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Dust Retrospective Study

Comment On: MSHA-2018-0014-0007
Retrospective Study of Respirable Coal Mine Dust Rule

Document: MSHA-2018-0014-DRAFT-0024
Comment from West, Allison

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General Comment

See attached/

Attachments

Comment_AW

April 10th, 2022

S. Aromie Noe

Office of Standards, Regulations, and Variances Department of Labor
Mine Safety and Health Administration

201 12th Street South, Room 4E401

Arlington, VA 22202

Re: MSHA-2018-0014, Dust Retrospective Study

Dear S. Aromie Noe,

Thank you for the opportunity to comment on the Mine Safety and Health Administration (MSHA) Dust Retrospective Study. I am a Master of Public Health Student concentrating on Environmental Health Science and Policy at the George Washington University Milken Institute School of Public Health. I am respectfully submitting this comment as we have the shared goal of protecting the health and safety of mine workers.

I would like to provide the requested evidence for developing a framework aimed at assessing the impact of the final Dust Rule to lowering miners' exposure to respirable coal mine dust regarding the Dust Retrospective Study:

1. Occupational exposure to respirable coal mine dust is dangerous for worker health.
2. Potential framework assessing the impact of the final Dust Rule.

1. Occupational exposure to respirable coal mine dust is dangerous for worker health

Occupational exposure to respirable coal mine dust is a major determinant of obstructive pulmonary and interstitial lung diseases like coal workers' pneumoconiosis (CWP) and silicosis. These illnesses result in significant permanent disability and death.

Progressive massive fibrosis, or complicated CWP, is the most extreme form of CWP and results in extensive lung scarring which can lead to compromised lung function and death (Bailey et al., 2018). Since 1990, it is estimated that 10% of miners with over 25 years of mining experience have CWP in the United States. In central Appalachia, a hub of mining, 20.6% of long-tenured miners have CWP (Blackley et al., 2018).

2. Potential framework assessing the impact of the final Dust Rule

The Dust Retrospective Study is essential due to the long latency period between exposure and outcome of these diseases. Although the MSHA's 2016 respirable dust regulation requires the use of personal dust monitors (PDM) by mine operators, the regulation fails to consider the inhalation of respirable silica dust.

The Centers for Disease Control and Prevention National Institute for Occupational Safety and Health (CDC- NIOSH) Pittsburgh Mining Research Division (PMRD) has developed a framework for monitoring respirable silica dust exposure after sampling has been completed. PMRD researchers take a gravimetric sample and analyze the filter using Fourier transform infrared spectroscopy (FTIR) to determine the silica content within minutes.

This practice of field-based silica analysis has growing interest in the industry and has proven to be effective (CDC, 2020). The MSHA should adopt a similar framework to assist in their efforts to lower miners' exposure to respirable coal mine dust as stated in the final Dust Rule.

I urge the Mine Safety and Health Administration to examine the impacts of this potential framework on miner's exposure to respirable coal mine dust and consider the points I have made in this comment.

Thank you for providing the opportunity to present these comments on the Dust Retrospective Study. If you have any questions or wish to discuss these comments further, please reach out to me at the contact information below.

Sincerely,

Allison West
MPH Student
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References

Bailey, Javins, & Carter. (2018, October 23). *Charleston, WV progressive massive fibrosis*. Bailey, Javins, and Carter LC. Retrieved April 6, 2022, from https://www.baileyjavinscarter.com/practice-areas/coal-mine-accidents/black-lung-and-other-lung-diseases/progressive-massive-fibrosis-pmf/

Blackley, D. J., Halldin, C. N., & Laney, A. S. (2018). Continued Increase in Prevalence of Coal Workers' Pneumoconiosis in the United States, 1970-2017. *American journal of public health*, *108*(9), 1220–1222. https://doi.org/10.2105/AJPH.2018.304517

CDC. (2020, October 16). *Mining Topic: Respirable Dust*. Centers for Disease Control and Prevention. Retrieved April 5, 2022, from https://www.cdc.gov/niosh/mining/topics/respirabledust.html

MSHA. (2019, June 3). *Dust Retrospective Study*. Regulations.gov. Retrieved April 1, 2022, from https://www.regulations.gov/document/MSHA-2018-0014-0007