North Carolina Department of Labor
Division of Occupational Safety and Health

Raleigh, NC

Chapter 7 CFR Revision 128J
Subchapter 7F

Field Information System

Personal Protective Equipment in Construction
29 CFR Part 1926

Final rule

A. **Discussion**.

OSHA is finalizing revisions to its personal protective equipment (PPE) standard for construction, at 29 CFR 1926.95(c), to explicitly state that PPE must fit properly. This revision will align the language in the PPE standard for construction with the corresponding language in OSHA's PPE standards for general industry and shipyards and affirm OSHA's interpretation of its PPE standard for construction as requiring properly fitting PPE. Properly fitting PPE is a critical element of an effective occupational safety and health program. PPE must fit properly to provide appropriate protection to employees from workplace hazards. Improperly fitting PPE may fail to provide any protection to an employee, reduce the effectiveness of protection, present additional hazards, or discourage employees from using such equipment in the workplace.

B. **Action**.

The N.C. Commissioner of Labor adopted this final rule with an effective date of October 1, 2025. Refer to the 12/12/24 *Federal Register* (Vol. 89, No. 239) for the details related to these requirements.

Scott Mabry
Director

9-29-2025
Date of Signature

NC Effective Date: October 1, 2025
NCAC Number: 13 NCAC 07F .0201

insurer must permit OWCP or its duly authorized representative to make such an inspection or examination as OWCP may require. In lieu of this requirement OWCP may in its discretion accept an adequate report of a certified public accountant.

(c) Failure to submit or make available any report or information requested by OWCP from an authorized self-insurer pursuant to this section may, in appropriate circumstances, result in a revocation of the authorization to self-insure.

§ 726.113 Disclosure of confidential information.

Any financial information or records, or other information relating to the business of an authorized self-insurer or applicant for the authorization of self-insurance obtained by OWCP is exempt from public disclosure to the extent provided in 5 U.S.C. 552(b) and the applicable regulations of the Department of Labor in 29 CFR part 70.

§ 726.114 Authorization and reauthorization timeframes.

(a) No initial or renewed authorization to self-insure may be granted for a period in excess of 12 months unless OWCP determines that extenuating circumstances exist to allow an extension.

(b) If an applicant is seeking to renew its authority to self-insure, the applicant must file its application no later than 90 days before its existing authorization period ends.

(c) Each operator authorized to self-insure under this part must apply for reauthorization for any period during which it engages in the operation of a coal mine and for additional periods after it ceases operating a coal mine. Upon application by the operator, accompanied by proof that the security it has posted is sufficient to secure all benefits potentially payable to miners formerly employed by the operator, OWCP will issue a certification that the operator is exempt from the coal mine operator insurance requirements of this part based on its prior operation of a coal mine. The civil money penalty provisions of subpart D of this part will be applicable to any operator that fails to apply for reauthorization in accordance with the provisions of this section.

§ 726.115 Revocation of authorization to self-insure.

OWCP may suspend or revoke the authorization of any self-insurer for good cause, including but not limited to:

(a) Failure by a self-insurer to comply with any provision or requirement of law or of the regulations in this part, or with any lawful order or request made by OWCP;

(b) The failure or insolvency of the surety on its indemnity bond, if such bond is used as security, or any other financial institution holding any form of security provided by an operator; or

(c) Impairment of financial responsibility of such self-insurer.

§ 726.116 Appeal process.

(a) *How to appeal.* Any applicant that wishes to appeal DCMWC's determination on an application must submit a written appeal to the Director of OWCP in the form and manner prescribed by OWCP within 30 days of DCMWC issuing such determination. This deadline may not be extended.

(b) *What to submit.* Within 30 days after filing a written appeal, the applicant must submit any briefing on which it intends to rely, including any arguments that DCMWC's initial determination was erroneous. The applicant is not entitled to submit any further evidence at this time; all evidence must be submitted to DCMWC with the initial application. OWCP may, at its discretion, extend this deadline at the applicant's request for up to 30 days upon a showing of good cause. No more than two extensions will be granted.

(c) *Conferences.* (1) The applicant may request an informal conference to present its position. Such request must be made in writing when the applicant submits briefing in support of its appeal.

(2) If the applicant requests a conference, the Director of OWCP will hold one with the applicant's representatives and the Department's Office of the Solicitor.

(3) If the applicant does not request a conference, OWCP may either decide the appeal on the record or, at its discretion, schedule a conference on its own initiative.

(4) The conference will be limited to the issues identified in the applicant's written materials.

(d) *OWCP's review.* OWCP will review the previous determination and issue a final agency decision.

(1) The Director of OWCP will review the initial decision, evidence of record, and arguments submitted on appeal. The applicant may not submit new evidence to the Director of OWCP.

(2) The Director of OWCP will have 60 days from receipt of the appeal to take up the appeal and issue a final agency decision.

(3) If the Director of OWCP issues a final agency decision denying self-insurance, any existing self-insurance authorization of the applicant will end. The applicant will have 30 days from the issuance of the final agency decision to obtain and submit proof of commercial insurance or begin facing civil penalties for failure to secure benefits.

Signed at Washington, DC, this 3rd day of December 2024.

Christopher J. Godfrey,

Director, Office of Workers' Compensation Programs.

[FR Doc. 2024–28848 Filed 12–11–24; 8:45 am]

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DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1926

[Docket No. OSHA–2019–0003]

RIN 1218–AD25

Personal Protective Equipment in Construction

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Final rule.

SUMMARY: OSHA is finalizing a revision to its personal protective equipment standard for construction to explicitly require that the equipment must fit properly.

DATES: This final rule is effective January 13, 2025.

ADDRESSES: *Docket:* To read or download comments or other information in the docket, go to *https://www.regulations.gov.* All comments and submissions are listed in the *https://www.regulations.gov* index; however, some information (*e.g.,* copyrighted material) is not publicly available to read or download through that website. All comments and submissions, including copyrighted material, are available for inspection through the OSHA Docket Office. Contact the OSHA Docket Office at (202) 693–2500 (TDY number 877–889–5627) for assistance in locating docket submissions.

FOR FURTHER INFORMATION CONTACT: *Press inquiries:* Frank Meilinger, Director, OSHA Office of Communications, telephone: (202) 693–1999; email: *meilinger.francis2@dol.gov.*

General and technical inquiries: Vernon Preston, OSHA Directorate of Construction, telephone: (202) 693–2020; email: *preston.vernon@dol.gov.*

Copies of this **Federal Register** *notice and news releases:* Electronic copies of these documents are available at OSHA's web page at *https://www.osha.gov.*

SUPPLEMENTARY INFORMATION:

Citation Method

In the docket for the personal protective equipment in construction rulemaking, found at *https://www.regulations.gov,* every submission was assigned a document identification (ID) number that consists of the docket number (OSHA–2019–0003) followed by an additional four-digit number (*e.g.,* OSHA–2019–0003–0002). In this final rule, citations to items in the docket are referenced by the last four digits of the Document ID Number. For example, Document ID number OSHA–2019–0003–0002 would be referenced as ''Document ID 0002.'' In a citation that contains two or more documents, the citations are separated by commas. In cases where a commenter submitted multiple documents, the attachment number is included after the Document ID. OSHA may also cite items that appear in another docket. When that is the case, OSHA includes the full document ID number for the corresponding docket (*e.g.,* OSHA–2010–0034–4247).

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I. Executive Summary

OSHA is finalizing revisions to its personal protective equipment (PPE) standard for construction, at 29 CFR 1926.95(c), to explicitly state that PPE must fit properly. This revision will align the language in the PPE standard for construction with the corresponding language in OSHA's PPE standards for general industry and shipyards and affirm OSHA's interpretation of its PPE standard for construction as requiring properly fitting PPE. Properly fitting PPE is a critical element of an effective occupational safety and health program. PPE must fit properly to provide appropriate protection to employees from workplace hazards. Improperly fitting PPE may fail to provide any protection to an employee, reduce the effectiveness of protection, present additional hazards, or discourage employees from using such equipment in the workplace.

The Final Economic Analysis for this rulemaking demonstrates that this rule is economically feasible and will not have a significant economic impact on a substantial number of small entities.

II. Background

A. OSHA's PPE Requirements

Section 6(b)(7) of the OSH Act, 29 U.S.C. 655(b)(7), authorizes OSHA to include requirements for protective equipment within its safety and health standards. Employees wear PPE to minimize exposure to hazards that can cause severe injuries and illnesses in the workplace. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other hazards. PPE includes many different types of protective equipment, such as hard hats, gloves, goggles, safety shoes, safety glasses, welding helmets and goggles, hearing protection devices, respirators, coveralls, vests, harnesses, and full body suits.

OSHA has specific standards that address PPE in general industry, shipyard employment, marine terminals, longshoring, and construction. These standards require employers to provide PPE when it is necessary to protect employees from job-related injuries, illnesses, and fatalities. With few exceptions, OSHA requires employers to pay for PPE when it is used to comply with an OSHA standard. In addition, the PPE standards for general industry (29 CFR 1910.132(d)(1)(iii)) and shipyard employment (29 CFR 1915.152(b)(3)) include a specific requirement that employers select PPE that properly fits each affected employee.

OSHA's standard at 29 CFR 1926.95 sets out the requirements for PPE in construction. Section 1926.95(a) requires that all types of PPE must be provided, used, and maintained in a sanitary and reliable condition whenever the PPE is necessary due to workplace hazards. Section 1926.95(b) further requires that, even when employees provide their own PPE, the employer must assure its adequacy, including proper maintenance, and sanitation. Section 1926.95(c) provides that all PPE must be of safe design and construction for the work to be performed. Unlike the general industry and shipyards PPE standards, the current PPE construction standard at § 1926.95 does not include an explicit requirement that PPE properly fit each affected employee.

PPE must fit properly to provide adequate protection to employees. If PPE does not fit properly, it can make the difference between an employee being safely protected, having inadequate protection, or being dangerously exposed. In some cases, ill-fitting PPE may not protect an employee at all, and in other cases it may present additional hazards to that employee and to employees who work around them. For example, sleeves of protective clothing that are too long or gloves that do not fit properly may make it difficult to use tools or operate equipment, putting the wearer and other workers at risk of exposure to hazards, or may get caught in machinery, resulting in injuries to the wearer such as fractures or amputations. The legs of protective garments that are too long could cause tripping hazards for the worker with the improperly fitting PPE and could also impact others working near that worker. Protective clothing that is too small may increase a worker's exposure to hazards by, for example, providing insufficient coverage from dangerous machinery or hazardous substances. The issue of improperly fitting PPE is particularly important for smaller construction workers, including some women, who may not be able to use currently existing standard-size PPE. Fit problems can also affect larger workers, and standard-size PPE does not always accommodate varying body shapes.

B. Rulemaking History

The Advisory Committee on Construction Safety and Health (ACCSH) is a continuing advisory body established by statute (40 U.S.C. 3701 *et seq.*) that provides advice and assistance to the OSHA Assistant Secretary on construction standards and policy matters related to construction. The issue of proper PPE fit in construction was discussed at the ACCSH meeting held on July 28, 2011. At that meeting, the committee unanimously passed a

motion recommending that OSHA use the Standards Improvement Project-Phase IV (SIP–IV) rulemaking ''to update the Construction PPE Standards to mirror the General Industry PPE requirements, specifically that PPE fit the employee who will use it . . . .'' (Document ID 0002).[1] On December 16, 2011, ACCSH unanimously passed another motion recommending that OSHA consider using the SIP–IV rulemaking to revise the construction standards to include the requirement that PPE properly fit construction workers (Document ID 0003).[2]

On December 6, 2013, OSHA issued a SIP–IV Request for Information (RFI) asking the public ''to identify provisions in OSHA standards that are confusing or outdated, or that duplicate, or are inconsistent with, the provisions of other standards, either OSHA standards or the standards of other agencies'' (Document ID 0004). In response, several commenters, including the AFL–CIO and the International Safety Equipment Association (ISEA), recommended that OSHA use the SIP–IV rulemaking to revise its construction PPE standard to ensure that PPE properly fits all construction employees (Document ID 0005, 0006).

Based on stakeholder suggestions, on October 4, 2016, OSHA published the SIP–IV Notice of Proposed Rulemaking (NPRM) in the **Federal Register** (Document ID 0007). Among other things, OSHA proposed revising 29 CFR 1926.95(c) to include an explicit requirement that PPE must properly fit each affected employee. In the preamble to the SIP–IV NPRM, OSHA stated that the proposed revision would ''clarify the construction PPE requirements on this point and make them consistent with general industry PPE requirements'' (Document ID 0007). Additionally, OSHA stated that clarifying the requirement would ''help ensure employers provide employees with properly fitting PPE, thereby adequately protecting employees exposed to hazards requiring PPE'' (Document ID 0007).

OSHA received several comments specifically addressing the proposed revision to § 1926.95(c) in the SIP–IV NPRM. Some commenters fully supported the proposed revision while a coalition of construction industry stakeholders opposed it. OSHA discusses the specific comments received during the SIP–IV rulemaking in the next section of this preamble.

Based on the comments received and the rulemaking record, on May 13, 2019, OSHA published the SIP–IV final rule in the **Federal Register** (Document ID 0008). The final rule did not include the proposed revision to the construction standard at § 1926.95(c). Instead, OSHA determined that such a revision to the construction PPE standard should occur in a separate rulemaking outside the SIP process. In the preamble to the final rule, OSHA explained that proposing to revise the PPE requirements separately from the SIP–IV rulemaking ''would provide the public with broader notice of the proposal, encourage robust commentary, and better inform OSHA's approach to employer obligations and worker safety in relation to PPE used in construction'' (Document ID 0008).

