

IN THE MATTER OF:)
)
EXPOSURE OF UNDERGROUND)
MINERS TO DIESEL EXHAUST)

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BEFORE THE U.S. DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

IN THE MATTER OF:)
)
EXPOSURE OF UNDERGROUND)
MINERS TO DIESEL EXHAUST)

Room 1-3
Hyatt Place Pittsburgh -
North Shore
260 North Shore Drive
Pittsburgh, Pennsylvania

Wednesday,
July 21, 2016

The parties convened, pursuant to the notice, at
10:00 a.m.

APPEARANCES:

SHEILA McCONNELL, Director
Office of Standards, Regulations and Variances

MICHAEL WRIGHT, Director
Health Safety and Environment for the
United Steelworkers

ALFRED DuCHARME
Office of the Solicitor, Department of Labor

GREG MEIKLE, Chief of Health, Coal,
Mine Safety and Health

PAMELA KING
MSHA Office of Standards

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Deputy Administrator, Metal and Nonmetal Mine
Safety and Health

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P R O C E E D I N G S

(10:00 a.m.)

MS. MCCONNELL: Again, my name is Sheila McConnell. I am the Director of the Office of Standards, Regulations and Variances for the Mine Safety and Health Administration. I would like to remind everyone that is here if they could please sign the attendance sheet out front. If you sign the sheet for our public hearing, we would also ask that you also sign the sheet for this public meeting.

I am the moderator for this public meeting on the Agency's request for information on exposure of underground miners to diesel exhaust, which was published in the Federal Register on June 8, 2016. On behalf of Assistant Secretary Joseph Main, I want to welcome all of you here today and thank you for your attendance and participation.

Let me introduce the members of our panel today. We have Marvin Lichtenfels, Deputy Administrator, Metal and Nonmetal Mine Safety and Health; Greg Meikle, Chief of Health, Coal, Mine Safety and Health; Al DuCharme, our Office of Solicitors; and again Pamela King in the front who works with the MSHA'S Office of Standards.

This is the second of four public meetings.

1 The remaining meetings will take place at MSHA's
2 Headquarters in Arlington, Virginia and on August 4 in
3 Birmingham, Alabama. We held our first meeting in
4 Salt Lake City, Utah this past Tuesday.

5 The purpose of this public meeting is to
6 receive information from the public that will help
7 MSHA evaluate the Agency's existing standards and
8 policy guidance on controlling miners' exposure to
9 diesel exhaust, and to evaluate the effectiveness of
10 the protection now in place to preserve miners'
11 health.

12 This meeting will be conducted in an
13 informal manner. Speakers and other attendees may
14 present information to the court reporter for the
15 rulemaking record. MSHA will accept comments and
16 other information for the record from any interested
17 party.

18 If you have not already done so, as I
19 mentioned, please sign the attendance sheet. We have
20 copies of the request for information and the notice
21 announcing the public meetings in the hallway in front
22 of the room. The verbatim transcript may be viewed on
23 Regulations.gov and MSHA's website.

24 But before we hear from you, I want to
25 provide some background on why MSHA is reviewing the

1 Agency's existing standards. MSHA regulates miners'
2 exposures to diesel exhaust to prevent the health risk
3 and to prevent material impairment of health in
4 miners.

5 Diesel engines are widely used in mining
6 operations because of their high power output and
7 mobility. Many mine operators prefer diesel powered
8 machines because they are more powerful than most
9 battery-powered equipment and can be used without
10 electrical trailing cables which can restrict
11 equipment mobility.

12 In March 2012, the National Institute for
13 Occupational Safety and Health and the National Cancer
14 Institute completed the Diesel Exhaust and Miner
15 Study. This epidemiological study was conducted to
16 determine whether breathing diesel exhaust could lead
17 to lung cancer and other health outcomes.

18 In June 2012, the International Agency of
19 Research on Cancer concluded that there is sufficient
20 evidence of carcinogenicity in humans from diesel
21 exhaust exposure to classify diesel exhaust as a human
22 carcinogen.

23 Following the International Agency for
24 Research on Cancer classification of diesel exhaust as
25 a human carcinogen, MSHA issued two health hazard

1 alerts, one on diesel exhaust and diesel particulate
2 matter in underground coal and metal/nonmetal mines
3 and one on nitrogen dioxide emissions in underground
4 coal mines.

5 MSHA issued the first health hazard in
6 partnership with OSHA on January 10, 2013. MSHA
7 issued a second health hazard on August 6th, 2013.
8 This alert reinforced the dangers of platinum-based
9 particulate filters as a source of increased
10 concentration of nitrogen dioxide in underground coal
11 mines.

12 This request for information seeks
13 information and data on the effectiveness of the
14 existing standards and controlling miners' exposures
15 to diesel exhaust, including diesel particulate
16 matter.

17 MSHA specifically requests information on a
18 series of questions related to (1) the use of non-
19 permissible light-duty diesel powered equipment in
20 underground coal mines; (2) maintenance of diesel
21 powered equipment in underground coal mines and record
22 keeping requirements; (3) the types and effectiveness
23 of after treatment and engine technologies used in
24 coal and metal/nonmetal underground mines.

25 MSHA's interested in best practices for

1 selecting and using after treatment devices, and (4)
2 under MSHA's existing standards for metal/nonmetal
3 underground mines, total carbon measurements are used
4 as a surrogate for diesel particulate matter when
5 determining miners' exposures. MSHA is seeking
6 information on alternative surrogates, other than
7 total carbon, to estimate a miner's diesel particulate
8 matter exposure.

9 MSHA's also seeking information on the
10 advances and sampling and analytical technology and
11 other methods for measuring a metal and nonmetal
12 miner's exposure to diesel particulate matter.
13 Lastly, MSHA's also interested in data and information
14 on existing controls that were most effective in
15 metal/nonmetal's exposures and what are the
16 technological challenges and relative cost of reducing
17 diesel particulate matter exposure limit from the
18 existing standard of 160 micrograms of total carbon
19 per cubic meter of air.

20 MSHA is interested in receiving any other
21 data or information that may be useful to MSHA in
22 evaluating miners' exposure to harmful diesel exhaust
23 emissions including the effectiveness of existing
24 control mechanisms for reducing harmful diesel
25 emissions and limiting miners' exposures to harmful

1 diesel exhaust emissions.

2 At this time, we will hear our first
3 presenter. Again, when you come make your
4 presentation, please give your name, spell your name
5 for the court reporter, and she has asked if you could
6 speak either louder or more directly into the
7 microphone. So our first speaker is Ron Bowersox and
8 Curt Burton. Again, could you just, for the record.

9 MR. BOWERSOX: My name is Ron Bowersox, and
10 that's B-O-W-E-R-S-O-X. Curt, come on.

11 MR. BURTON: And I'm Curtis Burton, that's
12 C-U-R-T-I-S, B-U-R-T-O-N.

13 MR. BOWERSOX: Okay. We're going to add
14 additional comments later on, but want to briefly
15 speak today. Okay, I said my name is Ron Bowersox,
16 and I'm an International Safety Representative for the
17 United Mine Workers of America. Curtis Burton, he's a
18 local safety committeeman. He works at the Cumberland
19 Mine, and he's also a mechanic on diesel equipment.

20 My area I cover is Pennsylvania, West
21 Virginia and Ohio. I'm also a member of the PA Diesel
22 Tech Advisory Committee on Diesel Equipment. The
23 United Mine Workers of America is happy to see the
24 Agency begin the rulemaking process for much needed
25 enforcement on light-duty diesel equipment in

1 underground coal mines.

2 As a Safety UMWA Representative for the
3 International Union, I coordinate safety committee
4 training classes at the Beckley Mine Academy two times
5 a year. We have UMWA members attend that class from
6 all parts of the United States, even Canada. One of
7 the classes we offer down there, it's a week long
8 class and what it is, is West Virginia Diesel Training
9 Class and also gives you the right to be an
10 instructor. Actually, Curtis attended one of those
11 classes.

12 Many of our members request this diesel
13 class even though they don't work in PA, Ohio or West
14 Virginia, because just the technology and the
15 knowledge they learn really helps them at their mine
16 sites. You know, of course, we have diesel law in PA,
17 West Virginia and Ohio, all three states have a state
18 law which really addresses light-duty diesel
19 equipment.

20 After these guys start their class, it only
21 takes a few hours into the class to realize, you know,
22 what protections are missing. There are hundreds of
23 pieces of light-duty equipment being operated in
24 underground coal mines outside of PA, West Virginia
25 and Ohio that are not being inspected by a state

1 agency or MSHA.

2 The UMW believes all miners should have the
3 same protection. The right thing to do is for the
4 Agency to include in their inspections, light-duty
5 diesel equipment, which is just more of the Mantrips.
6 We need this done quickly to protect our miners, and
7 that's the most precious resource we have. So that's
8 kind of all I need to say today. Curt?

9 MR. BURTON: Really, I would like to
10 reiterate the things my colleague, Ron, said. As he
11 stated, I've been through the training course in
12 Beckley, and I went in, Randy Bell is the instructor,
13 and he takes us in and he shows us an MSHA approved
14 light-duty piece of equipment. I wouldn't want that
15 in my mine. I believe every coal miner in the United
16 States should be protected by the same standards that
17 I'm afforded the opportunity to work under.

18 With the filtration and the reduction in
19 emissions that our state law requires us to achieve, I
20 believe all miners should have that luxury of working
21 in that atmosphere that I get to work in.

22 MS. MCCONNELL: Are you going to be making
23 comments for the record in terms of written comments?

24 MR. BURTON: Oh, we will definitely make
25 comment.

1 MS. MCCONNELL: And you're going to be
2 providing some specifics in terms of the types of
3 protections you think are missing.

4 MR. BOWERSOX: Exactly. Correct, correct.

5 MS. MCCONNELL: The issues that you see with
6 light-duty equipment.

7 MR. BOWERSOX: Yes.

8 MS. MCCONNELL: The type of protections
9 provided to PA that should be protected -- I'm sorry,
10 to Pennsylvania coal miners that should be protected
11 to other coal miners, underground coal miners.

12 MR. BOWERSOX: That's correct.

13 MS. MCCONNELL: Okay. Just wanted to --

14 MR. BOWERSOX: Actually, I just found out
15 about the meeting. So I wasn't really prepared today
16 for that.

17 MS. MCCONNELL: No, that's fine.

18 MR. BOWERSOX: But I will definitely do
19 that.

20 MS. MCCONNELL: That's great. Okay, well, I
21 don't have any other questions. But I do encourage
22 you to provide some specific detailed information and
23 data to the record for us to help evaluate our
24 existing standards.

25 MR. BOWERSOX: That will happen.

1 MS. MCCONNELL: Do you have anything, Greg,
2 that you want to ask or add?

3 MR. MEIKLE: No.

4 MS. MCCONNELL: Okay. Well, I thank you for
5 coming and presenting today, and we look forward to
6 hearing your, see your written comments.

7 MR. BOWERSOX: Thank you.

8 MS. MCCONNELL: Thank you. These gentlemen
9 were the only ones that had signed up to speak. It
10 doesn't prevent anyone else who may want to come and
11 make remarks. This is a request for information. So
12 we're seeking data information specific to allow us to
13 evaluate our existing standards and their protection.
14 So this is a good opportunity to come forward if you
15 have anything to say.

16 MR. CHAJET: Good morning again. My name is
17 Henry Chajet with the firm of Husch Blackwell, and
18 we're here today representing the Mining Coalition as
19 we were in the earlier portion of this hearing on mine
20 examination proposed rules.

21 The request for postponement and additional
22 time that we filed with the Agency applies to both
23 rulemakings. So you will note that we've asked you to
24 extend this request for information, and to separate
25 the two rulemakings.

1 We don't view back to back hearings as
2 separate rulemakings, and it is very difficult to
3 address a highly scientific medical and engineering
4 question, which you have posed, a series of, in a
5 compressed time frame.

