



MOSH DUST LEADING PRACTICES

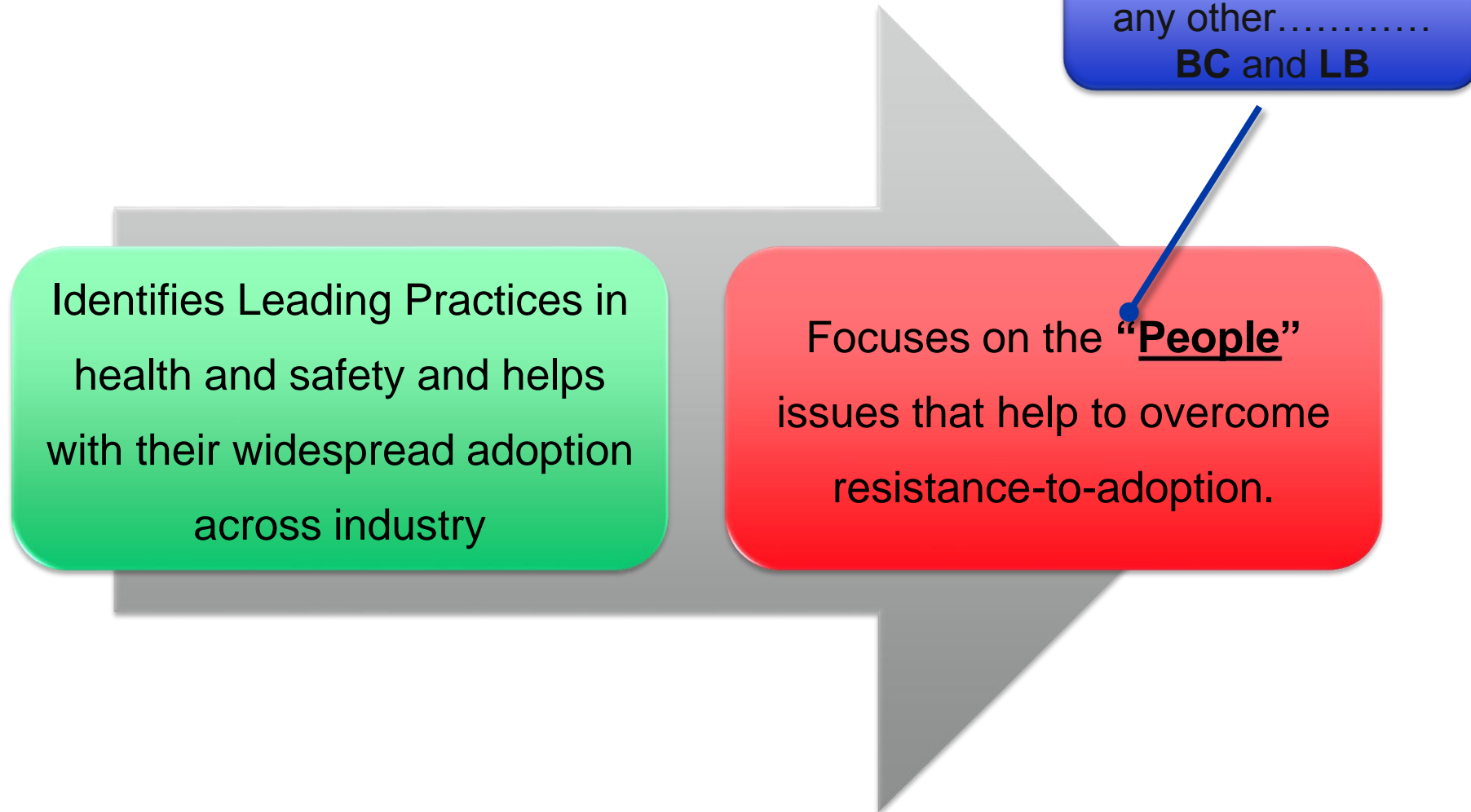
Dr Vukosi Banyini

Date: 13 June 2018, TB Parallel session



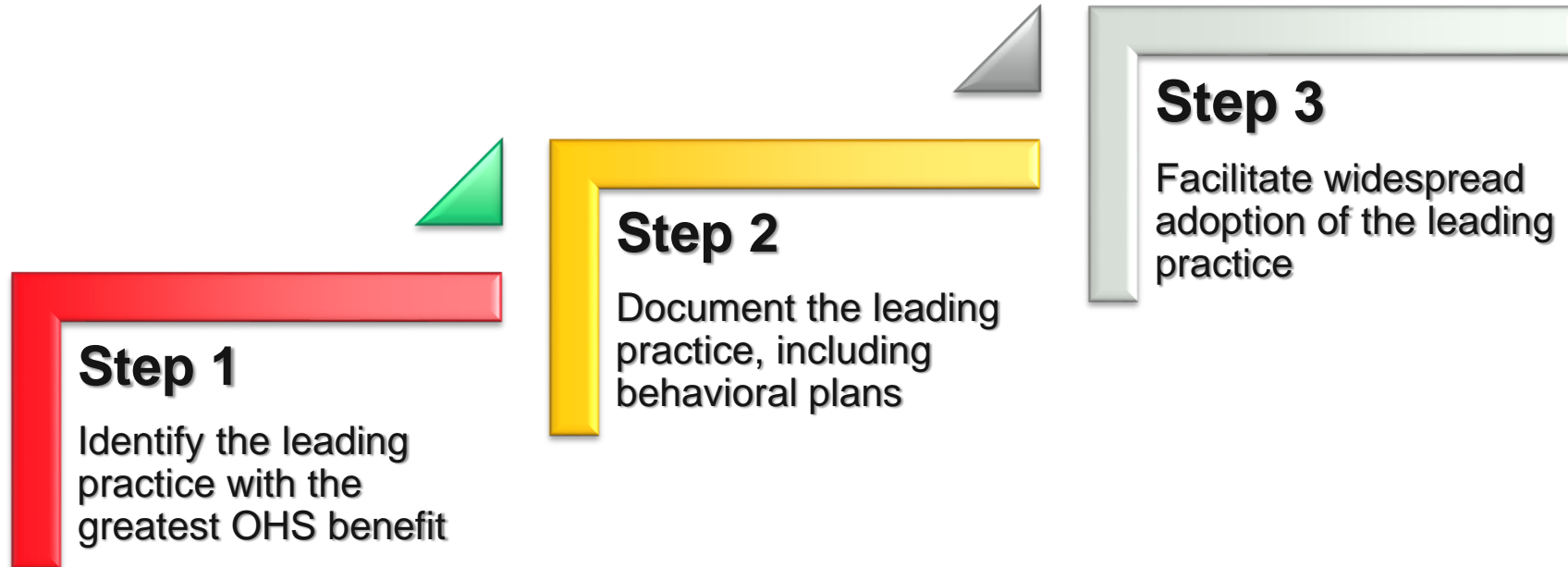
1. Definition of MOSH Adoption System
2. Dust Practices and Benefits
3. Conclusion

What is MOSH Leading Practice Adoption??



Leading practice: A practices with the highest impact

Mine Occupational Safety and Health (MOSH)



