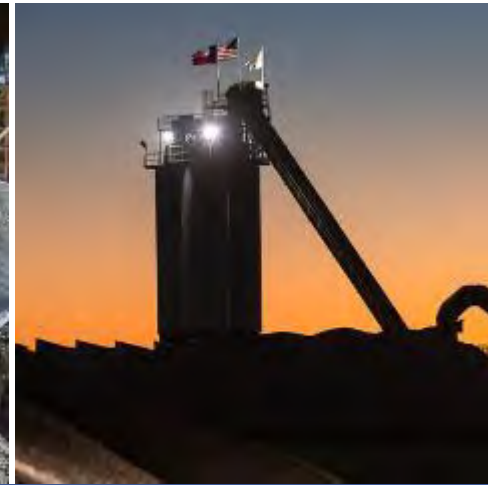


Controlling Silica Exposures

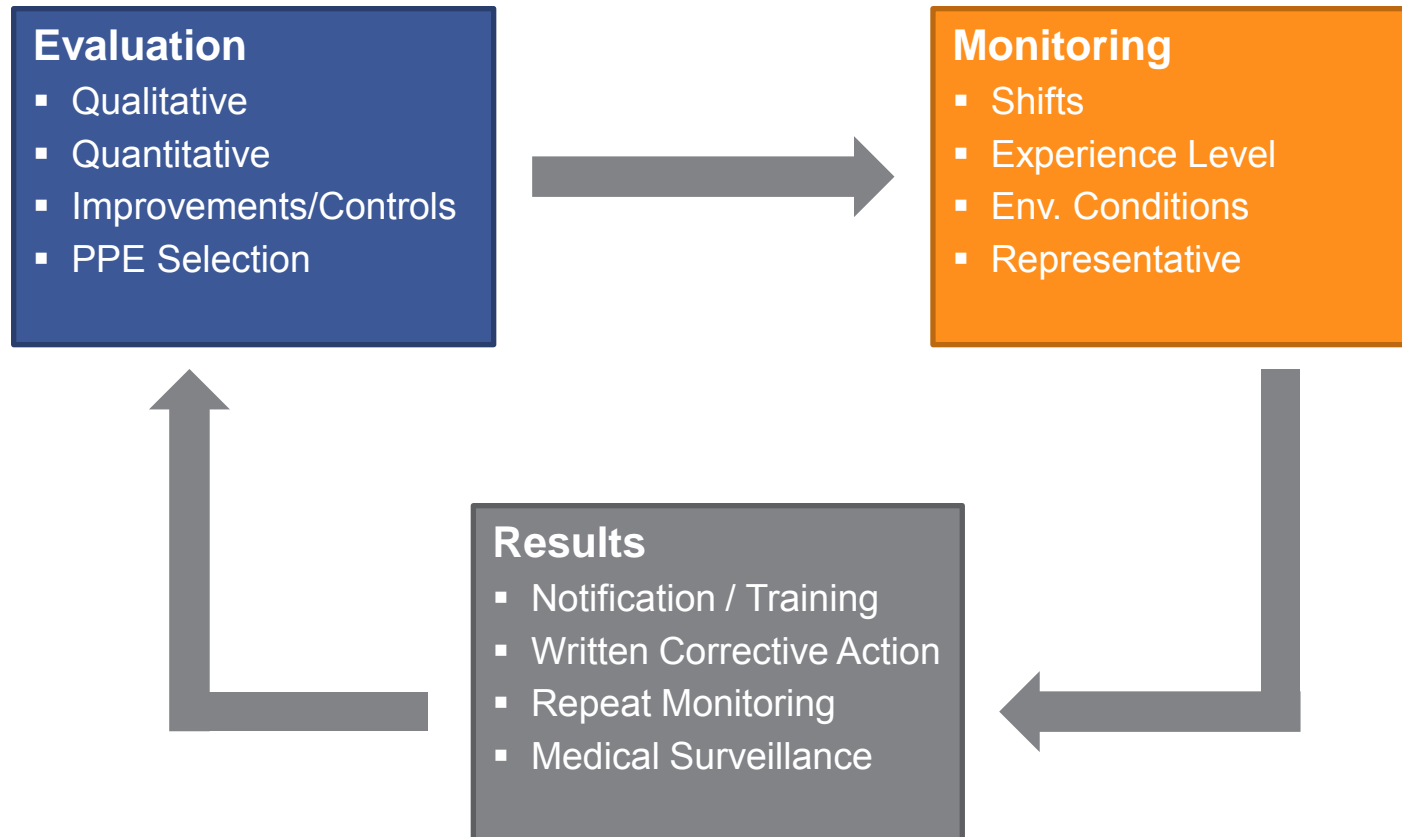
CalCIMA Spring Thaw ▪ Ontario & Sacramento, CA ▪ February 26 & March 20, 2019

Meghan Neal, Area Safety Manager

trust earned daily



Silica Management Program



Evaluation / Controls

Prohibited Practices

- Use of Compressed Air
 - Unless used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air
- Dry sweeping and Dry brushing are prohibited
 - Where such activity could contribute to employee exposure to silica unless wet sweeping, HEPA filtered vacuuming or other methods that minimize the likelihood of exposure are not feasible



