• 2002 / 03: NIOSH identifies silica in milling fines and recommends partnering to mitigate
  • Partnership loosely based off prior NIOSH partnership to reduce asphalt fumes from pavers
• Initial testing (2003) identifies exposure levels slightly below PEL.
  • Vested interest in protecting workers
  • Recognition that OSHA will revise PEL
• 2003 – 06: Intermittent field testing with limited progress
• 2006 - 10: Large-scale field testing with water spray
  • Continued to meet with NIOSH-Cincinnati to understand/increase spray effectiveness
  • Tested different spray configurations
  • Identified trends in dust = silica reduction
• 2010 / 11: Identified most effective spray system
• 2011 – current: Identified that vacuum/evacuation-type systems were quite effective
  • Tracer-gas and filed testing of combination systems
• 2013 - 15: OSHA proposes PEL / NIOSH drafts guidance
  • CPWR produces “field guide”
Asphalt milling machine with silica dust controls (Illustration by NIOSH)
Partnership Guidance Documents

Best Practice Engineering Control Guidelines to Control Worker Exposure to Respirable Crystalline Silica during Asphalt Pavement Milling

Field Guide for Controlling Silica Dust Exposure on Asphalt Pavement Milling Machines

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

NAPA
National Asphalt Pavement Association

CPWR
The Center for Construction Research and Training
Milling Machine Partnership Take-Aways

- Agency-Labor-Industry Partnerships can be successful
- Stakeholder identification and inclusion is critical
- Stepwise assessment / validation of controls is required
- Consensus guidance released and disseminated
- Voluntary commitment to implement controls
- Partnering in a voluntary, non-regulatory, non-enforcement environment is helpful