

Industrial Case Study

Hazard: Coal Dust



# Open Cut Mining and Quarry



# Challenge:

An Australian open-cut mine and quarry operation had a unique set of conditions.

In an environment characterised by hot temperatures, harsh working conditions, high concentrations of dust and tight-fitting spaces, workers required high protection and freedom of movement to perform their roles.

Given the inherent risks, they needed a unit that was light, comfortable and provided cool airflow. In addition, the hygienist highlighted the need to be simple to "don and doff", easy to teach and to have fewer parts for easy inventory management.

# Solution:

CleanSpace® Technology was approached by the distributor to set up a pilot in the field so that the team could test and ascertain whether the units met their needs. Working with the safety manager the employees were trained and the 2-4 week pilot was put in place with a key group of employees.

# Result:

Once the pilot was complete the team was interviewed for their feedback. Their comments were captured in a follow up survey:

- "Lightweight unit and easy to wear throughout the 10-12 hour shift."
- "Comfortable. Good airflow on the face; and combats the heat."
- "No waist-mounted battery pack or hoses helped with portability and movement around equipment."
- "Good filter life and filter alarms guaranteed efficient filter use."
- "Simple and quick to put on and operate."
- "Durable and tough enough to withstand the workplace conditions."
- "Few parts. Low inventory."

### Conclusion:

The pilot gave the facility first-hand practical experience with their employees in the field. The resounding result was that they preferred CleanSpace® respirators to any other respirator they had previously worked with. Additionally, the pilot provided a unique feedback loop that engaged employees and assisted CleanSpace® with delivering the right solution. This collaboration resulted in this opencut mining and quarry operation adopting CleanSpace respirators in many of their other quarry sites.













Water tolerance (IP 65) and provides eye protection when worn with a full face mask

- Breath responsive with peak airflow: 230L/min
- AirSensit® technology which monitors pressure 100 times a second
- Lightest PAPR on the market: < 450grams
- Compact with minimal parts: durable, and robust
- Approved for use with half mask or full face mask
- Bluetooth technology for real-time protection monitoring; set gas filter max use time
- Battery time up to 14 hours\*
- Filters: CleanSpace® CST Standard and High Capacity P3 Filters | CleanSpace® CST ABEK1P3 Combined Filter
- Applications include:
  - Protection against silica dust
  - Handling, maintenance, painting, sanding and grinding
  - Agricultural sector (pesticides, herbicides, phytosanitary treatments)
  - For wet-cut handling of stone, cement and concrete
- 2-year warranty
- Australian Made and owned
- Availability: five-day lead time on high volume orders

<sup>\*</sup> Operating time is strongly affected by filter type, filter loading, mask seal, work rate, altitude, and other factors. The operating times quoted above are average durations at moderate work rates at sea level. Actual operating times may vary widely from the quoted average durations.





Australia (Head Office): +61 2 8436 4000



sales@cleanspacetechnology.com



WWW.CLEANSPACETECHNOLOGY.COM

For further information contact:

