2020 Occupational Safety and Health Law Midwinter Meeting
Palm Springs, CA
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MSHA: General Update

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The MSHA Mission

“to prevent death, illness, and injury from mining and promote safe and healthful workplaces for U.S. miners”
MSHA’s Tools

• Fair and consistent enforcement, including mandated inspections
• Compliance and technical assistance
• Training and education
• Rulemaking and policy guidance
Mining Injury Rates & Fatalities
2008-2020

Calendar Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatals</th>
<th>Injury Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>53</td>
<td>3.26</td>
</tr>
<tr>
<td>2009</td>
<td>35</td>
<td>3.02</td>
</tr>
<tr>
<td>2010</td>
<td>72</td>
<td>2.83</td>
</tr>
<tr>
<td>2011</td>
<td>36</td>
<td>2.75</td>
</tr>
<tr>
<td>2012</td>
<td>36</td>
<td>2.59</td>
</tr>
<tr>
<td>2013</td>
<td>42</td>
<td>2.50</td>
</tr>
<tr>
<td>2014</td>
<td>46</td>
<td>2.47</td>
</tr>
<tr>
<td>2015</td>
<td>29</td>
<td>2.31</td>
</tr>
<tr>
<td>2016</td>
<td>25</td>
<td>2.20</td>
</tr>
<tr>
<td>2017</td>
<td>28</td>
<td>2.17</td>
</tr>
<tr>
<td>2018</td>
<td>28</td>
<td>2.05</td>
</tr>
<tr>
<td>2019</td>
<td>25</td>
<td>2.04</td>
</tr>
<tr>
<td>2020</td>
<td>4</td>
<td>2.00</td>
</tr>
</tbody>
</table>
## MSHA Data for 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Mines Reporting Employment</td>
<td>12,928</td>
</tr>
<tr>
<td>- Coal Mines Only</td>
<td>1,131</td>
</tr>
<tr>
<td>- Metal/Nonmetal Mines Only</td>
<td>11,797</td>
</tr>
<tr>
<td>Total Industry Employment (Operator &amp; Contractor)</td>
<td>330,872</td>
</tr>
<tr>
<td>MSHA Inspections/Employees</td>
<td>38,258/1,790</td>
</tr>
<tr>
<td>Citations &amp; Orders Issued</td>
<td>99,617</td>
</tr>
<tr>
<td>Dollars Assessed (millions)</td>
<td>$51.4</td>
</tr>
</tbody>
</table>
## MSHA’s Mine Portfolio (CY 2019)*

<table>
<thead>
<tr>
<th>Mine Type</th>
<th>Number of Mines</th>
<th>Share of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG Coal Only</td>
<td>388</td>
<td>2.8%</td>
</tr>
<tr>
<td>UG MNM Only</td>
<td>241</td>
<td>1.7%</td>
</tr>
<tr>
<td>UG Total</td>
<td>629</td>
<td>4.5%</td>
</tr>
<tr>
<td>All Surface</td>
<td>12,493</td>
<td>89.5%</td>
</tr>
<tr>
<td>Facilities Only</td>
<td>841</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

* Includes mines that either reported employment or an injury; or received an inspection or citation.
Coal - Number of Valid MSHA & Operator Respirable Dust Samples

Calendar Year

CPDM required 2/1/16

1.5 mg/m³ standard in effect 8/1/16
Average DO* Dust Concentration in Underground Coal Mines, by MSHA and Operator Samples

* Designated occupations (DO) exposed to the highest levels of respirable coal mine dust.
Coal - MSHA & Operator Respirable Dust Samples

% > Standard

Calendar Year
0.00% 0.79% 0.88% 0.91% 0.82% 1.65% 2.36% 3.06% 3.50% 3.90% 4.17% 4.68% 5.45% 6.49% 6.27% 6.40% 7.29% 7.58% 7.98% 9.08% 9.08%
UG Coal - MSHA Average Designated Occupation* Quartz Concentration by Calendar Year

