VTCA
ANNUAL SAFETY SEMINARS
2019

• Fredericksburg December 3, 2019
• Roanoke December 4, 2019
Mining History - DMME and DMM History

- Congress for Industrial Organization 1935
- President Roosevelt’ New Deal 1940
- Virginia Department of Labor 1950
- Virginia Division of Mines and Quarries
- State Labor Law changes 1968
- Coal Mine Safety Act 1969
- DOI created MESA 1973
- Congress passed the Federal Mine Safety and Health Act in 1977
- Federal Mine Safety and Health Act established MSHA under DOL replacing MESA
- Office of Surface Mining Reclamation and Enforcement (Surface Mining Control and Reclamation Act “SMCRA” 1977
- Virginia established current DMME structure in 1985
- Miner Act 2006 (Brookwood Sago)
DMME

- 7 divisions
- DA
- DE
- DM
- DMLR
- DGO
- DMM
- DGMR
DMM’s Mission

• To enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.
DMM’s Goal

• To provide for the **safe** and **environmentally sound** stewardship of Virginia’s mineral and energy resources.
The Division of Mineral Mining currently has 22 total employees. 8 are office personnel and 14 are field personnel. The state is divided geographically into 2 major enforcement areas, the Eastern Enforcement and the Western Enforcement Area. Each area has 7 field members, one supervisor and 6 compliance personnel. Each field member has an assigned area from where their work is based. Two of the 6 in each area have areas of expertise added into their work assignments. One has an added training specialization and one has an engineering permit review specialization. The Charlottesville office has 8 staff members who are management or support staff to provide safety and engineering specialization, technical services, and program support.
DMM’s Inspection Areas

Virginia Division of Mineral Mining
Mine Inspector Areas

Western Supervisor
Jim Smith
(540) 586-0232

Eastern Supervisor
Paul Saunders
(804) 519-7440

Area 1, Mac Hagy, (276) 597-7642
Area 2, Willie Cochran, (540) 382-4680
Area 3, Bentley Smith, (540) 425-3548
Area 4, Matt Kretsch, (540) 280-3603
Area 5, Damien Felker, (434) 315-0305
Area 6, Bruce Hutcheson, (540) 937-2644
Area 7, Vernon Harris, (434) 589-4253
Area 8, James Schaefer, (804) 912-6896
Area 9, Paul Grizzle, (804) 443-4680
Area 10, Sarah Hamm, (276) 233-2475
Area 11, Eric Snowadzky, (276) 433-1754
Area 12, Hunter Atkins, (804) 212-6975
DMM ‘s Responsibility

The Division of Mineral Mining is responsible for the safety and health of miners at the 443 mines licensed in the state. The Division personnel conduct inspections to assure miners are working in a safe manner and mining operations are operated in a safe manner and in compliance with the safety laws and regulations for mineral mining. As of this year, Virginia’s mines employed approximately 3,000 mine employees and 5,427 contract employees. Production employees worked 4,865,130 hours and contract employees worked 972,010 hours. 5,8347,140 total hours for 2018. MSHA currently inspects 175 mines in Virginia for health and safety compliance.

The Division is also responsible for oversight of mines to assure they are operated in an environmentally sound manner and operated in compliance with the reclamation laws and regulations for mineral mining. A mine permit covers the land and how it is mined from start of mining, completion of mining, and post mine land reclamation or re-purpose. The 443 permitted mines in the state have 77,595 acres under permit. 40,055 of the permitted acres are bonded for disturbance by mining.
DMM’s Critical Tasks

The Division staff and personnel performs the following functions critical to operating safe and environmentally sound mines:

• Issue Mine Licenses and Mine Permits
• Investigate accidents and complaints
• Inspect mining operations for compliance with health and safety laws and regulations for miners and mines
• Inspect mining operations for compliance with the reclamation laws and regulations for mineral mines
• Provide training and certification for miners
• Provide mine operators with assistance regarding safety and reclamation issues and concerns
• Administer the Abandoned Mine Land Program to inventory sites and eliminate hazards when possible
• Mitigate off site impacts from mining
DMM
5 YEAR
STATISTICS
Division of Mineral Mining

Permits

Virginia Permits

<table>
<thead>
<tr>
<th>Year</th>
<th>Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>436</td>
</tr>
<tr>
<td>2016</td>
<td>443</td>
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<tr>
<td>2017</td>
<td>443</td>
</tr>
<tr>
<td>2018</td>
<td>442</td>
</tr>
<tr>
<td>2019</td>
<td>439</td>
</tr>
</tbody>
</table>

Calendar Year

# of Permits
Division of Mineral Mining

Tonnage

![Graph showing the tonnage of mineral mining from 2014 to 2018. The tonnage increases from 2014 to 2016, peaks at 68.9 in 2017, and then decreases to 64.8 in 2018.](image_url)
Division of Mineral Mining

