Expert Model for Conveyor Belt Operations

for South African

Hard Rock Mining T&M Equipment

An Industry wide perspective

Purpose

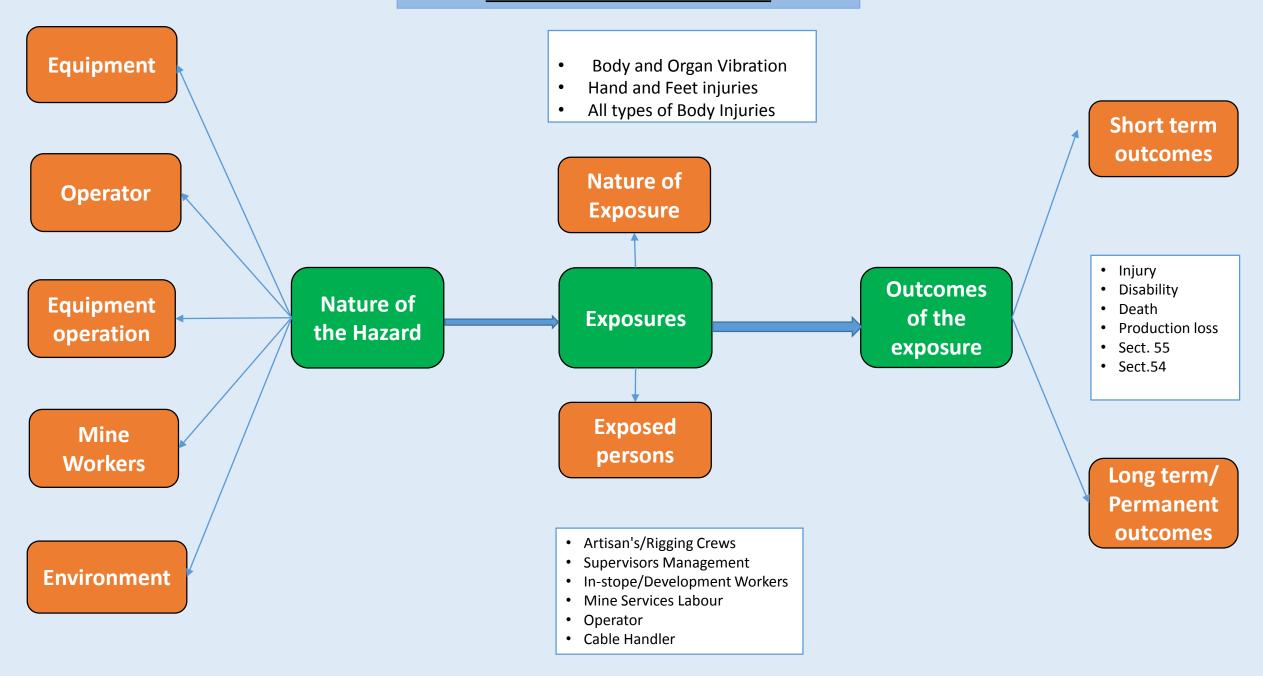
The model is a corner stone for the MOSH initiative's process to identify Leading Practices with the potential to make the **biggest** contribution to **industry wide** occupational safety performance for conveyor operation Hard Rock Mining operations. The model can be widely used for baseline risk analysis and can assist operations in to determine if they have adequate Critical Controls in place for the hazards of their specific operation. The model prompts a pro active approach to the identification of sources of hazards, its causes and the management thereof.

The model is generic for all Surface and Underground Coal Mining Operations and need to be expanded for each specific process

