



Agency Priority Goal Action Plan

Worker Safety: Reduce Miner Injuries

Goal Leaders:

David Zatezalo, Assistant Secretary, Mine Safety and Health Administration (MSHA)

Tim Watkins, Administrator, Mine Safety and Health Enforcement

Sheila McConnell, Director, Standards, Regulations and Variances

Overview

Goal Statement

- By September 30, 2019, reduce the reportable injury rate associated with powered haulage equipment, the primary cause of miners' injuries, by 10 percent per year based on a rolling 5-year average per 200,000 hours worked.

Challenge

- MSHA works to prevent death, illness, and injury from mining and promote safe and healthful workplaces for U.S. miners. Since 2013, total injury and fatality rates have declined by approximately 26 percent and 17 percent, respectively. However, MSHA has determined that accidents caused by powered haulage equipment, which is a category of moving machines used to transport miners or haul materials in mines, contributed to 30 percent of miner fatalities since 2013, and is the primary cause of miners' injuries. The stated goal supports the Agency's continued efforts to reduce fatalities and injuries at all mines.

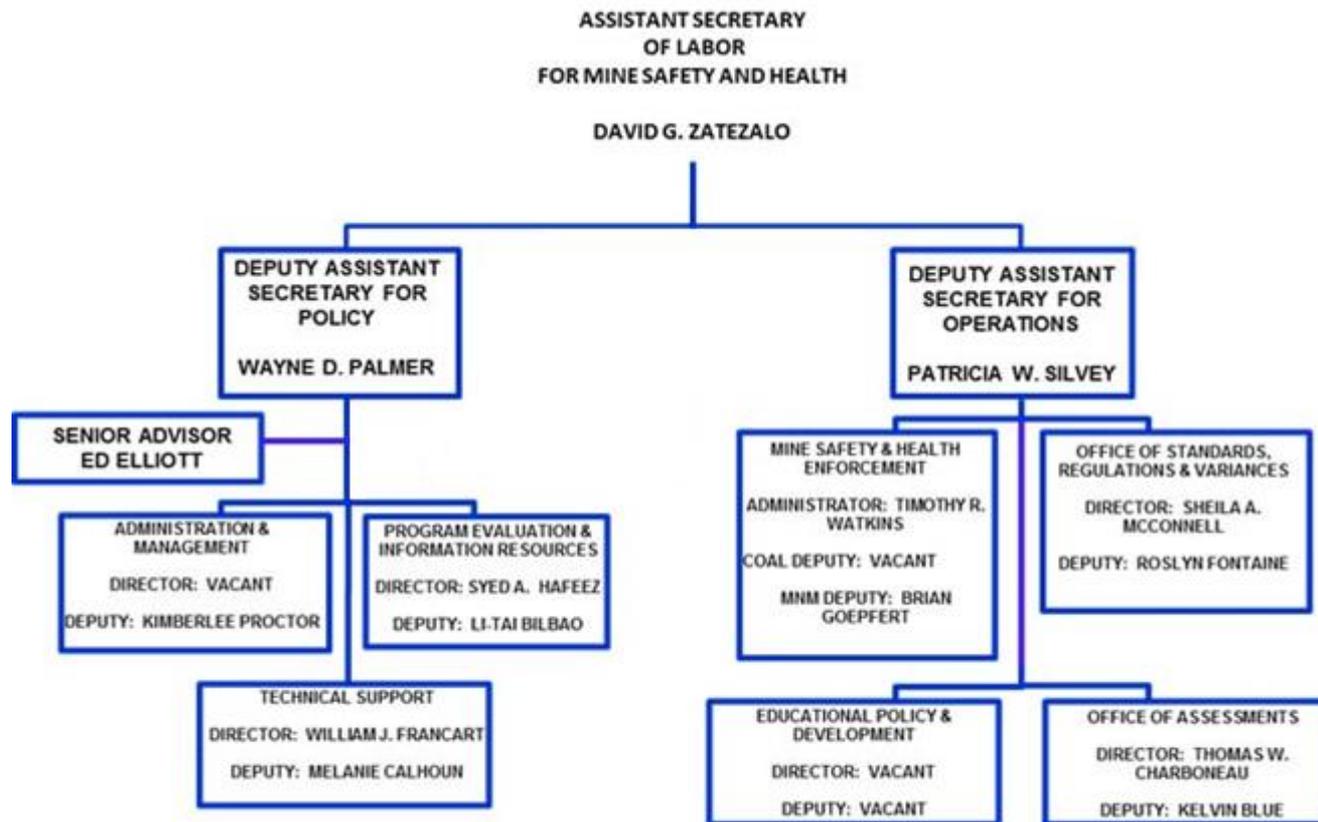
Opportunity

- MSHA will work to reduce fatalities and injuries by targeting workplace hazards that represent a primary cause of fatalities and injuries.

