

## MSHA'S 2006 Final Rule on the Final DPM Limit for Underground Metal and Nonmetal Miners



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**Mine Safety and Health Administration**

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### May 18, 2006 Final Rule

- ❖ Phases in final DPM PELs over two years
  - ◆  $308_{EC} \mu\text{g}/\text{m}^3$  - effective May 20, 2006
  - ◆  $350_{TC} \mu\text{g}/\text{m}^3$  - effective January 20, 2007
  - ◆  $160_{TC} \mu\text{g}/\text{m}^3$  - effective May 20, 2008
- ❖ 1<sup>st</sup> step,  $308_{EC} \mu\text{g}/\text{m}^3$ , is an EC limit
  - ◆ In 2005, we converted the  $400 \mu\text{g}/\text{m}^3$  total carbon limit to  $308 \mu\text{g}/\text{m}^3$  elemental carbon.
  - ◆  $308 \times \text{error factor } (1.12) = 345$

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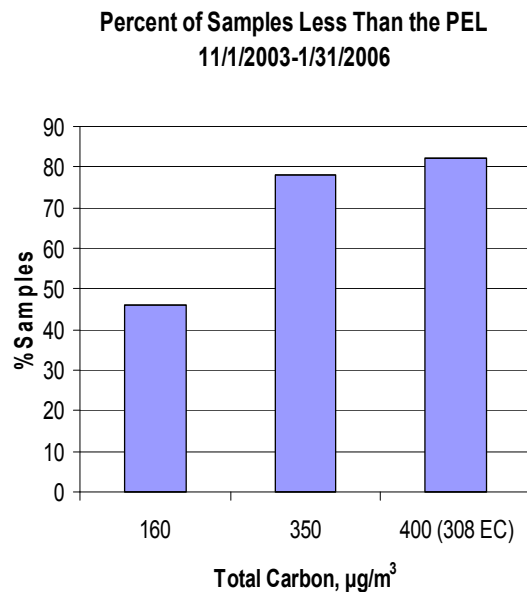
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## 2<sup>nd</sup> & 3<sup>rd</sup> steps are TC limits

- ❖ For the 350, treat like interim 400 limit under Settlement Agreement:
  - ◆  $TC = EC + OC$
  - ◆  $TC = EC \times 1.3$
  - ◆ Compliance based on lower of  $[EC + OC]$  or  $[EC \times 1.3]$
- ❖ must develop appropriate error factor
- ❖ *For the 160, to be determined in a separate rulemaking*

## enforcement samples from November 2003 to January 2006

- ❖ 1,798 samples
- ❖ 82% below 308EC
- ❖ 78% below 350TC
- ❖ 46% below 160TC



## **EXTENSION OF TIME IN WHICH TO MEET THE FINAL CONCENTRATION LIMIT §57.5060(c)**

- ❖ **Deletes provision restricting newer mines from applying for an extension**
- ❖ **Mine operators may apply to District Manager for additional time to come into compliance with the final DPM limit**
  - ◆ **technological OR economic constraints**
  - ◆ **must demonstrate that there is no cost-effective solution to reducing a miner's exposure to DPM.**

## **If DM determines it is infeasible to achieve compliance with the final limit using engineering and administrative controls**

- ❖ **one year (renewable) extension**
- ❖ **If affected miners are included in a respiratory protection program which meets the requirements of § 57.5060(d)**
  - ◆ **operator is in compliance and no citation will be issued.**
- ❖ **We will periodically check to determine current DPM exposures and operator's ability to implement new control technology.**

## Has the mine operator exhausted all feasible engineering and administrative controls before using respiratory protection to supplement controls?

- ❖ consideration of numerous factors
  - ◆ the specific mining conditions
  - ◆ type of mining equipment used
  - ◆ nature of the overexposure
  - ◆ controls used by the mine operator
  - ◆ MSHA policy and case law governing the economic and technological feasibility of controls

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## Supporting documentation

- ❖ information that shows controls are technologically or economically infeasible
- ❖ specific cost data
- ❖ unique mining conditions
- ❖ implementation difficulties
- ❖ effects on productivity
- ❖ unavailability of controls
- ❖ miners' DPM exposures
- ❖ the occupations and mine areas for which you are seeking an extension
- ❖ and any other relevant information



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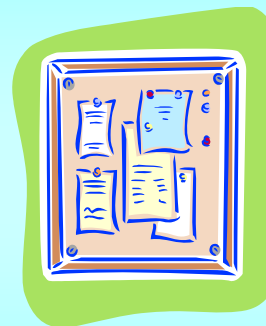
## The actions the mine operator will be taking to minimize the exposure of miners to DPM

- ❖ monitoring
- ❖ maintaining controls and respiratory protection
- ❖ other good faith actions



## post the application before filing with the District Manager

- ❖ post one copy of the application at the mine site for at least 30 days prior to the date of application
- ❖ provide a copy to the authorized representative of miners



### **if the application for a special extension is approved, the mine operator must...**

- ❖ comply with the terms of the approved application for a special extension for the duration of the extension
- ❖ post a copy of the approved application at the mine site for the duration of the special extension period
- ❖ provide a copy of the approved application to the authorized representative of miners.