Operator and Contractor Workers

Mineral Mining Workers

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Contractors</th>
<th>Operators</th>
<th>Total Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3,754</td>
<td>1,263</td>
<td>4,017</td>
</tr>
<tr>
<td>2015</td>
<td>3,578</td>
<td>1,285</td>
<td>4,863</td>
</tr>
<tr>
<td>2016</td>
<td>3,784</td>
<td>1,350</td>
<td>5,134</td>
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<tr>
<td>2017</td>
<td>3,954</td>
<td>1,391</td>
<td>5,345</td>
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<tr>
<td>2018</td>
<td>3,649</td>
<td>1,364</td>
<td>4,613</td>
</tr>
</tbody>
</table>

Graph showing the number of workers from 2014 to 2018 for contractors, operators, and total workers.
Division of Mineral Mining

Operators and Contractors Hours

Mineral Mining Hours

Calendar Year

- Operators
- Contractors
- Office
VTCA Statistics for Minerals Mined in Virginia

• Virginia’s mineral mines produced 64,845,434 tons in 2018 and employees worked 5,8347,140 hours.

• 284 mineral mines were active during 2018 having either worked hours and produced materials. 231 of the active mineral mining operations worked without having a lost time accident and zero Accident Frequency Rate. 53 mines in Virginia had a Accident Frequency Rate > Zero.

• The Virginia Transportation and Construction Alliances’ (VTCA) aggregates association members produced 59,110,702 tons of the total of 64,845,343 tons produced in the state in 2018 with an approximate value between $750 and $800 million. 5,906,165 tons were sand & gravel & industrial aggregates) and 53,204,537 tons were crushed stone.

• 199 out of the 443 permitted sites are controlled by VTCA members.

• 137 out of the 284 active mines are operated by VTCA members.
Division of Mineral Mining

Fatalities

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th># of Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1</td>
</tr>
<tr>
<td>2016</td>
<td>1</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
</tr>
<tr>
<td>2018</td>
<td>1</td>
</tr>
<tr>
<td>2019</td>
<td>0</td>
</tr>
</tbody>
</table>
2015

- August – Luck Stone Corporation – employee crushed when bin collapsed
2016

• September - Holston River Quarry – Dublin – contract driller received fatal injury when he was struck in the abdomen by a pipe wrench while using the hydraulic force of the drill system to loose a chuck on the drill head
• No fatality
2018

• October – New England Stone – Jet Mist Quarry - A 26 year old dimension stone quarry miner with two years of experience was fatally injured while attempting to topple a large sawn slab from the quarry face. The miner was on top of the slab using hydraulic bags to push the slab away from the quarry face when the slab unexpectedly broke horizontally a few feet above the quarry floor causing the bottom of the slab to drop and slide away from the face. The miner fell between the slab and the quarry face and was struck by several large rocks that fell from the top of the slab.
2019

- None thus far
SAFETY RECOGNITION PROGRAM
OPERATOR AND INDIVIDUAL
DMM/VTCA
Operator Recognition Program

DMM/VTCA
Division of Mineral Mining

Accidents Reported

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th># of Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>77</td>
</tr>
<tr>
<td>2016</td>
<td>88</td>
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<tr>
<td>2017</td>
<td>61</td>
</tr>
<tr>
<td>2018</td>
<td>61</td>
</tr>
<tr>
<td>2019</td>
<td>26</td>
</tr>
</tbody>
</table>

Virginia Accidents
Division of Mineral Mining

Serious Injuries

Calendar Year

# of Injuries

2015: 1
2016: 3
2017: 1
2018: 1
2019: 0
Operator Recognition

• Began in 2007
• Currently recognizes 8 mine operator each year for most hours worked in two categories by type of operation (Quarry or Open Pit) and each category is divided into 4 categories based upon operation’s hourly performance levels
• To receive the award, the operation must have worked the most hours within the hourly category with a ZERO Accident Frequency Rate

Quarry Categories
1. 0-25,000 employee hours
2. 25,000 – 50,000 employee hours
3. 50,000 – 75,000 employee hours
4. 75,000 plus employee hours
Open Pit

1. 0- 5,000 employee hours
2. 5,000 – 10,000 employee hours
3. 10,000- - 30,000 employee hours
4. 30,000 plus employee hours
Quarry Category AWARD WINNERS 2019:

- Chantilly Crushed Stone, Inc., Chantilly Quarry, Loudoun County, 123,450 hours
- Vulcan Construction Materials, LLC., Graham Quarry, Fairfax County, 73,302 hours
- Pounding Mill Quarry Group, Bluefield Quarry, Tazwell County, 47,718 hours
- BWI Abingdon, LLC., Abingdon Quarry, Washington County, 22,722 hours
Open Pit Category AWARD WINNERS:

- **30,000 Employee Hours +**
  - USC Saltville Brine, LLC. Saltville Salt Co., Washington County, 92,961 hours

- **10,000 – 30,000 Employee Hours**
  - Branscome, Inc. Hofmeyer Pit, Charles City County, 26,615 hours

- **5,000 – 10,000 Employee Hours**
  - Bardon, Inc. Rappahannock Farm, King George County, 8,670 hours

- **0 - 5,000 Employee Hours**
  - Adams Construction Company, Daniel Sand Plant, Halifax hours
Division of Mineral Mining