MOSH Dust Leading practices

Fogger Dust Suppression System



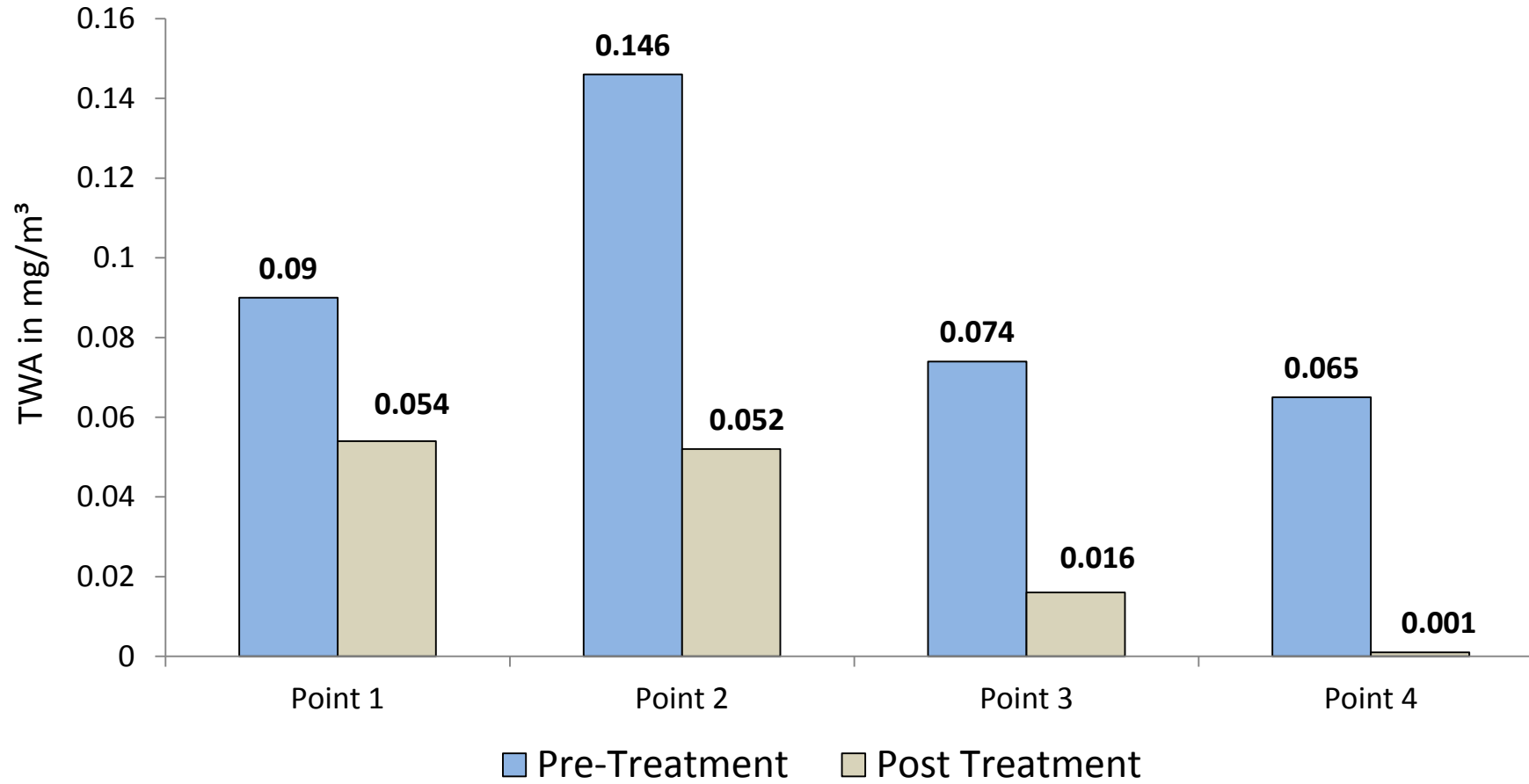
For Intake airways, Used with surfactants