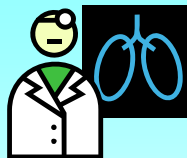
### **if the application for a special extension is approved...**

- ❖ Miners whose exposure to DPM continues to exceed the applicable DPM limit will be required to wear respiratory protection
- ❖ PPE is not a substitute for feasible engineering and administrative controls.
  - ◆ implement all feasible engineering and administrative controls
  - ◆ required to maintain these engineering and administrative controls

## §57.5060(d) RESPIRATORY PROTECTION



- ❖ Confidential medical evaluation required to determine miner's ability to use a respirator
- ❖ Must conduct before fit testing or use at mine
- ❖ No cost to miner
- ❖ Evaluation must be by physician or other licensed health care professional (PLHCP)



### What is a PLHCP?

- ❖ Physician or other Licensed Health Care Professional
- ❖ a physician, physician's assistant, nurse, emergency medical technician or other person qualified to provide medical or occupational health services
  - ◆ MSHA also defined a "health professional" under the Hazard Communication standards at 30 CFR 47.11.

**How long does the mine operator have to find a PLHCP, conduct a medical evaluation to determine if the miner can wear a respirator, and provide the miner with a respirator if the miner is able to wear one?**

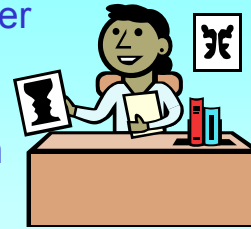
- ❖ As soon as feasible
- ❖ Be prepared to immediately implement the necessary respiratory requirements if controls are not successful in reducing the miner's exposure to within the PEL

**The PLHCP may use any medically valid procedure for making this determination.**

- ❖ no protocol specified
- ❖ evaluation based on the individual miner's medical information
- ❖ If the PLHCP determines that the miner cannot wear a negative pressure respirator, the mine operator must make certain that the PLHCP evaluates the miner's ability to wear a powered air purifying respirator (PAPR).



- ❖ Mine operator must provide the miner with an opportunity to discuss the miner's evaluation results with the PLHCP ***before*** obtaining the written determination from the PLHCP.



- ❖ **If the miner has concerns with or disagrees with the PLHCP's medical determination**

- ◆ the miner has the right to submit additional evidence of their medical condition within 30 days of their discussion of the PLHCP's determination.

Afterwards, the mine operator must obtain a ***written*** determination from the PLHCP regarding the miner's ability to wear a respirator.

- ❖ **Mine operator must exercise diligence in making certain that the PLHCP provides a the miner copy of the of the PLHCP's determination as to whether the miner is medically able to wear a respirator.**

## a medical evaluation to determine if the miner can wear a respirator must be conducted...

- ❖ before a miner is required to be fit tested or required to wear a respirator
- ❖ when the mine operator has reason to believe that conditions have changed which could adversely affect the miner's ability to wear the respirator

## The miner must be transferred...

- ❖ within 30 days of the final determination of the PLHCP that the miner is unable to wear a respirator.
- ❖ The miner must be transferred to an area of the same mine where respiratory protection is not required.



## Does the mine operator have to transfer a miner who is medically unable to wear a respirator if the miner does not want to transfer?

- ❖ Yes, if the mine operator has an existing job in an area of the same mine to which the miner can be transferred.



## What if the mine operator doesn't have a position to transfer the miner to that is within the PEL?

- ❖ The mine operator is not required to create a job for for purposes of transferring a miner.
- ❖ The mine operator can't require a miner to wear a respirator who has been found by the PLHCP to be unable to wear a respirator.
- ❖ The mine operator can't allow the miner to work in an occupation or area of the mine where the miner's exposure exceeds the applicable limit.

❖ The miner must continue to receive no less compensation than the miner received for their regular rate of pay in the job classification that the miner held immediately before the transfer.

❖ Wage increases for transferred miners must be based on the new work classification.



**Are transferred miners entitled to bonuses they received in their previous job that were in addition to their regular rate of pay?**

- ❖ If the bonus is discretionary, it is not considered part of the miner's regular rate of pay.
- ❖ If the bonus is nondiscretionary, it is considered to be part of the miner's regular rate of pay.

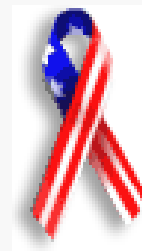
## records related to medical evaluation and transfer of a miner

- ❖ Keep a record of the identification of the PLHCP and the PLHCP's written determination of the miner's ability to wear a respirator.
- ❖ Keep the record for the duration of the affected miner's employment plus six months.



## estimated costs of medical evaluation and transfer provisions

- ❖ 680 miners would need evaluations in the first year after the rule takes effect to meet the 308 EC and 350 TC limits;
- ❖ An additional 244 miners would need evaluations at the beginning of the third year when the 160 TC limit takes effect;
- ❖ 1/2% of miners using respirators would need to be transferred or fewer than 5 in any given year; and
- ❖ the cost would be \$69,170 annually.



*Thank You*