Ventilation Priorities

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Abstract:

To have a safe, profitable underground mine, monitoring of a ventilation system and the associated hazards should be conducted diligently. Additionally, the ventilation system needs to be overdesigned to allow for increased demand when commodity prices increase and be able to be scaled back when they drop. Personnel need to be well trained and have systems in place to identify trends so that the risks posed by hazards are controlled, mitigated or eliminated.

Most hazards that are controlled by ventilation are invisible. Even the air required is not visible to the naked eye. To the contrary other aspects of mine operation are more tangible to people with limited or no mining background. Seeing a conveyor belt full of ore provides visual clues that the mine is effectively operating conversely an empty belt would be cause for concern. The need for roof support, strata control is strengthened by a fear of being buried alive.

It is easier to get funding for production related equipment and for geotechnical issues than it is for ventilation. Yet both geotechnical issues and production increases have a direct bearing on ventilation.

The consequences of providing a just adequate ventilation system may not become apparent for several years, however the costs involved to upgrade the ventilation system to meet higher demands or a change in duty could become costly or worse loss of life and loss of asset or premature closure of the mine.