6 You may recall that a similar Coalition
7 participated extensively in your diesel exhaust
8 rulemaking activities, and that that Coalition
9 presented probably ten scientists, physicians,
10 toxicologists and engineering witnesses or more,
11 perhaps, over time and did specific research on the
12 issues you're addressing now. That was a multi-year
13 rulemaking, and again we are concerned that this looks
14 like an attempt to do a compressed and double
15 rulemaking at the same time that won't allow for
16 adequate time for input.

17 I don't have any specific input today,
18 because the time's so short that you provided. And we
19 focused on the mine exam rule because it's a proposed
20 rule and this is a request for information. So we're
21 hoping that you will extend and permit additional time
22 and separate these issues.

23 Again, I have never seen, in 37 years, an
24 accelerated rulemaking like this, or a back-to-back
25 rulemaking two for one on the same day on complex --

1 it just hasn't happened ever. And the reason for that
2 is because it doesn't allow the regulated parties or
3 the Agency to adequately understand and comment and
4 evaluate the issues that you've raised.

5 So we would encourage you to separate these
6 rulemakings, extend the time and not try to do this in
7 what appears to be a three to five month rulemaking.
8 Thank you very much.

9 MS. MCCONNELL: Thank you, Mr. Chajet, for
10 your comments, and I'd like to acknowledge that we
11 have received your request and are considering your
12 request for extension.

13 MR. CHAJET: I remember going to MSHA for
14 the first time in 1978, and I went to meet with the
15 head of Coal and he looked at me about the
16 conversation we were having about an issue in the
17 field, and he says, "I understand your concerns. I
18 sympathize with you, and I'll get back to you." I
19 haven't heard back since then. I'll just leave you
20 with that thought. Thank you. That was Don Schlick,
21 by the way.

22 MS. MCCONNELL: Is there anyone else who
23 would like to make a presentation or remarks or speak?
24 Come on down. Again, for the record, could you state
25 your name?

1 MR. WRIGHT: Mike Wright, the Director of
2 Health Safety and Environment for the Steelworkers.
3 Along with Henry, I was deeply involved in the
4 rulemaking that established the current standard.
5 Before that rulemaking commenced, working in some
6 underground mines, metal/nonmetal mines, was like
7 working in the tailpipe of a city bus.

8 Today, it's better. It's like working three
9 feet back from the tailpipe of the city bus. But from
10 what I've been able to see, underground miners are
11 still the most highly exposed occupational group when
12 it comes to diesel emissions. So MSHA's current
13 activity on this issue is very welcomed.

14 Let me comment on some of the issues that I
15 think need to be considered. We will submit more
16 comments and what information we can, what technical
17 information we can at the appropriate time. But I just
18 want to raise a few issues.

19 First, there was a lengthy back-and-forth
20 about whether the proper surrogate was total carbon or
21 whether it was elemental carbon, and in fact as you
22 know and as MSHA points out in the notice -- I'm
23 sorry, in the Request for Information, the original
24 standard was based on total carbon because the
25 epidemiology was based on total carbon.

1 During the lengthy period after the rule was
2 promulgated, but before it went into effect when
3 various parties, MSHA, us and the industry were
4 discussing how to respond to an industry lawsuit; we
5 agreed that the proper surrogate really was elemental
6 carbon and NIOSH was able to provide a conversion
7 factor from total carbon to elemental carbon at what
8 was then the MSHA interim level. Of course, the
9 standard was due to be reduced in sort of two steps.

10 The problem was they were not able to
11 provide such a conversion factor for the final step.
12 So the final standard had to go back to total carbon.

13 We believe that the proper surrogate really
14 is elemental carbon. And the way to determine that
15 proper final standard is not to try to get a
16 conversion factor, because the data shows that that's
17 unstable. But to really look at feasibility with
18 respect to elemental carbon, to look at what kind of
19 elemental carbon levels are really achievable, and I
20 believe NIOSH is working on that.

21 Second, and let me say this. I think the
22 only issue in this possible rulemaking ought to be
23 feasibility. The health effects debate is done. We
24 know that diesel causes cancer. There should be no
25 further debate about that. And the only real question

1 is how low we can get those exposures. That's what
2 the rulemaking ought to concentrate on. That's what
3 the analysis ought to concentrate on.