Housekeeping



HEPA Vacuums



792 x 615

Dustless HEPA Certified Contracto...
evacuumstore.com



HEPA Pack Backpack Vacuu...
homedepot.com



Pullman Holt HEPA Cannister...
spycor.com



HEPA Vacuum Cleaners | All...
allergybuyersclub.com



AramSCO - Syclone HEPA Vac...
aramsco.com



HEPA-Vacuums ...
mastercraftusa.com



Industrial H.E.P.A. Vacuums...
nikro.com



HEPA Vacuums | Pneumatic, Electri...
novatekno.com

Power Tools

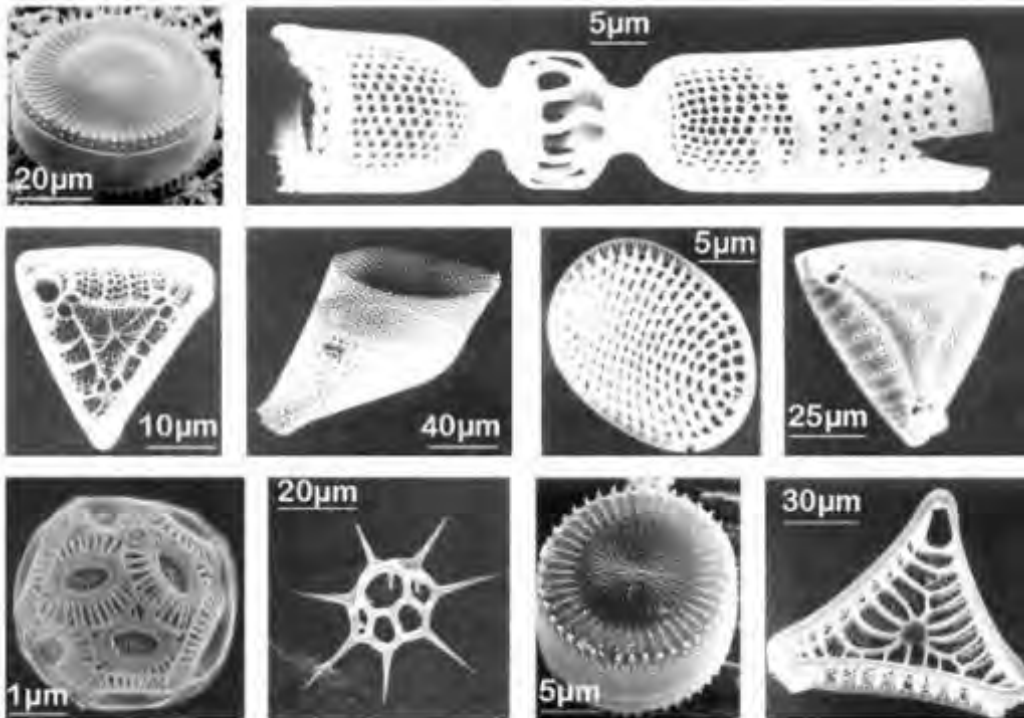




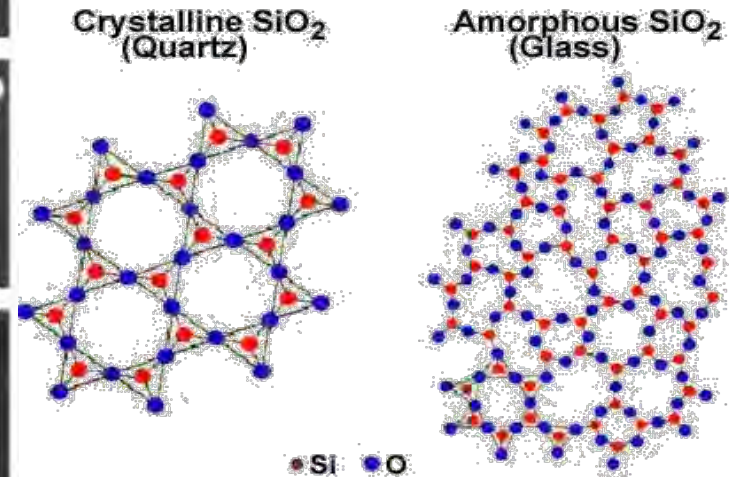
Power Tools



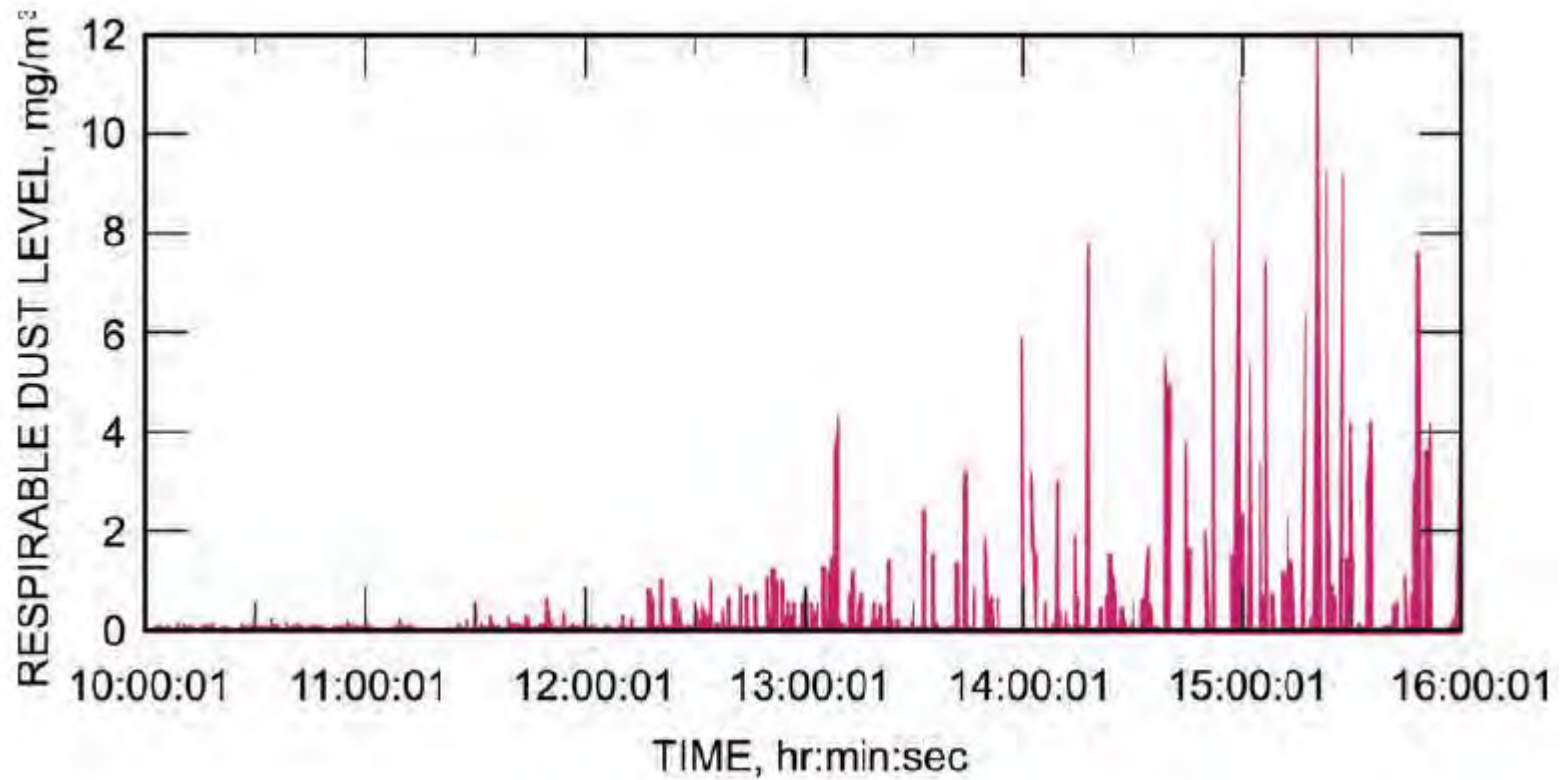
Substitution/Elimination



Selection of planktonic diatoms
(not representative for the mediterranean)



Wet Roadways



Automation



Figure 3 - Left side shows screenshot of EVADE software of miner performing manual deployment of scraper device with high peak in dust exposure shown in the bottom of the screen; right side shows photo of new pneumatic system to eliminate worker performing the task.