Footwall & Side wall treatment

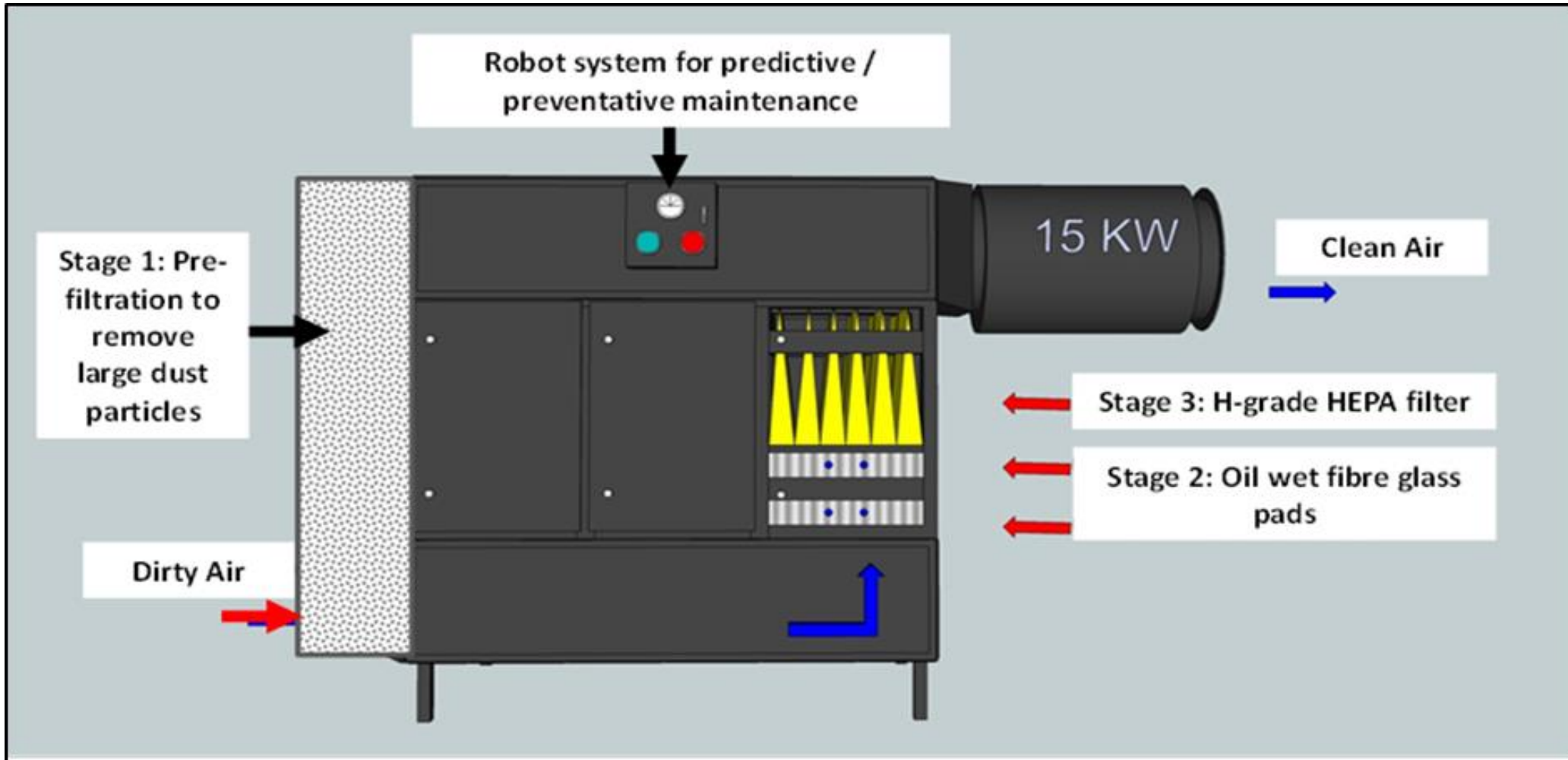


Wetting of footwalls and sidewalls with water and surfactants to prevent dust from airborne