4 But it ought to concentrate on one thing in
5 addition to what the standard is currently based on.
6 The current standard is based on, essentially total
7 mass, 160 micrograms.

8 We are concerned that mass may not be the
9 only thing we need to measure. Carcinogenicity may be
10 a surface phenomenon. It may be that what really is
11 important is not the amount of mass that a miner
12 breathes but the amount of surface area you get when
13 you add up all of those particles. That's not - it's
14 not proven that that's the proper measurement, but
15 it's also not proven that mass is the proper
16 measurement. So we really need to look at both.

17 If it is a surface phenomenon, then the
18 small particles are probably more dangerous than the
19 large ones. Because an equivalent mass of, say, one
20 microgram particles has more surface area than an
21 equivalent mass of 5 microgram particles.

22 Some of the filtering media may have the
23 effect of reducing mass, but actually increasing
24 surface area. That's because if they're taking out
25 the larger particles but letting the smaller ones

1 through, all things being equal, that should not
2 increase the surface area. That should decrease the
3 surface area.

4 But if the large particles are needed for
5 the smaller ones to agglomerate on, and there's some
6 indication that that may be the case, then we need to
7 look at what those filtering media should do.

8 So the data in the examination of what comes
9 in and in NIOSH's research and research generally on
10 this issue, we need to look not only at mass but at
11 surface area and what the different diesel controls
12 are doing with respect to surface area. Those are
13 things we are keenly interested in.

14 As for the requested delay, we're of two
15 minds on that. One is that if we need to delay in
16 order to get the right data, then we ought to. On the
17 other hand, diesel kills. So every day we delay,
18 certainly every month we delay, every year we delay,
19 in moving to a standard based on feasibility -- which
20 we are convinced will be a lower standard than what we
21 have now, the data certainly support that. Every day
22 we delay in moving to that lower standard puts miners
23 at risk and costs miners' lives.

24 So if we need to delay to get the data,
25 that's one thing. But delay for the purpose of delay

1 has a cost. Thank you.

2 MS. MCCONNELL: Mr. Wright, are you
3 preparing written comments, too, as well for the
4 record or --

5 MR. WRIGHT: Yes.

6 MS. MCCONNELL: Okay. Thank you. I don't
7 have any further questions. None?

8 Anyone else like to provide some remarks?
9 Please state your name and organization for the
10 record.

11 MR. DAVIS: Yes, my name is Jene Davis. I'm
12 an independent consultant, and I hadn't really figured
13 -- I didn't prepare anything. But I need to bring one
14 thing out, and that is that as I read through the
15 Federal Register, they tied it at 2.5 gram per hour
16 output of diesel engine, okay, and that was done in
17 the last rulemaking. We argued it in the last
18 rulemaking that 2.5 grams per hour is not a standard.
19 We must, MSHA has to get rid of that and has to come
20 up to a standard.

21 What 2.5 grams per hour allows is: a
22 smaller 30, 40, 50 horsepower engine is allowed to
23 produce much more DPM per cubic meter of air than a
24 100 or 200 or 300 horsepower engine. So the grams per
25 hour is not a standard. Grams per horsepower hour

1 would be a standard, but grams per hour is not a
2 standard.

3 To get down to a standard, what MSHA needs
4 to look at is: the grams per hour output of the
5 engine versus the vent plate. After all, it is what
6 the coal miner's breathing is what we're worried
7 about; okay. So we've got to get down to how many,
8 what is the milligram per cubic meter of air.

9 And the 2.5 gram standard will not get us
10 there. We must take an equation that takes into known
11 gram per output of the engine and a known vent plate
12 to get to grams per hour. We then add a filtration
13 system to reduce it further; okay. And like I said, I
14 really didn't -- but that point has to come out. We
15 argued that point 20 years ago, and it didn't go
16 anywhere.

