Remote Control Bogging Light

MMG Dugald River

The Problem:

At Dugald River, and most underground mines in Queensland, loaders in the underground workings have to have a flashing light positioned above a Danger sign to indicate that they are working in the vicinity. This is to inform other vehicles (particularly Light Vehicles) that they are entering a danger zone.

The flashing light indicates to the driver of vehicle that they have to make contact with the loader operator before progressing any further. The common practice at Dugald River, and other sites, is the use of a flashing bicycle light. Several problems have been identified in this system of work, namely:

- Lights not being seen due to low illumination.
- Exiting the cab to manually turn the light on increases risk of interaction with other mobile equipment
- Dust in the cabs.
- Musculoskeletal injuries.
- Operators not turning off the machine and existing with engine still running (a breach of procedure due to risk of uncontrolled movement, potential articulation crush and inability to deal with a potential fire situation).
- Lights not being turned on or off due to time required to perform the task.

The Solution

The solution to the problems outlined above was to install a light that did not require the operator to leave their cab. The result was a wall-mounted light that is activated remotely by the operator from the cab.

Flashing Light & Signage

The ‘remote activation’ solution resulted in:

1. New light being considerably brighter and clearly visible from any direction of approach.
2. As the light can be connected to the existing electrical boxes, it never goes flat.
3. Measureable boost in productivity due to increased asset utilisation of the loaders.
4. Potential reduction in maintenance costs due to the reduction in starting and stopping engines.
5. Lights always being turned on and off in line with safety procedures.
6. Likely reduction in musculoskeletal injuries.
7. Operators conforming to site procedures and not exiting with the loader still running.
8. Reduction in dust entering the cab.
9. Elimination of potential articulation crush injuries.