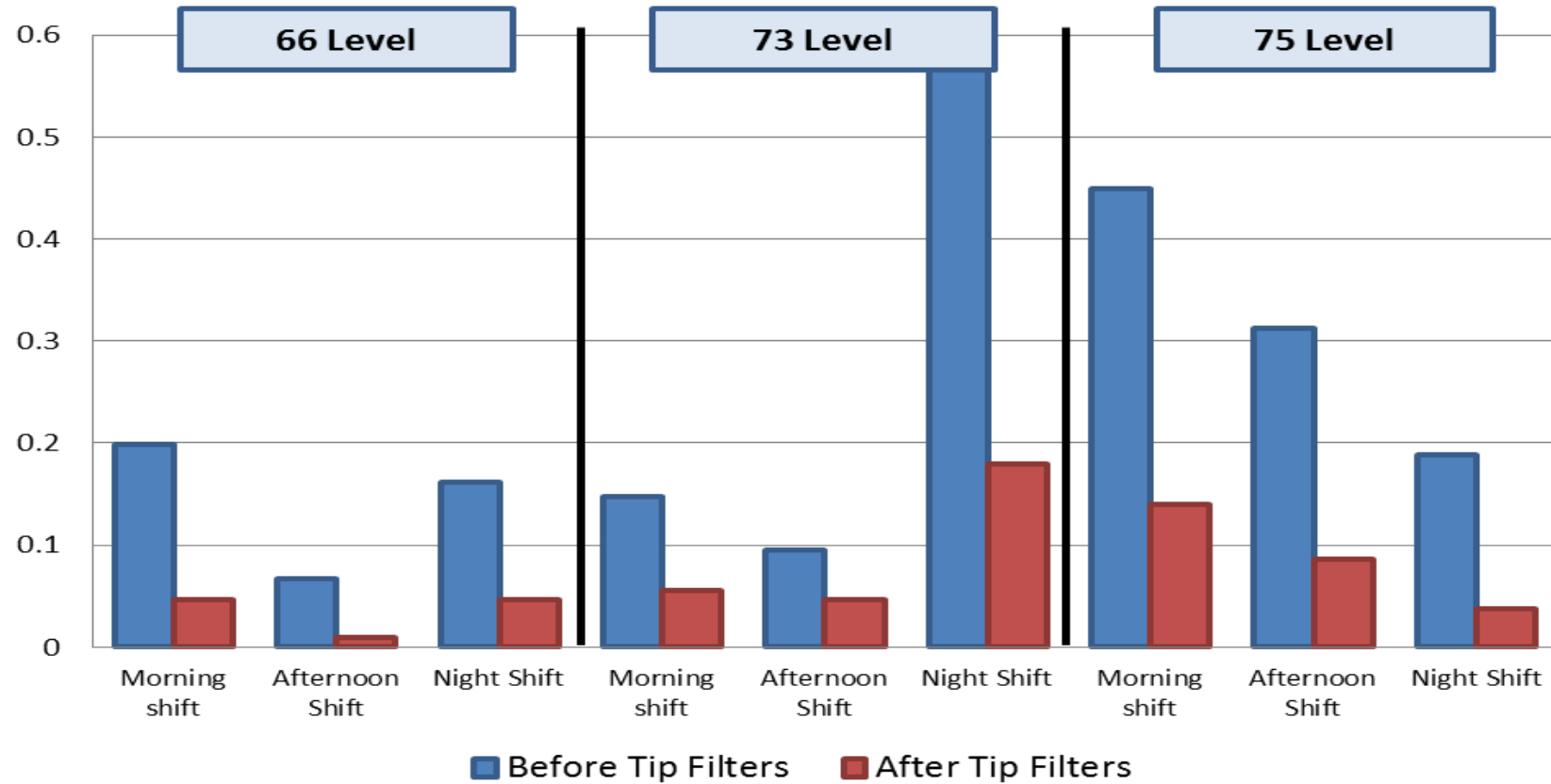
Benefits



Multistage Filtration System-Intake airway