ROCK
PRODUCTS

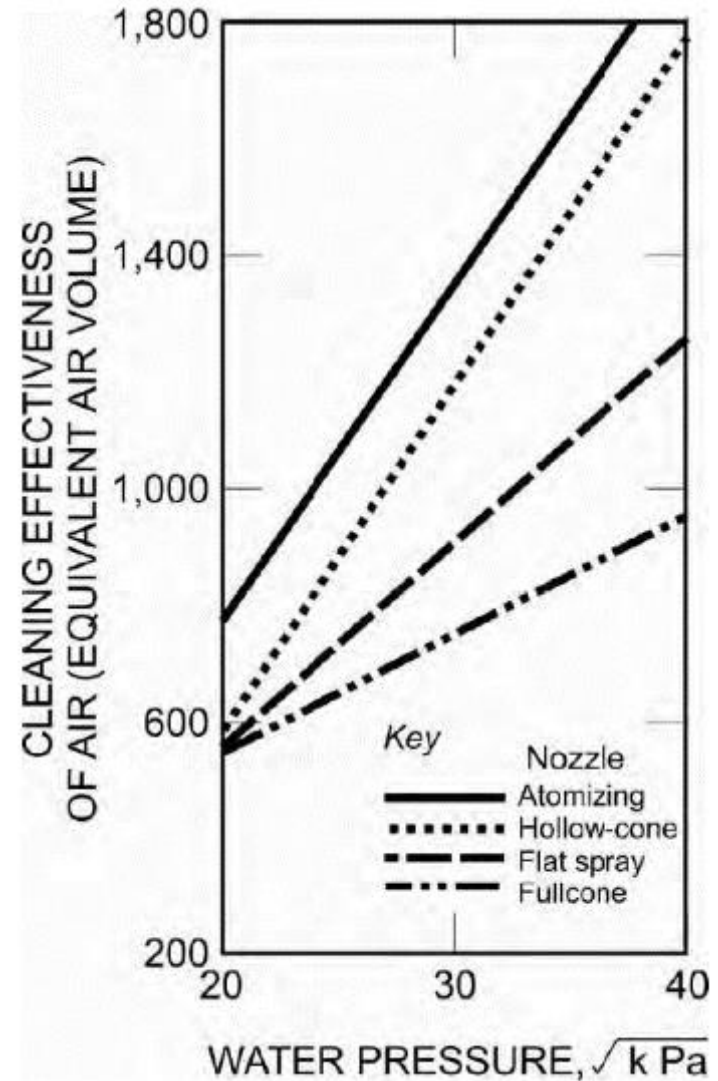
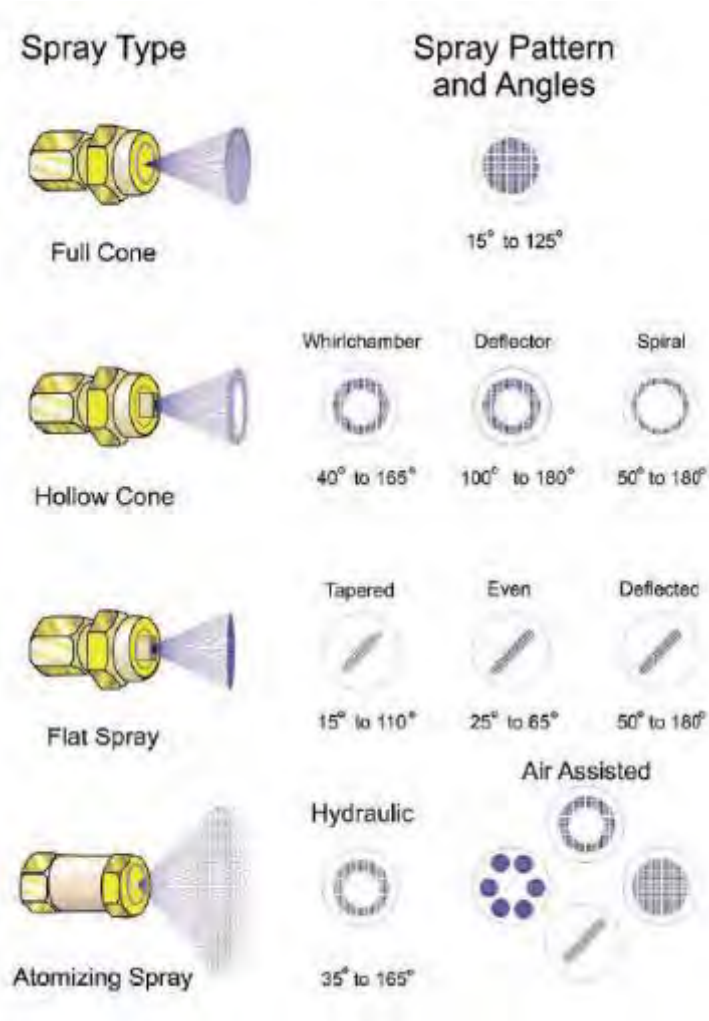
By Andrew B. Cecala and Andrew D. O'Brien

