



**MSHA/NIOSH Diesel Partnership
U.S. Department of Labor Auditorium
200 Constitution Avenue, NW
Washington, DC 20210**

Wednesday, January 23, 2019

Introduction to the Workshop

- Context Panel
- Current Emissions/Control Technologies Panels
 - Engine Controls
 - Emission Reduction/Exposure Reduction
- Current Barriers to Deployment of Technologies Panel
- Strategies and Path Forward Panel
- Closing Remarks

How We Got Here?

- The MSHA Diesel Particulate Matter (DPM) Rulemaking
- The NIOSH/National Cancer Institute (NCI) Diesel Exhaust in Miners Study (DEMS)
- MSHA DPM Rulemaking
 - Separate Proposals for Underground Coal Mines and Underground Metal-Nonmetal Mines
 - Coal Rules – based on engine testing by the MSHA Approval and Certification Center (A&CC)/or EPA limit
 - Metal/Nonmetal Rules – Permissible Exposure Limits (PEL) as actually measured at the tailpipe by MSHA and/or operator
- MSHA DPM Rulemaking Published in the Federal Register on the Very Last Day of the Clinton Administration as a “Midnight Rule” (January 19, 2001, See 30 C.F.R. §§ 57.5060-57.5075)

How We Got Here? (Cont'd)

- Virtually Overnight, Mining Industry Challenges the DPM Rules (Kennecott, AngloGold North America, Followed by Separate Suit by National Mining Association (NMA) And the Methane Awareness Research Group (MARG); Labor Unions Become Engaged as Well)
- In George W. Bush Administration, MSHA Chief Dave Lauriski Seeks Settlement Discussions which Go on for Years, with Changes to the DPM Rules Along the Way Giving Operators Time to Learn About Exhaust Filters and Other Engine Controls
 - With Very Favorable Global Settlement Finally in Hand, Discussions Break Down as Result of MARG Objections; MSHA Takes View If Cannot Settle with All, then Will not Settle with Anyone
 - Metal/Nonmetal – At Heart of Rules is Permissible Exposure Limit (PEL) of 160 Micrograms of Total Carbon per Cubic Meter of Air as Actually Measured at Tailpipe
 - Litigation Ensues-
 - Briefs are Filed; Oral Arguments are Held; Three-Judge Panel of US Court of Appeals for DC Circuit Rejects Industry Arguments and Upholds MSHA Rules in Their Entirety

How We Got Here? (Cont'd)

- NIOSH/NCI DEMS Begun in Early 1990s; Around Time of Initiation of MSHA DPM Rulemaking; Group of Eight Underground Nonmetal Mines Voluntarily Participate (Trona, Potash, Salt, Limestone); Involves Over 12,000 Miners
- Initially Constructive Relationships Between NIOSH, NCI and Participating Mines, Communications Break Down over Real and Perceived Problems; Quarrels and Litigation Ensur
- DEMS Finally Published in March 2012; Concluding that Diesel Exhaust May Cause Lung Cancer in Humans (Silverman, et al.) and that Exposure to Diesel Exhaust Increases the Risk of Death from Lung Cancer (Attfield, et al.)
- One Mine Seeks Repair of Relationship with NIOSH/NCI, as Agencies Begin to Prepare Letter to Participating Miners and Families re DEMS; DEMS Mines Worry About Tort Liability Issues; But Letter to Miners and Families Turns Out to be a “Nothingburger”
- But then comes IARC

How We Got Here? (Cont'd)

- Based on DEMS and Other Studies, in June 2012, the United Nations International Agency for Research on Cancer (IARC) Decides Diesel Exhaust is a “Known Human Carcinogen”
- As result of IARC Finding, MSHA Issues Hazard Alerts in January and August 2013
- MSHA then Publishes a Request for Information (RFI) on Exposure of Underground Miners to Diesel Exhaust in Federal Register of June 8, 2016 (81 Fed. Reg. 36826)
- Industry Parties (e.g., Industrial Minerals Association-North America (IMA-NA)) ask MSHA and NIOSH to Form a Diesel Exhaust Health Effects Partnership (Partnership) To Explore the 28 Highly Complex Questions Posed by the RFI
- MSHA and NIOSH Accept Offer and the MSHA/NIOSH Diesel Exhaust Health Effects Partnership is Formed in 2016
- This Workshop is one Outcome of the Partnership

Introduction of Context Panel Speakers

- Dr. Jessica Kogel, Associate Director for Mining and Director Office of Mine Safety and Health Research, NIOSH
- Dr. David Weissman, Director, Division of Respiratory Disease Studies, NIOSH
- Patricia Silvey, Deputy Assistant Secretary of Labor for Mine Safety and Health Operations
- Sheila McConnell, Director, MSHA Office of Standards, Regulations, and Variances

TBD
