compressed air, at flow rates ranging from 300 to more than 3,000 SCFM (18,000 to 180,000 SCFH). Whether your need is temporary or long term, Weatherford has the equipment for your safe operations.

Real Results

Weatherford has safely and successfully completed many projects for the mining industry. Our track record shows that clients will save as much as 70 percent over the cost of liquid nitrogen—without the logistical headaches. Our experience spans from the Appalachians to the Rocky Mountains, where we have successfully provided continuous availability:

- 60 days—119 MSCF of nitrogen pumped
- 87 days—118 MSCF of nitrogen pumped
- 90 days—350 MSCF of nitrogen pumped



Internal View of a Containerized Nitrogen Generation System



Compression and Nitrogen Units on Site at Thermal Event in Virginia

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