Lehigh Hanson
HEIDELBERGCEMENT Group

Remote Access



Water



Conveyors



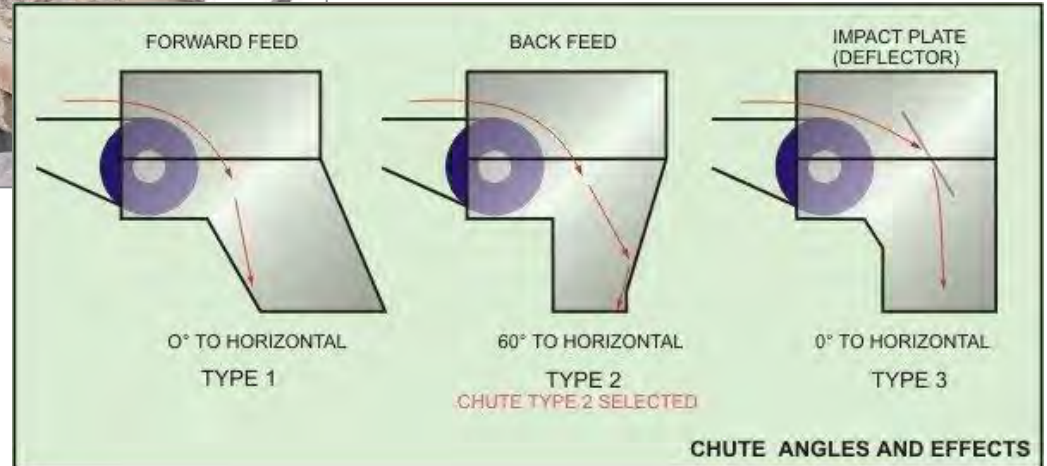
Conveyors



Crushing



Transfer Points



Baghouse Bag Changes



Local Exhaust Ventilation

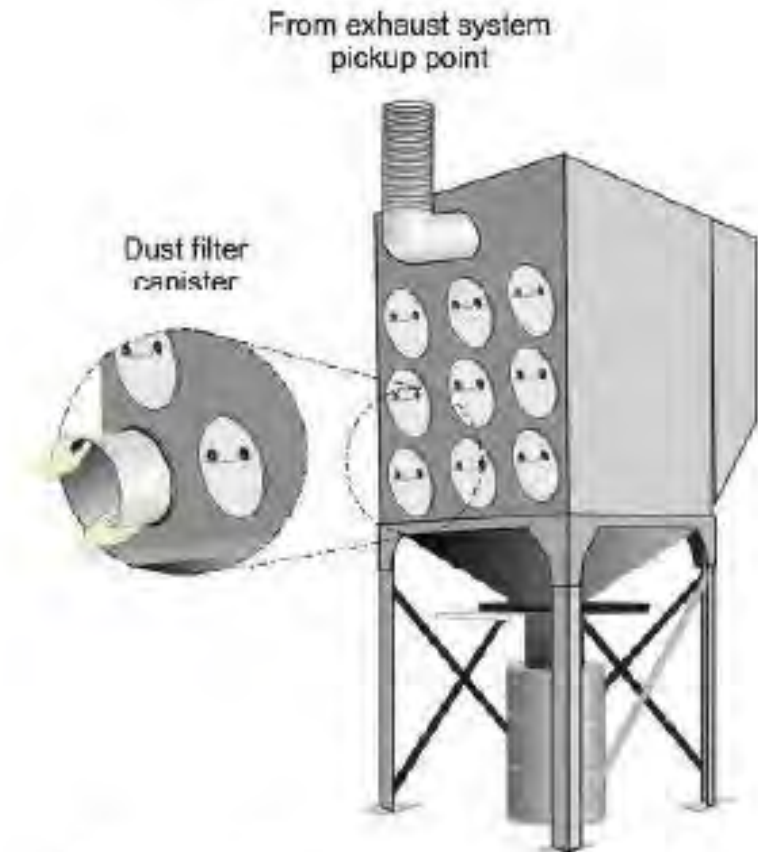
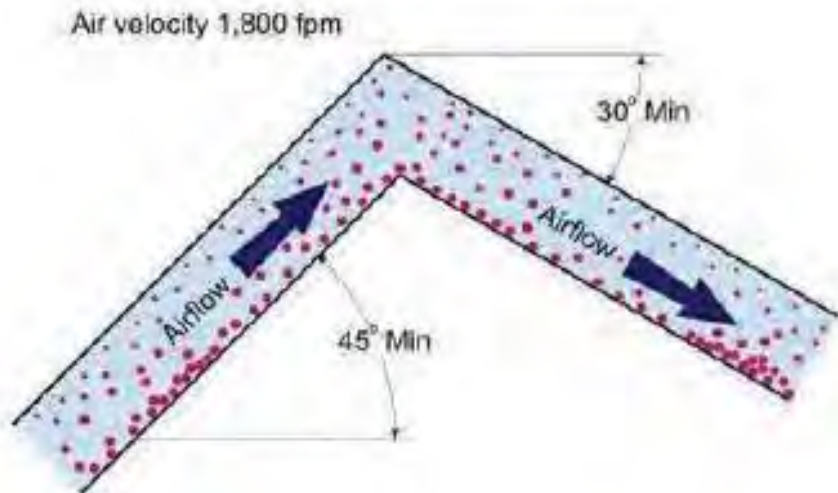
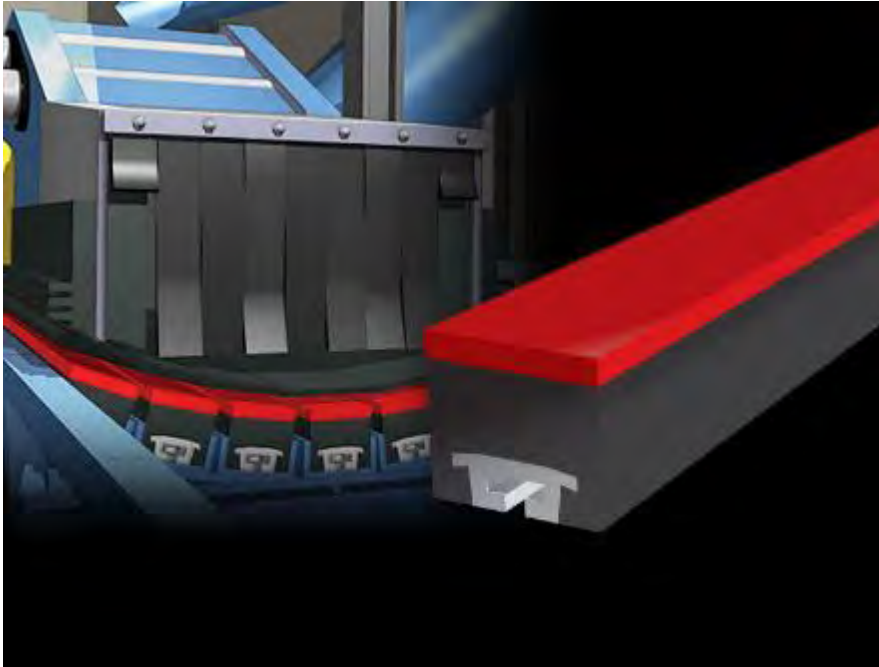


Figure 4-7. Canister-type dust collector system.

Transfer Points



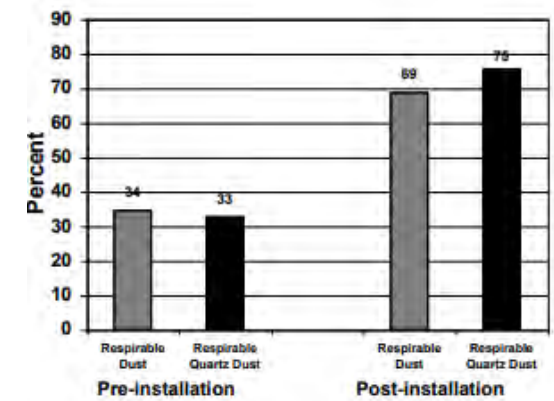
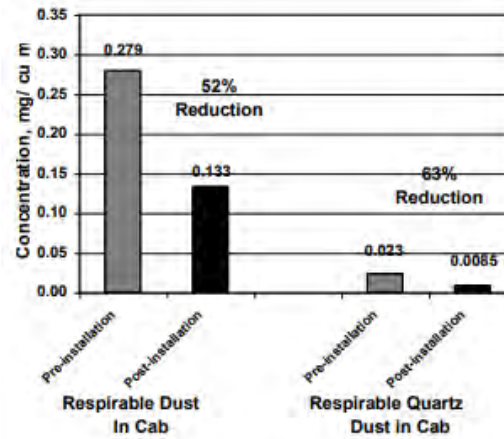
Screens



