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DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Parts 56, 57 and 77

[Docket No. MSHA-2018-0016]

RIN 1219-AB91

Safety Program for Surface Mobile Equipment

AGENCY: Mine Safety and Health Administration (MSHA), Department of Labor.

ACTION: Final rule.

SUMMARY: The Mine Safety and Health Administration (MSHA or the Agency) is requiring that mine operators develop, implement, and update, periodically or when necessary, a written safety program for surface mobile equipment (excluding belt conveyors) at surface mines and surface areas of underground mines. The written safety program must be developed and updated with input from miners and their representatives. The written safety program must include actions mine operators will take to identify hazards and risks to reduce accidents, injuries, and fatalities related to surface mobile equipment. The final rule offers mine operators flexibility to devise a safety program that is appropriate for their specific mining conditions and operations.

DATES: *Effective date:* The final rule is effective [INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

Compliance date: Compliance with this final rule is not required until [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]

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I. Introduction

A. Regulatory Authority

This final rule is issued under section 101 of the Federal Mine Safety and Health Act of 1977 (Mine Act), as amended. 30 U.S.C. 811.

B. Background

A variety of mining equipment is used at surface mines or in surface areas of underground mines. Surface mining vehicles can be very large (many can be several stories tall) and are capable of destroying smaller vehicles that cannot be seen by the vehicle operators. Accidents involving mining equipment are a leading cause of fatalities at mines, although fatalities involving powered haulage equipment, a type of mobile equipment, decreased in 2022.[1,2] To reduce the number of accidents, injuries and fatalities at mines, MSHA implemented several powered haulage initiatives – for example, conducting safety awareness campaigns, providing powered haulage guidance and technical assistance, and disseminating training materials and best-practices information that addresses powered haulage safety. Despite these

[1] Accidents at mines are classified by MSHA based on the Agency's "*Accident Investigation Procedures Handbook,*" which defines 21 categories of mine-related accidents. Most accidents involving mining equipment are classified under one of two MSHA accident categories – powered haulage accidents or machinery accidents – depending on the type of equipment involved. For more information, please see MSHA Accident Investigation Procedures Handbook, December 2020, Appendix 7, Accident Classifications – available at https://arlweb.msha.gov/READROOM/HANDBOOK/PH20-I-4.pdf.

[2] MSHA Fatality Reports, https://www.msha.gov/data-and-reports/fatality-reports/search?page=2

efforts, in 2023, machinery (mobile) accidents have still accounted for a significant number of mining fatalities.

On July 20, 2021, for example, MSHA hosted a national "Stand Down for Safety Day" to focus on powered haulage accidents and vehicle rollovers to help educate miners, save lives, and prevent injuries.[3] On that day, Mine Safety and Health Enforcement (MSHE) and Educational Field and Small Mine Services (EFSMS) staff visited mines to meet with miners and operators to increase awareness of powered haulage hazards and the need to be familiar with and follow mine-safety best practices.

On February 28, 2022, MSHA announced its "Take Time, Save Lives" campaign to remind mine operators to train miners and ensure miners can take their time to prevent accidents and injuries and to save lives.[4] As part of the campaign, mines across the country received a poster to display at mine sites with steps operators and miners can take to stay safe, including actions related to working around powered haulage equipment and wearing seat belts.

In addition, over the years, MSHA has developed a wide variety of mine safety and health materials and has made them available on the Agency's website (http://www.msha.gov) and mobile app.[5] These materials are intended to assist trainers and mine operators in promoting a safe and healthy environment, and among other topics, they cover safety topics related to mobile equipment at surface mines. For example, MSHA issued Powered Haulage Equipment Guidance in 2021 intended to help prevent accidents associated with working with, on, or near powered haulage equipment.[6] MSHA also launched an enforcement initiative focused on

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[3] More information on MSHA's "Stand Down for Safety Day" can be found on MSHA's website at https://blog.dol.gov/2021/07/14/stop-powered-haulage-accidents-stay-alert-stay-alive.

[4] More information on MSHA's "Take Time, Save Lives" campaign can be found on MSHA's website at https://www.msha.gov/take-time-save-lives.

[5] MSHA's Miner Safety & Health App gives miners and mine operators instant access to information that can help keep them safe and healthy on the job. The app provides important safety alerts, safety and health best practices that apply to their daily work, information on their rights and responsibilities, and the ability to contact MSHA with a question or to report an accident or hazard. The app is available for free on Android and iPhone mobile devices and can also be found at the respective app stores by searching for "Miner Safety & Health." More information can be found on MSHA's website at https://www.msha.gov/miner-safety-health-application.

[6] More information on MSHA's Powered Haulage Safety Initiative can be found on MSHA's website at https://www.msha.gov/safety-and-health/safety-and-health-initiatives/powered-haulage-safety. MSHA's guidance

powered haulage by issuing guidance on preventing accidents and meeting with mine personnel to emphasize best safety practices and training.

In April 2022, to complement the Agency's awareness initiatives, the Agency implemented an Enhanced Enforcement Program to help improve safety and health in the mining industry. As a part of MSHA's regular inspections, this program focuses on task training and hazard training for customer and contract truck drivers and task training for managers and supervisors who perform mining tasks. For example, MSHA inspectors will observe truck drivers and focus on enforcing existing standards necessary to ensure that they perform tasks in a safe manner at mines.

C. Rulemaking History

As part of its overall effort to improve safety in the use of mining equipment, MSHA published a request for information (RFI) on June 26, 2018, entitled *Safety Improvement Technologies for Mobile Equipment at Surface Mines, and for Belt Conveyors at Surface and Underground Mines* (83 FR 29716). The RFI focused on technologies for reducing accidents involving mobile equipment at surface mines and surface areas of underground mines and belt conveyors at surface and underground mines. The RFI requested information on what types of engineering controls are available, how to implement engineering controls, and how these controls could be used on mobile equipment and belt conveyors to reduce accidents, fatalities, and injuries. MSHA sought information on technologies, controls, and training that provide additional protection from accidents related to mobile equipment operation and working near or around belt conveyors.

To encourage additional public participation, the Agency held six stakeholder meetings and one webinar in August and September 2018. The meetings were held in Birmingham, Alabama; Dallas, Texas; Reno, Nevada; Beckley, West Virginia; Albany, New York; and

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on mitigating and preventing powered haulage equipment accidents, entitled "Powered Haulage Equipment Safety Guidance," can be found on MSHA's website at https://www.msha.gov/sites/default/files/events/Powered%20Haulage%20Guidance.pdf.

Arlington, Virginia.

Commenters responding to the RFI supported MSHA's focused efforts to improve miner safety related to the operation of mobile equipment at surface mines and in surface areas of underground mines. Some emphasized the use of technologies to achieve this goal, such as the use of new technologies and the use of current technologies (e.g., collision avoidance systems, collision warning systems, and seat belt warning signals used in automobiles). Others supported the importance of non-technological interventions, such as safety programs, to bring about behavioral and cultural changes. Commenters differed in how technological and non-technological interventions should be implemented. Some commenters noted that the application of engineering controls or technologies needs further review by MSHA and the National Institute for Occupational Safety and Health (NIOSH) before any regulatory changes are made. Other commenters suggested that the use of new technologies has the best outcomes when mine operators and their employees partner with other stakeholders such as NIOSH and equipment manufacturers.

In addition, one commenter underscored the importance of safety culture at a workplace. This commenter observed that mine operators who develop and implement safety programs do so with the goal of preventing injuries, fatalities, and the suffering these accidents cause miners, their families, and their communities. The commenter noted that for these mine operators, preventing harm to their miners is more than just compliance with safety requirements; it reflects a culture of safety. According to the commenter, this culture of safety derives from a commitment to a systematic, effective, and comprehensive approach to safety management at mines with the full participation of miners.

On September 9, 2021, MSHA published the proposed rule, *Safety Program for Surface Mobile Equipment* (86 FR 50496). In addition to information gathered from stakeholders who commented on the RFI, MSHA based the proposed rule on best practices and guidance on

workplace safety programs.[7] The comment period closed on November 8, 2021. On December 20, 2021, in response to a public request, MSHA reopened the rulemaking record for additional comments, and the Agency held a virtual public hearing on the proposed rule on January 11, 2022 (86 FR 71860). The comment period closed on February 11, 2022.

MSHA's proposed rule addresses hazards related to surface mobile equipment (except belt conveyors) used at surface mines and surface areas of underground mines. Surface mobile equipment in the proposed rule refers to wheeled, skid-mounted, track-mounted, or rail mounted equipment capable of moving or being moved and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface mines and surface areas of underground mines. Examples of this equipment include bulldozers, front-end loaders, skid steers, excavators, draglines, graders, and haul trucks.

The proposed rule would require a written safety program for operators employing six or more miners. The proposed written safety program would list actions that mine operators would take to identify hazards and reduce risks, develop equipment maintenance and repair schedules, evaluate technologies, and train miners. The proposal would provide mine operators with the flexibility to tailor the written safety program to meet the needs of their operations and unique mining conditions. Under the proposal, mine operators would be required to evaluate and update the written safety program whenever necessary to appropriately manage safety risks associated with their surface mobile equipment.

MSHA received comments on the proposed rule from miners, safety associations, mining associations, mining companies, manufacturers, labor unions, and trade associations. (Public

[7] As part of the proposed rule, MSHA reviewed safety program guidance materials from several types of organizations: (1) consensus standards organizations (e.g., American Society of Safety Professionals (ASSP), Occupational Health and Safety Management Systems, ANSI/ASSP Z10-2012 (R2017); and the International Standards Organization (ISO), Occupational Health and Safety Management Systems – Requirements With Guidance for Use (ISO 45001:2018)); (2) industry organizations (e.g., the National Mining Association's CORESafety and Health Management System); and (3) government agencies (e.g., the Department of Transportation, 49 CFR part 270). The Department of Labor's Occupational Safety and Health Administration (OSHA) also has developed recommended practices for developing safety and health programs (https://www.osha.gov/shpguidelines/). 86 FR 50498.

comments and supporting documentation submitted were posted on MSHA's website and at www.regulations.gov, along with the transcript from the public hearing.) Commenters supported MSHA's efforts to ensure the safety of all miners from powered haulage accidents. After considering the comments, for the reasons discussed further below, MSHA is adopting the proposed rule with modifications. MSHA has addressed comments more fully in the next section, Section II, Section-by-Section Analysis, of this preamble.

II. Section-by-Section Analysis

A. Sections 56.23000, 57.23000, and 77.2100 — Purpose and Scope

Final §§ 56.23000, 57.23000, and 77.2100 address the purpose and scope of the final rule. Like the proposal, final §§ 56.23000, 57.23000, and 77.2100 state that the purpose of the safety program is to reduce the accidents, injuries, and fatalities related to the operation of surface mobile equipment, promote and support a positive safety culture, and improve miners' safety at the mine. Unlike the proposal, all mine operators are required to develop, implement, and update a written safety program for surface mobile equipment used at surface mines and surface areas of underground mines. The final rule is changed from the proposal to cover operators with five or fewer miners. After reviewing comments and data, the Agency determined that operators of these mines need to develop a written safety program to address surface mobile equipment at their operations to protect their miners. MSHA intends to provide compliance assistance where necessary.

1. Mines Covered by the Proposal – Mines employing 6 or more miners.

In the proposal, §§ 56.23000, 57.23000, and 77.2100 would require mine operators with six or more miners to develop a written safety program. In the proposed rule, MSHA also requested comment on potentially requiring mines with five or fewer miners to develop a written safety program. *Safety Program: Surface Mobile Equipment*, 86 Fed. Reg. 50,496, 50,500 (Sept. 9, 2021).

Commenters stated that all mine operators, regardless of the number of miners employed, should be required to have a written safety program and that miners at small operations need the same protections as miners at larger operations. Several commenters stated that, regardless of whether a facility employs one miner or one hundred miners, each individual should be protected equally. One commenter stated that even though data may indicate that serious accidents occur less frequently at smaller operations, all miners and operations should still be covered because the hazards involving surface mobile equipment pose a risk for all miners. Several commenters stated that applying the rule to all mines, regardless of the number of miners employed, will minimize confusion, enhance safety practices, and increase consistency across mines and throughout MSHA enforcement. One commenter stated that the Mine Act does not set a threshold for how many miners must be employed at a mine in order for it to be subject to a standard, and as such, operators with five or fewer miners should not be excluded. Several commenters supported MSHA's goal to minimize the burden on small operations, but they did not believe that a mobile equipment safety program will present an undue economic burden on operators with five or fewer miners if MSHA provides clear guidance regarding what is expected.

In response to comments, MSHA reviewed recent data from 2011 to 2020 on fatalities and injuries and accident investigation reports. Based on that review, MSHA determined that the fatality rate for mines with five or fewer miners is greater than that for larger mines. MSHA found that from 2011 to 2020, the average fatality rates (or fatal incidence rate) per 200,000 working hours were as follows: 0.0227 at mines with 5 or fewer employees; 0.0167 at mines with 6 to 20 employees; 0.0103 at mines with 21 to 100 employees, and 0.0079 at mines with more than 100 employees. See Table II-1.

Table II-1. Fatality Rates (or Fatal Incidence Rates), 2011-2020

	Mine Size (Based on All Mine Employees)			
	5 or Fewer Employees	**6 to 20 Employees**	**21 to 100 Employees**	**101 or More Employees**
Fatalities at Surface Mines and	25	65	47	44

Surface Areas of Underground Mines (10-year total)[1]				
Hours worked at Surface Mines and Surface Areas of Underground Mines (10-year total in millions)[2]	220.5	776.9	912.6	1,110.6
Fatal Incidence Rate (or Fatality Rate) per 200,000 Working hours[3]	0.0227	0.0167	0.0103	0.0079

1. Includes fatalities of miners (including contract miners and office workers) that occurred at surface mines and at surface areas of underground mines.
2. Includes hours worked by miners (excluding contract miners) at surface mines and at surface areas of underground mines. Does not include hours worked at facilities.
3. (Number of Fatalities x 200,000) / Hours Worked = Fatality Rate.