On July 17, 2019, OSHA presented a draft proposed rule to ACCSH for its recommendation, as required by 29 CFR 1912.3(a). The committee asked OSHA to review enforcement statistics on PPE fit and consider including guidelines for what constitutes ''proper fit'' (Document ID 0009). One member of ACCSH expressed concern that OSHA would require employers to present a ''fit verification'' to an OSHA compliance officer during a workplace inspection. OSHA responded that the proposed rule would not change how employers assessed the PPE needs of their workers. OSHA also explained that the proposed revision had been included in the SIP–IV rulemaking in an effort to make the construction standard consistent with the general industry and shipyards PPE standards. In addition, while some ACCSH members did not believe there would be a cost associated with the proposed rule, one member asked OSHA to consider cost closely given the transient nature of the construction industry. After the period for comments and questions ended, ACCSH unanimously passed a motion recommending that OSHA move forward with the proposed rule.

C. Comments Received During the SIP–IV Rulemaking

OSHA received four comments on the proposed revision of § 1926.95(c) in response to the SIP–IV NPRM. The Laborers' Health & Safety Fund of North America (LHSFNA) and North America's Building Trades Unions (NABTU) both supported the proposed revision to clarify that PPE must properly fit each affected employee (Document ID 0016, 0017, Attachment 1). Both commenters also stated that improperly fitting PPE can limit or negate the ability of the PPE to protect employees. According to NABTU, ''[t]his is particularly important for women in the construction industry, who often have difficulty obtaining properly fitting PPE'' (Document ID 0017, Attachment 1). LHSFNA commented that the fit problem can also affect men, including with respect to harness sizes for men who are over certain weight limits (Document ID 0016). NABTU stated that the proposed revision not only would make the construction standard consistent with the general industry standard but also was supported by worker organizations, safety associations, and ACCSH (Document ID 0017, Attachment 1).

OSHA also received a comment in support of the proposed revision from Emmanuel Omeike (Document ID 0018), a safety professional, which included two studies addressing PPE and women in construction (Document ID 0018, Attachments 3, 4). The comment noted several examples of employees who were wearing PPE but nonetheless sustained injuries due to improper fit (Document ID 0018). Mr. Omeike stated that employees are more likely to remove improperly fitting PPE, thus negating whatever protection the PPE might otherwise provide (Document ID 0018). Lastly, the commenter stated that prevention through design can eliminate many costs associated with PPE because PPE designed to be adjustable and customizable can prevent employee exposure to hazards created by improperly fitting PPE.

Additionally, OSHA received comments from the Construction Industry Safety Coalition (CISC) (Document ID 0019) opposing the proposed revision to § 1926.95(c). This commenter raised concerns about the possible impact the proposed revision would have on the construction industry, the definition of ''properly fits,'' employer confusion regarding compliance, and whether the SIP–IV rulemaking was the appropriate means to revise the standard. CISC stated they ''[did] not believe that OSHA seriously considered the full impact this revision will have on employers and the construction industry in general.'' They argued that the proposed revision's ''broad scope covers a wide variety of PPE and situations that are not fully

[1] OSHA's Standards Improvement Project (SIP) is a series of regulatory reviews and rulemakings intended ''to improve and streamline OSHA standards by removing or revising requirements that are confusing or outdated, or that duplicate, or are inconsistent with, other standards'' (Document ID 0007).

[2] ACCSH had previously, in 1999, issued a report titled Women in the Construction Workplace: Providing Equitable Safety and Health Protection (Document ID 0020) in which the committee identified ill-fitting PPE as a pressing issue for women in construction and recommended that OSHA revise the construction PPE standards in 29 CFR part 1926 ''to conform with the General Industry Standard for PPE (29 CFR 1910.132) which specifies that the employer select PPE that properly fits each affected employee.''

appreciated in the SIP–IV'' and that ''[p]lacing an explicit requirement that employers must ensure that all types of construction PPE 'properly fits' all different sized employees in all different situations would be a monumental task which in many cases is not necessary and will not improve safety.'' They further argued that the proposed revision ''fails to provide adequate notice to employers as to what 'properly fit' would mean'' and questioned whether the standard would be violated if an employee complained that a hard hat is uncomfortable or if arc-flash clothing was ''too long in the legs for one employee'' (Document ID 0019).

CISC also commented that revising § 1926.95(c) to include an explicit requirement that all PPE fit properly ''greatly changes the dynamic of th[e] standard and places enormous new responsibilities on construction employers.'' According to CISC, the proposed revision does not simply clarify the standard, but ''opens up construction employers to subjective standards of whether particular PPE fits properly and what steps employers must take to ensure that such PPE fits properly, particularly when most PPE does not come in exact sizing for employees'' (Document ID 0019). They added that, in many cases, whether PPE properly fits is subjective, and it would be difficult for employers in construction to assess PPE for many employees of varying sizes in every situation. ''[T]he subjective nature of this standard would greatly increase the potential for enforcement actions without giving employers fair notice of what is required'' (Document ID 0019).

CISC also stated that it disagreed with OSHA's statement in the preamble to the SIP–IV proposed rule that applying the same standard to construction employers will have the same effect or benefit as in general industry. The comment emphasized that the types of and need for PPE vary greatly in construction, therefore adding a new fit requirement would create more of a burden for construction employers (Document ID 0019). CISC also argued that SIP–IV was not the appropriate avenue for making the proposed change and urged OSHA to embark on ''a more thorough and complete rulemaking process which gives fair notice to the regulated community and will allow the agency to receive comments from the regulated community as to the impact and implications that this change would have on employers'' (Document ID 0019).

In response to CISC's comment on the SIP–IV proposal, OSHA acknowledged in the NPRM for this rule that there is a wide variety of PPE and hazards in the construction industry and stated that to protect workers from these varied hazards in the construction industry, it is critical that workers' PPE fit them properly. OSHA explained that it used the phrase ''proper fit'' in the SIP–IV rulemaking because that is the phrase used in OSHA's general industry and shipyards PPE standards. The agency's intention throughout the SIP–IV rulemaking was to apply the proposed ''properly fits'' provision in the same manner as in general industry and shipyards. OSHA further noted that the addition of the ''properly fits'' provision to the general industry standard was made for the same reason that it was proposed during the SIP–IV rulemaking—that standard-sized PPE does not fit all employees, particularly women (see 59 FR 16334 (April 6, 1994)). OSHA's experience is that employers in general industry have had no issue understanding the phrase ''properly fits'' with regard to PPE.

Given the limited purposes of SIP–IV (*i.e.* ''to remove or revise outdated, duplicative, unnecessary, and inconsistent requirements in OSHA's safety and health standards'' (Document ID 0008)) and the comments on the PPE revision described above, OSHA determined not to finalize the revision to § 1926.95(c) in the SIP–IV rulemaking. Instead, OSHA concluded that such a change to the PPE construction standard should take place outside the SIP process, in order to encourage robust public comment and acquire relevant information from stakeholders.

On July 20, 2023, OSHA published the Personal Protective Equipment in Construction Notice of Proposed Rulemaking (NPRM) (Document ID 0001), proposing to revise 29 CFR 1926.95(c) to clarify that personal protective equipment used in the construction industry must properly fit workers to protect them from hazards they may encounter in the workplace. OSHA has considered the issues raised by commenters during the SIP–IV rulemaking along with the comments received on the NPRM and addresses them below in Section III, Summary and Explanation.

III. Summary and Explanation

This final rule amends 29 CFR 1926.95, Criteria for personal protective equipment, to make explicit the existing requirement that employers in the construction industry must ensure PPE worn by employees properly fits. Specifically, OSHA is revising § 1926.95(c) to state that employers must ensure all personal protective equipment: (1) is of safe design and construction for the work to be performed; and (2) is selected to ensure that it properly fits each affected employee.[3] After reviewing the comments received, OSHA is finalizing the provision as proposed because the agency has determined the proposed language appropriately clarifies employers' obligations under the standard. OSHA has also determined that additional clarifying language is not necessary for the reasons discussed in section III.C. below.

As OSHA explained in the NPRM, the agency has historically interpreted § 1926.95 as requiring that PPE properly fit each employee, has published guidance to that effect, and has issued citations to employers in the construction industry who failed to provide properly fitting PPE (88 FR 46710–46712). As such, the revision in this final rule does not represent a substantive change to the standard. Rather, the goal of the revision is to clarify employers' existing obligations while aligning the language in the construction PPE standard with similar requirements for properly fitting PPE in OSHA's general industry (29 CFR 1910.132(d)(1)(iii)) and shipyards (29 CFR 1915.152(b)(3)) standards.

In response to the proposed rule, OSHA received 85 public comments. The vast majority of commenters supported the change. These commenters generally agreed that the change would provide greater clarity about employers' responsibility to make sure employees wear properly fitting PPE and would improve the workplace safety and health of construction workers. Some commenters raised concerns about the revisions, stating, for example, that the specifics of the requirement were unclear or that the change would result in prohibitive costs for employers. The issues raised by these comments and others are discussed in more detail below.

A. Impact of Improperly Fitting PPE and the Need for an Explicit Requirement

In the NPRM, OSHA discussed the importance of properly fitting PPE in the construction industry, explaining that improperly fitting PPE may not protect workers from hazards and could create additional hazards (81 FR 46710–46711). The agency noted several studies and reports that identified instances of improperly fitting PPE either failing to protect workers from the hazard for which the PPE was intended

[3] Existing 1926.95(c) states only that all personal protective equipment shall be of safe design and construction for the work to be performed.

(*e.g.,* loose-fitting goggles exposing an employee's eyes to flying debris) or introducing additional hazards (*e.g.,* loose-fitting gloves becoming caught in machinery). In addition, OSHA identified evidence that employees are more likely to remove or not use ill-fitting PPE.

In response to the NPRM, many commenters agreed with OSHA that improperly fitting PPE poses a hazard to workers in the construction industry (see, *e.g.,* Document ID 0040, 0052, 0057, 0073, 0076, 0079–0081, 0115). For example, the American Industrial Hygiene Association (AIHA) commented that ''[a]ny worker's safety and health can be adversely impacted by PPE that does not fit properly,'' adding that workers who are smaller and larger than average size are most likely to be impacted by improperly fitting PPE (Document ID 0058). NABTU similarly stated that ''[p]roperly fitting PPE is essential in the construction industry because poorly fitting PPE does not provide the wearer with adequate protection'' (Document ID 0108). The National Institute for Occupational Safety and Health (NIOSH) identified several studies demonstrating that poorly fitting PPE can inadequately protect workers and can create additional hazards (Document ID 0073).

Numerous commenters shared their personal experiences with the lack of properly fitting PPE. For example, one commenter (Document ID 0061) was the first woman hired on a jobsite and resorted to buying her own extra small and small gloves because her employer refused to provide her with anything other than gloves that were too large. After running out of gloves that properly fit her, she was forced to wear the improperly fitting larger gloves. While working on an air conditioning unit, the improperly fitting gloves became caught in a pulley, resulting in a wrist sprain, torn ligaments, fractured fingers, and nerve damage. If this commenter had been provided properly fitting PPE, these injuries might have been avoided. Another commenter, who stated that OSHA's proposal ''would directly improve my safety on the job,'' shared that, as a woman who has been provided improperly fitting PPE, she has suffered ''multiple injuries and near misses'' because properly sized PPE often is not available (Document ID 0065). Another commenter explained how they have had to purchase their own gloves because they have been told it's impossible to find gloves small enough to fit them (Document ID 0056). For fear of losing her job or not being paid, a commenter who has worked 18 years as a laborer described using tape and raingear to protect herself while working in water because the only waders provided by the employer were too large and presented a drowning risk (Document ID 0080).

Many commenters raised concerns about being provided various items of improperly fitting PPE, with fall protection harnesses frequently cited as an item that often does not fit properly (Document ID 0031, 0035–0037, 0039, 0044, 0048, 0053, 0056, 0063, 0064, 0066, 0068, 0073, 0075–0077, 0080, 0081, 0084, 0087, 0090, 0093, 0098, 0108, 0112, 0113). Although harnesses come in various sizes and can be adjusted to some extent, many commenters describe receiving harnesses that were too large. There were commenters who mentioned receiving extra large harnesses that did not fit them appropriately because they were too long (Document ID 0076, 0081). When given larger harnesses, one commenter stated that the employer tells them to ''shrink it down to make it fit'' (Document ID 0068). A woman new to the construction industry commented that she has been dealing with ill-fitting PPE such as harnesses that are too loose on her and become a ''safety HAZARD and a hinderance'' (Document 0035). Several commenters noted that harnesses and other PPE designated as ''unisex'' are not truly appropriate for women (Document ID 0036, 0037, 0041, 0063, 0108).