Leadership

Core Team:

- David Zatezalo, Assistant Secretary, Mine Safety and Health Administration
- Tim Watkins, Administrator, Mine Safety and Health Enforcement
- Sheila McConnell, Director, Standards, Regulations and Variances



Goal Structure & Strategies

Strategies:

- Continue mandated inspections of mine sites: four times per year for underground mines and two times per year for surface mines.
- Conduct technical compliance assistance visits with mines, including providing best practices focused on the safe use of powered haulage equipment.
- Enhance mine operator and miner training regarding powered haulage equipment safety.
- Review powered haulage accidents to identify root causes or patterns, if any, that can serve as the focus of targeted initiatives.
- Optimize use of technology and other innovations in mining activities involving powered haulage equipment.
- Invite alliances, mining associations, labor organizations, mining companies, and state agencies to partner with MSHA in efforts to focus on powered haulage injury reductions.
- Publish on MSHA's website weekly near miss and serious accidents focusing on powered haulage accidents and injuries.
- Provide training specific to reducing accidents caused by powered haulage equipment at Mine Safety and Health Conferences.

Summary of Progress – FY19 Q1 and Q2

MSHA finalized and continued to implement its rollout plan for outreach efforts to promote best practices to prevent injuries and fatalities associated with powered haulage accidents. The rollout plan includes development of web and print materials, stakeholder calls and presentations, and direct outreach to miners and mine operators by inspectors.

The Powered Haulage Initiative mini-website at www.msha.gov/poweredhaulage was fully built-out with three pages highlighting Conveyor Safety, Large Equipment Blind Spots, and Seat Belt Usage. MSHA printed 100,000 copies of a tri-fold brochure on conveyor safety and distributed it to all MSHA field offices and major mining associations. Inspectors at all field offices focused on conveyor safety in mine visits, distributing hardhat stickers and brochures. The outreach materials reflected findings and best practice recommendations by engineers in MSHA's Technical Support who reviewed powered haulage accident data for the past 10 years. MSHA also launched a comprehensive field campaign on large equipment safety. Inspectors distributed 230,000 reflective stickers – enough for every miner who works around this equipment - and delivered a consistent message on safety. These resources and outreach efforts have been promoted extensively through social media, the MSHA website, and quarterly stakeholder calls.

MSHA also worked with Alliance partners to spread the word on powered haulage safety. The Industrial Minerals Association of North America (IMA-NA) developed co-branded flyers on conveyors, vehicle safety and seat belt usage that its members distributed to managers and employees. To generate interest, the National Sand, Stone and Gravel Association (NSSGA) launched a contest for a seat belt safety slogan with a \$5,000 prize.

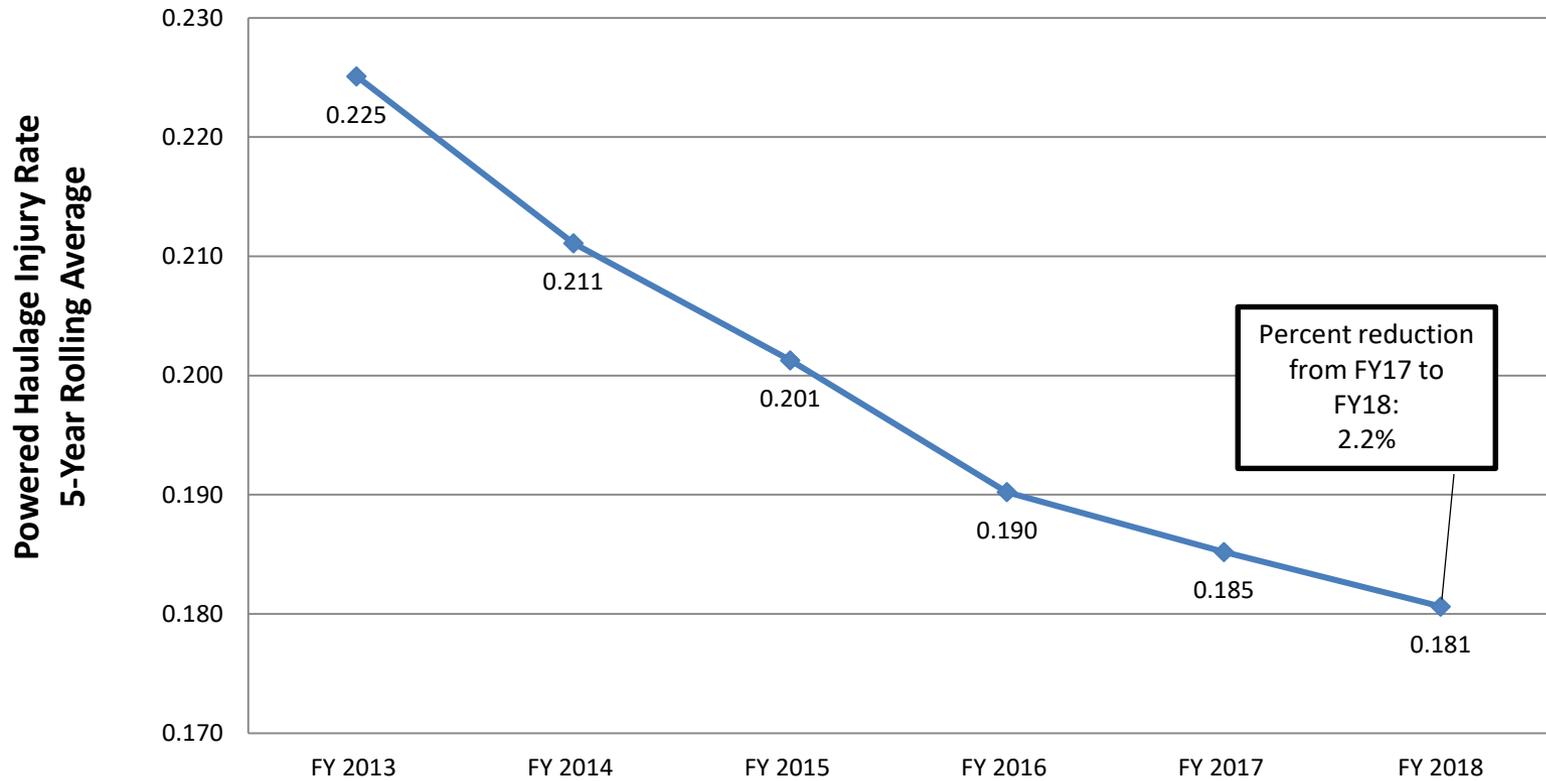
MSHA received and continues to review 90 comments from stakeholders via its [Request for Information](#) through the Federal Register, seeking input on technological advances that can promote safety in powered haulage.

