

# Improving Safety and Productivity in Mining with Digital Permitting and Isolation Management Systems

## OVERVIEW

A global mining company identified opportunities to improve isolation management processes and high-risk work activities. Even with electronic isolation systems already in place, the company felt it was time to investigate a system that combined permit to work and isolation management for managing high-risk processes.

After tailoring a fully integrated Oil and Gas permitting system to the mining industry, the company conducted a pilot to evaluate the potential of the digital permitting and isolation management system for improving the management of high-risk processes, increasing operational safety.

A key objective of the pilot was to achieve zero isolation system breaches. Further aims included achieving significant efficiency improvements in permit issuing by eliminating physical handwriting, as well as increasing the accuracy of work duration through the recording of opening and closing of permits.

## CHALLENGES



### Permit Creation

Writing permits takes hours. Authorizers cannot always decipher the handwriting.



### Risk Assessments

Hazards, risks and controls, site risk profiles and energy frameworks may be missing.



### Isolation Application

Misreading the isolation list and unique identifier for the isolation point causes errors.



### Manual Communication

Emergency services meet at muster, not necessarily at the location of high-risk work.

## SOLUTION

### SPHERA'S CONTROL OF WORK SOFTWARE

A digital permitting system offers value at every step of the permit to work process. Sphera's Control of Work for Mining helps increase safety and productivity by reducing human errors. Capturing knowledge and sharing information among workgroups and engineering benefit the entire company.

- **Improves permit efficiency.** Permit creation time goes down from hours to minutes.
- **Reduces isolation breaches.** Reduces the likelihood of isolation breaches through permit approval hard stops.
- **Increases permit visibility.** Area controllers can visibly identify what high-risk work takes place and in what location.
- **Retains risk knowledge.** Keeps risk profiles, lessons learned and isolation lists associated with permits to work.
- **Reduces manual record keeping.** Automatically stores permits electronically rather than storing hard copies as per legal requirement.
- **Can be integrated** with SAP for work orders competency management.



*"Sphera Control of Work for Mining is a highly intuitive platform. Our customer has been able to increase safety awareness, as well as make planning and execution of tasks more efficient."*

— Sphera Senior Subject Matter Expert

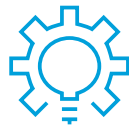
## RESULTS

Employing a digital system helps to eliminate isolation errors. Accuracy, communication and traceability increase, while manual efforts decrease. With Sphera Control of Work for Mining, improvements include:



#### Efficiency

Authority to work permits that contain information from the work order can be generated electronically.



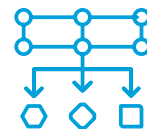
#### Insights

Risk controls are recorded and updated in the database. Insights on managing high-risk work evolve.



#### Safety

Unique QR codes on isolation tags are scanned in, and the system approves the correct isolation points.



#### Visualization

Colors and shapes represent the planned, executed or completed high-risk tasks for permit authorizers.

Are you ready to improve your Control of Work performance?

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