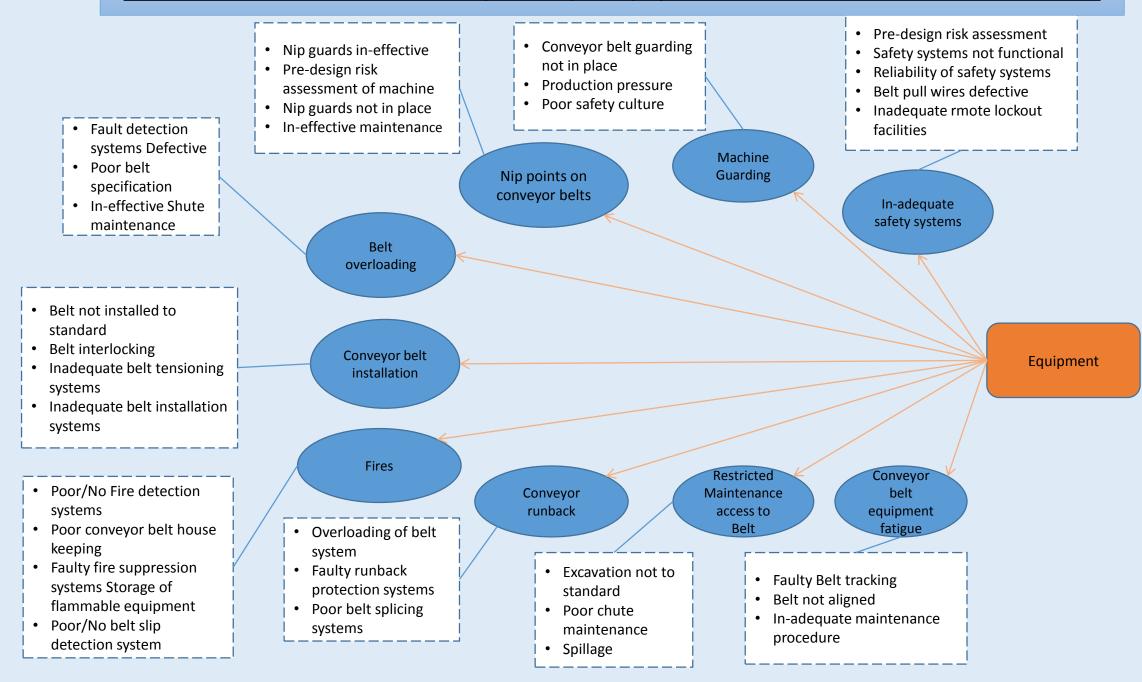
Note: It is important to note that this model only covers Transport and Machinery. Noise dust and falls of ground are covered by separate models.

Colour Code Level one : Overall Model Level Two: Risk Areas Colour Code Colour Code Level Two: Sourses of Hazards Colour Code Level Three: Posible Causes of Hazards