Some commenters noted that the lack of properly fitting PPE can lead to a less inclusive workplace. According to Chicago Women in Trades and Allied Organizations (CWIT), ''As a result, women struggle to secure consistent employment and find work on safe and respectful jobsites. In this sense, the disproportionate challenges tradeswomen face around accessing properly fitted PPE is a consequence of the way women are seen and valued in the construction industry'' (Document ID 0098). Flatiron Construction added that the proposed rule is not only essential for preventing injuries in the workplace, but ''having proper fitting PPE is also crucial to promoting a sense of belonging within the industry'' and helping the construction industry attract and retain workers (Document ID 0106). Another commenter also argued that clarifying OSHA's PPE requirement could lead to greater recruitment and retention of workers, specifically women (Document ID 0047). The International Painters and Allied Trades and the Signatory Wall and Ceiling Contractors Alliance (Painters et al.) added that ''[i]f we are going to bring more women into the trades both the industry and the regulatory structure that surrounds it must evolve to ensure the safety of women on the job. Establishing that an employer's obligation to provide PPE in construction extends to providing properly fitting PPE is a critical part of this'' (Document ID 0078). One commenter simply stated that putting workers at risk because they do not fit standard-size PPE is ''inequitable and immoral'' (Document ID 0059).

A few commenters mentioned efforts to address improperly fitting harnesses. NIOSH commented that they have conducted studies on fall protection harnesses that have resulted in ''guidelines to develop improved sizing systems and strap lengths for whole body fall arrest harnesses'' and ''improved harness configuration to fit construction workers'' (Document ID 0073). The ISEA notes that modern fall arrest harnesses, especially those with adjustable hip belts, are ergonomically designed to fit women, and some harnesses that are designed for women will also fit men. They recommended that ''employers and their distributors should work with employees to identify a harness that fits properly and is designed to protect against the hazards at hand'' (Document ID 0112). NABTU cited examples of harnesses that are designed to fit women, explaining that ''harnesses designed to fit women aim to provide improved protection against fall hazards and increased comfort. They offer a range of features tailored for varied anthropometry, including hip and chest adjustability, increased hip and back support, vertical shoulder straps, comfort padding and more'' (Document ID 0108).

In the NPRM, OSHA preliminarily determined that revising § 1926.95 to include clear and explicit language that PPE must fit properly would help ensure workers in the construction industry are protected from workplace hazards (81 FR 46711). OSHA requested comment on whether the inclusion of an explicit requirement in § 1926.95(c) would help clarify construction employers' obligations to provide properly fitting PPE to their employees. Numerous commenters were supportive of OSHA's clarifying language (Document ID 0024, 0028, 0029, 0031, 0034–0048, 0050–0068, 0071–0081, 0083–0088, 0091–0098, 0106–0108, 0110, 0112, 0113, 0115, 0116). Of these comments, many expressed the need for an explicit requirement in the standard to ensure that workers receive properly fitting PPE. Kentucky's Department of Workplace Standards commended OSHA for proposing explicit language on properly fitting PPE, agreeing with OSHA that ''providing clear and explicit

language in the construction PPE standard clarifies employers' responsibility to provide employees with properly fitting PPE, thereby ensuring employee protection'' (Document ID 0095). CWIT commented that ''[t]he rule clarification aids in reaffirming OSHA's existing interpretation of its current construction standard and clearly communicates to employers their obligations to provide properly fitting PPE'' (Document ID 0098). California's Occupational Safety and Health Standards Board (Cal/OSHSB) responded that clarification of the PPE requirements is necessary and supported OSHA's proposed revision (Document ID 0107). The National Safety Council (NSC) commented that the clarifying language ''will save lives and prevent injuries'' (Document ID 0096). The American Society of Safety Professionals (ASSP) Chesapeake Chapter also supported the proposed revision (Document ID 0083).

Some commenters who support the proposed changes believe including explicit language that PPE must properly fit construction workers could spur the manufacture, distribution, and availability of PPE in more wide-ranging sizes and fits. A commenter who has ''been too often confronted with the challenge of finding PPE scaled to fit smaller and female workers'' supports the clarification and hopes it will create more of a market for PPE that fits smaller workers and women (Document ID 0031). One commenter likewise expressed hope that this clarification would ''create the market demand for smaller PPE that merchants currently refuse to see'' (Document ID 0046). Another commenter said it was imperative for women to get safety equipment that fits them correctly (Document ID 0113). After mentioning how it is difficult to find options of smaller sizes for various PPE, a commenter said that the proposal would ''lead to more demand . . . and encourage manufacturers to make these products'' (Document ID 0039).

To this point, OSHA mentioned in its proposed rule that The Center for Construction Research and Training (CPWR) and ISEA have a list of manufacturers of PPE specifically for women (81 FR 46711). In their comment to the proposed rule, ISEA also noted that ''PPE manufacturers provide safety equipment in size ranges and adjustability to fit a vast majority of the construction workforce. ISEA members are willing to work with occupational safety stakeholders to make sure all workers have PPE that is required. . . .'' (Document ID 0112).

A number of commenters stated that an explicit requirement for properly fitting PPE will not only ensure they have PPE to protect them from hazards but would increase their productivity. CWIT highlighted in their comment that ''[w]hen PPE fits incorrectly, it can cause a disruption to a worker's . . . capacity to complete projects'' (Document ID 0098). A commenter expressed how being asked to ''make due [sic]'' with improperly fitting PPE put them at risk of going home without pay or losing their job because they couldn't complete the assigned tasks. Properly fitting PPE would not just protect them but allow them to do complete tasks that would benefit their employer (Document ID 0045). Another commenter stated how the proposal would drastically change their productivity at work (Document ID 0048) while another explained how it is difficult to do their job when safety equipment does not fit correctly (Document ID 0054). These comments demonstrate how improperly fitting PPE not only affords the wearer inadequate protection from hazards but also hurts employers' productivity and makes it difficult for workers who need non-standard sizes of PPE[4] to remain employed in the construction industry.

OSHA received two comments that questioned the necessity of the proposed revision and suggested that existing standards are sufficient. One commenter stated that OSHA could cite 29 CFR 1926.28(a), the general requirement that PPE be worn in hazardous conditions on construction worksites (Document ID 0026); another appeared to say that 29 CFR 1910.132(d), the general industry standard on which OSHA is modeling this revision to the construction standard, renders this revision unnecessary. That standard, however, applies only to general industry work, not construction work. And the general requirement for PPE in construction is inadequate because, as explained above, it is clear from the record that workers in the construction industry have either struggled to obtain properly fitting PPE or are still being provided PPE that does not fit. This often leaves these employees exposed to the hazards the PPE is meant to protect against and may be creating additional hazards. This is especially true for workers of larger and smaller stature, women in particular.

Based on the comments received and the information in the record, OSHA reaffirms its finding that improperly fitting PPE is a hazard to workers in the construction industry and finds that an explicit requirement in § 1925.95 is appropriate to clarify employers' existing obligation to ensure PPE properly fits each employee.

B. Whether the Rule Would Effectuate the Purpose of the OSH Act Better Than Consensus Standards

Section 6(b)(8) of the OSH Act (29 U.S.C. 655(b)(8)) requires OSHA, in adopting a standard, to consider national consensus standards; where the agency decides to depart from the requirements of a national consensus standard, it must explain why the OSHA standard better effectuates the purposes of the OSH Act. OSHA has reviewed national consensus standards on PPE and determined that revising 29 CFR 1926.95 as proposed will better effectuate the purposes of the OSH Act than relying on the language of existing national consensus standards.

While there are many consensus standards that address PPE, there is no general consensus standard on PPE that incorporates a fit requirement. Instead, each standard focuses on a different type of equipment. For example, OSHA incorporates by reference American National Standards Institute (ANSI) Z87.1, Occupational and Educational Personal Eye and Face Protection Devices, and ANSI Z89.1, Head Protection, into its construction standards. However, there are several other PPE consensus standards that address not only different types of PPE, but also different uses for that PPE, such as NFPA 2113, Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire. Rather than adopting each PPE consensus standard and whatever language it may include on proper fit, OSHA is revising its existing construction standard to make it clear that all types of PPE used in the workplace must fit properly. OSHA believes that centralizing the requirement in the OSHA construction standard will make employers more aware of their responsibility to ensure that PPE used to protect workers from hazards must fit properly. This revision also makes clear that all PPE must fit properly, regardless of whether there is an applicable consensus standard.

Additionally, many consensus standards do not include mandatory language. For example, both ANSI standards discussed above include specific language concerning properly fitting PPE. However, while ANSI Z87.1 discusses the importance of properly

[4] OSHA uses the term ''non-standard'' to refer to sizes of PPE that are available on the market but that some construction employers may not routinely order or keep in stock.

fitting eye and face protection, the standard does not include mandatory language regarding its use. Similarly, rather than including mandatory language, ANSI Z89.1 merely refers users of head protection equipment to the manufacturer for advice on proper fit. The revision to § 1926.95(c) in this final rule will clarify that properly fitting PPE is an enforceable requirement rather than the non-mandatory suggestions contained in those consensus standards. The agency believes that a clear and explicit requirement will help ensure that employers provide employees with properly fitting PPE.

OSHA requested comments on whether the proposed revision would effectuate the purpose of the OSH Act better than existing consensus standards. Several commenters agreed that it would (Document ID 0073, 0098, 0108, 0112). NABTU responded that the proposed revision would do so because ''[w]hile some national consensus standards address fit, there is no requirement that employers follow consensus standards'' (Document ID 0108). Similarly, CWIT stated that revisions to the OSHA standards would be better than ''adopting each consensus standard, with varying language around type, use, and fit'' and relying on ''a non-mandatory suggestion as described in certain consensus standards'' (Document ID 0098). NIOSH also supported revisions to the standard over reliance on consensus standards because ''[p]roviding all the information in one place will ensure all PPE fitting guidelines are readily accessible and consistent'' (Document ID 0073). AIHA also commented that this rule would effectuate the purpose of the OSH Act better than consensus standards because ''[r]egulatory language is helpful for employers to have a better understanding of what is required and thresholds for compliance'' (Document ID 0058). One commenter even identified an instance of a consensus standard obstructing their company's efforts to develop a Class 3 safety vest for women (Document ID 0106).

ISEA, an organization whose members design, test, manufacture, and supply PPE and which serves as secretariat for several consensus standards on PPE, supports the new regulatory language, noting that while consensus standards ANSI/ISEA Z87.1–2020, Current Safety Standards for Safety Glasses and Z89.1–2019, Industrial Head Protection, effectuate the purpose of the OSH Act, ''a requirement that PPE fit properly will help to make certain that workers get PPE that meets these standards and fits the wearer'' (Document ID 0112). Having evaluated the information relevant to this particular issue, OSHA concludes that revising the existing standard as proposed will better effectuate the purpose of the OSH Act than relying on the language of existing consensus standards.

C. The Appropriateness of the New Regulatory Text

OSHA requested comment on the wording of the agency's proposed addition to 29 CFR 1926.95, which, as explained above, is substantially similar to the language in OSHA's general industry and shipyards standards that require properly fitting PPE.

Some commenters suggested language for the regulatory text that would refer to manufacturers' instructions regarding fit. A representative from Cook's Excavating, LLC, commented that OSHA should adopt the language ''[a]ll personal protective equipment shall properly fit the affected employee in accordance with the manufacturer's recommendations'' (Document ID 0034). The World Floor Covering Association also recommended relying on ''manufacturer's recommendations or specifications to determine proper fit'' as well as suggesting that ''PPE that meets applicable national consensus standards should also be deemed to properly fit'' (Document ID 0114). Cal/OSHSB encouraged OSHA to adopt language similar to their standards, which provide that PPE be used according to the manufacturer's instructions (Document ID 0107). NIOSH also recommended a reference to manufacturers' recommendations for proper fit to provide additional guidance to stakeholders (Document ID 0073). One commenter, however, was skeptical of using manufacturers' recommendations because ''manufacturer's instructions may not provide clear or accurate guidance on how to measure or adjust fit, especially for women's sizes or models'' (Document ID 0091).

OSHA believes that the manufacturer's instructions and recommendations can be an important source of information concerning the proper fit of PPE. OSHA encourages employers to look to manufacturer's instructions and recommendations for guidance on how an item of PPE should properly fit the wearer. However, the agency is not including it as a requirement in its construction standard because doing so would limit employers' flexibility when finding and choosing PPE that meets the individual needs of their workers. In addition, the clarified requirement for employers to provide properly fitting PPE applies regardless of whether the manufacturer of the PPE provides instructions or recommendations on proper fit. Where the manufacturer's instructions or recommendations are silent on proper fit, the employer can often look to consensus standards for additional guidance on the appropriate fit of an item of PPE. Employers can also choose PPE products for which guidance on proper fit exists, either from the manufacturer or otherwise, over items where such information is lacking.

OSHA also requested comment on whether there was any confusion about what ''properly fits'' means for PPE used in the construction industry. In the NPRM, OSHA explained that ''properly fits'' means the PPE is the appropriate size to provide an employee with the necessary protection from hazards and does not create additional safety and health hazards arising from being either too small or too large. Most commenters expressed no confusion about what ''properly fits'' means, but some had additional suggestions for explaining the term. For example, the AIHA suggested an ''operational definition . . . so that employers know what is meant and for proper compliance documentation . . . . The standard should point employers to specific actions per PPE item that can be taken'' (Document ID 0058). NIOSH commented that they agree with OSHA's interpretation of ''properly fits'' but that based on responses to the SIP–IV rulemaking, it is clear it is not ''universally understood'' (Document ID 0073). They suggested that OSHA define the phrase. CWIT endorsed OSHA's interpretation of the term but noted that assessments of proper fit must take into account workers' body changes during pregnancy (Document ID 0098).