Note: Table excludes fatalities and work hours reported at facilities.

Based on the analysis and comments, the final rule requires a written safety program for all mines. MSHA agrees with comments that the Mine Act requires that miners' safety and health must be protected no matter how many employees work at the mine. The Agency concludes that applying the final rule to all mines will provide improved safety for all miners.

MSHA will provide compliance assistance through the Agency's EFSMS staff to all mines. MSHA will also encourage state grantees to focus on providing training to address hazards and risks involving surface mobile equipment in small mining operations. In addition, MSHA will provide assistance to small mine operators in the form of additional training materials, education, technical assistance, and work with mining industry stakeholders as it develops materials and templates to assist mine operators. Also, MSHA is implementing a 6-month delayed compliance date from the effective date to provide mine operators, especially small mine operators, sufficient time to identify and acquire, if necessary, the needed resources to comply with this final rule.

2. Belt Conveyors

The proposed rule did not include belt conveyors in the definition of surface mobile equipment. MSHA received comments on whether to include or exclude belt conveyors from the definition of surface mobile equipment and whether belt conveyors should be covered under this rule. Some commenters stated that belt conveyors should be included in the scope of the rule and that a written safety program should be developed and implemented to include them. One commenter reviewed accident and injury data and stated that many fatalities are associated

with belt conveyers. Several commenters stated that technologies and controls exist that can help prevent accidents, for example: devices that can sense a miner's presence in hazardous locations, properly installed machine guards, and properly locked-out and tagged-out machines undergoing maintenance. According to these commenters, MSHA should require a written safety program for belt conveyors just as it is requiring one for mobile and powered haulage equipment.

Several commenters agreed with MSHA's exclusion of belt conveyors from the proposed rule. The commenters stated that belt conveyors should be addressed separately from powered haulage vehicles because they are very different types of equipment and keeping them separate would increase clarity.

Based on the comments, the final rule, like the proposal, excludes belt conveyors from the definition of surface mobile equipment. Belt conveyors present different safety hazards from those associated with surface mobile equipment. Belt conveyors range from a single belt to a series of belts spanning miles. All conveyor systems have inherent dangers while in motion. Belt conveyor accidents predominantly involve entanglements in equipment whereas accidents related to other mobile equipment involve striking, colliding, falling, or overtravel while the equipment is in operation. MSHA continues to believe that the safety issues surrounding the operation of belt conveyors can be better addressed through existing standards (e.g., §§ 56/57.14107 and 56/57.14112 for moving machine parts and construction and maintenance of guards), best practices, and training. As MSHA does with many other types of mining equipment, the Agency provides training resources to help operators and miners that include best practices for working safely around conveyor systems. These best practices are available on the Agency's website at http://www.msha.gov.

3. Underground Areas of Underground Mines

MSHA proposed to require a written safety program for surface mobile equipment at surface mines and surface areas of underground mines. Several commenters stated that all areas

of underground mines – meaning both surface and underground areas of underground mines – should be included in the scope of the proposed rule. Commenters stated that powered haulage accidents happen in underground areas of underground mines, not just surface areas. This observation, a commenter pointed out, is based on MSHA accident data. One commenter stated that underground mining equipment should be expressly excluded from the proposed rule even if the equipment is operated on surface areas.

Like the proposal, the final rule applies to surface mobile equipment used at surface mines as well as surface areas of underground mines. Surface mobile equipment being used in underground mines and only brought to the surface for maintenance or repair, for example, is not included in the scope of the final rule.

A large amount of surface mobile equipment operates at many surface mines and surface areas of underground mines, which creates common hazards such as striking, collision, and falling. Surface mobile equipment tends to be complex and large in size (compared to mobile equipment used at underground mines), which generates some unique hazards, such as large blind spots for equipment operators. The final rule applies only to surface mobile equipment.

As is the Agency's practice, MSHA will continue to work with operators and miners in underground mines to deliver training and best practice materials to prevent accidents involving mobile equipment in underground areas and to provide safety protections for miners at these mines.

B. Sections 56.23001, 57.23001, and 77.2101 — Definitions

Final §§ 56.23001, 57.23001, and 77.2101 continue to define the terms *responsible person* and *surface mobile equipment* in the same way as defined in the proposed rule.

MSHA proposed to define a *responsible person* as a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment. MSHA believes that designating a person with authority and responsibility to evaluate and update the safety program as necessary will help ensure the successful development and

maintenance of a safety program that addresses and reduces the likelihood of surface mobile equipment hazards at a particular mine. This individual should be able to communicate the operator's commitment to safety and the importance of miners' involvement in the program to prevent or mitigate hazards. The responsible person must communicate the goals of the safety program to all miners. The responsible person will need to have the experience and knowledge about mining conditions, including surface mobile equipment, necessary to evaluate and update the written safety program.

MSHA received comments on this definition. Commenters indicated a preference for removing or redefining the term. Some commenters stated that the definition is redundant and should be deleted, and that operators are already required to designate a responsible person for health and safety purposes. Several commenters discussed the similarities between the responsibilities and liability burdens of the mine operator, as compared to the proposed definition of a responsible person. One commenter stated that the definition should be deleted as it serves no purpose.

Other commenters brought up the feasibility of assigning the duties to a single individual. For example, one commenter stated its view that the proposed rule would require a person that has the knowledge to identify hazards on every piece of mobile equipment, the authority to make high-level financial decisions, and the responsibility for any shortfalls in the program. Still other commenters questioned the consequences of assigning the title of "responsible person" to a single individual because that individual could become temporarily or permanently unavailable. One commenter stated that MSHA should amend this language to clearly allow for multiple persons to be designated as a responsible person. In the commenter's view, there are many practical reasons to have additional people in this position. For example, if one designee is out sick, on vacation, or leaves the company, there would still be a designated responsible person on-site.

In response to the comments, the final rule requires that each operator designate at least

one responsible person to evaluate and update the written safety program. Under the final rule, the operator can designate one person or multiple persons so long as the designated persons have the authority and responsibility to evaluate and update the written safety program.

In addition, the final rule, like the proposed rule, defines *surface mobile equipment* as wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved, and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface mines and surface areas of underground mines. This definition is adapted from the current definition in 30 CFR §§ 56.2 and 57.2 for metal and nonmetal mines: mobile equipment means "wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved."

MSHA received comments on the proposed definition of surface mobile equipment. Several commenters requested that MSHA clarify the type of equipment that would meet the proposed definition. One commenter stated that equipment such as push carts, welding carts, cylinder carts, and basic hand trucks would be subject to the proposed rule. The commenter stated that the rationale to include this type of equipment under the definition is unclear. Another commenter stated that certain skid-mounted equipment such as light towers and substations could be covered unintentionally. Another commenter stated that it is unclear whether small boats, portable crushers, dredges, etc., are included.

Several commenters requested further clarification from MSHA on the types of equipment to be included in the definition. Commenters requested that MSHA provide a finite list of equipment that would be included or exempted from the rule. One commenter suggested that MSHA create a supplementary, clarifying guidance document.

After reviewing all the comments, MSHA concludes that the definition in this final rule is sufficiently clear about what types of surface mobile equipment are subject to a written safety program. Surface mobile equipment excludes any manually powered tools, such as wheelbarrows, hand carts, push carts, welding carts, cylinder carts, basic hand trucks, or dollies

for the purposes of this written safety program. This definition is consistent with the currently enforced definition in 30 CFR parts 56 and 57.

C. Sections 56.23002, 57.23002, and 77.2102 — Written Safety Program

Final §§ 56.23002(a), 57.23002(a), and 77.2102(a), like the proposal, require each mine operator to develop and implement a written safety program no later than 6 months after the effective date of the final rule. Three issues raised by commenters are discussed below.

1. Independent Contractors

Commenters stated that the proposed rule is unclear as to whether or not contractors are subject to the requirements. Some commenters stated that the proposed rule is silent on whether it covers contractor equipment and how such coverage would be implemented in a practical sense, and one commenter said that this silence would lead to enforcement actions against the mine and/or contractors for inconsistencies in how they would comply with the proposed requirements. Several commenters stated that MSHA should clarify how contractor programs should be integrated with operators' on-site safety programs.

Commenters requested that MSHA clarify that contractors are considered operators, and thus would need to have their own written safety program. Several commenters stated that the definition of "operator" in section 3(d) of the Mine Act includes "any independent contractor performing services or construction" at a mine. 30 U.S.C 802(d). Several commenters stated that MSHA's regulations at 30 CFR part 45, which sets forth procedural requirements for independent contractors working at mine sites, state that such requirements exist "to facilitate implementation of MSHA's enforcement policy of holding independent contractors responsible for violations committed by them and their employees."

Several commenters stated that it would be untenable to require production operators to account for contractor equipment in their own safety programs. According to the commenters, contractors often have their own equipment and specialized knowledge, so that it would be impractical to require the operator to be responsible for the contractors' equipment.

MSHA's intent in the proposed rule was that an operator would mean "any owner, lessee, or other person who operates, controls, or supervises a coal or other mine or any independent contractor performing services or construction at such mine" as stated in section 3(d) of the Mine Act. To facilitate implementation of MSHA's enforcement policy with respect to certain independent contractors, MSHA published regulations in 30 CFR part 45 related to the responsibility of independent contractors that met the requirements of part 45.

Consistent with MSHA's part 45 regulations and the Agency's longstanding policy regarding independent contractors, this final rule requires operators, including contractors with a part 45 identification number, to develop and implement a written safety program addressing surface mobile equipment. MSHA has a long history and practice of enforcing its standards and regulations against operators and independent contractors and believes that the industry is familiar with and understands this history and practice. Under this final rule, MSHA will treat operators and part 45 independent contractors consistent with the definition in the Mine Act and the Agency's longstanding history and practice.

MSHA expects that a majority of the Part 45 independent contractors will develop and implement their own written safety programs addressing their surface mobile equipment and follow the site-specific requirements, as necessary, in the operators' written safety programs. In some situations, operators may choose to integrate the independent contractors' written safety programs into their programs. No matter what approach is used, MSHA expects that, in all cases, operators and independent contractors will communicate and coordinate with each other, as appropriate, to ensure that miners' safety and health is protected.

Final §§ 56.23002(b), 57.23002(b), and 77.2102(b), similar to the proposal, require each mine operator, within 6 months after the effective date of the final rule, to designate at least one responsible person to evaluate and update the written safety program. As discussed in the definition section, a responsible person is a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment.

2. Compliance Date

The final rule implements a 6-month delayed compliance date from the effective date. Commenters provided varying suggestions on the proposed effective date. Some commenters suggested that all mine operators should have an additional 6 to 12 months without receiving citations relating to this rule, for a total of up to 18 months delayed effective date. Another commenter suggested a longer time period for only those mines that meet the Small Business Administration's size standards; therefore, a 6-month delay (as proposed) for larger entities and up to an 18-month delay for smaller entities. Some commenters agreed with MSHA's proposal that 6 months from the effective date of the final rule is sufficient time for operators to develop a written safety program.

The final rule includes a delayed compliance date to allow for development and implementation of the written safety program for surface mobile equipment. After considering comments and reviewing data on accidents, injuries, and fatalities involving surface mobile equipment, MSHA determined that 6 months is a reasonable timeframe for the development and implementation of the safety program for all mines, regardless of size. MSHA believes that the 6-month time frame gives operators sufficient time to develop a meaningful written safety program, with input from miners and their representatives. MSHA has offered and will continue to offer materials and information that operators can use in developing and implementing a written safety program. MSHA will also work with operators, miners, and their representatives as well as other stakeholders in the mining industry (e.g., contractors) to develop written safety program templates, as well as best practices and guidance on the development, implementation, and evaluation of safety programs.

3. Approval of the Written Safety Program

The proposed rule did not require MSHA approval of the operator's written safety program. Commenters provided their views on whether MSHA should require its approval of operators' written safety programs. Several commenters stated that MSHA's approval of the

written safety program is necessary, and that not requiring MSHA approval would lead to inconsistent enforcement by MSHA inspectors. One commenter stated that approval by MSHA should be required because the written safety programs that are developed without MSHA's oversight or approval would be, in the commenter's view, based on the operator's convenience, not the miners' health and safety. One commenter stated that MSHA approval of the operator's program is needed before it is implemented to ensure the adequacy of the individual, site-specific program and to ensure that mine operators have the opportunity to be alerted to any possible deficiencies in their program prior to MSHA approval. One commenter stated that MSHA already approves a number of written programs and plans submitted by mine operators, such as roof control plans, ground control plans, and ventilation plans. The commenter further stated that without MSHA oversight, mine operators will have generic programs that will not be mine-specific or include meaningful participation from miners and their representatives.

Other commenters supported MSHA's proposal that required no Agency approval of written safety programs. One commenter stated that they appreciate MSHA proposing to require a written safety program without the Agency's approval, rather than with the Agency's approval. Another commenter agreed that not requiring approval is a wise decision because it would be burdensome for MSHA to approve tens of thousands of programs.

After considering all comments, MSHA has determined that an operator's written safety program will be appropriately reviewed by MSHA during regular inspections. During the inspection, MSHA will review the written safety program to determine if it reflects actions that identify and address surface mobile equipment hazards at mine sites and to verify whether input from miners and their representatives was sought. This approach will also allow the Agency to ensure that the written safety program addresses hazards identified by mine operators and miners. MSHA will also determine whether the written safety program is adequately evaluated and updated. In light of the Agency's inspection presence, MSHA has determined that Agency approval of the written safety program is not needed.

D. Sections 56.23003, 57.23003, and 77.2103 — Requirements for Written Safety Program

Like the proposal, final §§ 56.23003(a), 57.23003(a), and 77.2103(a) list general, performance-based requirements for the written safety program. Under this final rule, an operator's safety program must include four types of actions the operators will take to reduce accidents, injuries, and fatalities and to improve miners' safety. As discussed earlier, this and other provisions in the final rule, unlike the proposed rule, clarify the term "operator" or "operators," to be consistent with section 3(d) of the Mine Act.