Benefits



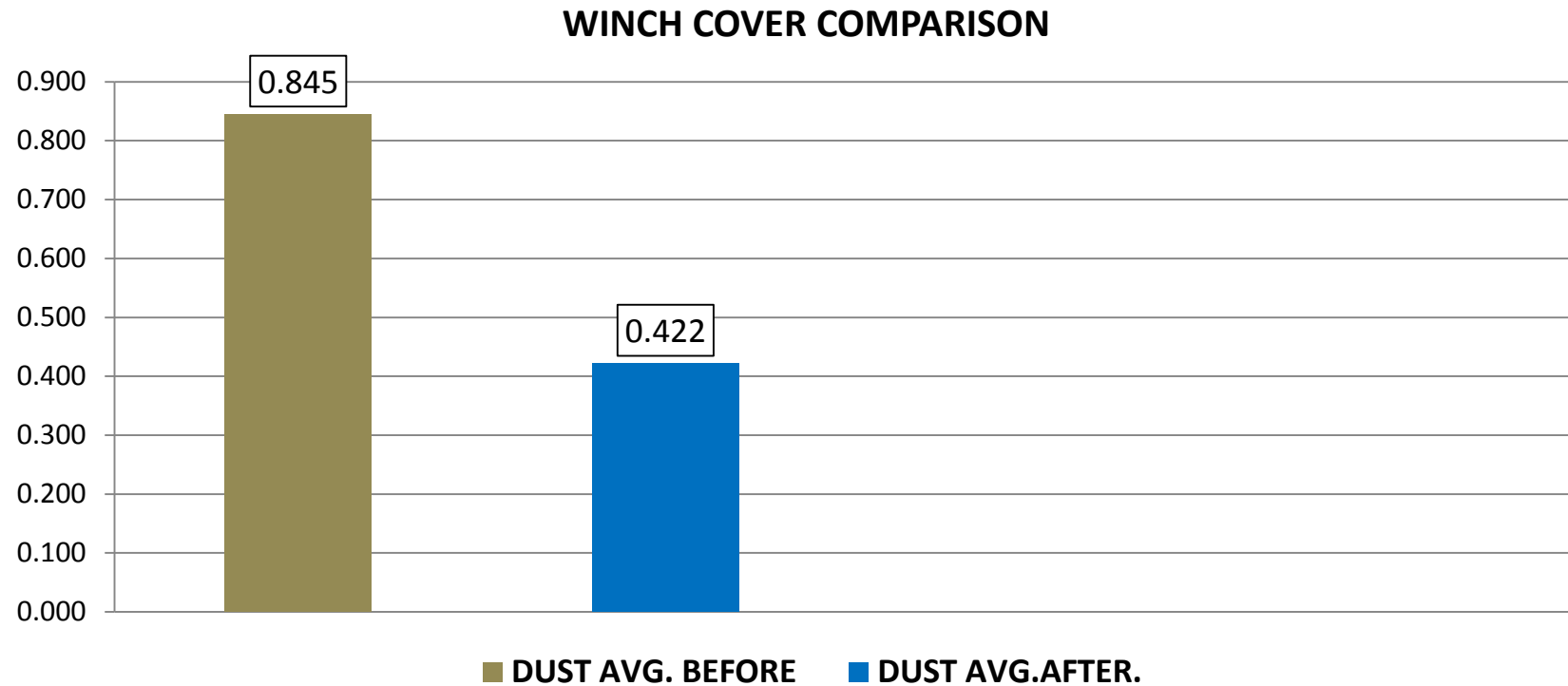
□ Average improvement of 71% in the dust load (TWA)