Some comments requested additions to the proposed regulatory text. The ASSP Chesapeake Chapter asked for clarification of employer and employee responsibilities to ''emphasize the gravity of the issue and encourage proactive measures in ensuring properly fitting PPE is available'' (Document ID 0083). One commenter asked OSHA to ''expound[ ] on 'proper fit' in the standard . . .'' (Document ID 0032), while another asked for ''clarifications, specifications, or resources for the employers who are responsible to provide the properly fitting PPE in question'' (Document ID 0033). The latter commenter also suggested that OSHA include a requirement for a qualified or competent person to determine the proper fit of PPE (Document ID 0033). The United Brotherhood of Carpenters & Joiners of America (UBCJA) suggested expanding

the regulatory text to add, ''To properly fit personal protective equipment must be comfortable to wear, not pose a danger and provide effective protection'' (Document ID 0074).

OSHA believes its explanation of ''properly fits'' provides employers with enough information that they can select PPE for their workers that will adequately protect them from the hazards of the worksite without creating additional hazards. Given the significant variety in types and models of PPE, the varied circumstances in which they are used, and the potential for new technology and new forms of PPE in the future, OSHA does not believe it is appropriate or necessary for the agency to prescribe specific fit criteria for all possible forms of PPE. Similarly, OSHA does not believe it is necessary for the agency to prescribe specific criteria for workers' changing bodies, as the requirement for properly fitting PPE applies every time the PPE is used. Rather, the agency believes a performance-based approach is appropriate, just as the underlying requirement to identify and provide necessary PPE is performance-based (see 29 CFR 1926.95).

In the general industry and maritime sectors, OSHA has not needed to accompany the requirement for properly fitting PPE with specific directions regarding fit for each item of PPE or other details about what ''properly fits'' means; nor do those standards include a requirement that a designated competent person assess PPE fit. There is no indication that this has resulted in significant confusion among employers in those sectors. Indeed, as noted in the NPRM, OSHA issued only 51 citations for improperly fitting PPE in general industry and shipyards between the years 1994 and 2021, which suggests the vast majority of employers have been able to comply (88 FR 46712). Providing specific fit requirements for each individual type of PPE item also might undermine the manufacturer's recommendations for a particular PPE item. Accordingly, OSHA is not convinced that further details within the regulatory text are necessary for the construction industry. In any event, OSHA can issue additional guidance in the future if the agency determines it is needed.

In the proposed rule, OSHA stated that ''properly fits'' means, in part, that the PPE ''does not create additional safety and health hazards arising from being either too small or too large'' (88 FR 46711). OSHA listed examples of the additional hazards to which workers can be exposed because of improperly fitting PPE (81 FR 46710–46711). These examples demonstrate a few of the ways that improperly fitting PPE can create additional hazards, with a few examples coming directly from OSHA inspections. Commenters also submitted examples of how improperly fitting PPE can create additional hazards. The UBCJA agreed with OSHA's emphasis on additional hazards, adding that ''[e]ven a loose safety vest can pose a danger if it is unexpectedly caught in equipment'' (Document ID 0074). NIOSH explained that ''[s]afety glasses slipping off, loose gloves getting caught on machines or exposing skin, or blisters forming from ill-fitting safety boots make working more difficult and can adversely affect worker safety and job satisfaction'' (Document ID 0073. The State Building and Construction Trades Council of California noted that ''oversized protective clothing can lead to tripping hazards or get caught in machinery. . . . Poorly-fitted fall protection harnesses may lead to other injuries. . . . Gloves that are too big put a worker at risk of coming into contact with chemicals that can cause dermatitis or other skin diseases'' (Document ID 0028). Another commenter mentioned how ill-fitting PPE could snag on scissor lifts (Document ID 0097) while a member of IBEW Local 48 commented that ''[i]tems that are too large run the risk of becoming entangled in machinery. . . .'' (Document ID 0040).

CISC raised concerns about OSHA's discussion of additional hazards. They contend that ''[w]ithout additional clarification on what 'additional hazards' employers must address in order to comply with the proposed rule, employers will be forced to re-evaluate every single piece of PPE they provide to their employees. Employers will be tasked with identifying additional hazards that could result from their PPE not 'properly fitting' in every situation'' (Document ID 0109). CISC suggested OSHA ''provide notice of specific hazards that are associated with PPE that does not properly fit'' and ''clarify what 'additional hazards' improperly fitting PPE may cause'' (Document ID 0109).

It is neither necessary nor possible for OSHA to identify all hazards that might arise from improperly fitting PPE, just as the agency does not identify all hazards that might necessitate PPE in the first place (see 29 CFR 1926.95(a)). Given the many combinations of PPE that can be selected to protect workers from the multitude of workplace-specific hazards, employers are in the best position to identify what hazards exist at their particular worksite, the appropriate PPE to address those hazards, and the proper fit of PPE that will not result in additional hazards. This is both because employers have the most knowledge of the work tasks involved and the hazards faced by employees at their worksite and because they have access to the people with the most direct knowledge about proper fit: the employees who must wear the PPE. In most cases, the affected employee will be able to indicate whether the provided PPE fits properly or whether it poses a hazard from their work tasks. The employer also knows the specific PPE involved in a given case and can refer to the manufacturer's instructions for that specific item for additional guidance. Finally, to the extent that relevant national consensus standards address proper fit of particular PPE, employers may look to those standards for guidance as well.

The ASSP Chesapeake Chapter asked for clarification of how the proposed change affects the employer/employee relationship, stating that ''[c]learly defined responsibilities for employers will emphasize the gravity of this issue and encourage proactive measures in ensuring properly fitting PPE is available'' (Document ID 0083). This revision has no impact on the employer/employee relationship; it simply clarifies that every employer is responsible for ensuring that their workers have properly fitting PPE. Additional responsibilities employers have regarding PPE of their workers in the construction industry can be found in Subpart E—Personal Protective and Life Saving Equipment, 29 CFR 1926.95 through 1926.107.

D. Differences Between General Industry, Maritime, and the Construction Industry

OSHA requested comments on whether any differences between general industry and maritime and the construction industry impact whether OSHA should include ''properly fits'' in the construction standard as proposed in the NPRM. Commenters expressed support for language that reflects the requirements for properly fitting PPE in the general industry and maritime industries. NIOSH, for example, stated that ''mirroring the language for general industry and maritime standards is appropriate because of the significant hazards and injury burden in the construction industry. The change will provide added emphasis on the documented need to ensure all PPE fits all workers well'' (Document ID 0073). The AIHA noted that it knew of no differences between general industry, maritime, and construction that would impact OSHA's inclusion of ''properly

fits'' in the construction standards (Document ID 0058). Painters et al. commented that ''[t]here is nothing unique to the construction industry that would put an undue burden on employers to ensure that each worker has access to PPE that fits their size and shape properly and can be used for the purpose for which it was intended: to protect the worker from hazards of injury or illness'' (Document ID 0078).

Some commenters suggested that it is inappropriate to align the language in the construction industry with the language of general industry and shipyards because the construction industry is different from general industry and shipyards. CISC argued that an important difference between the construction industry and other industries is the changing conditions of the worksite. ''The construction industry does not operate in static, permanent worksites'' with known hazards that ''have long since been identified and documented'' like in general industry and shipyards; rather, it is ''dynamic'' and ''[w]hat PPE is needed and when, can vary from day to day . . .'' (Document ID 0109). The National Demolition Association (NDA) made a similar argument, stating that construction worksites present different challenges and work conditions than other industries, but did not elaborate on what those differences are and how they would be impacted by OSHA's proposal (Document ID 0111).[5]

OSHA does not find this argument persuasive. First, § 1926.95(a) requires construction employers to provide appropriate PPE to employees when necessitated by workplace hazards. This is true regardless of how dynamic the work activities are. Given that employers must already analyze the hazards on their worksites, no matter how dynamic, and provide necessary PPE, these commenters fail to explain why the dynamic nature of the activities warrants permitting employers to provide PPE that does not fit.

Moreover, although there are differences between the construction industry and other industries, many of the hazards that necessitate properly fitting PPE to protect workers are the same. In the NPRM, OSHA referenced citations in general industry and maritime for violation of the requirement for properly fitting PPE. Many of those violations were for PPE that is also used in the construction industry, such as harnesses and gloves. As evidenced by the comments to the NPRM, several stakeholders' primary concerns about properly fitting PPE involve these types of items (see, *e.g.,* OSHA's discussion of comments related to harnesses in B. Impact of Properly Fitting PPE). Neither CISC nor NDA identified examples of PPE that are unique to the construction industry.

OSHA also emphasizes that the Advisory Committee on Construction Safety and Health (ACCSH), which is composed of an equal number of employee and employer representatives along with representatives from State and Federal agencies and subject-matter experts (see 29 CFR 1912.3(b)), has on several occasions urged OSHA to align the language in the construction PPE standards with those in general industry and shipyards (Document ID 0002, 0003, 0020). Finally, as explained in Section VI, Technological Feasibility, OSHA finds that there are no technological barriers to providing construction employees with properly fitting PPE.

In sum, OSHA is not convinced any differences that exist between the construction industry and other industries warrant depriving construction employees of protection against the hazards posed or not prevented by improperly fitting PPE. Indeed, as discussed above, properly fitting PPE is already an implicit requirement under the construction standard for PPE and this final rule makes that requirement explicit. Accordingly, OSHA concludes that the proposed language is appropriate for inclusion in the standard.

E. The Adequacy of Guidance on PPE ''Proper Fit'' in Construction

Prior to the publication of the proposed rule, ACCSH recommended that OSHA provide additional guidance explaining what ''proper fit'' means for the construction industry. As described above, in the NPRM, OSHA explained that '' 'properly fits' means the PPE is the appropriate size to provide an employee with the necessary protection from hazards and does not create additional safety and health hazards arising from being either too small or too large'' (88 FR 46711). OSHA also requested comment on whether existing OSHA guidance regarding PPE ''proper fit'' in construction is adequate and if it is not, what type of additional guidance OSHA should provide.

OSHA received a variety of comments in response to this request. While NIOSH responded that existing guidance was not adequate, they commented that revising OSHA's construction standards to explicitly state that PPE must properly fit would help address this concern. NIOSH also suggested that OSHA should define ''properly fitting'' (Document ID 0073). The NSC noted they have a PPE training that teaches that PPE should fit comfortably and not be too large or too small (Document ID 0096). CWIT suggested that OSHA develop an eTool to provide guidance on proper fit of PPE (Document ID 0098). Cal/OSHSB recommended that OSHA work with manufacturers and provide guidance on conformity assessments for all PPE (Document ID 0107). The ISEA, while agreeing with OSHA's interpretation of proper fit, suggested that OSHA work with stakeholders to develop additional guidance such as FAQs to minimize any confusion about the requirement to provide properly fitting PPE.

OSHA is willing to work with construction industry stakeholders to develop specific guidance that will broadly address any confusion or concerns the industry has about providing PPE that properly fits workers. To do that, OSHA must first have clear and explicit language in its construction standards that communicates an employer's obligations. After a review of the comments received in response to this proposed rule, OSHA believes that the proposed language accomplishes this goal.

F. Osha Enforcement of PPE Fit Requirements

In the NPRM, OSHA explained that enforcement of the requirement for properly fitting PPE in construction would be the same as it has been in general industry and maritime, relying on enforcement guidance the agency has already created for those industries and applying it to the construction industry. OSHA also provided citation data and examples of violations of the requirement to have properly fitting PPE to demonstrate how the agency has been enforcing this requirement in general industry and shipyards (88 FR 46711).

Some commenters requested additional information on how OSHA will enforce this requirement. CISC argued that the proposed rule ''does not discuss how investigators will be evaluating PPE for compliance'' resulting in ''concern that employers will be held to subjective standards of whether PPE fits properly and what steps employers must take to ensure they are in compliance'' (Document ID 0109). Other commenters who

[5] NDA also commented that State and local governments, rather than OSHA, should develop any regulations on properly fitting PPE (Document ID 0111). However, the OSH Act grants OSHA the authority to promulgate safety and health standards, including the construction standard that this final rule revises. Furthermore, OSHA sees no reason why a general requirement for properly fitting PPE would differ among different geographic areas.

supported the proposed rule overall agreed with this concern that enforcement could be subjective (Document ID 0088, 0091). Painters et al., on the other hand, noted that the proposed changes do not introduce new concepts. ''[W]e think it is important to note that the uncertainty often associated with the revision of an OSHA standard does not pertain to this proposed rule. OSHA is adopting language it has long applied in the general industry and maritime standards'' (Document ID 0078).

With regard to enforcement-related concerns, OSHA believes that this preamble adequately explains what OSHA expects from employers: to select PPE for their workers that is appropriately designed and sized to adequately protect them from hazards without creating additional hazards. OSHA believes this performance-based interpretation of ''properly fits'' provides sufficient specificity while maintaining flexibility to allow employers to select the PPE necessary to protect their workers on the job. Additionally, there is existing guidance that can assist employers in selecting properly fitting PPE. Several commenters pointed out that the manufacturer's instructions are an important source of information on the proper fit of PPE (see Document ID 0034, 007, 0107, 0114). Although consensus standards do not carry mandatory obligations to meet their standards, they also can provide guidance on how various PPE items should fit.

One important aspect of determining what PPE should be provided to workers is comfort. OSHA stated in the proposed rule that improperly fitting PPE can be uncomfortable for the wearer, which in turn can lead workers to modify or disregard the PPE and become vulnerable to a hazard (81 FR 46711). Several commenters echoed this concern. Some commenters mentioned that ill-fitting, uncomfortable PPE could be dangerous (Document ID 0076, 0081). NIOSH stated that comfort is an important factor that can positively impact PPE use (Document ID 0073). Cal/OSHSB commented that ''[m]aking sure that PPE not only fits but is comfortable is imperative to ensuring that employees wear the PPE throughout their shift'' (Document ID 0107). UBCJA requested that OSHA adopt language stating that for PPE to properly fit, it must be comfortable to wear (Document ID 0074).