17 Since I'm here, I might as well bring
18 another one up that has, this has bothered me for
19 years.

20 MS. MCCONNELL: Sure.

21 MR. DAVIS: The definition of a light-duty.
22 Any time I've spoken to anyone at MSHA about light-
23 duty equipment, the hierarchy of MSHA believes light-
24 duty equipment to be personnel carriers. But by
25 definition, it is not solely personnel carriers.

1 And for years, I have tried to get testing
2 and filtration of light-duty equipment. And I keep
3 being told that the equipment is only run for an hour
4 or so a day, light-duty, and therefore the output, the
5 DPM output of this is insignificant to the amount of
6 DPM that goes into the air.

7 Well, what you have to understand is: we
8 have mines in Pennsylvania, of course they're under
9 Pennsylvania rule. They were filtered, and they are
10 tested, emissions tested. But nowhere else in the
11 nation are they.

12 If you have a 20-ton locomotive rail mount,
13 and that locomotive does not haul long wall
14 components, it is considered light-duty equipment even
15 though it runs back and forth through the mine all day
16 long with supplies hooked to it, 10-12 cars it
17 supplies. This is light-duty. Anywhere else but
18 Pennsylvania, West Virginia and Ohio, this piece of
19 equipment never needs testing emissions-wise, never
20 needs filtration. This is ludicrous, guys. This is
21 the 21st century.

22 We also have on light-duty, heavy-duty, your
23 categories, we have engines that fall in between. We
24 use them for both either light-duty or heavy-duty.
25 One of the engines I'll bring up that is very easy to

1 check is the 2011 Deutz. 2011 Deutz is used in the
2 heavy duty category. If it's in the heavy duty
3 category according to MSHA, it must be filtered to 2.5
4 grams at least; okay. It must be tested emissions-
5 wise weekly. Take that same engine, put it in a
6 mantrip personnel carrier, never has to be tested,
7 never has to be filtered.

8 So therefore you, MSHA must figure it is the
9 piece of equipment that's causing the problem, not the
10 engine; correct? Because we have the same engine that
11 falls into two categories here. One category must be
12 tested, must be filtered. The other category does
13 not, same engine.

14 Those two items must be corrected. I will
15 put electronic -- yeah, I'm in the process of putting
16 it together now. I had no intention to speak, but
17 those couple things have bugged me for 15 years now.
18 So I needed to get it off my chest.

19 MS. MCCONNELL: No, I appreciate you making
20 your comments. I thank you for coming and making your
21 comments, and I appreciate your comments being --
22 written comments being submitted to the record as
23 well.

24 MR. DAVIS: Yeah, that will be coming in a
25 couple of weeks.

1 MS. MCCONNELL: That's fine. That's good.

2 MR. DAVIS: All right.

3 MS. MCCONNELL: Thank you.

4 Anyone else like to come and make comments
5 for the record? I'm just pausing here for everyone to
6 collect their thoughts.

7 (Pause.)

8 MS. MCCONNELL: So it seems that no one else
9 will like to speak. Okay. Therefore, I am going to
10 conclude MSHA's public meeting on the request for
11 information on exposure of underground miners to
12 diesel exhaust.

13 Again, on behalf of Assistant Secretary
14 Joseph Main, we appreciate your participation in this
15 rulemaking process and encourage you to submit your
16 comments by September 6, 2016. And please, in your
17 comments be as specific as possible. Only through
18 specific information are we going to be able to
19 sufficiently evaluate our existing standards.

20 With that, the meeting is now concluded, and
21 I thank you, and all have a good day.

22 (Whereupon, at 10:29 a.m., the meeting in
23 the above-entitled matter concluded.)

24 //

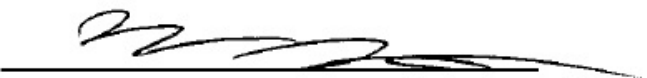
25 //

REPORTER'S CERTIFICATE

DOCKET NO.: N/A
CASE TITLE: Exposure of Underground Miners to
Diesel Exhaust
DATE: July 21, 2016
LOCATION: Pittsburgh, Pennsylvania

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the U.S. Department of Labor, Mine Safety & Health Administration.

Date: July 21, 2016



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