Several commenters stated that the written safety program requirement is redundant with provisions already required in the CFR and does not provide a new or strategic focus that advances mobile equipment safety. These commenters stated that there are existing regulations in part 56 that require mine operators to identify and correct hazards in all work areas and for all equipment, including surface mobile equipment, such as § 56.18002 on the examination of working places and § 56.14100 on safety defects; examination; and correction of records. One commenter stated that the requirements of this section are redundant with the training requirements already set forth in part 46, and another commenter stated these requirements are redundant with training requirements already set forth in part 48. One commenter requested clarification on the specifics of the documentation requirement for the review and collection of this information. For example, what type of information would meet the requirement, how should it be maintained, for how long would it need to be kept, and how would MSHA evaluate it for compliance? Another commenter also requested additional guidance on the types of safety hazards that should be included. One commenter asked how this requirement could be enforced. Finally, one commenter fully supported the inclusion of this requirement.

After reviewing comments and relevant information, MSHA believes that structuring the final rule to include a performance-based requirement to identify and analyze hazards is more appropriate than a prescriptive requirement. The performance-based approach in the final rule allows operators the flexibility to devise and tailor a safety program that is appropriate for their

specific and unique mining conditions and operations. These actions could include review of accident data and information on near misses and any operational or maintenance accidents at their mines. For example, under 30 CFR part 50, mine operators are already required to submit a report of each accident, injury, and illness to MSHA within 10 working days after an accident or occupational injury occurs or an occupational illness is diagnosed. Based on such information and data, mine operators will be able to develop a program that more specifically addresses conditions at their mines; mining equipment, work locations, and tasks at their mine site; and measures to eliminate, prevent, or mitigate identified hazards. Regarding the comment asking how this information should be maintained and for how long it would need to be kept, further discussion of records and inspection requirements is located elsewhere in this preamble under §§ 56.23004, 57.23004, and 77.2104.

1. Sections 56.23003(a)(1), 57.23003(a)(1), and 77.2103(a)(1)

Final §§ 56.23003(a)(1), 57.23003(a)(1), and 77.2103(a)(1), like the proposal, require that the written safety program include actions the operator will take to identify and analyze hazards and reduce the resulting risks related to the movement and operation of surface mobile equipment. Operators are required to identify and analyze hazards relevant to surface mobile equipment and to take actions to reduce the site-specific risks so that their written safety programs can be tailored to their unique mining operations and conditions. Actions that mine operators may take include enhanced administrative controls such as increased use of signage and procedural changes to tasks that remediate identified hazards. Other actions may include visibility studies to identify inherent blind spot areas around mobile equipment and use of visibility enhancing devices such as flags and additional mirrors to minimize these areas. Mine operators may choose to change traffic patterns, implement dispatchers for certain areas of a mine, and limit or prohibit small vehicular or foot traffic in identified high risk areas.

2. Sections 56.23003(a)(2), 57.23003(a)(2), and 77.2103(a)(2)

Final §§ 56.23003(a)(2), 57.23003(a)(2), and 77.2103(a)(2), like the proposal, require

that the written safety program include actions the operator will take to develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment.

Commenters stated that this requirement is redundant when compared to existing part 56 and part 57 regulations. Likewise, another commenter stated that § 77.404 already addresses the requirements that mobile and stationary machinery and equipment be maintained in safe operating conditions. Another commenter stated that §§ 77.1600-77.1607 includes extensive rules that address loading and haulage, including traffic controls, transportation of persons, berms, inspection and maintenance, and operation.

Another commenter expressed a concern about the ambiguity of the requirement, stating that inspectors may be subjective and issue violations for failure to follow manufacturers' recommendations. Several commenters stated that operators should have additional flexibility when it comes to manufacturers' recommendations. In these commenters' view, manufacturers' recommendations for maintenance and repairs are often not reflective of how the equipment is used at a given operation. A commenter noted that recommendations from the manufacturer are a valuable resource for equipment operators and maintenance personnel, but often are designed to avoid legal challenges rather than maximize safe operation. One commenter requested that this requirement for maintenance and repairs apply to the safe operation of the equipment, rather than all maintenance and repairs in general. Another commenter stated that MSHA should make clear that this section does not require any new maintenance or repair procedures, but requires only that the facility's procedures be reflected (or referenced) in a written program.

Under the final rule, MSHA does not intend for operators to develop new maintenance and repair procedures, unless operators do not have these in place already. Operators may decide to modify existing maintenance and repair procedures based upon newly conducted risk assessment findings. The procedures and schedules for maintenance and repairs for surface mobile equipment developed for the written safety program can reflect or reference the

operator's existing procedures and schedules.

3. Sections 56.23003(a)(3), 57.23003(a)(3), and 77.2103(a)(3)

Final §§ 56.23003(a)(3), 57.23003(a)(3), and 77.2103(a)(3), like the proposed rule, require that the written safety program include actions the mine operator will take to identify currently available and newly emerging feasible technologies that can enhance safety and evaluate whether to adopt them. Examples of these technologies could include seat belt interlocks that affect equipment operation when a seat belt is not fastened; seatbelt notification systems that alert management when the seatbelts are not worn; collision warning systems and collision avoidance systems that may prevent accidents by alerting equipment operators to hazards located in blind areas; technologies that use Global Positioning Systems to provide equipment operators with information regarding their location when pushing and dumping material; as well as cameras, curvilinear mirrors, and other vision enhancements (86 FR 50500).

Commenters stated that this requirement is ambiguous, burdensome, and redundant, and should be stricken from the rule. Several commenters stated that: the proposal does not appear to require mine operators to implement newly emerging technologies, and, instead, it appears to require evaluations. They further stated that most mine operators likely already evaluate newly emerging technologies to save money and improve safety. Some commenters were concerned that certain terminology in the proposal is subjective. For example, commenters stated that MSHA needs to elaborate on what types of actions operators should take to "evaluate" how "newly emerging feasible technologies" would "enhance" safety. Other commenters stated that there are many areas of concern related to testing and implementing new technologies into existing equipment, potentially creating safety hazards. Another commenter stated that new technologies often have problems when they are initially developed. For example, the commenter noted that when airbags were first released there were issues causing injuries, and thus they had to be redesigned. Another commenter stated that MSHA should make clear that the rule does not require the adoption of any particular technology but is strictly a requirement

that the operator have a procedure to identify and evaluate potentially useful new technology.

After considering all comments, the final rule is unchanged from the proposal, and it requires that the operator identify and evaluate currently available and newly emerging feasible technologies that can enhance safety at the mines. MSHA's intent is that operators consider feasible technologies that are capable of being used successfully at that mine. MSHA recognizes the safety benefits of new and emerging technologies related to surface mobile equipment. MSHA believes that operators can typically determine what types of new or existing technologies that they need to enhance safety at their operations. MSHA will offer educational assistance on currently available and newly emerging technologies in a number of ways, including through EFSMS, industry stakeholders, quarterly stakeholder calls and stakeholder meetings, safety and health training workshops (e.g., Training Resources Applied to Mining (TRAM) and Spring Thaw Training Workshops), guidance documents, and Agency website and mobile app resources. Also, as part of the Agency's compliance assistance efforts, MSHA will work with operators and provide information and technical assistance that will help them identify control options and the use of new technologies to prevent accidents and injuries. MSHA will also encourage its state grantees to focus on providing training to address feasible technologies involving surface mobile equipment in mining operations.

4. Sections 56.23003(a)(4), 57.23003(a)(4), and 77.2103(a)(4)

Final §§ 56.23003(a)(4), 57.23003(a)(4), and 77.2103(a)(4), like the proposal, require that the written safety program include actions the operator will take to train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

Several commenters stated that they already comply with part 46 requirements and that this section is another example of regulatory redundancy and does not provide a new or strategic focus to advance mobile equipment safety. One commenter suggested that MSHA make clear that the mobile equipment program can refer to other sections of regulations relating to mobile

equipment and can incorporate these by reference, for example §§ 46.5(b)(2), 46.6(b)(2), and 46.8(c). Another commenter requested that the Agency disambiguate the language, "other persons at the mine necessary to perform work," by providing more precise language. Otherwise, for training purposes, the language effectively would expand the definition of "miner" to all employees.

After reviewing the comments, MSHA clarifies that mine operators will only need to integrate existing training provisions, as applicable, into the written safety program. The Agency previously described the intended audience for site-specific hazard awareness training in the final rule for *Training and Retraining of Miners Engaged in Shell Dredging or Employed at Sand, Gravel, Surface Stone, Surface Clay, Colloidal Phosphate, or Surface Limestone Mines* (64 FR 53080, September 30, 1999). In that final rule, MSHA required that "…hazard awareness training be appropriate for the individual who is receiving it and that the breadth and depth of training vary depending on the skills, background, and job duties of the recipient. For example, it may be appropriate to provide hazard awareness training to customer truck drivers by handing out a card to the drivers alerting them to the mine hazards or directing them away from certain areas of the mine site. More extensive hazard awareness training might be needed for an equipment manufacturer's representative who comes onto mine property to service or inspect a piece of mining equipment. Although this individual may not be on mine property for an extended period, the person's exposure to mine hazards may warrant more training. Appropriate hazard awareness training would typically be more comprehensive for contractor employees who fit the definition of 'miner' because they are engaged in mining operations. These employees receive comprehensive training but also need orientation to the mine site and information on the mining operations and mine hazards." (64 FR 53128) Similarly, under this final rule, the written safety program must include the actions that the mine operator will take to train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

Under the final rule, mine operators will need to integrate their existing training procedures for miners and other persons at the mine necessary to perform work into their written safety program to address and avoid hazards related to surface mobile equipment.

5. Sections 56.23003(b), 57.23003(b), and 77.2103(b)

Final §§ 56.23003(b), 57.23003(b), and 77.2103(b), similar to the proposal, require the responsible person to evaluate and update the written safety program for the mine at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made. The final rule is clarified in two ways. First, the written program must be evaluated and updated "at least" annually. This clarification indicates that an annual evaluation and update is the minimum, and more frequent evaluations and updates of the written safety program must be done, if necessary. Second, the final rule specifies that the evaluation and update must be done when changes in the mining conditions or practices "may adversely affect the health and safety of miners or other persons." MSHA acknowledges that not all changes to mining conditions or practices warrant updates to the written safety program. This is similar to MSHA's existing requirements in §§ 56/57.18002 that require for each working place in metal and nonmetal (MNM) mines an examination to be conducted for conditions that may adversely affect safety or health.

One commenter stated that requiring the responsible person to evaluate and update the written safety program is redundant and already covered by part 56 requirements. Other commenters recommended that the proposed language regarding "surface mobile equipment changes or modifications" be removed. The commenters believe that any significant changes in equipment are covered under the provision of "mining practices" changing. In their view, this deletion would capture the large-scale changes the Agency intended to cover without including small, insignificant changes. These same commenters also recommended removing the term "injuries" from the proposal because most powered haulage injuries cannot meaningfully be

addressed in a safety program. The commenters stated that, for example, an equipment operator who slams a finger in the door of a pickup truck or pulls a muscle climbing on or off a loader has sustained a powered haulage injury, but they are not the types of injuries that warrant re-evaluation of the program. The commenters stated that "accidents," however, should be retained and that yearly is a reasonable timeframe to reevaluate the program. Other commenters suggested that MSHA revise the requirement to read: "evaluate and update the written safety program at least annually or whenever necessary to manage safety risks associated with their surface mobile equipment appropriately."

Except the clarifications described earlier, this requirement is the same as the proposal. As explained in the previous section, MSHA believes that given the type of authority and responsibility, it is a responsible person who must evaluate and update the written safety program. In addition, as stated in the proposal, best practices shown by NIOSH, OSHA, and other safety standards organizations include ongoing evaluations of workplace activities and processes to address safety proactively and to find and fix hazards before injuries and fatalities happen. Moreover, in response to some commenters recommending that the term injuries be removed from the requirements, MSHA believes that the term is still needed because injuries are an indicator of hazards at mines that could result in further injuries and fatalities. The final rule also clarifies that the written safety program must be evaluated and updated when mining conditions and practices change that may adversely affect the health and safety of miners.

6. Sections 56.23003(c), 57.23003(c), and 77.2103(c)

Final §§ 56.23003(c), 57.23003(c), and 77.2103(c) is a provision that requires operators to consult with miners and their representatives in developing and updating the safety program. These requirements are consistent with existing obligations to consult with miners and representatives and MSHA's long-standing recognition that such consultation is vital for ensuring the efficacy of safety programs. Under existing requirements, operators already must (in many cases) provide miners and miners' representatives the opportunity to comment on or

otherwise participate in these existing processes. See, e.g., 30 CFR 46.3(g), 48.23(d) and (j)(1), and 56/57.18002. As these existing processes are expected to be referenced in developing and updating the safety program, miners and their representatives similarly should be consulted in developing and updating the program. In drafting the proposal, MSHA intended that operators would seek input from miners and their representatives in the development and updating of a meaningful safety program, given their existing involvement with most of the component parts of the program. The proposal also provided that the responsible person "should be able to communicate the operator's commitment to safety and the importance of miners' involvement in the program to prevent or mitigate hazards." 86 FR 50500. In addition, commenters requested that miners and their representatives participate in the development of the written safety program. MSHA includes this provision in the final rule to recognize the comments and to be consistent with the Agency's intent in the proposal and with the Mine Act. In drafting the proposal, consistent with the Agency's long-standing practice and section 2(e) of the Mine Act, MSHA intended that miners would be involved in the development and updating of the program, although it was not discussed in the preamble.