Active Mines with Zero Frequency

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th># of Mines</th>
</tr>
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<tbody>
<tr>
<td>2014</td>
<td>264</td>
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<tr>
<td>2015</td>
<td>278</td>
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<td>2016</td>
<td>284</td>
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<tr>
<td>2017</td>
<td>268</td>
</tr>
<tr>
<td>2018</td>
<td>231</td>
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</table>
Individual Recognition Program

DMM/VTCA
INDIVIDUAL MINER RECOGNITION PROGRAM

• Nominations submitted annually
• 5 year increments beginning at 15 years
• Nominations are accepted generally April of the each year
During 2019, DMM recognized 45 miners working from 15 to 45 years without a lost time accident in 2018. These miners received their individual recognition awards this year.

Since this program began in 2007, a total of 339 miners have been recognized for working safely.
## Mineral Mine Individual Safety Awards Per Year

<table>
<thead>
<tr>
<th>Year Presented</th>
<th>15 Year</th>
<th>20 Year</th>
<th>25 Year</th>
<th>30 Year</th>
<th>35+ Year</th>
<th>40+ Year</th>
<th>45 Year</th>
<th>Total</th>
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<tbody>
<tr>
<td>2007</td>
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<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<tr>
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<td>8</td>
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<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>36</td>
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<tr>
<td>2018</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>2019</td>
<td>9</td>
<td>11</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>83</td>
<td>52</td>
<td>86</td>
<td>36</td>
<td>65</td>
<td>10</td>
<td>7</td>
<td>339</td>
</tr>
</tbody>
</table>
RESULTS

• The 339 individual awards represents a total of 8,202 years without a lost time accident
2019 SAFETY INITIATIVES
Beginning of Shift Examinations

• Required by Virginia Mine Safety Law under 45.1-161.292:29.C and 4 VAC 25-40-130

• Conduct beginning of shift examination of miner’s work areas to detect & eliminate hazards. Record must be kept and include name, date, areas examined, time of examination and time work began as well as notes on hazards found and actions taken to correct them. MSHA’s ruling is requiring more along these same lines and emphasizing the need for those performing inspections to be properly trained to do so.

• Any hazard or unsafe condition shall be corrected, or the area barricaded & posted with warning signs, prior to miners starting work in the affected area.
Major Responsibilities of Certified Foreman

• Ensure that their assigned section of mine is in compliance with State mining laws and regulations.
• Ensure that miners under their supervision carry out their assigned tasks in a safe manner.
Conduct beginning of shift examination of miner’s work areas to detect & eliminate hazards. Record must be kept and include name, date, areas examined, time of examination and time work began as well as notes on hazards found and actions taken to correct them. MSHA is now requiring more along these lines and highlighting the need for those performing inspections to be properly trained to do so. Any hazard or unsafe condition shall be corrected, or the area barricaded & posted with warning signs, prior to miners starting work in the affected area.
POWERED HAULAGE

BE AWARE OF YOUR SURROUNDINGS

SMART
ALERT
FOCUSED
EDUCATED
SEAT BELT USAGE
CONVEYORS

THINK SAFETY - BE ALERT AROUND ALL POWERED CONVEYORS
Operator Assistance

- DMM provides operator assistance upon request (safety and reclamation)
- DMM/DM have provided operator assistance related to electrical safety and electrical installation to more than 50 mine sites when DMM began offering this specific type of assistance approximately 3 years ago.
- DMME provides Mine Rescue services for underground mineral mine. Lhoist of North America has a service contract with DMME to provide primary and secondary coverage. Team composed of DMM and Dm personnel.
OTHER

• Continuing use of DMM’s online Certification process for registration, document submittal, and fee payment for classes (initial, renewal, reciprocity, and general mineral miner)
• Annual Reporting of contractors for those signed up due December 2019
• Current versions of the Mineral Mine Safety Laws, Safety and Health Regulations, and Reclamation Laws and Regulations are available. The PDF version of these is available online at our web page.
• DMM providing MSHA Law Seminars
• DMM providing Electrical Classes and credit for Continuing Education Requirements for DPOR
• Utilization of DGMR – Mineral Resources, Geologists, rock formation structure, etc.
What is Safety?

• It is about the parties that have to work together to accomplish common goal
• Common goal for a safe work environment and working in a safe manner
• Takes individual commitment to choose to work safe and obey laws and regulations
• Takes operator commitment to provide a safe workplace and promote safety work practices and a safety oriented culture
• Takes daily attention and practice on everyone’s part
• Consciously choosing to “Doing the right things”
• Everyone must have a sincere commitment and firm belief in working today in safe manner and not getting hurt is a number 1 priority.....
• People matter!!!
QUESTIONS

• Call our office at (434) 951-6311
• Call your local Mine Inspector
• Contact our Training Specialists (Vernon Harris or Hunter Atkins)
• Visit our website at: www.dmme.virginia.gov
• Sign up for our e-mail messages by contacting Chrissie Wood Smith at: (434)951-6322
THANK YOU

Happy Holidays Ahead and Having a next New Year!