Some commenters expressed concern about whether comfort would be an indication of proper fit and, if so, how OSHA would address that from an enforcement standpoint. CISC asked, ''Is comfort important because it encourages employees to keep PPE on, or is it a citable offense even if 'uncomfortable' PPE is being worn?'' (Document ID 0109). Similarly, the Wood Floor Covering Association asked, ''Is simply finding the PPE to be uncomfortable sufficient to claim it does not properly fit even [if] the equipment provides full protection?'' (Document ID 0114).

OSHA reaffirms its position that comfort is an important consideration for properly fitting PPE, both because more comfortable PPE is more likely to be worn by workers rather than discarded and unused and because discomfort in many cases can indicate improper fit. An employee's expression of discomfort should be taken seriously by the employer, as it may signal that the PPE warrants further evaluation to ensure it will serve its protective purpose and will not create additional hazards.

At the same time, OSHA also recognizes that discomfort during the use of PPE may not always be the result of improper fit. Some PPE may be inherently uncomfortable, despite fitting properly. OSHA has explained in other contexts that personal discomfort alone does not give rise to a violation of the OSH Act's General Duty Clause, absent a related recognized hazard that could cause death or serious physical harm (see Reiteration of Existing OSHA Policy on Indoor Air Quality: Office Temperature/Humidity and Environmental Tobacco Smoke, available at *https://www.osha.gov/laws-regs/standardinterpretations/2003-02-24*). The same is true with respect to PPE under 29 CFR 1926.95: OSHA cannot issue a citation simply because PPE that properly fits is uncomfortable.[6] However, OSHA cautions that regardless of fit, employers have an independent duty to ensure that appropriate PPE is worn at all times when necessitated by a workplace hazard (29 CFR 1926.28). Because the record clearly indicates uncomfortable PPE is more likely to go unused, employers would be wise to take seriously employees' concerns about discomfort.

Finally, a few commenters suggested that increased enforcement from OSHA and/or a ''culture change'' among employers would be more effective in achieving the goal of properly fitting PPE than changing the rule (Document ID 0026, 0027). While OSHA operates, as always, with limited resources, the agency believes that the amended standard, by making employers' responsibilities explicit, will encourage a more protective approach to PPE across the construction industry.

[6] OSHA notes that while discomfort may not alone establish improper fit, the converse is also true; a lack of employee discomfort does not alone establish proper fit.

IV. Pertinent Legal Authority

The purpose of the Occupational Safety and Health Act (29 U.S.C. 651 *et seq.*) (''the Act'' or ''the OSH Act'') is ''to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources'' (29 U.S.C. 651(b)). To achieve this goal Congress authorized the Secretary of Labor (''the Secretary'') to promulgate standards to protect workers, including the authority ''to set mandatory occupational safety and health standards applicable to businesses affecting interstate commerce'' (29 U.S.C. 651(b)(3); see also 29 U.S.C. 654(a) (requiring employers to comply with OSHA standards), 655(a) (authorizing summary adoption of existing consensus and Federal standards within two years of the Act's enactment), 655(b) (authorizing promulgation, modification or revocation of standards pursuant to notice and comment)), and 655(b)(7) (authorizing OSHA to include among a standard's requirements labeling, monitoring, medical testing, and other information-gathering and information-transmittal provisions)). An occupational safety or health standard is a standard which requires conditions, or the adoption or use of one or more practices, means, methods, operations, or processes ''reasonably necessary or appropriate'' to provide safe or healthful employment and places of employment (29 U.S.C. 652(8)).

Section 6(b)(7) of the OSH Act (29 U.S.C. 655(b)(7)) authorizes OSHA to include requirements for protective equipment within a standard. It provides that, where appropriate, standards must prescribe suitable protective equipment and control or technological procedures to be used in connection with workplace hazards and must provide for monitoring or measuring employee exposure as necessary to protect employees (29 U.S.C. 655(b)(7)).

The OSH Act imposes several requirements OSHA must satisfy before adopting a safety standard. Among other things, the standard must provide a high degree ofemployee protection, substantially reduce a significant risk to workers, be technologically feasible, and be economically feasible (see 58 FR 16612, 16614–16 (Mar. 30, 1993); *UAW* v. *OSHA,* 37 F.3d 665, 668–69 (D.C. Cir.

1994)). OSHA need not make additional findings on risk for this final rule because the rule involves a clarification of an existing OSHA standard and does not create any new requirements for employers. Accordingly, OSHA is not required to conduct a significant risk analysis for the change to § 1926.95 (see *Edison Elec. Inst.* v. *OSHA,* 849 F.2d 611, 620 (D.C. Cir. 1988)).

A standard is technologically feasible if the protective measures it requires already exist, can be brought into existence with available technology, or can be created with technology that is reasonably expected to be developed (see *Am. Iron and Steel Inst.* v. *OSHA,* 939 F.2d 975, 980 (D.C. Cir. 1991)). Courts have also interpreted technological feasibility to mean that a typical firm in each affected industry or application group will reasonably be able to implement the requirements of the standard in most operations most of the time (see, *e.g., Public Citizen* v. *OSHA,* 557 F.3d 165, 170–71 (3d Cir. 2009); *United Steelworkers of Am.* v. *Marshall,* 647 F.2d 1189, 1272 (D.C. Cir. 1981)).

In determining economic feasibility, OSHA must consider the cost of compliance in an industry rather than for individual employers. In its economic analyses, OSHA ''must construct a reasonable estimate of compliance costs and demonstrate a reasonable likelihood that these costs will not threaten the existence or competitive structure of an industry, even if it does portend disaster for some marginal firms'' (*Am. Iron and Steel Inst.,* 939 F.2d at 980, quoting *United Steelworkers of Am.,* 647 F.2d at 1272).

V. Final Economic Analysis and Regulatory Flexibility Act Certification

Introduction

OSHA has examined the impacts of this rule as required by Executive Order 12866, Regulatory Planning and Review (September 30, 1993); Executive Order 13563, Improving Regulation and Regulatory Review (January 18, 2011); Executive Order 14094, Modernizing Regulatory Review (April 6, 2023) (hereinafter, the Modernizing E.O.); the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96354); section 202 of the Unfunded Mandates Reform Act of 1995 (March 22, 1995; Pub. L. 104–4); and Executive Order 13132, Federalism (August 4, 1999).

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity).[7] The Modernizing E.O. amends section 3(f) of Executive Order 12866. As amended, section 3(f) defines a ''significant regulatory action'' as an action that is likely to result in a rule that may: (1) have an annual effect on the economy of $200 million or more in any 1 year (adjusted every 3 years by the Administrator of the Office of Information and Regulatory Affairs (OIRA) for changes in gross domestic product), 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 impacts of entitlement 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 Modernizing E.O.], as specifically authorized in a timely manner by the Administrator of OIRA in each case.

OIRA has determined that this final rule is a significant regulatory action under E.O. 12866 (but not under section 3(f)(1)), and that it does not meet the criteria set forth in 5 U.S.C. 804(2) under the Congressional Review Act.

OSHA has prepared this Final Economic Analysis (FEA) which presents the agency's estimates of the costs and benefits of the rulemaking.

Changes From the Proposal

As discussed above, OSHA is finalizing this rule with the same changes to the regulatory text that the agency proposed. Public comments received in response to the proposal generally support the need for the rule. A number of commenters gave examples of employers not providing them with properly fitting PPE. One commenter said ''I buy my own PPE, *i.e.,* glasses, gloves because no contractor ever has small of either. I've been in the trade 27 years and have never had a contractor have those for me'' (Document ID 0094). Another stated that ''[a]s an electrician since 2015, there have been years I have not been provided correctly fitting PPE. Employers did not anticipate my pregnancy, so high-visibility coats were hard to find and expensive. . . . A coat for males had sleeves that were too long and got in the way of working'' (Document ID 0115). However, public comments also support several changes to the economic analysis. Those changes are as follows.

For the proposal, OSHA estimated minimal costs to comply with the rule since it simply clarifies an existing requirement. OSHA did, however, request information from commenters about the impact of the rule on the provision of properly fitting PPE. Based on responsive comments in the record, OSHA has determined that it is appropriate to account for additional costs. In particular, OSHA has added costs for purchasing properly fitting harnesses and earplugs, which were not included in the proposal. In addition, OSHA has added ongoing annual costs for non-compliant employers to continue to provide properly fitting PPE to their employees after initially replacing it. OSHA has also added costs for rule familiarization time as well as the time for employers to assess, research, and identify properly fitting PPE for those workers who are not currently being provided with it. Where more recent economic data is available, OSHA has updated the data used for its analysis. Finally, OSHA is attributing (although not quantifying) health and safety benefits to this final standard based on evidence in the record that workers are being injured due to improperly fitting PPE. These updates are discussed in more detail later in this section.

A. Profile of Affected Establishments and Employees

1. Introduction

This final rule amends the construction standard at 29 CFR 1926.95—Criteria for Personal Protective Equipment, paragraph (c), to clarify that PPE must properly fit each employee. This revision clarifies an existing requirement and OSHA therefore concludes that the rule will impose only limited costs on employers that are not already providing their employees with properly fitting PPE. OSHA normally assumes full compliance with existing requirements when performing its analysis of costs related to a new or amended standard. However, in this case, the purpose of the final rule is to clarify an existing requirement about which there may have been confusion in the regulated community. Given the public comments indicating that some employees are not

[7] While OSHA presents the following analysis under the requirements of Executive Orders 12866 and 13563, the agency ultimately cannot base its regulatory decisions on a simple maximization of net benefits due to the overriding legal requirements in the OSH Act.

being provided with PPE that properly fits, the record supports the need for changes in behavior among some employers. As a result, OSHA has estimated the costs for a portion of employers to come into compliance with the already-existing requirement to provide properly fitting PPE. This analysis demonstrates that the rule will be feasible to implement.

2. Background

On November 15, 2007, OSHA published its final rule on Employer Payment for Personal Protective Equipment (PPE Payment) (72 FR 64342). A brief description of this rulemaking is provided here because certain estimates and parameters used in the economic analysis for this rule are taken from the analysis accompanying that final rule. In the PPE Payment rulemaking, OSHA identified the various types of PPE that are worn by employees, the percentage of employees who use PPE, and the numbers of employees that would typically use each type of PPE in the construction industries: NAICS 236 (Construction of Buildings), NAICS 237 (Heavy and Civil Engineering Construction), and NAICS 238 (Specialty Trade Contractors). Information on employee PPE use was derived from a statistically representative nationwide telephone survey of 3,722 employers conducted for OSHA. The survey was benchmarked to the whole working population based on employment data available at that time (see 72 FR 64391). For this rulemaking, OSHA developed assumptions about the types of PPE that are universal fit versus those that are not universal fit and the types of PPE that are provided by the employer versus purchased by employees for reimbursement.

When the economic analysis for the PPE Payment rule was performed, the most recent data available on number of employees were from the U.S. Census' 2004 *County Business Patterns.* Using that data, OSHA estimated the number of employees using PPE and the industries in which they worked. Total use of PPE in the construction industries as derived in the PPE Payment rule is presented in table 1. Note that only the types of PPE that are subject to replacement under this PPE Fit rule are presented. OSHA uses the values in table 1 as the basis for its updated 2022 [8] figures for PPE items used (see table 7).

TABLE 1—USE OF SELECTED PPE IN THE CONSTRUCTION INDUSTRIES, FROM THE PPE PAYMENT RULE

PPE provided by the employer	Total PPE items used by employees (2004) U.S.
Chemical Protective Clothing	358,089
Chemical Protective Footwear	211,871
Chemical Splash Goggles	584,797
Earmuffs	642,362
Face Shields	1,194,399
Gloves for Abrasion Protection	2,940,764
Gloves for Chemical Protection	896,173
Non-Prescription Safety Glasses	3,485,009
Safety Goggles	2,506,959
Splash Aprons	197,632
Total of PPE items used by construction employees	13,018,055

Source: OSHA, Office of Regulatory Analysis (ORA), based on PPE Payment rule (72 FR 64406). See Final Economic Analysis spreadsheet (Document ID 0118).

3. PPE Fit Rule—Affected Establishments and Employees

OSHA determined the number of establishments that would need to comply with this rule using County Business Patterns (CBP) data for 2022. All establishments within NAICS 236 (Construction of Buildings), NAICS 237 (Heavy and Civil Engineering Construction), and NAICS 238 (Specialty Trade Contractors) are considered to be within the scope of this rule. As shown in table 2, there are a total of 800,651 establishments in the affected Construction NAICS industry codes.