The Mine Act provides miners and their representatives a right to participate in various safety and health activities. Some examples are as follows. Section 2(e) provides that "the operators of [coal or other] mines with the assistance of the miners have the primary responsibility to prevent the existence of [unsafe and unhealthy] conditions and practices in such mines." Section 101(c) provides that the representative of miners may petition the Secretary (of Labor) to "modify the application of any mandatory safety standard to a coal or other mine if the Secretary determines that an alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard. . ." Section 103(f) provides that miners' representatives "be given an opportunity to accompany the Secretary or authorized representative during the physical inspection of any coal or other mine . . ." Section 103(g)(1) provides a representative of miners

or a miner in case there is no representative the "right to obtain an immediate inspection by giving notice to the Secretary or authorized representative" that a violation of the Mine Act or its standards, or an imminent danger exists. Section 105(c) provides miners and their representatives the right to file a discrimination complaint with MSHA if they believe they have been discharged, discriminated against, or interfered with for complaining of "an alleged danger or safety or health violation in a coal or other mine". Further, as stated by the Senate Committee on Human Resources in keeping with a purpose of the Mine Act: "If our national mine safety and health program is to be truly effective, miners will have to play an active part in the enforcement of the Act." S. Rep. No. 95-181, 95th Cong., 1st Sess. at 35 (1977).

Based on MSHA's experience and past practice, and consistent with the statutory intent of the Mine Act, miners and their representatives are involved in many aspects of MSHA's enforcement program and standards. MSHA is persuaded by commenters who stated that for safety programs to be successful, there must be active and meaningful participation from miners. The final rule makes explicit that miners provide input in developing and updating the written safety program.

E. Sections 56.23004, 57.23004, and 77.2104 — Record and Inspection

Final §§ 56.23004, 57.23004, and 77.2104 is clarified from the proposed provision. Like the proposal, the final rule requires that the operator make available a copy of the written safety program for inspection by authorized representatives of the Secretary, miners, and their representatives. In response to comments and consistent with the Mine Act that the operator, with the assistance of miners, is primarily responsible for safety and health, the final rule clarifies that miners and their representatives will receive, upon request, a copy of the written safety program at no cost.

Several commenters requested that MSHA provide further clarity on the acceptable formats for delivery of the written safety program. One commenter stated that the proposed rule needs to clarify that the written safety program is to be provided at no cost to miners and their

representatives. Another commenter stated that this section should indicate that the written program can be maintained and provided electronically.

The final rule allows operators the flexibility to create the written safety program in any electronic or hard copy format, as long as the written safety program includes the information required by the final rule and can be made available for inspection by the Secretary, miners, and their representatives. Consistent with the Agency's longstanding policy, an operator must provide notice to miners by providing an electronic or hard copy of the written safety program to miners and their representatives, at no cost, upon request.

III. Executive Order 12866 (Regulatory Planning and Review), Executive Order 14094 (Modernizing Regulatory Review), and Executive Order 13563 (Improving Regulation and Regulatory Review)

Under Executive Order (E.O.) 12866 (as amended by E.O. 14094), the Office of Management and Budget (OMB)'s Office of Information and Regulatory Affairs (OIRA) determines whether a regulatory action is significant and, therefore, subject to the requirements of the E.O. and review by OMB. 58 FR 51735, 51741 (1993). As amended by E.O. 14094, section 3(f) of E.O. 12866 defines a "significant regulatory action" as a regulatory action that is likely to result in a rule that may: (1) have an annual effect on the economy of $200 million or more; or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, territorial, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights and obligations of recipients thereof; or (4) raise legal or policy issues for which centralized review would meaningfully further the President's priorities or the principles set forth in the E.O. OIRA has determined that this rule is significant under E.O. 12866, and accordingly it has been reviewed by OMB.

E.O. 13563 directs agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs; the regulation is tailored to impose the least

burden on society, consistent with achieving the regulatory objectives; and in choosing among alternative regulatory approaches, the agency has selected those approaches that maximize net benefits. 76 FR 3821 (2011). E.O. 13563 recognizes that some benefits are difficult to quantify and provides that, where appropriate and permitted by law, agencies may consider and discuss qualitative values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts.

MSHA presents the costs and benefits associated with the final rule. MSHA estimated the costs associated with the final rule's requirements by adding the estimated costs of the following. First, the estimated costs include developing the written safety program document, including the actions the operators will take to follow better safety procedures and practices, by identifying and analyzing hazards, evaluating currently available and emerging technologies, developing and maintaining maintenance and repair schedules and procedures, and training miners and others to identify and address hazards, and including miners in developing and updating the program. Operators must also provide copies of the written safety program to miners and their representatives upon request. MSHA anticipates that the listing of actions operators will take will enhance existing compliance and improve safety regarding several of the existing requirements (such as training, maintenance and repair, workplace exams) that the program must describe. Second, the estimated costs include updating the written safety program at least annually and under certain circumstances, such as when new equipment is brought to the mine or when accidents or changes in mining conditions or practices occur that may adversely affect the safety and health of miners, and providing copies of the written safety program to miners and their representatives upon request. The first component is a one-time, initial compliance costs in the first year, whereas the second component represents the recurring compliance costs for subsequent years.

This section provides a summary of MSHA's cost and benefit estimates of the final rule. This final rule is estimated to have a 10-year total net benefit of $411 million at a 3 percent

discount rate, based on estimated 10-year total benefits of $522 million and estimated 10-year total costs of $111 million. At the 3 percent discount rate, the estimated annualized net benefit is $48.2 million (annualized benefits of $61.3 million and annualized costs of $13.0 million). Supporting materials and data that provide additional details on the methodology used to estimate the costs, benefits, and other required analyses of this rule are included in the standalone Final Regulatory Impact Analysis (FRIA), which has been placed in the rule docket (RIN 1219-AB91, Docket ID No. MSHA–2018–0016) at https://www.regulations.gov and is posted on MSHA's website at https://www.msha.gov.

A. Mining Industry Profile

A total of 12,434 mines in the U.S. reported their working hours in 2021. Over 301,000 workers worked at those mines. Table III-1 shows which types of mines the miners and other workers worked.

Table III-1. Mines and Employment by Surface or Underground Location in 2021

Commodity	Location	Mines[1]	Miners	Total Mine Workers[2]	Contract Miners	Total Contract Workers[2]	Total Workers[3]
MNM	Surface Including Facilities	11,236	128,156	149,846	60,120		
	Underground	235	18,223	20,712	7,047		
	Total	**11,471**	**146,379**	**170,558**	**67,167**	**69,433**	**239,991**
Coal	Surface Including Facilities	750	18,294	19,200	11,887		
	Underground	213	21,323	21,916	7,664		
	Total	**963**	**39,617**	**41,116**	**19,551**	**20,288**	**61,404**
All Mines	Surface Including Facilities	11,986	146,450	169,046	72,007		
	Underground	448	39,546	42,628	14,711		
	Total	**12,434**	**185,996**	**211,674**	**86,718**	**89,721**	**301,395**

Source: MSHA MSIS Data (reported on MSHA Form 7000-2), Accessed on April 7, 2022.
Notes: All Miners and workers are calculated using employers' headcount reports; some miners and workers may be counted more than once, as they work at more than one mine.
1. Of the 12,434 mines, 40 did not have any employment in surface areas; they were thus excluded from the analysis.
2. Total mine workers and total contract workers include both miners and office/administrative workers.
3. Total workers include total mine workers and total contract workers.

This final rule applies to all operators of surface mines and underground mines with surface areas, including independent contractors working at those mines. As shown, there were

11,986 surface mines and 448 underground mines. Most underground mines have surface areas where miners work. Of all the mines, about 92 percent were metal and nonmetal mines and the rest were coal mines.

B. Costs

Under the final rule, operators are required to develop, implement, and update at least annually and when necessary, a written safety program for surface mobile equipment used at their mines. As defined in this rule, surface mobile equipment refers to wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved, and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface mines and surface work areas of underground mines.

The required written safety program for surface mobile equipment must include the actions that operators will take to identify and analyze hazards and reduce the resulting risks related to equipment movement and operation. It must also include actions to develop and maintain procedures and schedules for routine maintenance and non-routine repairs. Operators are also required to describe the actions they will take to identify currently available and newly emerging feasible technologies that can enhance safety and evaluate whether to adopt them. Finally, the rule requires operators to describe the actions they will take to train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

Once the written safety program is developed and implemented, a responsible person is required to evaluate and update it for the mine at least annually, or when mining conditions or practices change that may adversely affect the health and safety of miners or other persons, when accidents or injuries occur, or when surface mobile equipment changes or modifications are made. While the final rule provides operators flexibility to devise a safety program that is appropriate for their specific mining conditions and operations, the final rule also requires operators to solicit input from miners and their representatives as they develop and update the

written safety program.

MSHA estimated the costs associated with the final rule's requirements by adding the estimated costs of the following. First, the estimated costs include developing the written safety program document, including the actions the operators will take to identify and analyze hazards, evaluate current and emerging technologies, develop and maintain the maintenance and repair schedules and procedures, train miners and others to identify and address hazards associated with surface mobile equipment. Operators must also provide copies of the written safety program to miners and their representatives upon request. Second, the estimated costs include updating the written safety program at least annually and under certain circumstances, such as when new equipment is brought to the mine or when accidents or changes in mining conditions or practices occur that may adversely affect the safety and health of miners, and, for each update, providing copies of the written safety program to miners and their representatives upon request. The first component is considered to be the one-time, initial compliance costs in the first year, whereas the second component represents the recurring compliance costs for subsequent years. Estimated costs also include providing copies of the written safety program to miners and their representatives upon request.

MSHA calculated these compliance costs based on the estimated time spent by mine employees to develop and update the written safety program, multiplied by their wage rates. MSHA assumed that mine supervisors, safety professionals, and maintenance workers would participate in the creation and updates of the written safety program. MSHA assumed that operators will solicit input from miners and their representatives in developing and maintaining all aspects of the written safety program, and MSHA included the time for their collaboration in its cost estimates.

MSHA further assumed that the time needed to develop and update the written safety program would vary by the number of unique surface mobile equipment units at each mine,

which would be related to a mine's production output (e.g., tonnage), and employment size.[8] Based on these factors, MSHA grouped all MNM and coal mines into three categories each and estimated the compliance costs for this final rule by category.[9] MSHA also assumed a majority of independent contractors (75 percent or 4,739) would develop and update a written safety program for surface mobile equipment at mines.[10]

The total compliance cost estimates are shown in Table III-2. The compliance costs for the 10-year period of analysis (i.e., 10-year implementation period) are estimated to be about $126 million (in 2021 dollars) undiscounted, while the 10-year compliance costs discounted at 3 percent and 7 percent are about $111 million and $95 million, respectively. The annualized costs discounted at 3 and 7 percent are $13.0 million and $13.5 million, respectively.

Table III-2: Yearly Compliance Cost Estimates (Millions of 2021 Dollars)

Implementation Year	Total Compliance Costs		
	Discounted at		
	0%	3%	7%
Year 1	$37.0	$36.0	$34.6
Year 2	$9.9	$9.4	$8.7
Year 3	$9.9	$9.1	$8.1
Year 4	$9.9	$8.8	$7.6
Year 5	$9.9	$8.6	$7.1
Year 6	$9.9	$8.3	$6.6
Year 7	$9.9	$8.1	$6.2
Year 8	$9.9	$7.8	$5.8
Year 9	$9.9	$7.6	$5.4
Year 10	$9.9	$7.4	$5.0
10-Year Total	**$126.4**	**$111.0**	**$95.1**
Annualized	**$12.6**	**$13.0**	**$13.5**

Note: Totals may not equal the sum of the components due to rounding.

C. Benefits

[8] MSHA used metric tons for the production output as based on the cost estimation chapter of the Society for Mining, Metallurgy, and Exploration Handbook. Stebbins, S.A., and Leinart, J.B. 2011. Cost estimating for surface mines. In SME Mining Engineering Handbook, 3rd ed. Edited by P. Darling.

[9] See Appendix A of the Final Regulatory Impact Analysis for this final rule for a detailed explanation.

[10] Based on its examination of the mining contractors listed in 2021, MSHA estimated that approximately 75 percent of 6,318 part 45 independent contractors would be required under the final rule to develop a safety program because they have surface mobile equipment.

This final rule is expected to generate numerous benefits, including reductions in individual injuries and fatalities, fostering of a positive safety culture at the mine, reductions in worker compensation and other insurance premiums, and decreases in down-time (non-production time) due to accidents. Among these benefits, MSHA focused on estimating the number of surface mobile equipment-related fatalities and injuries that could be prevented due to this final rule and the monetized benefits of those fatalities and injuries prevented. MSHA also performed a sensitivity analysis covering different scenarios that would lead to different percentages of fatalities and injuries prevented, and thus to different levels of benefits depending on the assumptions made.

Since the final rule includes all mines, MSHA modified the approach from the proposed rule and used the following analysis to estimate the monetized benefits of fatalities and injuries prevented. MSHA first established a baseline using the fatality and injury data and post-accident investigation reports from the 2011-2020 period. In the proposed rule, MSHA used data for accidents, fatalities, and injuries from the years 2003 to 2018 for mines that employed six or more miners. For the final rule, however, MSHA is using more recent and comprehensive data and detailed information concerning accidents, fatalities, and injuries that occurred between 2011 and 2020 for all mines. The Agency believes the more recent data better reflects current and future circumstances.

To estimate the monetized benefits of fatalities and injuries prevented, MSHA first examined historical fatality and injury data and post-accident investigation reports from the 2011-2020 period. MSHA found that over that 10-year period, there were 113 surface mobile equipment fatalities. MSHA further observed that in the case of 63 (about 56 percent) of the 113 fatalities involving surface mobile equipment, deficiencies in training, hazard identification, or maintenance or any combination of these three factors contributed to the fatality. MSHA also counted 13,753 non-fatal injuries involving surface mobile equipment and 454,076 workdays lost due to those injuries during the 10-year period.