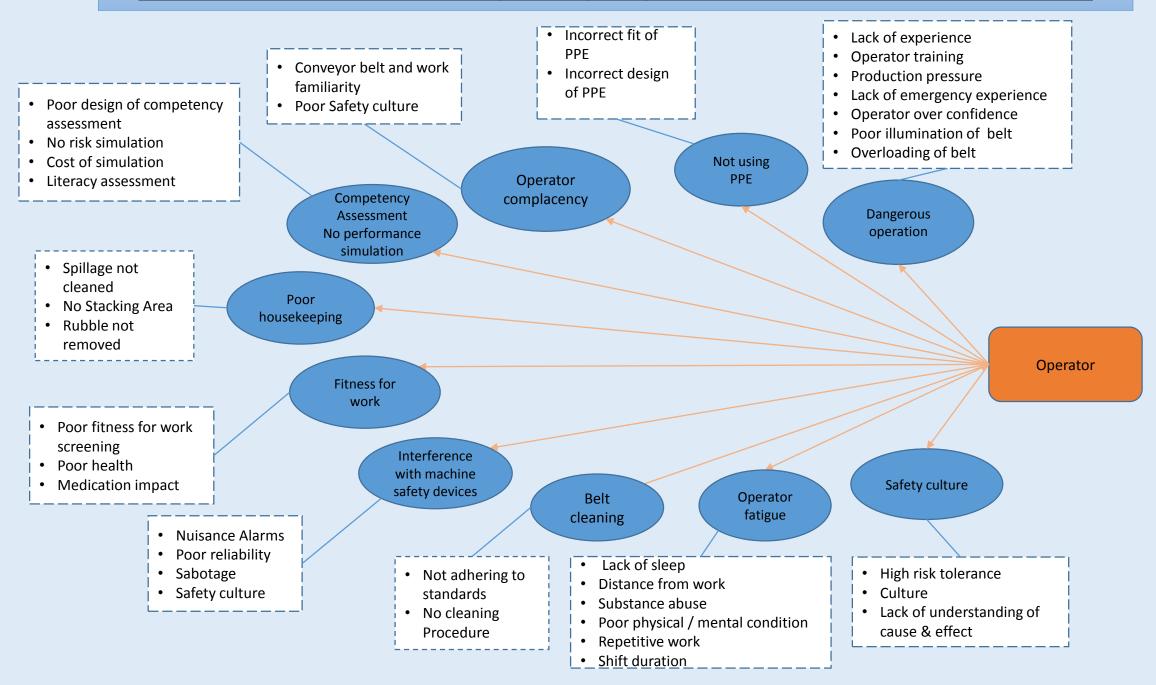
Level One: Overall Model



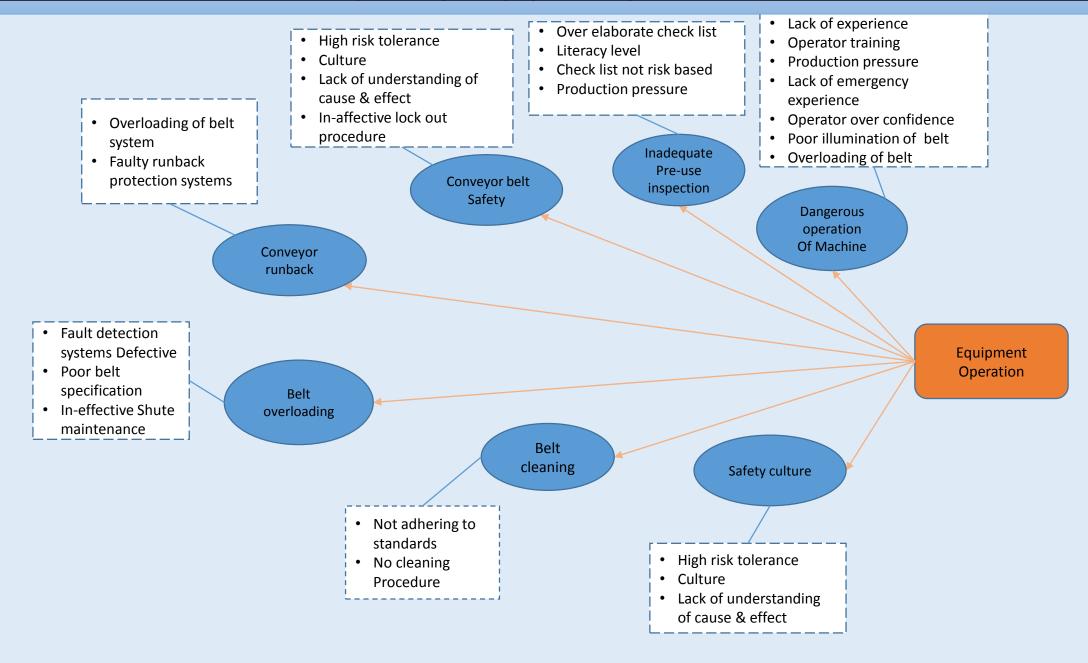
Level Two: Sources of Hazards by Conveyor Equipment. Level Three: Causes of Hazards



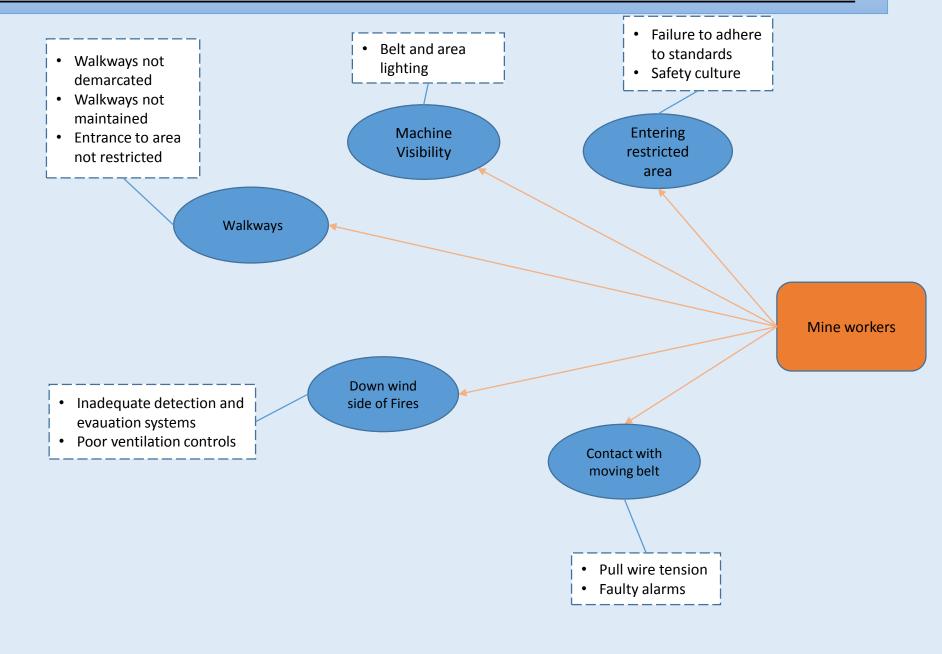
Level Two: Sources of Hazards by Conveyor Operator. Level Three: Causes of Hazards



Level Two: Sources of Hazards by Conveyor Equipment Operation. Level Three: Causes of Hazards



Level Two: Sources of Hazards to Mine Workers. Level Three: Causes of Hazards



Level Two: Sources of Hazards by Environment. Level Three: Causes of Hazards

- Poor/No Fire detection systems
- Poor conveyor belt house keeping
- Faulty fire suppression systems Storage of flammable equipment
- Poor/No belt slip detection system

Conveyor belt fires

Environment