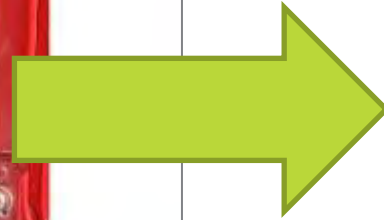
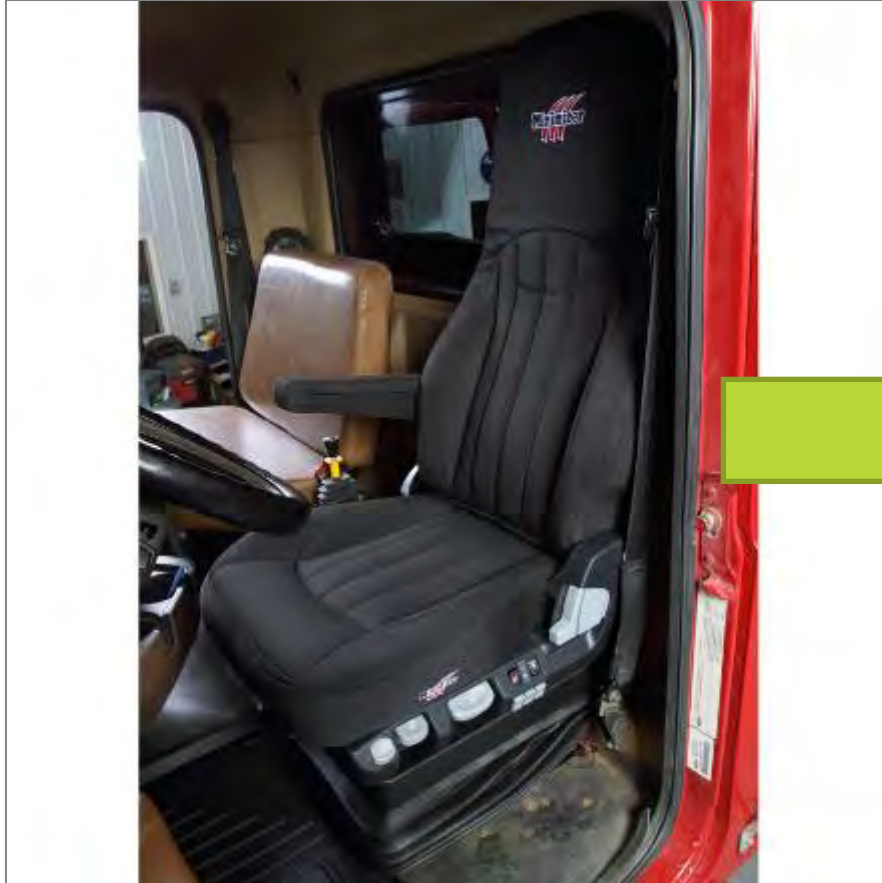
Kiln demo



Enclosed Cabs

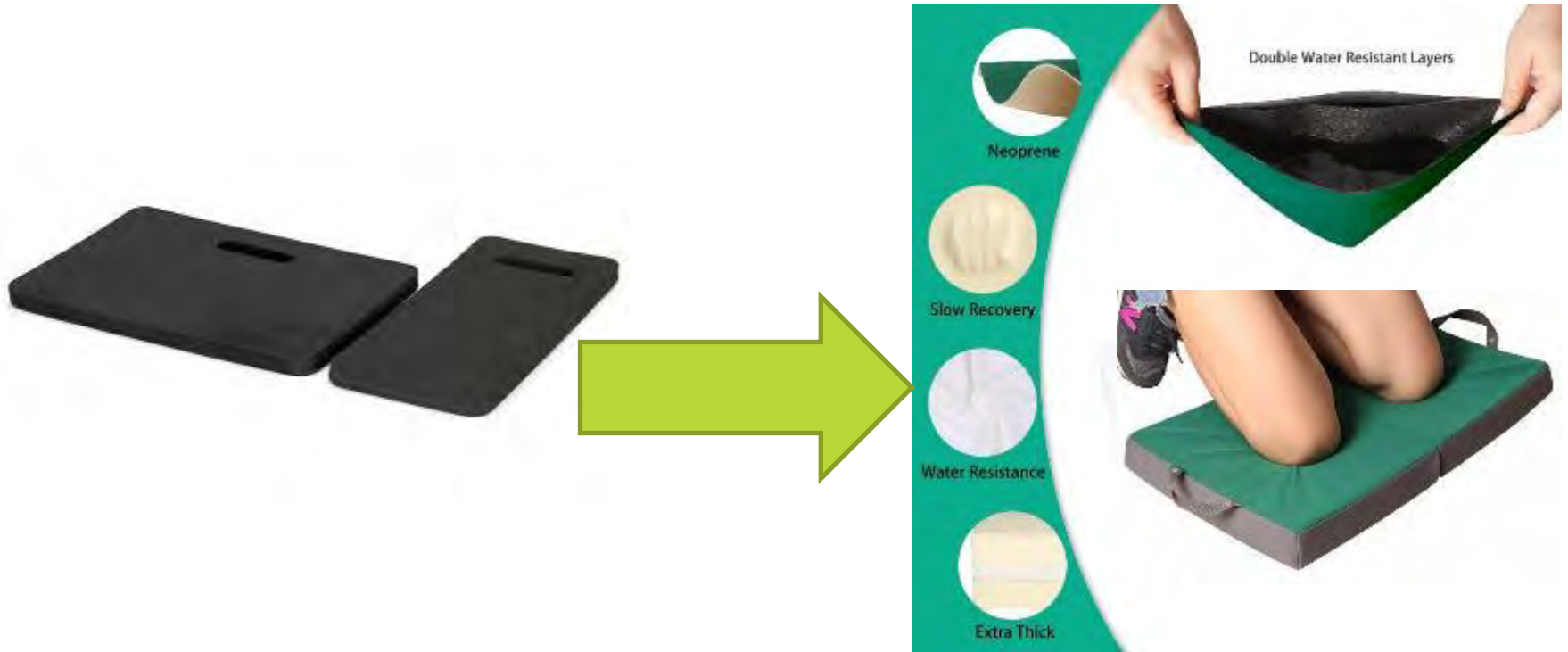


Vinyl Seats



- 78% lower exposure to cleaner cab (e.J. Haas and A.B. Cecala, Min Eng. 2017 Jul; 69(7): 105-109)