Based on this historical analysis, MSHA projected the numbers of surface mobile equipment fatalities, non-fatal injuries, and lost workdays that would be expected due to deficiencies in training, hazard identification, or maintenance, in the absence of the final rule. MSHA then compared those projected numbers ("baseline") with the projections of the same types of fatalities, non-fatal injuries, and workdays lost, in the presence of the final rule. The difference between the two was used as the basis for calculating benefits of the final rule. MSHA believes that a safety program that identifies actions operators will take to accomplish the required tasks will reduce fatalities, non-fatal injuries, and lost workdays that would be expected due to deficiencies in training, hazard identification, or maintenance because it will increase compliance with MSHA's existing hazard identification, hazard correction, maintenance, and training requirements.

MSHA projected that in the absence of the final rule, over the next 10 years, there would be 60 fatalities, 7,298 injuries, and 240,954 workdays lost annually due to deficiencies in training, hazard identification, or maintenance related to surface mobile equipment. These projections assume a mining workforce of approximately 253,401 (each working 2,000 hours in a year) each year. MSHA estimated that the final rule would reduce the projected fatalities, injuries, and workdays lost resulting from deficiencies in training, hazard identification, or maintenance by about 75 percent for each year the rule is in effect, beginning in the second year.[11] MSHA then performed a sensitivity analysis with two additional scenarios – a 50 percent reduction and a 25 percent reduction. Table III-3 and Table III-4 present summaries of these results.

Table III-3: Projected Surface Mobile Equipment Fatalities in the Absence of and

[11] In the first year - because the rule will be effective for only half the year - there would be a 37.5 percent, rather than a 75 percent, reduction.

With the Final Rule

Implementation Year	In the Absence of Final Rule	With Final Rule		
	Projected Surface Mobile Equipment Fatalities due to Deficiencies in Training, Hazard Identification, or Maintenance	Fatalities Prevented - Projections		
	Baseline	Program Effectiveness at 75% (Expected Scenario)	Program Effectiveness at 50%	Program Effectiveness at 25%
Year 1*	6.00	2.2	1.5	0.7
Year 2	6.00	4.5	3.0	1.5
Year 3	6.00	4.5	3.0	1.5
Year 4	6.00	4.5	3.0	1.5
Year 5	6.00	4.5	3.0	1.5
Year 6	6.00	4.5	3.0	1.5
Year 7	6.00	4.5	3.0	1.5
Year 8	6.00	4.5	3.0	1.5
Year 9	6.00	4.5	3.0	1.5
Year 10	6.00	4.5	3.0	1.5
10-Year Total	**60.0**	**42.7**	**28.5**	**14.2**

Note: Totals may not equal the sum of the components due to rounding.

* Due to delayed compliance in the first year of implementation, MSHA assumes that there will be fewer fatalities prevented in the first year than in each subsequent year. For example, under the expected scenario, MSHA estimates that 4.5 lives will be saved in a full year after implementation, but given the 6-month delayed compliance date, a half of 2.2 lives is assumed to be saved in the first year.

Table III-4: Projected Surface Mobile Equipment Injuries in the Absence of and With the Final Rule

Implementation Year	In the Absence of Final Rule	With Final Rule		
	Projected Surface Mobile Equipment Injuries due to Deficiencies in Training, Hazard Identification, or Maintenance	Injuries Prevented - Projections		
	Baseline	Program Effectiveness at 75% (Expected Scenario)	Program Effectiveness at 50%	Program Effectiveness at 25%
Year 1 *	730	273.7	182.5	91.2
Year 2	730	547.4	364.9	182.5
Year 3	730	547.4	364.9	182.5
Year 4	730	547.4	364.9	182.5
Year 5	730	547.4	364.9	182.5
Year 6	730	547.4	364.9	182.5
Year 7	730	547.4	364.9	182.5
Year 8	730	547.4	364.9	182.5
Year 9	730	547.4	364.9	182.5
Year 10	730	547.4	364.9	182.5
10-Year Total	**7,298**	**5,200**	**3,467**	**1,733**

Notes: Totals may not equal the sum of the components due to rounding.
* Due to delayed compliance in the first year of implementation, MSHA assumes that there will be fewer injuries prevented in the first year than in each subsequent year.

The monetary value of the reduction in fatalities and injuries related to surface mobile equipment is calculated as follows. First, to develop a monetized benefit estimate of fatality reduction, MSHA used the Value of a Statistical Life (VSL) adopted by other Federal agencies like the Department of Transportation and Department of Homeland Security, and adjusted for the real per-capita Gross Domestic Product (GDP). Second, to estimate the monetized benefit of injury reduction, MSHA used the projected reduction in the number of workdays lost due to injuries, multiplied by the average wage of miners. The monetized benefits of reduced injuries were then calculated by multiplying the total workdays lost due to the injuries and the average wage of miners. Again, MSHA performed a sensitivity analysis with two additional scenarios –

a 25 percent reduction and a 50 percent reduction in fatalities and injuries. In the expected scenario, the 10-year monetized benefit totals, in 2021 dollars, are calculated at $522 million at a 3 percent discount rate and $424 million at a 7 percent discount rate.

D. Net Benefits

Table III-5 presents the monetized net benefits for the first 10 years of implementation of the final rule. The 10-year net benefit totals in 2021 dollars are $411 million at a 3 percent discount rate and $329 million at a 7 percent discount rate. An annualized net benefit is estimated at $48.2 million and $46.8 million, respectively, at 3 percent and 7 percent discount rates.

Table III-5. Monetized Net Benefits (Millions of 2021 Dollars)

	Expected Scenario			**Low Net Benefit Scenario**			**Lowest Net Benefit Scenario**		
	Discounted at			**Discounted at**			**Discounted at**		
	0%	**3%**	**7%**	**0%**	**3%**	**7%**	**0%**	**3%**	**7%**
10-Year Total *	$493	$411	$329	$286	$237	$187	$80	$63	$46
Annualized	$49.3	$48.2	$46.8	$28.6	$27.8	$26.7	$8.0	$7.4	$6.6

Note: Totals may not equal the sum of the components due to rounding.
* MSHA assumed that a full-year worth costs would be incurred, while projecting a half of the full-year monetized benefits in the first year, due to the timing of implementation (6-month delayed compliance).

MSHA believes that the net-benefits of the rule are understandable, because the costs of the safety program are modest relative to the much-higher value of the estimated reduction in fatalities.

IV. Regulatory Flexibility Analysis (RFA) and Small Business Regulatory Enforcement Fairness Act (SBREFA) and Executive Order 13272: Proper Consideration of Small Entities in Agency Rulemaking

MSHA has reviewed the final rule to assess and take appropriate account of its potential impact on small businesses, small governmental jurisdictions, and small organizations. Pursuant to the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), MSHA analyzed the impact of the final rule on small entities. Based on that analysis, MSHA certifies that this final rule does not have a significant

economic impact on a substantial number of small entities. The factual basis for this certification is presented in this section..

A. Definition of Small

Under the RFA, when analyzing the impact of a rule on small entities, MSHA must use the Small Business Administration's (SBA) definition for a small entity or, after consultation with the SBA Office of Advocacy, establish an alternative definition for the mining industry by publishing that definition in the Federal Register for notice and comment. The SBA uses North American Industry Classification System (NAICS) codes, generally at the 6-digit NAICS level, to set thresholds for small business sizes for each industry.[12]

B. Factual Basis for Certification

Following SBA guidance on carrying out a threshold analysis, MSHA evaluates the impacts on small entities by comparing the estimated compliance costs of a rule for small entities in the sector affected by the rule to the estimated revenues for the affected sector. When estimated compliance costs are less than 1 percent of the estimated industry revenues, it is generally appropriate to conclude that there is no significant economic impact on a substantial number of small entities. In addition to assessing the overall impact on small entities, MSHA examines data for the NAICS codes that have much higher impact ratios (cost/revenue) than others to ensure that the first-level screening is representative.

As the first step, MSHA identified all small-entity controllers in the mining industry on the basis of the small-entity thresholds. The MNM and coal mining operations affected by the rule fall into two general categories: (1) controllers (parent companies) that own and operate mines, which is the appropriate unit for this RFA analysis (based on SBA guidance),[13] and (2)

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[12] Small Business Administration, *Table of Size Standards: Effective July 14, 2022.* https://www.sba.gov/document/support-table-size-standards.

[13] A controller is a parent company owning or controlling one or more mines, whereas a mine is an establishment of that parent company. Small entities, subject to requirements of the Regulatory Flexibility Act, are entities that are parent companies only and not establishments. See Small Business Administration, Office of Advocacy, How to Comply with the Regulatory Flexibility Act, August 2017. Sec. 3(d) of the Mine Act defines "operator" as "any owner, lessee, or other person who operates, controls, or supervises a coal or other mine." 30 U.S.C. 802(d). Under

mining contractors (independent contractors designated under part 45 of 30 CFR), hired by mine operators to work at mines, that operate their own surface mobile equipment. MSHA identified and analyzed the effect of the rule on small-entity controllers of mines and on small-entity mining contractors.

To determine the number of small entities subject to the final rule, MSHA reviewed NAICS, the standard used by Federal statistical agencies in classifying business establishments, as well as information from the SBA Office of Advocacy. MSHA used its data from the MSHA Standardized Information System (MSIS) to identify the responsible party for each mine, as well as the contractors hired to do work on mines. MSHA then combined that information with the size classification information. The two sections below describe MSHA's analysis of controllers and mining contractors, respectively.

Small-entity controllers: In analyzing controllers of mines, MSHA determined that mining operations that fall into 19 NAICS-based industry classifications may be subject to the final rule. These industry categories and their accompanying six-digit NAICS codes are shown in Table IV-1.[14] MSHA then matched the NAICS classifications with SBA small-entity size standards (based on number of employees) to determine the number of small entities within each of the respective NAICS codes. See Table IV-1.

MSHA counted the number of small-entity controllers in each NAICS code, after determining which mines were owned by which controllers. Table IV-1 shows the count of all

30 CFR part 41, an operator must file a legal identity report with MSHA and with this report, MSHA identifies a controller for each mine. 30 U.S.C. 819(d) (each operator shall file the name and address of the "person who controls or operates the mine."). In the IRFA, MSHA considered the controller of a mine and then determined whether the mine, not the controller, was a small entity. In the FRFA, consistent with the SBA guidance and the Mine Act, MSHA determines whether a controller is a small entity.

[14] The NAICS classifications used in this analysis are drawn from the latest version of the NAICS, which was effective in July 2022. MSHA also used, in the analysis, an earlier the version of NAICS categories that were effective in August 2019. When developing the analysis, MSHA had begun the work prior to the most current NAICS being effective. The older NAICS categories were still used in the part of the current analysis that estimated revenues. This is because the older categories were still needed in order for MSHA to cross-tabulate (or crosswalk) its data on mines and controllers with Bureau of Census data on revenues by NAICS codes, where these Census data were organized by the same NAICS codes that were in the earlier version. No comparable revenue data, at this writing, had yet been revised to the most recent NAICS categories.

controllers and a count of small-entity controllers in each NAICS code.[15]

Based on this methodology, MSHA estimated that in 2021, there were a total of 5,879 controllers, and 5,462 of them were small-entity controllers. Many controllers owned one or two mines, while some controllers owned hundreds of mines nationwide (or worldwide). [16]

Table IV-1: Small Entities Affected by the Final Rule: Number of Controllers and Small-Entity Controllers by NAICS Code*

NAICS Code	Industry Description	SBA Size Standards in Maximum Number of Employees**	Number of All Controllers	Number of Small-Entity Controllers
211120	Crude Petroleum Extraction***	1,250	4	3
211130	Natural Gas Extraction***	1,250	1	0
212114	Surface Coal Mining	1,250	282	237
212115	Underground Coal Mining	1,500	122	99
212210	Iron Ore Mining	750	31	26
212220	Gold Ore and Silver Ore Mining	1,500	142	108
212230	Copper, Nickel, Lead, and Zinc Mining	750	45	33
212290	Other Metal Ore Mining	750	29	22
212311	Dimension Stone Mining and Quarrying	500	491	432
212312	Crushed and Broken Limestone Mining and Quarrying	750	820	738
212313	Crushed and Broken Granite Mining and Quarrying	750	182	165
212319	Other Crushed and Broken Stone Mining and Quarrying	500	760	704
212321	Construction Sand and Gravel Mining	500	3,221	2,984
212322	Industrial Sand Mining	500	172	155

[15] Some controllers own mines with more than one NAICS code if those mines produce different commodities. For this analysis, however, MSHA counted each "unique" controller only once. In other words, there is no double-counting of the same controller if a controller produces in more than one NAICS code. It is not uncommon for firms to produce different products falling under more than one six-digit NAICS codes, especially if the firm is large. In any case, no single NAICS code is attributed to any controller that has more than one NAICS code. Rather, the analysis takes all of any one controller's multiple NAICS codes into account without losing any of the information about the NAICS codes. Specifically, that one controller's revenues and employees are partitioned among each of that one controller's production by NAICS code, and then aggregated for that one controller.

[16] The number of controllers and mines examined in this regulatory flexibility analysis are those specifically known to operate in 2021. The year 2021 is the most current year for which complete information were available. Such information about controllers as parent companies might include, for example, knowledge of whether the parent company is a large, multinational corporation, which has bearing on this regulatory flexibility analysis. Because the benefit-cost analysis performed on the proposed rule did not need this kind of detailed information about controllers, it was able to have a broader scope to include data from other years besides 2021, and to include some more data in the year 2021 itself, which it did. As a result, the benefit cost analysis included a larger number of mines (and affected mines) and controllers. The key factor for this regulatory flexibility analysis is the estimated ratio of the regulatory cost per revenue for controllers, as reflected by the most current data. The estimation of this ratio is robustly addressed in MSHA's analysis of the 5,879 controllers in 2021 (which is not impacted by the exclusion of other years in this analysis).