TABLE 2—AFFECTED CONSTRUCTION ESTABLISHMENTS BY NAICS INDUSTRY, 2022

NAICS	Establishments
236 (Construction of Buildings)	251,634
237 (Heavy and Civil Engineering Construction)	38,214
238 (Specialty Trade Contractors)	510,803
Total	800,651

Source: OSHA, ORA, based on U.S. Census Bureau, County Business Patterns, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

Overall employment and the number of employees using PPE in these NAICS industries—both broken out by sex—are shown in table 3. Based on BLS Current Employment Statistics for 2022, the construction industry was made up of about 86 percent men and 14 percent women. According to the CBP, there were 7,361,847 employees in the

[8] As noted below, 2022 was the most recent year for which the County Business Patterns data were available at the time this analysis was performed.

construction industry in 2022. Taken together, these data indicate that employment in the construction industry is comprised of 6,313,488 men and 1,048,359 women. OSHA estimated in the PPE Payment rule that 79.85 percent of construction employees use PPE of any type. Using this percentage, the agency estimates that 5,041,402 men and 837,128 women in the construction industry use any type of PPE. OSHA used these parameters and this methodology to identify employees by sex and PPE usage in the proposed rule and received no comment on this approach; OSHA therefore has maintained the same methodology for the final rule.

TABLE 3—ESTIMATED EMPLOYEES IN CONSTRUCTION INDUSTRIES BY SEX AND PPE USE, 2022

	% of employees	Total employees	% Using PPE	Total employees using PPE
Men	85.8	6,313,488	79.85	5,041,402
Women	14.2	1,048,359	79.85	837,128
Total		7,361,847		5,878,530

Source: OSHA, ORA, based on U.S. Census Bureau, 2024, and OSHA PPE Payment rule, 2007. See Final Economic Analysis spreadsheet (Document ID 0118).

B. Costs of Compliance

OSHA has determined that this rule could impose three main types of costs on establishments in the construction industry: (1) rule familiarization, (2) researching PPE, and (3) replacing PPE. The costs for researching properly fitting PPE for purchase and for replacing improperly fitting PPE will only be incurred by employers who are out of compliance with the already-existing requirement to provide workers with PPE that fits properly.

1. Rule Familiarization

Employers in some affected establishments will spend time familiarizing themselves with the rule. OSHA estimates that rule familiarization will take ten minutes for a health and safety coordinator to complete [9] and that 50 percent of the establishments in the three construction NAICS industries will take time to familiarize themselves with the rule. OSHA has assumed that only 50 percent of establishments will need familiarization time not only because this final rule is simply a clarification of an existing requirement, but because the rule aligns the construction regulatory text on PPE fit with the general industry requirement, with which many construction employers are likely familiar. OSHA, therefore, believes that many employers already know that they must provide PPE that fits properly and will not need to spend time familiarizing themselves with this final rule. The loaded wages [10] used to calculate the cost of rule familiarization time are taken from BLS' Occupational Employment and Wage Statistics (OEWS) dataset for 2023 (*https://www.bls.gov/oes/tables.htm*) for Occupational Health and Safety Specialists and Technicians.[11] Table 4 shows the costs of rule familiarization.

TABLE 4—TOTAL COSTS OF RULE FAMILIARIZATION

[2023$]

NAICS	Establishments	50% of establishments	Unit burden (hours)	Wage	Total cost (2023$)
236 (Construction of Buildings)	251,634	125,817	0.17	$65.45	$1,372,517
237 (Heavy and Civil Engineering Construction)	38,214	19,107	0.17	63.65	202,694
238 (Specialty Trade Contractors)	510,803	255,402	0.17	58.32	2,482,631
Total	800,651	400,326	NA	NA	4,057,842

Source: OSHA, ORA, based on U.S. Census Bureau, 2024, and BLS OEWS, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

2. Researching PPE for Purchase

For this final rule, OSHA is accounting for costs related to researching and finding non-standard-sized PPE. Some commenters said that it is difficult to locate PPE in certain non-standard sizes. For instance, one commenter said that it was challenging finding PPE, including protective footwear, to fit her smaller frame and that she hopes this final rule will eliminate the need for ''extensive searches for 'small' gear'' (Document ID 0031). Another commenter said that ''[h]igh-visibility coats that fit a pregnant belly are hard to find'' (Document ID 0115), while a third commenter said that small size high visibility vests and boots are difficult to come by and that even proactive employers can encounter limited supply in non-standard sizes (Document ID 0079). Other commenters, however, noted the availability of PPE to fit a wide range of worker body shapes and sizes (Document ID 0108, 0112; see also Document ID 0014, 0117). Based on these comments, OSHA has estimated that it may take some additional time for employers to find appropriate PPE in non-standard sizes for workers not

[9] This is comparable to the five minutes estimated to be spent on familiarization in the FEA for OSHA's recent (and similarly brief) final rule on the Worker Walkaround Representative Designation Process (See 89 FR 22558, 22594 (April 1, 2024)).

[10] The loaded wages include an industry specific base wage (BLS, 2024, OEWS), a 31.23 percent markup from base wages to account for employer provided fringe benefits (BLS, 2024, Employer Costs for Employee Compensation), and OSHA's standard 17 percent markup from base wages to account for overhead costs to the employer.

[11] OSHA used the BLS OEWS Standard Occupation Classification code 19–5010 for NAICS 236, 237, and 238.

currently wearing properly fitting PPE.[12]

In order to provide properly fitting PPE for the employees who need it, OSHA estimates that affected establishments will spend 10 minutes assessing the needs of their employees related to PPE (assessment) and another 10 minutes researching and identifying specific replacement PPE for employees (identification). The agency estimates that 184,935 construction employees might require non-standard sizes of PPE (see table 9) but recognizes that not all those employees are using improperly fitting PPE. This is especially true given that construction employers are already required to provide their employees with properly fitting PPE. OSHA assumes that up to 10 percent of those workers—or 18,494 workers—were being provided with incorrectly fitting PPE prior to promulgation of this final rule. While it potentially overstates the number of employers who will need to assess PPE needs and spend time researching PPE in different sizes, OSHA assumes that each employee needing replacement PPE works at a different company, such that the number of employers that will need to research PPE equals the number of affected employees. A more detailed explanation of the estimated number of affected employees and thus employers is described in the next section and presented in tables 9 and 10.

OSHA calculated one-time, initial costs for the PPE needs assessment and identification of non-standard size PPE. OSHA also estimated annually recurring costs to identify properly fitting PPE for newly-hired employees who may need non-standard sizes of PPE. To calculate the number of employers that would need to incur this cost annually, OSHA multiplies the estimated 18,494 workers mentioned above by the JOLTS annual hire rate within the construction sector for 2023, which is 55.7 percent (BLS JOLTS, 2024). For this analysis, OSHA uses the loaded wage rate for a purchasing manager[13] based on BLS' OEWS dataset for 2023 to estimate the costs for identifying the correct PPE, and the loaded wage rate for Occupational Health and Safety Specialists and Technicians[14] for PPE assessment costs.[15] Table 5 shows the initial costs for the assessment and identification of properly fitting PPE. Table 6 presents the ongoing, annual costs of identifying non-standard sizes of PPE for newly hired employees. The cost of the PPE itself is estimated in the next section.

TABLE 5—TOTAL COSTS OF INITIAL PPE RESEARCH

PPE research item	Affected establishments	Unit burden (hours)	Wage (weighted average)	Total cost (2023$)
Assessment	18,494	0.17	$60.82	$187,457
Identification	18,494	0.17	91.64	282,454
Total Cost				469,911

Note: Using the figures presented here to perform the calculations in the table may not result in the same totals due to rounding.
Source: OSHA, ORA, based on BLS OEWS, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

TABLE 6—ANNUAL COST OF PPE IDENTIFICATION

Cost item	Affected establishments	Hire rate	Unit burden (hours)	Wage (weighted average)	Total cost (2023$)
Identification	18,494	55.7%	0.17	$91.64	$157,327

Note: Using the figures presented here to perform the calculations in the table may not result in the same totals due to rounding.
Source: OSHA, ORA, based on BLS OEWS, 2024 and BLS JOLTS, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

3. Replacing PPE

As shown in table 7, the types of PPE used in construction fall into the following three categories: PPE provided by the employer and not of universal fit, PPE items purchased by the employee and reimbursed by the employer, and PPE of universal fit. PPE items identified as universal fit are those that are adjustable and capable of fitting most people.[16] OSHA assumes that PPE items purchased by the employee and then reimbursed by the employer already fit properly, since the employee will select the size that fits them best. The remaining PPE items are those provided by the employer that are not universal fit.

TABLE 7—PPE USED IN THE CONSTRUCTION INDUSTRIES *

PPE items provided by the employer, not universal fit	PPE items purchased by employee and reimbursed by employer	PPE items of universal fit
Body Harnesses	Prescription Safety Glasses	Body Belts.
Chemical Protective Clothing	Protective Electrical PPE	Hardhats.
Chemical Protective Footwear	Protective Welding Clothing	Welding Helmets.

[12] As noted in the Technological Feasibility discussion, extensive lists of providers of non-standard-sized PPE are available online from multiple sources.

[13] OSHA used the BLS OEWS Standard Occupation Classification code 11–3061 for NAICS 236, 237, and 238.

[14] OSHA used the BLS OEWS Standard Occupation Classification code 19–5010 for NAICS 236, 237, and 238.

[15] The loaded wages include an industry specific base wage (BLS, 2024, OEWS), a 31.23 percent markup from base wages to account for employer provided fringe benefits (BLS, 2024, Employer Costs for Employee Compensation), and OSHA's standard 17 percent markup from base wages to account for overhead costs to the employer. The wages presented are weighted averages from the three NAICS codes affected by this rule.

[16] In their comment, AIHA objected to the term ''universal fit,'' saying that ''[n]o PPE is universal fit, even the most adjustable PPE may not fit workers on the extremes of anthropometric data'' (Document ID 0058). OSHA acknowledges that at the tail ends of the distribution of human variation, some adjustable PPE will not fit. For the purposes of this analysis, however, OSHA maintains that some items of PPE that come in standard, adjustable sizes will fit nearly all individuals working in the construction industry and so maintains this designation for a limited number of items in this analysis.

TABLE 7—PPE USED IN THE CONSTRUCTION INDUSTRIES *—Continued

PPE items provided by the employer, not universal fit	PPE items purchased by employee and reimbursed by employer	PPE items of universal fit
Chemical Splash Goggles Earmuffs Earplugs Face Shields Gloves for Abrasion Protection. Gloves for Chemical Protection. Non-Prescription Safety Glasses. Safety Goggles. Safety Vests. Splash Aprons.	Safety Shoes with Metatarsal Guards. Safety Shoes Without Metatarsal Guards. Welding Goggles. Welding Helmets.	

* Respirators are not included in the table, as fit testing is already required in paragraph 1910.134(f) of the respiratory protection standard (29 CFR 1910.134(f)), which covers the construction industry (see 29 CFR 1926.103).

Note that Safety Vests were not included in the PPE Payment rule. Body harnesses and ear inserts have been moved from the Universal Fit column to the column for Provided by the Employer, not Universal Fit, as a result of comments indicating these items are not universal fit.

Source: OSHA, ORA.

In this analysis, the only PPE that OSHA is estimating may need replacement as a result of this final rule are the items that are provided by the employer and not universal fit. For these items, the standard size may not fit all workers. Therefore, in cases where employers have provided only standard-sized PPE, some workers may not have been provided properly fitting PPE.

OSHA derives the total number of PPE items currently used by employees by multiplying the number of PPE items used by employees in 2004 as estimated in the PPE Payment rule analysis by the employment growth rate in the construction industry from 2004 to 2022 per County Business Patterns data. Using currently available supply catalogs, the agency identified up to three cost estimates for ''standard'' sizes of each PPE item potentially requiring replacement, taking the average of those estimates for use in this analysis.[17] OSHA then calculates the total costs of replacing all employer-supplied, non-universal fit PPE by applying these unit costs to the total number of PPE items used by all employees who wear PPE. Finally, to get the total one-time replacement costs related to this rule, OSHA estimates the number of employees needing replacement PPE and the average per-employee cost for replacing their PPE with non-standard sized PPE and multiplies them. A detailed description of this approach is provided in the following paragraphs.

In the PPE Payment rule, OSHA estimated that the total number of employer-provided, non-universal fit PPE items worn by construction employees in 2004 was about 13 million. However, that analysis did not include safety vests in the list of necessary PPE. For this rulemaking, as presented in the proposal, the agency estimated the cost and use of safety vests, including them in the number of PPE items worn by construction workers in 2022, the unit cost, and the total cost.

In addition, in the proposed PPE Fit rule, OSHA treated body harnesses as universal fit, which was consistent with how body harnesses were treated in the PPE Payment rule. However, OSHA received a number of comments suggesting that standard body harnesses frequently do not fit women. One commenter stated, ''[o]ur research suggests that there are a very limited number of harnesses available on the market that are truly 'universal fit' harnesses'' (Document ID 0108). Several commenters pointed out that women's bodies are shaped differently and that unisex harnesses are not properly adjustable to accommodate breasts, hips, leg length, and height; that use of improperly fitting harnesses could lead to bodily harm; and that use of unisex harnesses is uncomfortable for women (*e.g.,* Document ID 0048, 0068, 0076, 0077, 0080, 0084, 0093, 0098). One commenter noted that in a fall, a traditional unisex harness could damage a woman's pelvic region. That commenter pointed out that while there are harnesses that are designed specifically to accommodate women's bodies, some employers think unisex is ''good enough'' (Document ID 0063). Another commenter said ''Women have breasts so harnesses are not very comfortable when they are designed for men. There are, apparently, harnesses designed for women but I never to this day have even seen one'' (Document ID 0066). Yet another commenter noted that ''On more than one job I have had to use the generic one size fits all XL safety harness where leg straps on the tightest eyelet hang to my knees'' (Document ID 0090). Therefore, in the final rule, OSHA has added body harnesses to the list of PPE that are non-universal fit and might require replacement. As a result, they have been moved to the first column of table 7 above.