Foam Pads



Building Design



Dumping

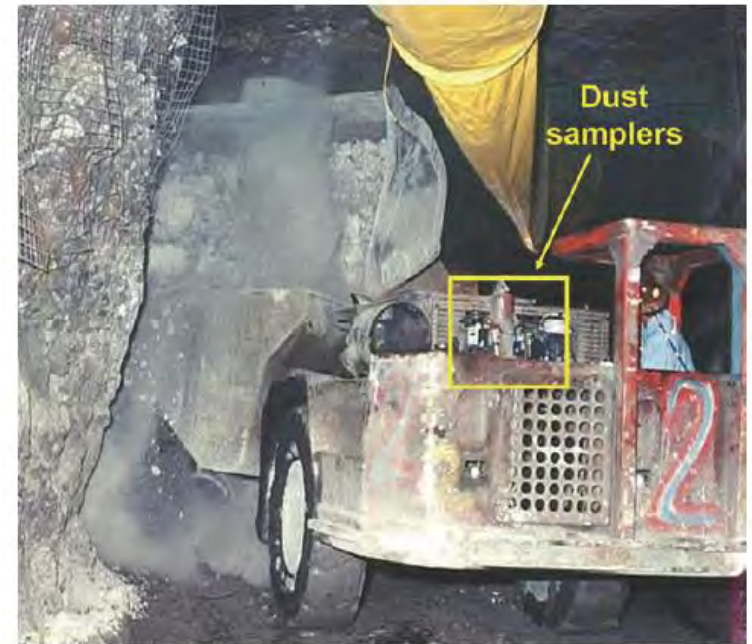
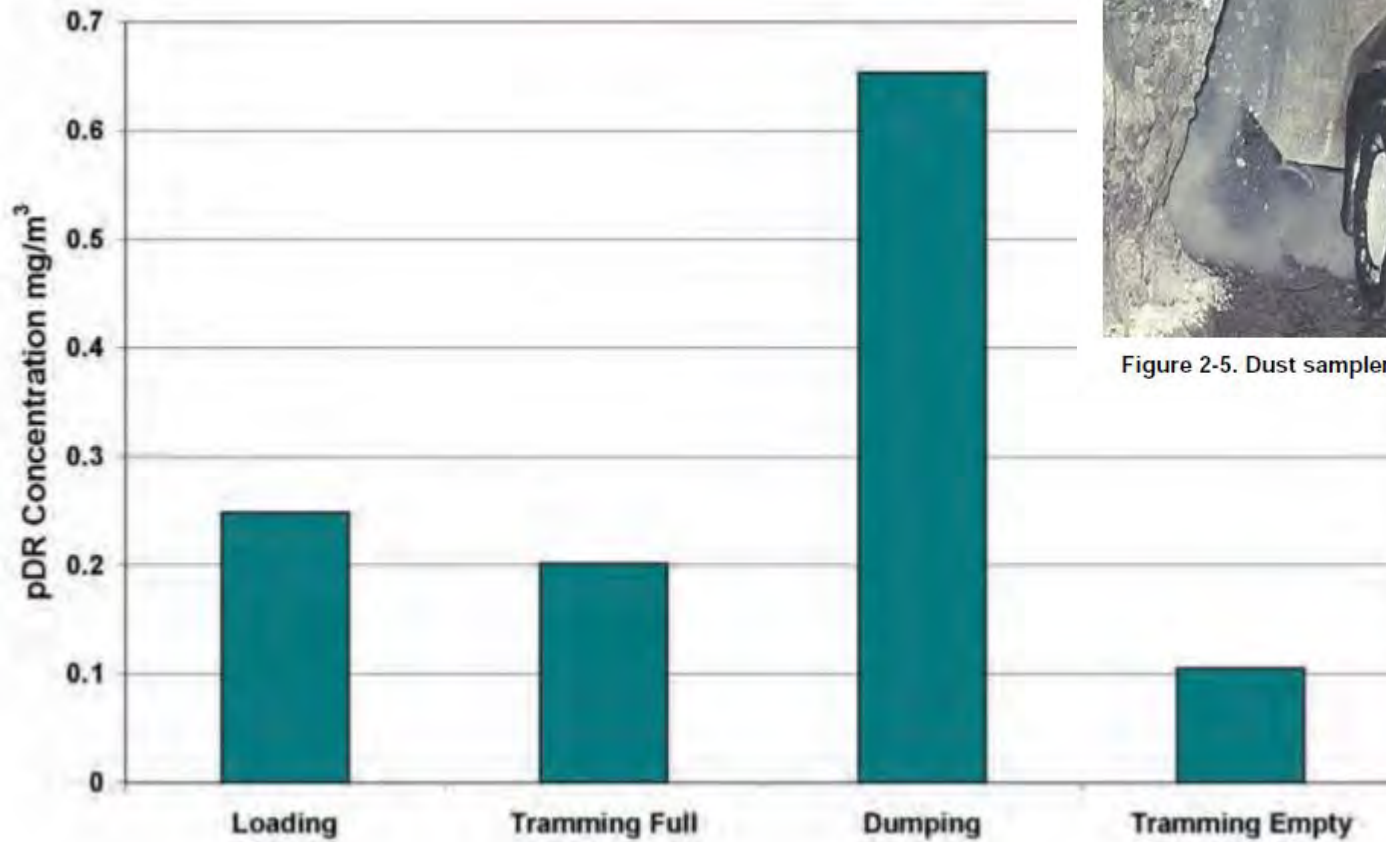
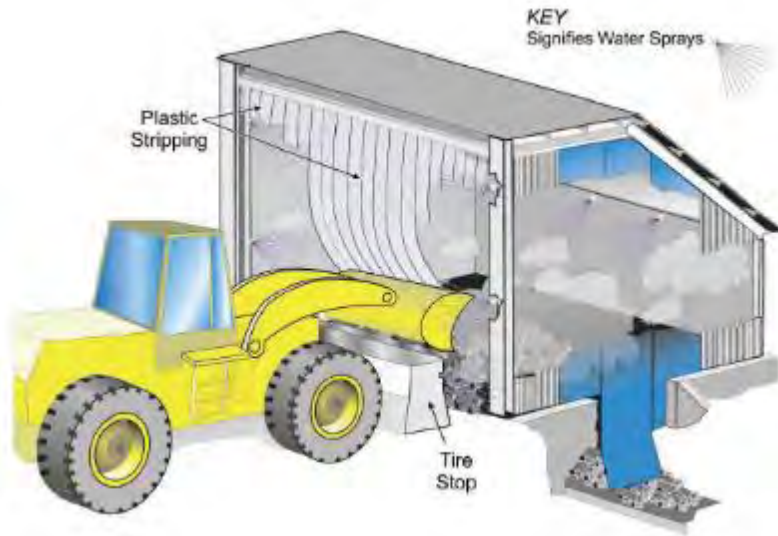
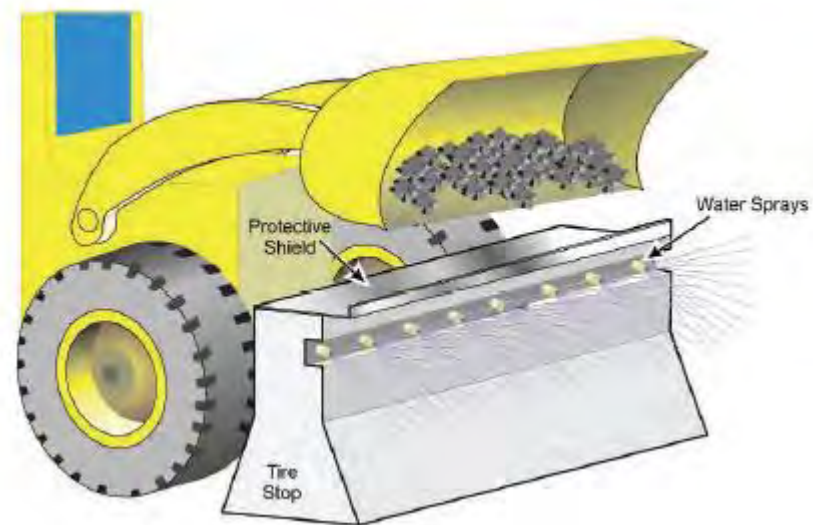


Figure 2-5. Dust samplers mounted on haul truck in gold mine.