* Designated occupations (DO) exposed to the highest levels of respirable coal mine dust.
Coal - MSHA Quartz Samples % >100 µg/m³
COAL: QUARTZ SAMPLING RESULTS CY 2019

<table>
<thead>
<tr>
<th></th>
<th>Total Samples</th>
<th># Over 50 Micrograms</th>
<th>% Over 50 Micrograms</th>
<th># Over 100 Micrograms</th>
<th>% Over 100 Micrograms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14,100</td>
<td>840</td>
<td>6.0%</td>
<td>151</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Quartz Sample Date


Quartz Micrograms

0 50 100 150 200 250 300 350 400
Black Lung Claims Paid

Source: https://www.dol.gov/owcp/dcmwc/
Powered Haulage Safety Initiative

Powered Haulage accidents were responsible for 50% of fatalities in recent years; 7 of 25 (28%) in 2019

Preventing these accidents is a priority for MSHA, with a focus on:

• Mobile Equipment
• Belt Conveyors
• Seat Belt Safety
View from the Operator’s Cab
Actual Activity on the Ground
Large vehicles striking other vehicles or pedestrians have killed 24 miners since 2003
Belt Conveyors

• Eight miners killed working around belt conveyors since January 2017;
• Since 2008, 20 fatalities and more than 40 permanent injuries
• Guarding, lock-out tag-out, properly using crossovers - all essential for safety
Seat Belt Safety

• Three fatalities in 2017 and 2018, 3 more in 2019 and 41 fatalities since 2007, involved miners not wearing seat belts

• 6000+ MSHA citations issued for failure to wear seatbelts since 2007 (most in MNM mines)
ELECTROCUTIONS of 2019

• THREE FATAL ELECTROCUTIONS IN SIX WEEKS
• Two in West Virginia (Coal – District 04)
• One in Louisiana (M/NM – South Central)
• Near miss situations such as “victim in Florida contacted high voltage by placing head in electrical box”

All have somethings in common:
1. No Lock Out/Tag Out
2. Not protected with appropriate PPE
3. Working on electrical equipment with Certified or Qualified persons present
4. Working – Not Troubleshooting
Contractors

- 11 of 25 (44%) Fatalities in 2019 were contractors
- Contractors represent approx. 25% of workforce
- Mine Act defines “operator” to include both owner/production operators and independent contractors
- Operator & Contractor have equal responsibility for compliance with laws, standards & regulations
- Most (if not all) contractor fatalities correlate with training deficiencies
One MSHA Initiative

• Blurring the distinction between Coal and MNM enforcement for more efficient use of resources

• Cross-training inspectors and updating systems to accommodate change where it makes sense

• Specialized inspector expertise still required for certain mines

• 213 mines “blurred”

• Phasing in 3 Regions and corresponding Regional Administrators
Compliance Assistance and Enforcement

- MSHA held stakeholder meetings and provided in-person compliance assistance and technical advice during the first 90 days.

- Dates and locations of stakeholder meetings can be found on our website at www.msha.gov.

- During this 90-day period (which ended December 31, 2019), MSHA conducted its regular inspections and expected mine operators to comply with the 2018 rule requirements while moving to adoption of the 2017 final rule.

- As of January 1, 2020, MSHA enforces the 2017 final rule and will issue citations to mine operators not in compliance with these requirements.
Regulations and Guidance


2. **Respirable Quartz** – had public session w/ NIOSH. Spring regulatory agenda will detail next action. Workshop to be held this summer.

3. **Permissible Survey Eq** – working on proposed rule-estimated for 2020.

4. **Electronic Detonators** – proposal and direct final rule were published. To date, no adverse comments received. Notice on next actions will be published early March. MSHA anticipates finalization in March.


6. **Guidance** – updating and streamlining MSHA program handbooks is underway to comply with Executive Order and best practices.
Questions?