In addition, a comment from the ISEA indicated that earplugs (referred to as ''ear inserts'' in the proposal) ''are designed and manufactured in multiple sizes and shapes to accommodate the wide range of sizes and shapes of ear canals'' (Document ID 0112). NIOSH agreed, stating that earplugs ''should be reclassified as 'provided by the employer, not universal fit' because earplugs are not completely adjustable and may not be capable of fitting every person'' (Document ID 0073, attachment 2). Based on these comments, OSHA reclassified earplugs from universal fit to provided by the employer, not universal fit, and adjusted the cost model accordingly.

Based on the most recent data (2022) available from CBP (*https://www.census.gov/programs-surveys/cbp/data/tables.html*), employment in the construction industries has increased by 10.74 percent since 2004. OSHA applied this 10.74 percent increase to the agency's estimates, in the PPE Payment rule, of the numbers of PPE items in 2004 that were employer-supplied and not universal fit. As described above, OSHA also added estimates for the use of several PPE items that were not included in that category in the PPE Payment rule (safety vests, body harnesses, and earplugs). Body harnesses and ear plugs were accounted for in the PPE Payment analysis as universal fit PPE, and their use was estimated there; thus, the estimates of current use of these items are derived from the PPE Payment analysis in the

[17] Note that current prices are in 2024 dollars whereas this FEA uses 2023 dollars as its base year. As such, the prices may be somewhat overstated.

same way as use of the other items accounted for in PPE Payment.

Because safety vests were not included in the PPE Payment rule, OSHA estimated the number of safety vests used by construction workers using occupation-level employment data from BLS OEWS for 2023. A certain subset of the employees in the three affected NAICS industries is estimated to need safety vests based on general assumptions about the specific occupation. As an example, while all employees in occupations deemed in-scope for this rule in the Heavy and Civil Engineering Construction industry (NAICS 237) are assumed to need safety vests, Security Guards in the other two industries (Construction of Buildings, NAICS 236, and Specialty Trade Contractors, NAICS 238) are considered to be employees who are not near roads and thus OSHA assumed only 5 percent of these employees would need safety vests.[18]

Based on the calculations described above, the agency estimates that the total number of non-universal fit PPE items worn by construction employees in 2022 was about 20.0 million. Dividing the total number of PPE items in use from table 8 (20,020,424) by the total number of construction workers in 2022 wearing PPE from table 3 (5,878,530) yields an estimate that each construction employee wearing PPE provided by the employer, and not universal fit, wears an average of 3.41 items of PPE.

Based on current pricing information, OSHA estimated a total cost of purchasing ''standard'' sizes of non-universal fit PPE of approximately $262.0 million, including an estimated $6.3 million for safety vests, $147.3 million for body harnesses, and $442,000 for earplugs. OSHA divided the total cost of PPE by the total number of items of PPE for an average per unit PPE cost of $13.08. The agency then multiplied the per unit PPE cost by the average number of items of PPE per employee to calculate an average cost of $44.56 ($13.08 × 3.41) to outfit a construction employee in their needed PPE, assuming that employee can use standard sizes.

TABLE 8—USE AND COST OF SELECTED PPE IN THE CONSTRUCTION INDUSTRIES

PPE provided by the employer, not universal fit	Total PPE items used by employees (2022)	PPE unit cost, standard size (2024$)	Total cost (2024$)
Body Harnesses[a]	2,004,783	$73.48	$147,311,472
Chemical Protective Clothing	396,561	7.71	3,059,075
Chemical Protective Footwear	234,634	12.86	3,018,178
Chemical Splash Goggles	647,626	10.07	6,521,590
Earmuffs	711,375	12.49	8,887,449
Earplugs[a]	2,761,510	0.16	441,658
Face Shields	1,322,723	15.79	20,890,200
Gloves for Abrasion Protection	3,256,712	10.63	34,607,992
Gloves for Chemical Protection	992,455	1.82	1,809,577
Non-Prescription Safety Glasses	3,859,430	3.87	14,923,130
Safety Goggles	2,776,301	4.60	12,761,729
Safety Vests[b]	837,448	7.49	6,275,277
Splash Aprons	218,865	6.60	1,443,772
Total PPE items used by construction employees	20,020,424	.....	261,951,099
Average per Unit PPE Cost (2024)	.....	.....	13.08

[a] The PPE Payment analysis estimated the use of body harnesses and earplugs but considered them to be universal fit PPE items.
[b] afety vests were not included in the PPE Payment analysis. OSHA, ORA, estimated their use in 2022 and their cost in 2024 dollars to be consistent how the agency derived the values for other types of PPE.
Source: OSHA, ORA, based on PPE Payment rule, ERG Cost Estimates, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

Finally, OSHA estimated the costs of purchasing replacement PPE for employees with improperly fitting PPE. Given the current lack of data on how many employees might be wearing improperly fitting PPE, OSHA estimated this parameter by combining sex specific construction employment data with general population height and weight distributions. The numbers of women and men in the construction industry who wear PPE is presented above in table 3.

To estimate the numbers of women and men who might require non-standard sizes of PPE, the agency relied on height and weight data for the general population in the Census Bureau's 2010 National Health and Nutrition Examination Survey (NHANES) (*https://www2.census.gov/library/publications/2010/compendia/statab/130ed/tables/11s0205.pdf*).[19] OSHA assumed, as shown in table 9, that women and men weighing above 300 pounds and women shorter than five feet tall might require non-standard sizes of PPE and thus could currently be using improperly fitting PPE.[20] [21] OSHA acknowledges that this assumption results in only a rough estimate of workers who might be using PPE that fits improperly, for several reasons. First, using the general population height and weight distributions may not align precisely with the height and weight distributions for construction workers. For example, Hispanic males make up a greater proportion of the

[18] As a result of these calculations, OSHA determined that, among the roughly 1.4 million construction workers considered, 837,448 of these workers would use safety vests.

[19] This data source reflects the most recent publicly available data that can be used to estimate the percentage of construction employees who are above a certain weight threshold or below a certain height threshold.

[20] The base figure for men shorter than five feet tall was too small to meet statistical standards of reliability of a derived figure.

[21] OSHA's analysis assumes that only construction workers who meet the specified height or weight criteria may require non-standard sizes of PPE. OSHA then uses this universe of workers when calculating the number of workers using PPE that does not properly fit. OSHA's analysis does not attempt to account for workers who wear standard-sized PPE but may nevertheless have been provided with improperly fitting PPE by their employers.

construction workforce than the population in general and are, on average, slightly shorter than, and weigh less than, non-Hispanic white males. Second, it is possible that there are fewer people who are much smaller or larger than average in the construction industry. Finally, OSHA acknowledges that this estimate is imprecise because it assumes that all workers who weigh more than 300 pounds and all female workers who are shorter than five feet tall require PPE that is not standard sized; conversely, it assumes that standard-sized PPE is appropriate for all other workers, both male and female.[22] Note that OSHA used an identical approach to this issue in its preliminary analysis and did not receive any comments on it. Therefore, the agency decided to retain this approach for the final analysis.

Due to data limitations and as a simplifying assumption for this analysis, the agency also assumes that construction workers are distributed across age groups in the same proportions as the general population examined in the NHANES. The agency then multiplies the average percentages for each weight and height category by the total number of men, and the total number of women, in the construction industry that wear any type of PPE, as shown in table 9.

TABLE 9—CONSTRUCTION EMPLOYEES WHO MIGHT REQUIRE NON-STANDARD SIZES OF PPE

Construction employee characteristic	Ages					Average	Total employees
	20–29	30–39	40–49	50–59	60–69		
Men Above 300 pounds	2.5%	3.1%	1.9%	1.9%	2.2%	2.32%	116,961
Women Above 300 pounds	2.3%	1.6%	1.7%	0.6%	0.7%	1.38%	11,552
Women Under 5 foot tall	5.7%	6.0%	5.0%	8.0%	9.0%	6.74%	56,422
Total Employees Who Might Require Non-Standard Sizes of PPE							184,935

Source: OSHA, ORA, based on NHANES, 2010. See Final Economic Analysis spreadsheet (Document ID 0118).

The agency estimates that 184,935 construction employees might require non-standard sizes of PPE but recognizes that not all of those employees are using improperly fitting PPE. This is especially true given that construction employers are already required to provide their employees with properly fitting PPE. OSHA assumes that up to 10 percent of those workers—or 18,494 workers—were being provided with incorrectly fitting PPE prior to promulgation of this final rule. OSHA used the same assumption in the preamble to the proposed rule and received no comments on the estimate nor suggestions on a different estimate the agency should use; therefore, OSHA has maintained this methodology and simply updated the underlying data used for this final analysis.

OSHA received a number of comments on the issue of whether non-standard sizes of PPE are more expensive than standard sizes. For example, some commenters expressed that ''outlier sizes'' tend to cost more and that because of this, employers are less likely to purchase them (Document ID 0038, 0047). Similarly, others said that employers' ''costs or compliance burdens'' would increase because employers will have to purchase multiple sizes of PPE, purchase smaller quantities, or purchase from manufacturers with which they do not typically do business (Document ID 0082, 0107, 0112). Some commenters who asserted that the rule would increase costs for businesses cited very high PPE unit costs that OSHA could not corroborate or suggested employers would be required to amass inventories of PPE that the rule does not require (Document ID 0082, 0114).

Other commenters argued that the costs associated with purchasing properly fitting PPE will be minimal. For example, CWIT stated that this final rule should result in ''[l]ittle economic burden'' (Document ID 0098). NABTU commented, ''. . . over 90 percent of construction establishments employ less than 20 workers. As such, to the extent some construction employers are not already in compliance, the cost of doing so will not be substantial'' (Document ID 0108). ISEA noted that while there may be costs for special orders of PPE in extremely small or large sizes, ''the size ranges of current PPE are likely to be able to provide a proper fit to the vast majority of the nation's construction workforce'' (Document ID 0112).

To address these comments, OSHA estimates that larger and smaller sizes of PPE cost 15 percent more than the average size PPE of that type. OSHA thus calculated the average, per-person cost to issue replacement PPE in non-standard sizes by increasing the base price of $44.56 by 15 percent, for an estimate of $51.24. As indicated in table 10, OSHA estimates that replacing the PPE for 18,494 employees would cost roughly $948,000 for the entire construction industry.

[22] OSHA recognizes that the assumption that standard-sized PPE properly fits all workers who are above five feet tall and weigh less than 300 pounds is not accurate in some cases, especially given the comments noting that ''unisex'' fall protection harnesses do not fit many women properly. As the rulemaking record reflects, standard-sized PPE may not properly fit some workers who are above five feet tall and weigh less than 300 pounds; at the same time, some workers who are shorter than five feet tall and/or weigh more than 300 pounds may be able to safely use standard sizes of PPE. Further, some individuals who are under five feet tall may also be over 300 pounds, meaning the data may potentially double count some individuals. Given this, it is important to note that OSHA views the categories of women shorter than five feet tall and men and women weighing above 300 pounds as a proxy for all workers who might require non-standard sizes of PPE and therefore are more likely than others to be receiving PPE that does not fit them properly.

TABLE 10—POTENTIAL PPE REPLACEMENT COST

[2023$]

Assumed percent of employees needing replacement PPE (2022)	Total affected employees	Average per-employee PPE cost, non-standard size	Total cost (2023$)
10% Employees	18,494	$51.24	$947,696

Note: Using the figures presented here to perform the calculations in the table may not result in the same totals due to rounding.
Source: OSHA, ORA. See Final Economic Analysis spreadsheet (Document ID 0118).

In addition to the cost of initially replacing improperly fitting PPE for some employees, employers will need to continue providing these non-standard sizes of PPE to those employees on an ongoing basis. OSHA calculates the recurring annual costs of providing these non-standard sizes of PPE using the marginal cost of non-standard sizes of PPE compared to the cost of standard sizes of PPE. As noted above, OSHA estimates this marginal cost increase is 15 percent. As shown in table 12, OSHA multiplies this marginal unit cost by the number of PPE items per employee for each PPE type, the total number of employees needing non-standard sizes of PPE, and the number of units of each PPE type needed in a year. OSHA determined the average useful life for the PPE items being considered here, as presented in table 11, based on estimates the agency developed for the PPE Payment rule and adjusted according to comments in the record for this rulemaking.[23]

TABLE 11—USEFUL LIFE OF SELECTED PPE

PPE provided by the employer, not universal fit	Useful life (yr.)
Body Harnesses	2.00
Chemical Protective Clothing	0.50
Chemical Protective Footwear	0.50
Chemical Splash Goggles	0.50
Earmuffs	0.40
Earplugs	0.005
Face Shields	1.00
Gloves for Abrasion Protection	0.15
Gloves for Chemical Protection	0.05
Non-Prescription Safety Glasses	1.00
Safety Goggles	0.20
Safety Vests	0.50
Splash Aprons	0.50

Source: OSHA based on PPE Payment FEA (72 FR 64342 (Nov. 15, 2007)).

The number of PPE items per employee presented in table 12 are calculated using the average number of items needed per employee (3.41) and proportionally distributing that estimate based on the overall numbers of each PPE item compared to the total number of all PPE items (see table 8). The number of units of each PPE type needed in a year is based on the useful life estimates presented in table 11.