Scraper winch covers

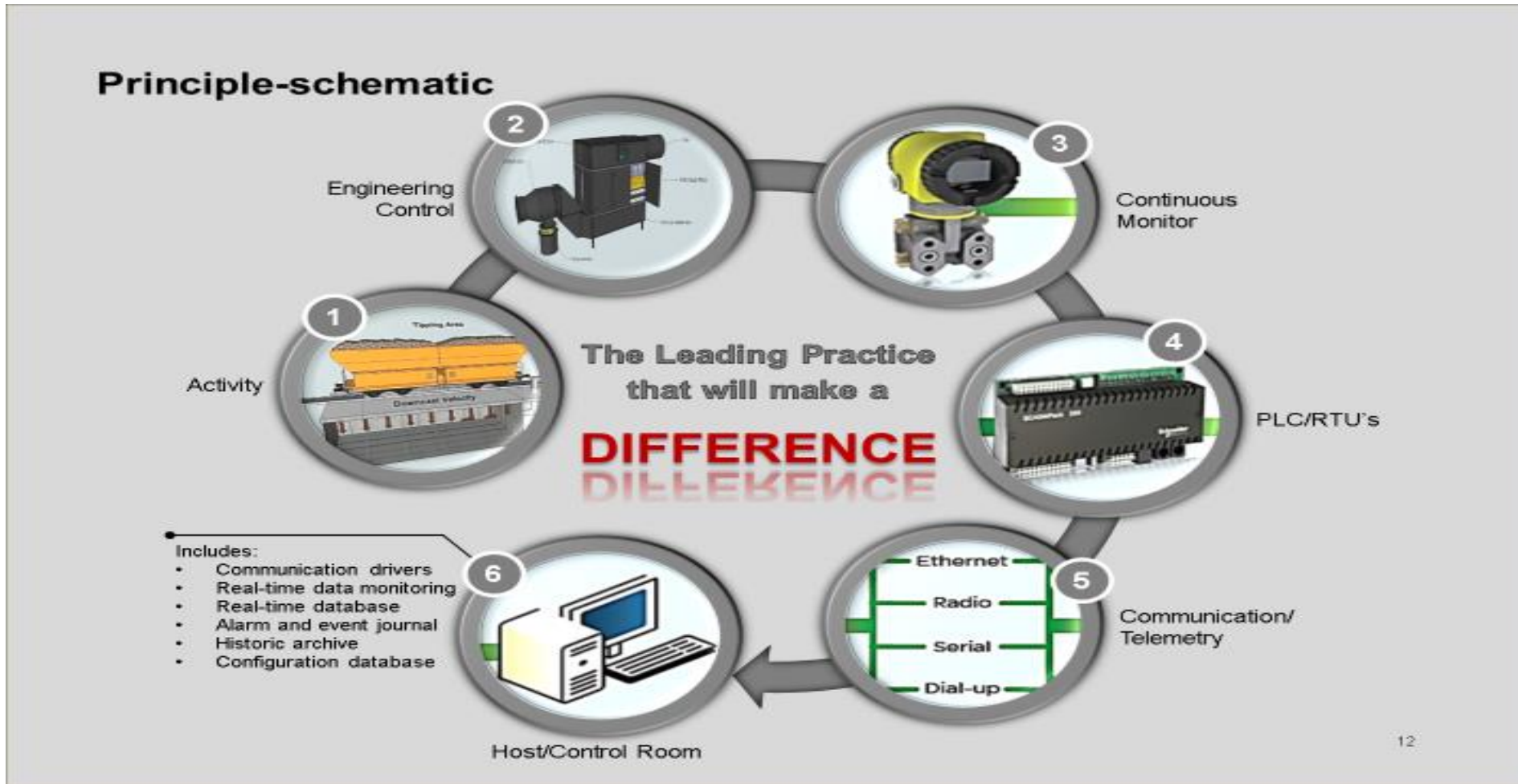


PRE-COVER

POST-COVER



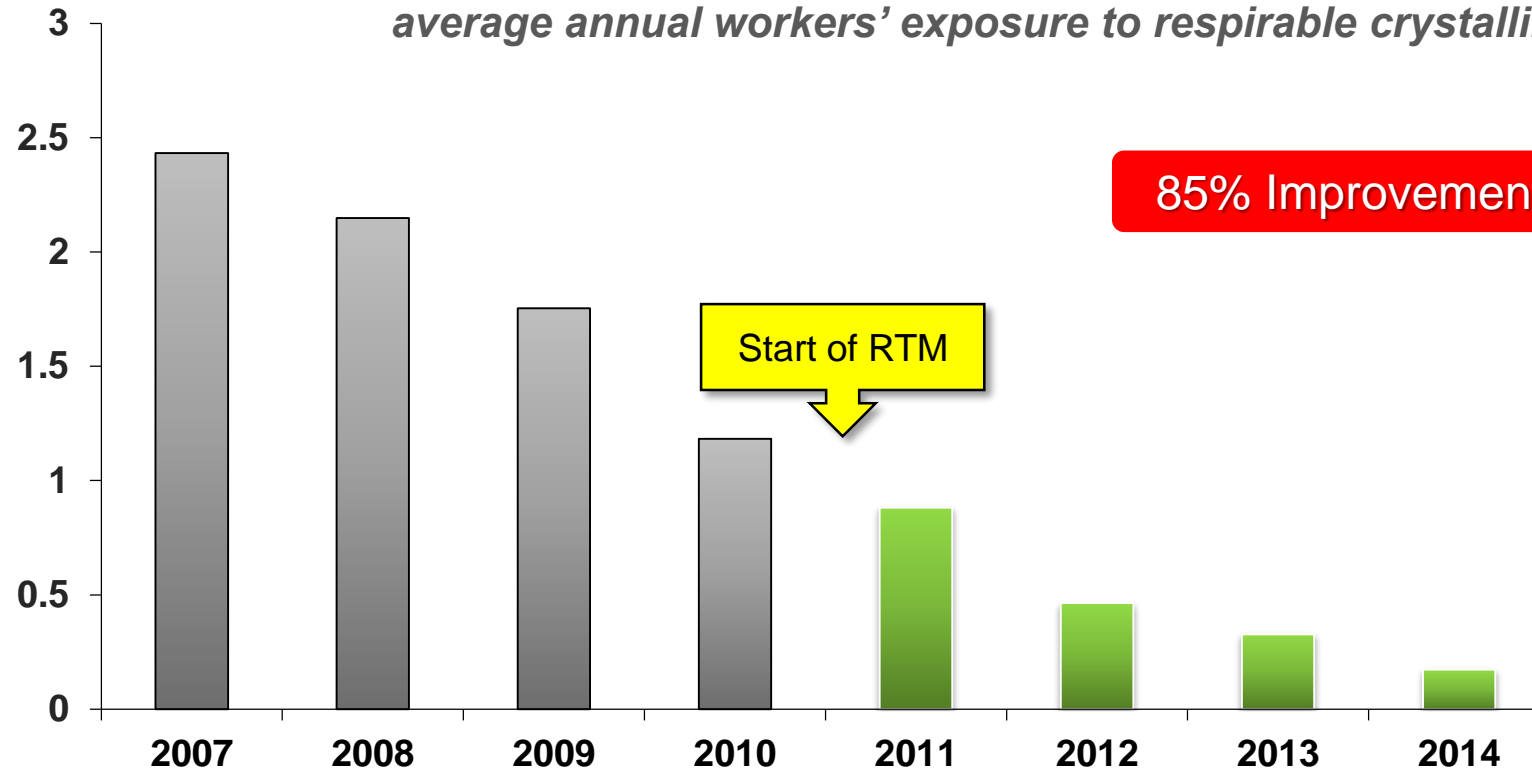
Continuous Real Time Monitor



Open cast source

Time Weighted Average (TWA) - mg/m³

average annual workers' exposure to respirable crystalline silica dust



Continuous real time notes

- Alarm levels set at a level far lower than the TWA exposure levels
- Proactive response to engineering controls problems
- Next step is to automate the engineering controls while waiting for human intervention
- Coal underground mines piloting real-time, which if successful, will be ground breaking globally

Conclusion

1. MOSH Dust Leading Practices are assisting the industry to achieve the 2024 Milestones, however,
2. No single leading practice is “silver bullet” but merely one of a number of interventions that will take industry to 2024 and beyond



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Dust

Practices that reduce occupational lung diseases and improve occupational health.

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