

### CASE STUDY:

Fortune 500 mining company strengthens lightning safety, weather resilience, and compliance with services from AEM



### Maximizing intelligence for worker & site safety

### **OVERVIEW**

There's an international mining company with a multi-decade history whose name you might not know, but metal from one of their mines is likely somewhere in your house right now. That company manages an impressive portfolio of mining sites across the globe, each of which faces its own localized challenges.

In recent years, as major weather events and natural hazards have grown, this forwardthinking industry leader has continually added to their technology stack and operational approach to remain resilient and continue to thrive. Working with AEM, they've evolved weather intelligence, worker safety, and alerting strategy at a variety of mine sites around the world.

### Overcoming evolving industry challenges

Mining has always faced threats from the weather. Flash floods, extreme temperatures, and lightning strikes can make day-to-day mining work downright deadly. Now, with weather proving increasingly variable and major systems more common, this mining company found their mines required more situational intelligence, and they need to be absolutely sure of that intel. To maintain their reputation as an industry leader and minimize the impact of weather risk on operations, the company needed to:

### 1

#### IMPROVE LIGHTNING SAFETY FOR WORKERS AT MINE SITES

The company wanted to strengthen the quality of lightning safety alerts and make them unmissable.

INCREASE REAL-TIME WEATHER AWARENESS AND RESILIENCE

The company required realtime intelligence to inform operational decision-making around safety.

### PROTECT PEOPLE & THE ENVIRONMENT FROM AIR POLLUTION

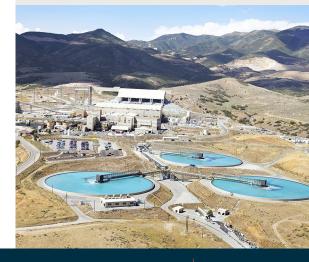
The company needed to understand where wind was carrying debris and particulate matter.

### SCALING SOLUTIONS TO SITE-BASED NEEDS

Mining is an exceptionally challenging industry to manage from a corporate perspective because each site presents its own individual challenges based on geography, geology, hydrology, climate, local regulations, and more.

That's why this company needs partners that understand how to assess each mine on a project-based level while establishing best practices that can be replicated easily at scale for other sites in the future.

AEM and the Earth Networks brand first engaged with this industry giant more than seven years ago and have grown into a trusted provider.



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# Solution: site-based monitoring & alerting packages

AEM first engaged with a single mine from this company's portfolio on a lightning detection project. Based on our successful delivery, the customer re-engaged in hopes of upgrading additional weather monitoring hardware after a competitor's stations experienced major data loss. From there, a collaborative relationship blossomed, and we've provided several of their mines with:



### SFERIC SIREN OUTDOOR ALERTING SYSTEMS

The Sferic Siren provides an audible horn to alert workers to lightning risks in addition to flashing lights, providing a comprehensive system.



### VANTAGE PRO2™ WEATHER STATIONS

Deployment-ready stations offered a cost-effective solution for onsite wind and weather monitoring with reliable real-time communication.



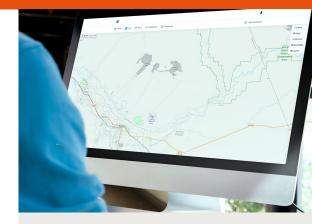
### EASY-TO-INTERPRET SOFTWARE

Real-time weather data from site-based weather networks and lightning alerts are all made highly visual in Elements<sup>™</sup> 360 to inform decision-making.

## Weather resiliency for mines around the world

Now, thousands of miners across the globe are better protected from lightning than ever before, and their leaders have the capacity to lead proactively and decisively in the face of whatever Mother Nature brings their way. By embracing a site-based approach where individual mines could address their weather needs in the most well-scaled way possible, this Fortune 500 leader is poised to continue leading the way for years to come.





### Why AEM?

AEM's purpose is to empower communities and organizations to survive – and thrive – in the face of escalating environmental risks. A big part of that is supporting mining companies around the world so they can power the global supply chain and economy while continually adopting safer practices and operating better in tune with growing weather and climate challenges.

If you're in the mining industry – anywhere in the world and at any scale – we'd love to have a chat about our:

### **1. MINING INDUSTRY EXPERTISE**

Mines around the world trust AEM because we understand the space and have an established record of success.

### 2. NEEDS-BASED WEATHER RESILIENCE

Operations of all sizes and types look to AEM to tailor natural hazard monitoring to their hyperlocal site-based challenges.

### 3. END-TO-END SOLUTIONS

Whether your mining company is looking for a transformational multi-hazard management partner or just trying to get over the next hill, AEM can help.