212323	Kaolin, Clay, and Ceramic and Refractory Minerals Mining	500	161	143
212390	Other Nonmetallic Mineral Mining and Quarrying	500	151	123
327310	Cement Manufacturing	1,000	74	53
327410	Lime Manufacturing	750	58	49
331313	Primary production of alumina and aluminum	1,300	3	3

* Each mine is assigned only one NAICS (as its major product) but some controllers that own more than one mine own mines that are in different NAICS. Consequently, some controllers have more than one NAICS (when they own mines with different NAICS) and they are therefore counted more than once in this table. See Table _ -2 for the distribution of controllers by the NAICS code for which they have the most employees, which will then show only one NAICS code for each controller.
**SBA, effective *July 14, 2022*.
*** These categories are commonly associated with mines with activities involving crude petroleum or natural gas extraction, but the mines in these categories that are counted here, and included in this analysis, also involve mining operations that would fall under MSHA's jurisdiction. This analysis does not include crude petroleum or natural gas extraction (and the mines that perform them exclusively) since MSHA does not regulate these activities.

Each mine is assigned only one NAICS code, with that code reflecting what that mine produces the most. There are several cases in which more than one mine, owned by the same controller, have different NAICS codes, and as a result that one controller has multiple NAICS codes. For this reason, some controllers are counted more than once in this Table IV-1 (as also explained in a footnote in the table). In particular, of the 5,879 unique controllers identified in 2021, 608 of them each owned multiple mines with different NAICS codes. In theory, this could present an ambiguity as to whether a controller, with more than one NAICS code, should be considered a small entity or not. Since NAICS codes vary by their small-entity thresholds, it is theoretically possible for a controller with more than one NAICS code to be a small entity according to the threshold for one of its NAICS codes, while not being a small entity under the lower threshold that applies to another of its NAICS codes. However, this situation was not found to occur for any of the controllers; all controllers that were determined to be small entities met the conditions for a small entity for each of their NAICS codes.

While some controllers are in more than one mining NAICS code, the distribution of controllers by their most significant NAICS code may also provide useful information about the general structure of the industry. Therefore, MSHA also prepared Table IV -2 to present the distribution of controllers by the one NAICS code under which the largest number of their employees are reported. This table then assigns only one NAICS code for each controller,

allowing for a count of controllers by their (mutually exclusive) most significant NAICS code in mining.[17]

Table IV-2: Small Entities Affected by the Final Rule: Distribution of Controllers by NAICS Category, with One NAICS Code Per Controller*

NAICS Code	Industry Description	SBA Size Standards in Maximum Number of Employees**	Number of All Controllers	Number of Small-Entity Controllers
211120	Crude Petroleum Extraction***	1,250	3	3
211130	Natural Gas Extraction***	1,250	1	0
212114	Surface Coal Mining	1,250	246	218
212115	Underground Coal Mining	1,500	93	75
212210	Iron Ore Mining	750	19	18
212220	Gold Ore and Silver Ore Mining	1,500	98	82
212230	Copper, Nickel, Lead, and Zinc Mining	750	31	25
212290	Other Metal Ore Mining	750	14	12
212311	Dimension Stone Mining and Quarrying	500	415	382
212312	Crushed and Broken Limestone Mining and Quarrying	750	716	675
212313	Crushed and Broken Granite Mining and Quarrying	750	133	130
212319	Other Crushed and Broken Stone Mining and Quarrying	500	617	596
212321	Construction Sand and Gravel Mining	500	3,046	2,839
212322	Industrial Sand Mining	500	120	113
212323	Kaolin, Clay, and Ceramic and Refractory Minerals Mining	500	108	101
212390	Other Nonmetallic Mineral Mining and Quarrying	500	108	95
327310	Cement Manufacturing	1,000	61	49
327410	Lime Manufacturing	750	48	47
331313	Primary production of alumina and aluminum	1,300	2	2
	Total		5,879	5,462

* Each controller is assigned the one NAICS code for which it devotes the most employees, based on the employees at its mines and each of its mines being associated with only one NAICS code.
**SBA, effective *July 14, 2022*.
*** These categories are commonly associated with mines with activities involving crude petroleum or natural gas extraction, but the mines in these categories that are counted here, and included in this analysis, also involve mining operations that would fall under MSHA's jurisdiction. This analysis does not include crude petroleum or natural gas extraction (and the mines that perform them exclusively) since MSHA does not regulate these activities.

[17] Note that many of the controllers also own operations in other, non-mining industries, and in other mining operations in other nations.

MSHA estimated the costs of the rule for small-entity controllers by summing the costs for each of these controller's mines. The estimated cost for each mine was based on the number of miners at that mine, and the mine's industry category. Thus, if two mines belonging to the same controller had different NAICS codes, both of those NAICS codes would be accounted for, and the total cost to the controller would be calculated as the total cost for all of that controller's mines. Similarly, the estimated revenues of controllers were derived as the sum of the revenues of each of their mines, which was, in turn, dependent on the NAICS codes associated with those mines. Thus, all of NAICS codes for all of the mines, and all of the mines under all of the NAICS codes, were accounted for in the estimates of the costs and revenues of controllers.

As shown in Table IV-2, MSHA determined that, in 2021, there were a total of 5,879 controllers, and 5,462 of them were small-entity controllers. These small-entity controllers owned a total of 9,395 mines, out of the 12,529 mines owned by all controllers in 2021. Table IV-3 presents a summary of the main findings regarding small-entity controllers. As shown, MSHA estimated the total cost of the rule to all 5,462 small-entity controllers to be $26.69 million in the first year, and $8.17 million in each subsequent year (in 2021 dollars). Per small entity, this amounted to an average compliance cost of $4,886 in the first year and $1,496 in each year thereafter. MSHA estimated the total revenues of the 5,462 small-entity controllers to be $33,720 million (in 2021 dollars). As a result of these estimates, MSHA found the compliance cost of the final rule to small entities, as a percent of revenues, on average, to be 0.165 percent in the first year, and 0.069 percent in each subsequent year. Among the small-entity controllers examined, the compliance cost as a percent of controllers' revenues ranged from near zero to a maximum of 0.341 percent in the first year, and to a maximum of 0.175 percent in each year thereafter. On the basis of these findings, MSHA determined that the final rule does not have a significant impact on small entities controllers in the mining industry.

Table IV-3: Main Findings for 5,462 Small-Entity Controllers

Economic Measure	First Year	Each Subsequent Year

Total Compliance Costs (in Millions of 2021 Dollars)	$26.69	$8.17
Total Revenue (in Millions of 2021 Dollars)	$33,720	$33,720
Average Compliance Cost per Small-Entity Controller (in 2021 Dollars)	$4,886	$1,496
Ratio of Total Compliance Cost / Total Revenue (in Percent)	0.079	0.024
Average of the Ratios of Compliance Cost/Revenue (in Percent)	0.165	0.069

Small-entity independent contractors: For its analysis of independent contractors designated under part 45 of 30 CFR, MSHA used MSIS data to first derive a list of all mining contractors in the year 2021. The list contained a total of 6,318 contractors. While these contractors varied greatly in terms of their corresponding NAICS codes, MSHA determined that the most relevant NAICS codes for characterizing the mining contractors were the NAICS Codes for (1) "Support Activities for Coal Mining" (213113), (2) "Support Activities for Metal Mining" (213114), and (3) "Support Activities for Nonmetallic Minerals" (213115). MSHA did not have data on parent companies of these contractors. However, MSHA analyzed data on enterprises and establishments in these NAICS codes from the Census Bureau, Statistics of U.S. Businesses (SUSB).[18] The SUSB data on entities in these three NAICS codes indicated that the vast majority of contractors (which would be listed separately in MSHA's data) are, themselves, parent companies. Specifically, based on the SUSB data on parent companies and the enterprises that belong to them, MSHA observed that the number of enterprises in these three NAICS codes, on average, exceeded the number of parent companies by only about 9 percent. Therefore, over 91 percent of parent companies that are mining contractors have only one establishment, implying that the vast majority of listed contractors are themselves parent companies, rather than subsidiaries of larger companies. Based on these findings, MSHA assumed in its analysis that

[18] Census Bureau, Statistics of U.S. Businesses. https://www.census.gov/data/tables/2017/econ/susb/2017-susb-annual.html.

the contractors on its list are parent companies.

Based on this assumption that each of the listed mining contractors in 2021 is not a subsidiary of a larger company, MSHA estimated how many of them would be considered small entities under the RFA. To make this determination, MSHA applied the size thresholds for the three NAICS categories for support activities for mining (213113, 213114, and 213115). Small entities in NAICS 213113 (support activities for coal mining) are those with annual revenues below the threshold of $27.5 million in 2022 dollars, while those in NAICS 213114 (support activities for metal mining) and NAICS 213115 (support activities for nonmetallic minerals) have annual revenues of less than $41.0 million and $20.5 million, respectively.[19] In estimating how many contractors are small entities, MSHA conservatively applied the $20.5 million (in 2022 dollars) threshold, so as not to underestimate the number of small entities.[20] MSHA's estimation of the number of small-entity contractors may therefore be an overestimation; however, MSHA still believes it is a close approximation to the number of small-entity contractors that would be determined if more detailed data were available.

From the employment and revenue data in the SUSB tables for the three NAICS Codes for support activities for mines, MSHA estimated that mining support contractors have, on average, revenues of approximately $315,000 (in 2017 dollars) per employee.[21]

MSHA's data on mining contractors included the number of employees working for each contractor. MSHA was able to estimate the revenue of each contractor by multiplying its number of employees by the average revenue per employee of $315,000 from the SUSB data. From these estimates of each contractor's revenue, MSHA estimated that approximately 4,469 contractors out of a total of 4,739 contractors affected by the rule (or about 94.3 percent of those

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[19] Small Business Administration, *Table of Size Standards: Effective July 14, 2022.* https://www.sba.gov/document/support-table-size-standards.

[20] MSHA translated the threshold of $20.5 million in 2022 dollars to $17.44 million in 2017 dollars based on the Bureau of Economic Analysis' GDP Price Index.

[21] It is important to note that, although, contractor revenues may be close in magnitude to their costs, those costs often far exceed their labor costs, and therefore their revenue per employee would be expected to far exceed their average salaries. Such additional costs, besides labor costs, include the costs of equipment, fuel, overhead, taxes, etc.

contractors) are potentially small entities, under the threshold of $17.4 million (in 2017 $) in annual revenue.

Table IV-3 presents a summary of the main findings on mining contractors that would be affected by the rule. As shown, MSHA estimated the total cost to all 4,469 potential small-entity contractors of the rule to be $2.69 million in the first year and $0.954 million in each subsequent year. Per small-entity contractor, this amounted to an average cost of $453 in the first year and $212 in each year thereafter. MSHA estimated the total revenues of the 4,469 potential small-entity contractors to be $12,783 million (in 2021 dollars). As a result of these estimates, MSHA found the cost of the final rule to small-entity contractors, as a percent of revenue, to be, on average across the contractors, 0.0211 percent of revenue in the first year and 0.0074 percent of revenue in each subsequent year. On the basis of these findings, MSHA determined that the final rule does not have a significant impact on small-entity-contractors in the mining industry.

Table IV-3: Main Findings for 4,469 Small-Entity Contractors

Economic Measure	First Year	Each Subsequent Year
Total Compliance Costs (in Millions of 2021 Dollars)	$2.69	$0.95
Total Revenue (in Millions of 2021 Dollars)	$12,783	$12,783
Average Compliance Cost Per Small-Entity Contractor (in 2021 Dollars)	$453	$212
Ratio of Total Compliance Cost / Total Revenue (in Percent)	0.0211	0.0074
Average of the Ratios of Compliance Cost/Revenue (in Percent)	0.0460	0.0212

In conclusion, MSHA determined that the rule does not have a significant effect on either small-entity mining controllers or small-entity mining contractors. MSHA therefore certifies that this final rule does not have a significant economic impact on a substantial number of small entities.

V. Paperwork Reduction Act of 1995

The Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501-3521) provides for the Federal Government's collection, use, and dissemination of information. The goals of the PRA include minimizing paperwork and reporting burdens and ensuring the maximum possible utility from the information that is collected under 5 CFR part 1320. The PRA requires Federal agencies to obtain approval from OMB before requesting or requiring "a collection of information" from the public.

MSHA determined that this final rule creates a new information collection burden for the mining community. However, the final rule does not contain changes that transfer burden from, or add burden to, existing information collections because the paperwork requirements in this rule are applicable to only the new information collection discussed below. MSHA expects that some mine operators may use existing information collections to help the development or implementation of a written safety program at their mine. For example, under OMB No. 1219-0089, *Safety Defects; Examination, Correction, and Records*, MNM operators record inspections of surface mobile equipment before equipment is placed in operation and when equipment is removed from service to be repaired before use is resumed. Under OMB No. 1219-0083, *Surface Coal Mines Daily Inspection; Certified Person; Reports of Inspection*, coal mine operators record reports of hazardous conditions in active work areas of surface operations along with a description of any corrective actions taken. Some operators may incorporate these existing information collections, if applicable, into their safety program for surface mobile equipment because they have determined the existing information collections would support the safety program's development or implementation. Hence, only new requirements from this final rule will be recorded under this new information collection and there will be no change to existing information collections.

Once OMB completes its review of MSHA's new information collection, the Agency will publish a notice on the new information collection under the Information Collection Review

(ICR) 1219–0155. (The regulated community is not required to respond to any collection of information unless it displays a current, valid, OMB control number.)

A. New Information Collection Under "Safety Program for Surface Mobile Equipment"

Under this final rule, new burdens will apply to operators and independent contractors who are subject to 30 CFR Part 45, as discussed below.