Enclose the Primary Hopper



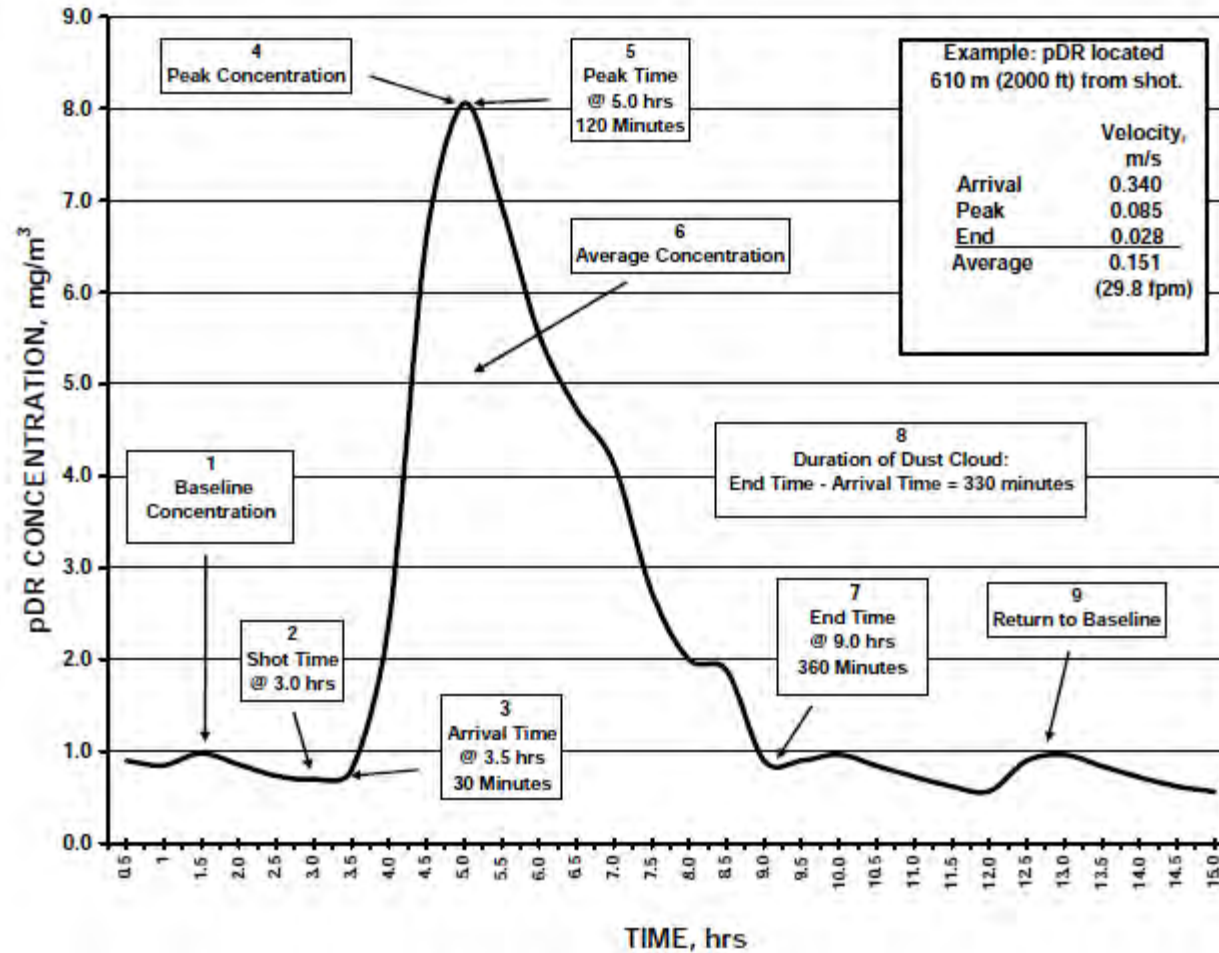
Dumping



Drilling & Blasting



Underground Blasting

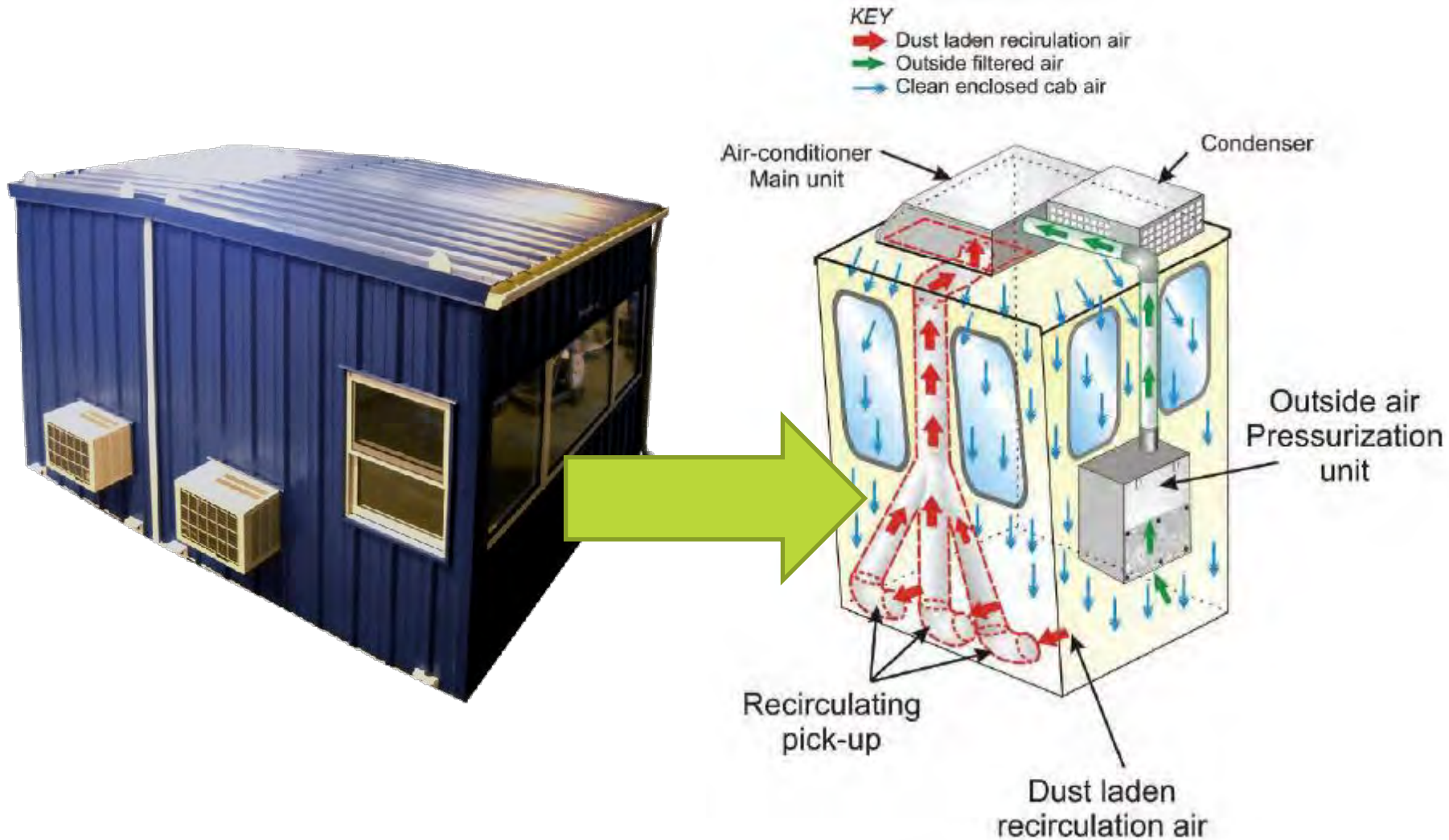


Clothes Cleaning Booth

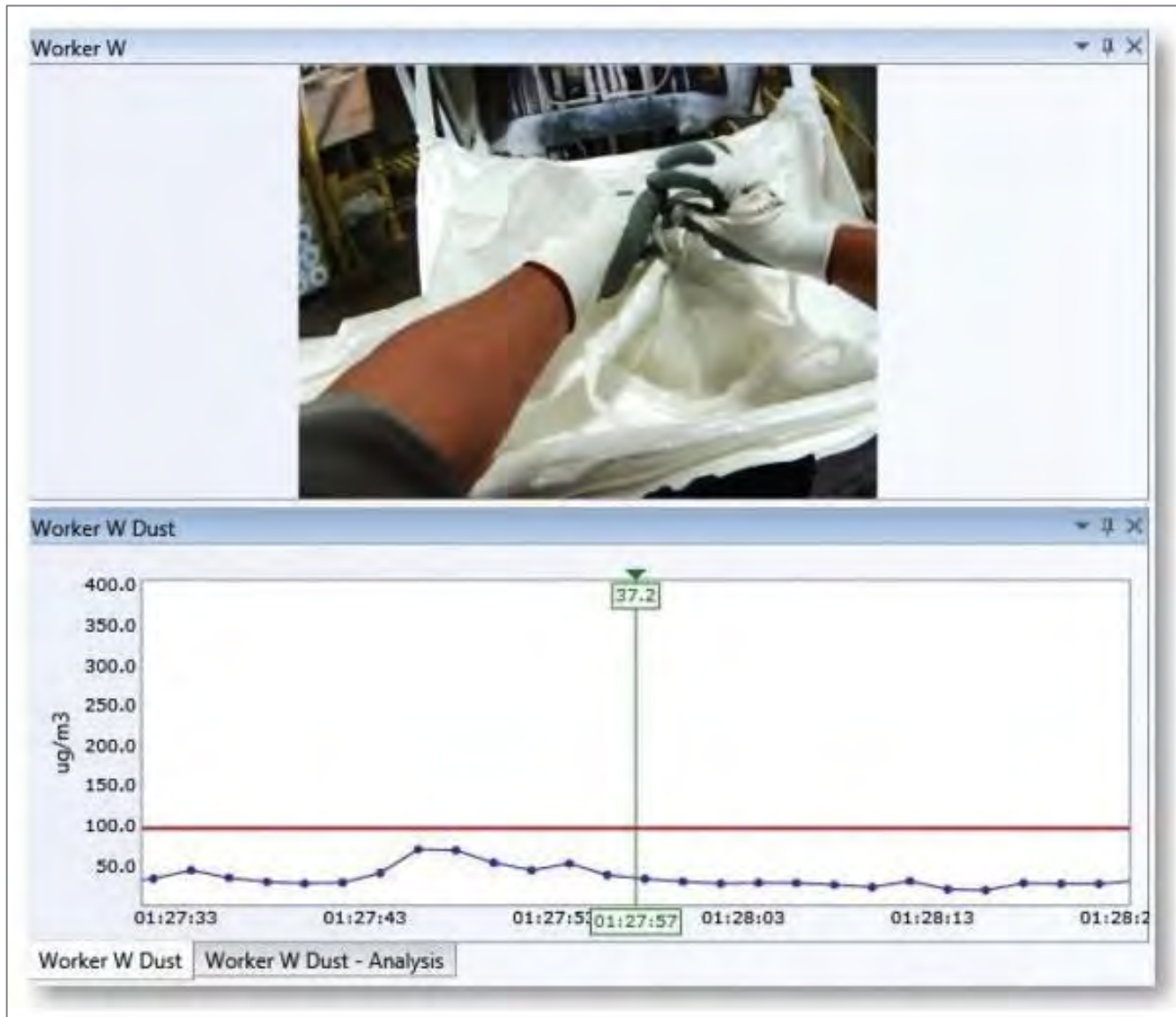




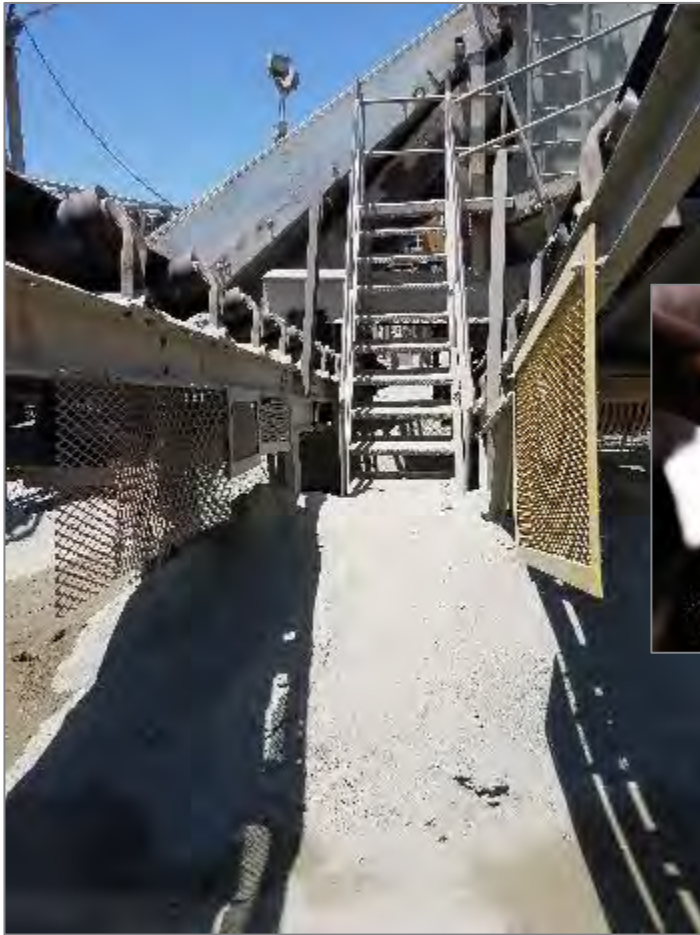
Control Room Ventilation




Bagging



Clapping/Climbing



Water

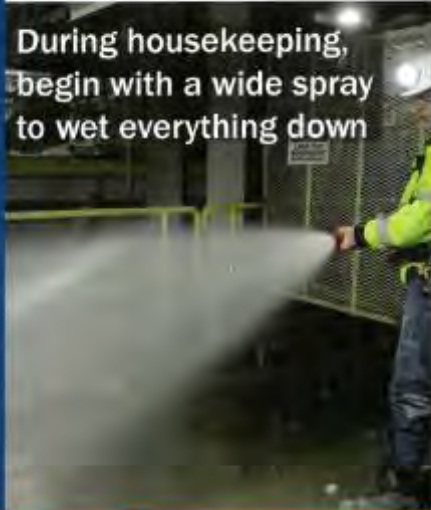


Reduce your dust exposure Spraying or hosing cleanup


Did you know?


Starting with a forceful stream of water during housekeeping (e.g., hosing down equipment, walls, beams, and the floor) can **elevate dust exposure**

During housekeeping, begin with a wide spray to wet everything down



Then use a narrow, forceful stream





Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Findings based on NIOSH field studies
To learn more, visit go.usa.gov/xRk0u

Thank You