Key Milestones

Milestone Summary					
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments
Review Accident Data involving Powered Haulage to identify root causes of accidents	October 1, 2018	Completed	Completed	M/NM, Coal, PEIR	MSHA will report quarterly on this milestone.
Develop Rollout Plan on addressing corrective actions to the root causes	December 31, 2018	Completed	Completed	M/NM , Coal, EPD, Tech Support	MSHA will report quarterly on this milestone.
Rollout Plan	January 2019	Completed	Completed	M/NM , Coal, EPD	MSHA will report quarterly on status of implementation.
Complete Rollout Plan	July 2019	On-Track	N/A	M/NM , Coal, EPD	
Evaluate effectiveness of Powered Haulage Accident Reduction Initiative	August 2019 – October 2020	On-Track	N/A	M/NM, Coal, PEIR	

Key Indicators

5-Year Rolling Average Injury Rate (per 200,000 hours worked) Caused by Powered Haulage Equipment



Data Accuracy and Reliability

- **Means used to verify and validate measured values:** There are three levels of internal review prior to uploading any submitted record into MSHA databases. First, MSHA district and headquarters offices run and review reports daily; second, MSHA's IT directorate performs data verification; and third, performance analysts monitor data quality and documents, then respond to, resolve, and correct performance data quality issues.
- **Sources for the data:** The five-year rolling average powered haulage all-injury rate per 200,000 hours worked is dependent on accident/injury and employment data reported by mine operators. MSHA computes this rate for the most recent 5-year period by applying the following calculation: $[number\ of\ reportable\ powered\ haulage\ injuries] \div [reported\ mining\ hours] * [200,000]$. 30 CFR 50 (Part 50) requires mine operators to self-report an accident/injury within 10 days of incident and employment data quarterly. This information is stored in MSHA's Standardized Information System, a centralized database accessed through an application server for all authorized MSHA users to conduct transactions for data entry and data retrieval.
- **Level of accuracy required for the intended use of the data:** The level of accuracy required for all accident/injury data is high. The data are reported to the public, and MSHA management uses the data to make strategic decisions. The data are vetted via multiple levels of internal review, encompassing legal and programmatic requirements, to ensure data accuracy.
- **Limitations to the data at the required level of accuracy:** Since accident/injury and employment data are self-reported, underreporting of the data is possible. Underreporting of either accident/injury or employment data would impact accuracy because the factors are used to calculate the five-year rolling average powered haulage all-injury rate.
- **How the agency has compensated for such limitations, if needed, to reach the required level of accuracy:** Mine inspectors are required to inspect underground mines four times, and surface operations two times per year. During these events, inspectors review records to ensure compliance with Part 50 reporting requirements. Failure to report can result in civil and/or criminal action. Furthermore, MSHA's Office of Injury and Employment Information performs regular data checks, flagging anomalies and following up with mine operators to make corrections.

Additional Information

Contributing Programs

Organizations:

- MSHA
- Coal, M/NM, EPD, PEIR, Tech Support

Regulations:

- 30 CFR (Mineral Resources): 56/57.9100; 56/57.9200; 56/57.14200; 56/57.14130; 77.404; 77.1400; 77.1600; 75.1725; 75.1403; 75.500; 75.1000; 75.1400

Tax Expenditures:

- N/A

Policies:

- Policies are for the standards listed in Regulations

Other Federal Activities:

- N/A

Stakeholder / Congressional Consultations

Feedback and suggestions obtained from stakeholders during the rollout phase will be incorporated into updating the rollout plan, and their ideas and suggestions will also be incorporated into future initiatives.