Section 56.23003(a) requires operators of surface metal and nonmetal mines to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to all surface mobile equipment at surface metal and nonmetal mines. Such a program will include actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

Section 57.23003(a) requires operators of underground metal and nonmetal mines to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to all surface mobile equipment at surface areas of underground metal and nonmetal mines. Such a program will describe actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

Section 77.2103(a) requires operators of surface coal mines and surface work areas of underground coal mines to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to all surface mobile equipment at surface coal mines and surface work areas of underground coal mines. Such a program will describe actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

In addition, §§ 56.23003(b), 57.23003(b), and 77.2103(b) require evaluation and updates to the written safety program at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

B. Information Collection Requirements

I. Type of Review: New Collection.

OMB Control Number: 1219–0155.

1. *Title*: Safety Program for Surface Mobile Equipment

2. *Description of the ICR*: This final rule on safety program for surface mobile equipment contains collection of information requirements that will assist miners, operators, and independent contractors in identifying risks to their safety and help reduce injuries and fatalities at mines.

There are provisions of this final rule that have different burden hours, burden costs, and responses each year. Therefore, MSHA shows the estimates of burden hours, burden costs, and responses in three separate years.

3. *Summary of the Collection of Information*:

Sections 56.23003(a), 57.23003(a), 77.2103(a) – Developing and Implementing Written Safety Program

ICR. Final §§ 56.23003(a), 57.23003(a), and 77.2103(a) require operators to develop and implement written safety programs.

Number of respondents. For §§ 56.23003(a), 57.23003(a), and 71.2103(a), the respondents consist of operators and independent contractors owning and using surface mobile equipment since they will be responsible for developing and implementing the written safety program for surface mobile equipment.

MSHA estimates that, based on its 2021 data, a total of 17,133 respondents (12,394 operators and 4,739 part 45 independent contractors) will develop a written safety program for surface mobile equipment in the first year of implementation. MSHA estimated that 12,394 are surface mines and underground mines with surface areas, so the operators of those mines are assumed to comply with this rule. MSHA estimates that some operators may need to update, enhance, or even develop portions of this written safety program to meet current requirements. MSHA estimated that no additional recordkeeping costs will be generated by the activities associated with training because this activity is already being performed during compliance efforts for existing training standards.

Annual number of responses. The estimated average annual number of responses will be 17,133.

Estimated annual burden. The total burden arising from the development of the safety program in the first year of implementation is estimated to be 682,833 hours, which includes 297,687 hours to list the actions the operator will take to conduct the mine-specific hazard analysis and technology evaluation components of the safety program, 383,860 hours for listing the actions operators will take to develop a maintenance schedule for surface mobile equipment as part of the written safety program (if needed), as well as 1,285 hours to make available and copy the written safety program. An average burden per respondent is estimated to be 39.85 hours to develop a written safety program for surface mobile equipment in the first year.

Sections 56.23003(b), 57.23003(b), and 71.2103(b) – Annual Updates to the Written Safety Program

ICR. Final §§ 56.23003(b), 57.23003(b), and 71.2103(b) require the responsible person to evaluate and update the written safety program for the mine at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

Number of respondents. For §§ 56.23003(b), 57.23003(b), and 71.2103(b), the respondents will consist of all operators and contractors who have developed a written safety program for surface mobile equipment. MSHA estimates that a total of 17,133 mine operators and independent contractors will subsequently update a written safety program for surface mobile equipment in years two and three. The respondents will update at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

Annual number of responses. The estimated average annual number of responses will be 17,133.

Estimated annual burden. The total burden arising from the annual and other updating of the safety program will be 259,834 hours in the second and third years of implementation, 129,917 hours each year. This annual burden includes updates to the written safety program arising from changing conditions at mine sites, surface mobile equipment unit updates, as well as making available and copying the written safety program. The estimated annual burden per respondent is 7.58 hours.

Besides the development and update of the written safety program, no additional information collection cost is expected. Information collection associated with training requirements in this final rule is covered under existing regulations in 30 CFR parts 46, 48, and 77.

Total Recordkeeping and Documentation Burden for the Safety Program for Surface Mobile Equipment Rule

Table V-1. Estimated Annual Recordkeeping and Documentation Burden

Year	Annual Number of Respondents	Annual Number of Responses	Annual Burden per Respondent	Estimated Annual Burden (Hours)
Year 1	17,133	17,133	39.85	682,833
Year 2	17,133	17,133	7.58	129,917
Year 3	17,133	17,133	7.58	129,917
3-Year Total	17,133	51,399	55.02	942,666
Annual Average	17,133	17,133	18.34	314,222

The cost estimates of information collection burden are calculated as follows. In the first year, the average burden per respondent for developing a safety program, combining hazard analysis and technology evaluation, identifying actions operators will take to maintain and repair equipment and train miners as well as making available and copying the written safety program, is 39.85 hours for a total of 682,833 burden hours in Year 1. In Years 2 and 3, the average burden per respondent for updating a safety program is 7.58 hours, for a total of 129,917 burden hours in Year 2 and 129,917 burden hours in Year 3.

MSHA determined the hourly wage rates through data from the U.S. Department of Labor, Bureau of Labor Statistics (BLS), Occupational Employment and Wage Statistics (OEWS) published May 2021. Annual Burden Hours are summarized in Table V-2.

Table V-2. Wage and Hour Burdens

Occupation	Loaded Hourly Wage Rate*	Year 1 Burden Hours	Year 2 Burden Hours	Year 3 Burden Hours
Mining Supervisor, MNM	$61.41	241,085.00	103,182.50	103,182.50
Mining Supervisor, Coal	$71.79	21,198.80	7,989.28	7,989.28
Maintenance and Mechanic, MNM	$42.22	307,802.50	-	-
Maintenance and Mechanic, Coal	$47.70	33,406.80	-	-
Occupational Health & Safety Specialist, MNM	$59.06	16,318.40	4,561.34	4,561.34
Occupational Health & Safety Specialist, Coal	$68.29	8,422.40	2,354.24	2,354.24
Clerk, MNM	$35.58	858.78	858.78	858.78
Clerk, Coal	$35.01	70.80	70.80	70.80
Clerk, Contractor	$35.45	355.43	355.43	355.43
Mining Supervisor, Contractor	$63.70	10,662.75	10,544.28	10,544.28
Maintenance and Mechanic, Contractor	$43.43	42,651.00	-	-
Occupational Health & Safety Specialist, Contractor	$61.09	-	-	-
Total (Rounded)	**-**	**682,833**	**129,917**	**129,917**

* Loaded hourly wages are mean wages that are increased by a benefits multiplier of 1.488 plus a separate overhead multiplier of 1.01.

The resulting annual burden cost is summarized in Table V-3.

Table V-3. Summary of Information Collection Burden for Safety Program for Surface Mobile Equipment

	Year 1	Year 2	Year 3	Annual Average
Number of Respondents	17,133	17,133	17,133	17,133
Number of Responses	17,133	17,133	17,133	17,133
Number of Burden Hours (Rounded)	682,833	129,917	129,917	314,222
Respondent or Recordkeeping Costs (Rounded)	$25,700	$25,700	$25,700	$25,700

1. *Affected Public*: Business or other for-profit.
2. *Estimated Number of Respondents*: 17,133 respondents in the first year; 17,133 respondents in the second year; and 17,133 respondents in the third year.
3. *Frequency*: On occasion.
4. *Estimated Number of Responses:* 17,133 responses in the first year; 17,133 responses in the second year; and 17,133 responses in the third year.
5. *Estimated Number of Burden Hours:* 682,833 hours in the first year; 129,917 hours in the second year; and 129,917 hours in the third year.
6. *Estimated Respondent or Recordkeeper Hour Burden Costs:* $25,700 in the first year; $25,700 in the second year; and $25,700 in the third year.

For a detailed summary of the burden hours and related costs by provision, see the FRIA accompanying the final rule. The FRIA includes the estimated costs and assumptions for the paperwork requirements related to this final rule.

MSHA received comments on the information collection requirements contained in the proposed rule (86 FR 50496). These comments are addressed in the Supporting Statement for the information collection requirements for this final rule. The Information Collection Supporting Statement is available at http://www.reginfo.gov/public/do/PRAMain, on MSHA's website at http://www.msha.gov/regs/fedreg/informationcollection/informationcollection.asp, and at http://www.regulations.gov. A copy of the Statement is also available from MSHA by request to S. Aromie Noe at Noe.Song-Ae.A@dol.gov, by phone request to 202-693-9440, or by facsimile to 202-693-9441. These are not toll-free numbers.

VI. Other Regulatory Considerations

A. National Environmental Policy Act of 1969

The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq*.), requires each Federal agency to consider the environmental effects of final actions and to prepare an Environmental Impact Statement on major actions significantly affecting the quality of the environment. MSHA has reviewed the final rule in accordance with NEPA requirements, the regulations of the Council on Environmental Quality (40 CFR part 1500), and the Department of Labor's NEPA compliance procedures (29 CFR part 11). As a result of this review, MSHA has determined that this final rule will not have a significant environmental impact. Accordingly, MSHA has not conducted an environmental assessment nor provided an environmental impact statement.

B. The Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (Act) (2 U.S.C. 1501 *et seq.*) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million (adjusted annually for inflation) or more in any 1 year. MSHA has reviewed the final rule and has determined that it does not result in such an expenditure. Accordingly, the Unfunded Mandates Reform Act of 1995 requires no further Agency action or analysis.

C. The Treasury and General Government Appropriations Act of 1999: Assessment of Federal Regulations and Policies on Families

Section 654 of the Treasury and General Government Appropriations Act of 1999 (5 U.S.C. 601 note) requires agencies to assess the impact of Agency action on family well-being. MSHA has determined that the final rule has no effect on family stability or safety, marital commitment, parental rights and authority, or income or poverty of families and children, as defined in the Act. Accordingly, MSHA determines that the final rule does not impact family

well-being, as defined in the Act.

D. Congressional Review Act

The Congressional Review Act (5 U.S.C. 801 *et seq.*) allows Congress to review "major" rules issued by federal agencies. The Congressional Review Act states that, before a rule may take effect, the agency issuing the rule must submit the rule, and certain related information, to each House of Congress and the Comptroller General. 5 U.S.C. 801(a)(1). The Congressional Review Act defines a major rule as one that has resulted in or is likely to result in (1) an annual effect on the economy of $100 million or more; (2) a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, or innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets. 5 U.S.C. 804(2).

Pursuant to the Congressional Review Act, this rule is not a "major rule," as defined by 5 U.S.C. 804(2). However, pursuant to the Congressional Review Act, MSHA will submit a copy of this final rule to both Houses of Congress and to the Comptroller General.

E. Executive Order 12630: Government Actions and Interference with Constitutionally Protected Property Rights

E.O. 12630 requires Federal agencies to "identify the takings implications of proposed regulatory actions …." MSHA has determined that the final rule does not include a regulatory or policy action with takings implications. Accordingly, E.O. 12630 requires no further Agency action or analysis.

F. Executive Order 12988: Civil Justice Reform

Section 3 of E.O. 12988 contains requirements for Federal agencies promulgating new regulations or reviewing existing regulations to minimize litigation by eliminating drafting errors and ambiguity, providing a clear legal standard for affected conduct rather than a general standard, promoting simplification, and reducing burden. MSHA has reviewed the final rule and

has determined that it meets the applicable standards provided in E.O. 12988 to minimize litigation and undue burden on the Federal court system. Accordingly, the final rule meets the applicable standards provided in E.O. 12988, Civil Justice Reform.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

E.O. 13045 requires Federal agencies submitting covered regulatory actions to OMB's Office of Information and Regulatory Affairs (OIRA) for review, pursuant to E.O. 12866, to provide OIRA with (1) an evaluation of the environmental health or safety effects that the planned regulation may have on children, and (2) an explanation of why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency. In E.O. 13045, "covered regulatory action" is defined as rules that may (1) be significant under E.O. 12866, supplemented by E.O. 14094, (i.e., a rulemaking that has an annual effect on the economy of $200 million or more or would adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities), and (2) concern an environmental health risk or safety risk that an agency has reason to believe may disproportionately affect children. Environmental health risks and safety risks refer to risks to health or to safety that are attributable to products or substances that the child is likely to come in to contact with or ingest through air, food, water, soil, or product use or exposure.

This final rule is not subject to E.O. 13045 because it is not significant under section 3(f)(1) of E.O. 12866, and because it does not concern an environmental health risk or safety risk that may disproportionately affect children. This final rule is requiring that operators develop, implement, and update a written safety program for surface mobile equipment (excluding belt conveyors) at surface mines and surface areas of underground mines. The written safety program includes actions operators will take to identify hazards and risks to reduce accidents, injuries, and fatalities related to surface mobile equipment. This rule does not concern risks to

health or to safety that are attributable to products or substances that children are likely to come in to contact with or ingest through air, food, water, soil, or product use or exposure. Accordingly, E.O. 13045 requires no further Agency action or analysis.

H. Executive Order 13132: Federalism

MSHA has determined that the final rule does not have federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, E.O. 13132 requires no further Agency action or analysis.

I. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

MSHA has determined that the final rule does not have tribal implications because it does not have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Accordingly, E.O. 13175 requires no further Agency action or analysis.

J. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

E.O. 13211 requires agencies to publish a Statement of Energy Effects for "significant energy actions" which are agency actions that are "likely to have a significant adverse effect on the supply, distribution, or use of energy" including a "shortfall in supply, price increases, and increased use of foreign supplies." MSHA reviewed the final rule for its impact on the production of coal and uranium mining. The final rule results in annualized costs of approximately $12.6 million (in 2021 dollars, undiscounted) to covered surface mines and surface areas of underground mines, though most of these costs will be incurred in MNM mining that does not involve uranium mining (nor coal mining). MSHA therefore determined that such costs do not have any substantive effect on coal and uranium mining. Because the final rule does not result in a significant adverse effect on the supply, distribution, or use of energy, it is not a

"significant energy action." Accordingly, E.O. 13211 requires no further Agency action or analysis.

K. Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government; Executive Order 14091: Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

E.O. 13985 provides "that the Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality." E.O. 13985 defines "equity" as "consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality." To assess the impact of the final rule on equity, MSHA considered two factors: (1) the racial/ethnic distribution in mining in NAICS 212 (which does not include oil and gas extraction) compared to the racial/ethnic distribution of the U.S. workforce (Table VI-1), and (2) the extent to which mining may be concentrated within general mining communities (Table VI-2).

In 2008, NIOSH conducted a survey of mines, which entailed sending a survey packet to 2,321 mining operations to collect a wide range of information, including demographic information on miners. NIOSH's 2012 report, entitled "National Survey of the Mining Population: Part I: Employees" reported the findings of this survey.[22] Race and ethnicity information about U.S. mine workers is presented in Table VI-1. Of all mine workers, including

[22] National Institute for Occupational Safety and Health (NIOSH), "National Survey of the Mining Population: Part I: Employees," June 2012. https://www.cdc.gov/niosh/mining/works/coversheet776.html.

miners as well as administrative employees at mines, 93.4 percent of mine workers were white, compared to 80.6 percent of all U.S workers.[23] There were larger percentages of American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander people in the mining industry compared to all U.S. workers, while there were smaller percentages of Asian, Black or African American, and Hispanic/Latino people in the mining industry compared to all U.S. workers.

Section 6 of E.O. 14091 further provides that agencies are "to create equitable economic opportunity and advance projects that build community wealth" in rural America. The final rule helps miners in rural areas by improving safety and health at their mines. Table VI-2 shows that there are 22 mining communities, defined as counties where at least 2 percent of the population is working in the mining industry.[24] Although the total population in this table represents only 0.15 percent of the U.S. population, it represents 12.0 percent of all mine workers. The average per capita income in these communities in 2020, $47,977,[25] was lower than the U.S. average, $59,510, representing 80.6 percent of the U.S. average. However, each county's average per capita income varies substantially, ranging from 56.4 percent of the U.S. average to 146.8 percent.

This final rule is requiring that operators develop, implement, and update a written safety program for surface mobile equipment (excluding belt conveyors) at surface mines and surface areas of underground mines. The written safety program includes actions operators will take to identify hazards and risks to reduce accidents, injuries, and fatalities related to surface mobile equipment. MSHA determined that the final rule is consistent with the goals of E.O. 13985 and supports the advancement of equity for all workers at mines, including those who are historically

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[23] National data on workers by race were not available for the year 2008; comparable data for 2012 are provided for comparison under the assumption that there would not be major differences in distributions between these 2 years.
[24] Although 2 percent may appear to be a small number for identifying a mining community, one might consider that if the average household with one parent working as a miner has five members in total, then approximately 10 percent of households in the area would be directly associated with mining. While 10 percent may also appear small, this refers to the county. There are likely particular areas that have a heavier concentration of mining households.
[25] This is a simple average rather than a weighted average by population.

underserved and marginalized.

Table VI-1: Racial and Ethnic Distribution of Miners* (2012)

	Number of Miners in Mining (except oil and gas) (NAICS 212)	As a Percent of Total Miners Who Self-Identified in These Categories (Latest Data for 2008)	Percent of All Workers in the United States for Comparison (Latest Data 2012)****
Ethnicity			
Hispanic/Latino	26,622	12.1	15.0
Non-Hispanic or Latino	192,839	87.9	85.0
Total	**219,461**	**100.0**	**100.0**
Race**			
American Indian or Alaska Native***	4,050	1.9	0.8
Asian	183	0.1	5.4
Black or African American	8,893	4.3	13.0
Native Hawaiian or Other Pacific Islander	634	0.3	0.2
White	194,016	93.4	80.6
Total	**207,776**	**100.0**	**100.0**

* The term "miners" includes miners and other workers at mines such as administrative employees.
** Does not include miners who did not self-report in one of these categories. Some of the surveyed miners may not have self-reported in one of these categories if they are affiliated with more than one race, or if they chose not to respond to this survey question.
*** Includes miners who self-identified as an American Indian or Alaskan Native as a single race, not in combination with any other races. No other data on miners in this racial group were available from this source. In other employment statistics often reported on American Indians and Alaska Natives, their population is based on self-reporting as being American Indian or Alaska Native in combination with any other race, which has resulted in the reporting of much higher employment levels. See BLS, *Monthly Labor Review*, "Alternative Measurements of Indian Country: Understanding Their Implications for Economic, Statistical, and Policy Analysis," https://www.bls.gov/opub/mlr/2021/article/alternative-measurements-of-indian-country.htm.
**** More recent data from the 2020 Decennial Census were not available in September 2022.

Sources: National Institute for Occupational Safety and Health (NIOSH). 2012a. National Survey of the Mining Population Mining Publication: Part 1: Employees, DHHS (NIOSH) Pub. No. 2012-152, June 2012; U.S. Census Bureau, 2012 American Community Survey (ACS).

Table VI-2. Mining Counties: Counties in the United States with Relatively High Concentrations of Miners* (At Least 2 Percent of the County Population)

#	County	Number of Miners (First Quarter 2022)	Population of County (Latest Data in 2021)	Estimated Percent of Population Who Are Miners
1	White Pine County, Nevada	1,288	9,182	14.0
2	Pershing County, Nevada	771	6,741	11.4
3	Humboldt County, Nevada	1,549	17,648	8.8
4	Campbell County, Wyoming	3,547	46,401	7.6
5	Winkler County, Texas	513	7,415	6.9
6	Mercer County, North Dakota	555	8,323	6.7
7	Chase County, Kansas	166	2,598	6.4
8	Shoshone County, Idaho	723	13,612	5.3
9	Logan County, West Virginia	1,643	31,909	5.1
10	Sweetwater County, Wyoming	2,050	41,614	4.9
11	Glasscock County, Texas	56	1,149	4.9
12	Livingston County, Kentucky	431	8,959	4.8
13	Buchanan County, Virginia	946	19,816	4.8
14	McDowell County, West Virginia	660	18,363	3.6
15	Big Horn County, Wyoming	413	11,632	3.6
16	Sevier County, Utah	601	21,906	2.7
17	Boone County, West Virginia	582	21,312	2.7
18	Moffat County, Colorado	349	13,185	2.6
19	Nye County, Nevada	1,062	43,946	2.4
20	Raleigh County, West Virginia	1,647	73,771	2.2
21	Wyoming County, West Virginia	456	21,051	2.2
22	Elko County, Nevada	1,090	53,915	2.0
	Total	**20,963**	**494,448**	**4.2**
	All U.S. Counties	174,387	331,893,745	
	Miners in Mining Counties as a Percent of All U.S. Miners	12.0%		
	Population of Mine Counties as a Percent of U.S. Population		0.15%	

* The term "miners" includes miners and other workers at mines such as administrative employees.
Source: Bureau of Labor Statistics (BLS), Quarterly Employment and Wages First Quarter 2022 (2022); Bureau of Economic Analysis, Personal Income by County, Metro, and Other Areas 2020 (2020); U.S. Census Bureau, "Annual Estimates of the Resident Population for Counties: April 1, 2020, to July 1, 2021 (CO-EST2021-POP)." *Census.gov.* Accessed DATE. Available at: *https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html*; U.S. Census Bureau, Quick Facts, available at: https://www.census.gov/quickfacts/fact/table/US/PST045221 (accessed DATE).

VII. References

American Society of Safety Professionals (ASSP), Occupational Health and Safety Management Systems, ANSI/ASSP Z10-2012, (R2017).

International Standards Organization (ISO), Occupational Health and Safety Management Systems – Requirements With Guidance for Use (ISO 45001:2018).

National Mining Association, CORESafety and Health Management System

U.S Department of Labor, Occupational Safety and Health Administration (OSHA), Recommended Practices for Safety and Health Programs (https://www.osha.gov/safety-management).

U.S. Department of Transportation, 49 CFR part 270 – System Safety Program.

List of Subjects

30 CFR Parts 56 and 57

Metal and nonmetal mining, Mine safety and health, Surface mining, Mobile equipment safety program, Reporting and recordkeeping requirements, and Underground mining.

30 CFR Part 77

Coal mining, Mine safety and health, Surface mining, Mobile equipment safety program, Reporting and recordkeeping requirements, and Underground mining.

Christopher J. Williamson

Assistant Secretary of Labor
for Mine Safety and Health.

For the reasons set out in the preamble, and under the authority of the Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006, chapter I of title 30 of the Code of Federal Regulations is amended as follows:

SUBCHAPTER K-METAL AND NONMETAL MINE SAFETY AND HEALTH

PART 56–SAFETY AND HEALTH STANDARDS-SURFACE METAL AND NONMETAL MINES

1. The authority citation for part 56 continues to read as follows:

Authority: 30 U.S.C. 811.

2. Add subpart T to part 56 to read as follows:

Subpart T–Safety Program for Surface Mobile Equipment

Sec.

§ 56.23000 Purpose and scope.

This subpart requires operators to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to surface mobile equipment at surface metal and nonmetal mines. The purpose of this safety program is to promote and support a positive safety culture and improve miners' safety at the mine.

§ 56.23001 Definitions.

The following definitions apply in this subpart—

Responsible person means a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment.

Surface mobile equipment means wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved, and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface metal and nonmetal mines.

§ 56.23002 Written safety program.

(a) Each operator shall develop and implement a written safety program for surface mobile equipment that contains the elements in this subpart, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

(b) Each operator shall designate at least one responsible person to evaluate and update the written safety program, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

§ 56.23003 Requirements for written safety program.

(a) The operator shall develop and implement a written safety program that includes actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that can enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

(b) The responsible person shall evaluate and update the written safety program at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

(c) The operator shall solicit input from miners and their representatives in developing and updating the written safety program.

§ 56.23004 Record and inspection.

(a) The operator shall make the written safety program available for inspection by authorized representatives of the Secretary and provide a copy upon request.

(b) The operator shall make the written safety program available for inspection by miners and their representatives and, at no cost, provide a copy upon request.

PART 57–SAFETY AND HEALTH STANDARDS-UNDERGROUND METAL AND NONMETAL MINES

3. The authority citation for part 57 continues to read as follows:

Authority: 30 U.S.C. 811.

4. Add subpart U to part 57 to read as follows:

Subpart U–Safety Program for Surface Mobile Equipment

Sec.

§ 57.23000 Purpose and scope.

This subpart requires operators to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to surface mobile equipment at surface areas of underground metal and nonmetal mines. The purpose of this safety program is to promote and support a positive safety culture and improve miners' safety at the mine.

§ 57.23001 Definitions.

The following definitions apply in this subpart—

Responsible person means a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment.

Surface mobile equipment means wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved, and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface areas of underground metal and nonmetal mines.

§ 57.23002 Written safety program.

(a) Each operator shall develop and implement a written safety program for surface mobile equipment that contains the elements in this subpart, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

(b) Each operator shall designate at least one responsible person to evaluate and update the written safety program, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

§ 57.23003 Requirements for written safety program.

(a) The operator shall develop and implement a written safety program that includes actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that can enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

(b) The responsible person shall evaluate and update the written safety program at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

(c) The operator shall solicit input from miners and their representatives in developing and updating the written safety program.

§ 57.23004 Record and inspection.

(a) The operator shall make the written safety program available for inspection by authorized representatives of the Secretary and provide a copy upon request.

(b) The operator shall make the written safety program available for inspection by miners and their representatives and, at no cost, provide a copy upon request.

SUBCHAPTER O-COAL MINE SAFETY AND HEALTH

PART 77–MANDATORY SAFETY STANDARDS, SURFACE COAL MINES AND SURFACE WORK AREAS OF UNDERGROUND COAL MINES

5. The authority citation for part 77 continues to read as follows:

Authority: 30 U.S.C. 811.

6. Add subpart V to part 77 to read as follows:

Subpart V–Safety Program for Surface Mobile Equipment

Sec.

§ 77.2100 Purpose and scope.

This subpart requires operators to develop, implement, and update a written safety program for surface mobile equipment to reduce the number and rates of accidents, injuries, and fatalities. This subpart applies to surface mobile equipment at surface coal mines and surface

work areas of underground coal mines. The purpose of this safety program is to promote and support a positive safety culture and improve miners' safety at the mine.

§ 77.2101 Definitions.

The following definitions apply in this subpart—

Responsible person means a person with authority and responsibility to evaluate and update a written safety program for surface mobile equipment.

Surface mobile equipment means wheeled, skid-mounted, track-mounted, or rail-mounted equipment capable of moving or being moved, and any powered equipment that transports people, equipment, or materials, excluding belt conveyors, at surface coal mines and surface work areas of underground coal mines.

§ 77.2102 Written safety program.

(a) Each operator shall develop and implement a written safety program for surface mobile equipment that contains the elements in this subpart, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

(b) Each operator shall designate at least one responsible person to evaluate and update the written safety program, no later than [INSERT DATE 210 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

§ 77.2103 Requirements for written safety program.

(a) The operator shall develop and implement a written safety program that includes actions the operator will take to:

(1) Identify and analyze hazards and reduce the resulting risks related to the movement and the operation of surface mobile equipment;

(2) Develop and maintain procedures and schedules for routine maintenance and non-routine repairs for surface mobile equipment;

(3) Identify currently available and newly emerging feasible technologies that can enhance safety at the mine and evaluate whether to adopt them; and

(4) Train miners and other persons at the mine necessary to perform work to identify and address or avoid hazards related to surface mobile equipment.

(b) The responsible person shall evaluate and update the written safety program at least annually, or as mining conditions or practices change that may adversely affect the health and safety of miners or other persons, as accidents or injuries occur, or as surface mobile equipment changes or modifications are made.

(c) The operator shall solicit input from miners and their representatives in developing and updating the written safety program.

§ 77.2104 Record and inspection.

(a) The operator shall make the written safety program available for inspection by authorized representatives of the Secretary and provide a copy upon request.

(b) The operator shall make the written safety program available for inspection by miners and their representatives and, at no cost, provide a copy upon request.

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