TABLE 12—ANNUAL MARGINAL COST OF NON-STANDARD SIZE PPE

[2023$]

PPE type	Items per employee	Employees	Items per year	Non-standard size marginal unit cost	Total items per year	Total marginal cost (2023$)
Body Harnesses	0.34	18,494	0.5	$11.02	3,153	$34,758
Chemical Protective Clothing	0.07	18,494	2.0	1.16	2,495	2,887
Chemical Protective Footwear	0.04	18,494	2.0	1.93	1,476	2,849
Chemical Splash Goggles	0.11	18,494	2.0	1.51	4,075	6,155
Earmuffs	0.12	18,494	2.5	1.87	5,595	10,485
Earplugs	0.47	18,494	200.0	0.02	1,737,512	41,683
Face Shields	0.23	18,494	1.0	2.37	4,161	9,858
Gloves for Abrasion Protection	0.55	18,494	6.7	1.59	68,303	108,875
Gloves for Chemical Protection	0.17	18,494	20.0	0.27	62,444	17,078
Non-Prescription Safety Glasses	0.66	18,494	1.0	0.58	12,142	7,042
Safety Goggles	0.47	18,494	5.0	0.69	43,670	30,111
Safety Vests	0.14	18,494	2.0	1.12	5,269	5,923

[23] One commenter stated ''The useful life in regards to the economic analysis for ''Gloves for Abrasion Protection,'' ''Earmuffs,'' and ''Safety Goggles'' all seem too high. In my experience as a worker, I would imagine the earmuffs to be closer to 0.40, gloves to be 0.15, and safety goggles to be 0.20 or less on average'' (Document ID 0069). OSHA has adjusted the useful life of these types of PPE accordingly.

TABLE 12—ANNUAL MARGINAL COST OF NON-STANDARD SIZE PPE—Continued

[2023$]

PPE type	Items per employee	Employees	Items per year	Non-standard size marginal unit cost	Total items per year	Total marginal cost (2023$)
Splash Aprons	0.04	18,494	2.0	0.99	1,377	1,363
Total	3.41	.....	N/A	N/A	1,951,673	279,065

Note: Using the figures presented here to perform the calculations in the table may not result in the same totals due to rounding.
Source: OSHA, ORA, based on PPE Payment rule, ERG Cost Estimates, 2024. See Final Economic Analysis spreadsheet (Document ID 0118).

As presented in table 13, the agency estimates that if 10 percent of employees who might require non-standard sizes of PPE are provided with properly fitting PPE as a result of this clarifying rule, 50 percent of employers in the construction industry take time to familiarize themselves with the rule, and one establishment for each employee who requires new PPE spends time researching properly fitting PPE, the rule could have a one-time total cost to the construction industry of $5,475,450 plus $436,392 in annual recurring costs. These estimated costs translate to an annualized cost of $1,045,955 over 10 years using a 2 percent discount rate.

TABLE 13—TOTAL COSTS OF THE PPE RULE

[2023$]

Requirement	Total one-time cost (2023$)	Total annual cost (2023$)	Total annualized cost (2023$)	
			2%	0%
Rule Familiarization	$4,057,842	$0	$451,746	$405,784
PPE Research	469,911	157,327	209,640	204,318
PPE Replacement	947,696	0	105,504	94,770
Marginal Cost of Non-Standard Size PPE	0	279,065	279,065	279,065
Total	5,475,450	436,392	1,045,955	983,937

Note: Using the figures presented here to perform the calculations in the table may not result in the same totals due to rounding.
Source: OSHA, ORA. See Final Economic Analysis spreadsheet (Document ID 0118).

4. Sensitivity Analysis

The primary analysis above assumes that only 10 percent of the employees who may require non-standard sizes of PPE would need to have their PPE replaced as a result of this rule. For the first sensitivity analysis, the agency compared the assumed 10 percent of potentially affected employees with a lower rate of 5 percent and, alternatively, a higher rate at each quartile of the group (25, 50, and 100 percent). Additionally, as discussed above, OSHA has estimated that affected employees in construction wear an average of 3.41 pieces of PPE of the type (provided by the employer, not universal fit) covered by OSHA's analysis; the primary analysis assumes they would all need to be replaced. In reality, for individual employees, some items might need to be replaced and not others. The second sensitivity analysis examines the cases where employees need replacements for 1, 2, 3, or 4 items of PPE, along with the 3.41 items used in the primary analysis.

In the first sensitivity analysis, OSHA multiplied the total number of employees who may require non-standard sizes of PPE (184,935) by the various assumed non-compliance percentages. Table 14, below, presents a range of 5 percent to 100 percent non-compliance with the requirement to provide PPE for construction workers who may not be able to wear standard sizes of PPE. OSHA believes most companies want to act in the best interest of their employees and are already in compliance with the existing requirement to provide properly fitting PPE. As such, OSHA believes the actual non-compliance rate is towards the lower end of the range presented in table 14. At most, fewer than 200,000 employees might be affected.

TABLE 14—POTENTIALLY AFFECTED EMPLOYEES

[2022]

Percent of employees needing replacement PPE	Total employees
5	9,247
10	18,494
25	46,234
50	92,468
75	138,701
100	184,935

For the second sensitivity analysis, OSHA combined the different percentages of employees who might need replacement PPE with different numbers of items of PPE that might need to be replaced for each affected employee. In table 15, OSHA calculated the total number of PPE items in the affected construction industries that might need to be replaced based on employees needing 1, 2, 3, 4, or the average 3.41 pieces of replacement PPE.

TABLE 15—PPE ITEMS PER EMPLOYEE NEEDING REPLACEMENT

Percent of employees needing replacement PPE	Total PPE items needing replacement				
	1 Item	2 Items	3 Items	3.41 Items	4 Items
5	9,247	18,494	27,740	31,492	36,987
10	18,494	36,987	55,481	62,983	73,974
25	46,234	92,468	138,701	157,458	184,935
50	92,468	184,935	277,403	314,916	369,871
75	138,701	277,403	416,104	472,374	554,806
100	184,935	369,871	554,806	629,832	739,741

To complete the sensitivity analysis, OSHA multiplied the cost of the average piece of non-standard sized PPE, calculated as $15.05 per piece ($51.24 cost per employee/3.41 items per employee), by the number of total items of PPE needing replacement (displayed in table 15, above). The results are presented in table 16.

TABLE 16—TOTAL COST OF REPLACEMENT PPE, SENSITIVITY ANALYSIS RESULTS

[2023$]

Percent of employees needing replacement PPE	Total cost for replacement PPE (2023$)				
	1 Item	2 Items	3 Items	3.41 Items	4 Items
5	$139,134	$278,269	$417,403	$473,848	$556,538
10	278,269	556,538	834,807	947,696	1,113,076
25	695,672	1,391,344	2,087,017	2,369,241	2,782,689
50	1,391,344	2,782,689	4,174,033	4,738,481	5,565,378
75	2,087,017	4,174,033	6,261,050	7,107,722	8,348,067
100	2,782,689	5,565,378	8,348,067	9,476,963	11,130,756
Per Employee Cost	15.05	30.09	45.14	51.24	60.19

Table 16 shows that, as a worst-case scenario, if no employers are providing properly fitting PPE to employees who may require non-standard sizes of PPE, and if each employee needs 4 items of replacement PPE (more PPE than the average of 3.41 PPE items), then the total one-time cost to industry to provide that properly fitting PPE would be approximately $11.1 million. Meanwhile, the cost to industry could be as low as about $140,000 to replace improperly fitting PPE, assuming only 5 percent of employees need one replacement PPE item.

The percentage of employees needing replacement PPE and the number of PPE items each employee needs replaced also impact the estimated marginal cost of providing properly fitting PPE on an ongoing basis. Table 17 presents the annual marginal costs associated with continuing to supply employees with non-standard size PPE after initial replacement, assuming varying percentages of employees needing this PPE and varying numbers of PPE items per employee.

TABLE 17—ANNUAL MARGINAL COST OF NON-STANDARD SIZES OF PPE, SENSITIVITY ANALYSIS RESULTS

[2023$]

Percent of employees needing replacement PPE	Annual marginal cost of non-standard size PPE (2023$)				
	1 Item	2 Items	3 Items	3.41 Items	4 Items
5	$40,970	$81,941	$122,911	$139,533	$163,882
10	81,941	163,882	245,823	279,065	327,764
25	204,852	409,705	614,557	697,663	819,409
50	409,705	819,409	1,229,114	1,395,325	1,638,819
75	614,557	1,229,114	1,843,671	2,092,988	2,458,228
100	819,409	1,638,819	2,458,228	2,790,650	3,277,637

Table 18 shows that the total annualized cost of the rule could range from approximately $718,000 to $5.2 million when factoring in rule familiarization, PPE research, and the various PPE replacement scenarios (assuming a 10-year time horizon and 2 percent discount rate).

TABLE 18—TOTAL ANNUALIZED COST OF PPE FIT RULE, SENSITIVITY ANALYSIS RESULTS

[2023$]

Percent of employees needing replacement PPE	Total annualized cost of PPE fit rule (2023$)				
	1 Item	2 Items	3 Items	3.41 Items	4 Items
5	$717,846	$774,305	$830,765	$853,670	$887,225
10	774,305	887,225	1,000,145	1,045,955	1,113,064
25	943,685	1,225,984	1,508,283	1,622,808	1,790,582
50	1,225,984	1,790,582	2,355,180	2,584,230	2,919,779
75	1,508,283	2,355,180	3,202,078	3,545,652	4,048,975
100	1,790,582	2,919,779	4,048,975	4,507,073	5,178,171

OSHA also considered a sensitivity analysis that assumes a Purchasing Manager would spend 30 minutes instead of 10 minutes researching and identifying non-standard sizes of PPE for employees who do not currently have properly fitting PPE. This revised assumption increases the total annualized costs of the rule from $1,045,955 to $1,423,497 using a 2 percent discount rate over a ten-year period.

C. Economic Feasibility

The OSH Act requires that OSHA show the economic feasibility of standards. A standard is economically feasible when industry can absorb or pass on the costs of compliance without threatening the industry's long-term profitability or competitive structure (*American Textile Mfrs. Inst.* v. *Donovan,* 452 U.S. 490, 530 n.55 (1981) (*Cotton Dust*)), or ''threaten[ing] massive dislocation to, or imperil[ing] the existence of, the industry'' (*United Steelworkers of Am.* v. *Marshall,* 647 F.2d 1189, 1272 (D.C. Cir. 1981)). ''[T]he Supreme Court has conclusively ruled that economic feasibility [under the OSH Act] does not involve a cost-benefit analysis'' (*Pub. Citizen Health Research Grp.* v. *U.S. Dept. of Labor,* 557 F.3d 165, 177 (3d Cir. 2009)). The OSH Act ''place[s] the 'benefit' of worker health above all other considerations save those making attainment of this 'benefit' unachievable'' (*Cotton Dust,* 452 U.S. at 509). Therefore, ''[a]ny standard based on a balancing of costs and benefits by the Secretary that strikes a different balance than that struck by Congress would be inconsistent with the command set forth in'' the statute (*Id.*). This case law arose with respect to health standards issued under section 6(b)(5) of the OSH Act (29 U.S.C. 655(b)(5)), which specifically require a showing of feasibility; OSHA has also rejected the use of formal cost benefit analysis for safety standards, which are not governed by section 6(b)(5) (See 58 FR 16612, 16622–23 (Mar. 30, 1993) (''in OSHA's judgment, its statutory mandate to achieve safe and healthful workplaces for the nation's employees limits the role monetization of benefits and analysis of extra-workplace effects can play in setting safety standards.'')).

OSHA historically has applied two threshold tests to examine economic feasibility for industries covered by the rule: whether the rule's average per establishment costs as a percentage of average per establishment revenues, for each industry sector, are below 1 percent, and whether those costs as a percentage of profits are below 10 percent.[24] However, as discussed in OSHA's recent proposed rule on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings (89 FR 70698, 70943 (Aug. 30, 2024)), the agency is no longer using costs as a percent of profits as a measure of feasibility because OSHA determined that the profit test is not a useful measure of the economic feasibility of a standard for a given industry. To determine whether there is a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act, the threshold test examines whether the average costs for small entities are 1 percent of their average revenues or below.[25] These threshold tests are not a hard ceiling or determinative; instead, they provide guidelines the agency uses to examine whether there are any potential economic impact issues that require additional study.

Although this rule simply clarifies an existing requirement, OSHA has provided an estimate of the costs for a proportion of employers to come into compliance with the already-existing requirement to provide properly fitting PPE. As one commenter pointed out, the rule ''should not cause any financial stress on any company unless they are providing ill-fitting PPE to employees currently'' (Document ID 0034). Even assuming these estimated costs will be incurred by employers as a result of the rule, the rule easily passes OSHA's threshold tests for feasibility. As shown in table 19, the average construction industry employer has revenues of $3.35 million annually and 9 employees. As a worst-case scenario, if such an employer had to conduct rule familiarization, research PPE, and replace all the PPE at issue in this rulemaking for all of their employees (*i.e.,* 3.41 items per employee for 9 employees), including new hires, and then continue to provide properly fitting PPE, it would cost an annualized $258, which is much less than 0.1 percent of an average employer's revenues. More realistically, an employer might have to replace the PPE for one of its employees and the per-establishment costs would be substantially lower. Therefore, this rule is clearly economically feasible.

[24] For example, see p. VI–14 of the Final Economic Analysis supporting OSHA's rule on Respirable Crystalline Silica. Final Economic Analysis and Final Regulatory Flexibility Analysis for OSHA's Rule on Occupational Exposure to Respirable Crystalline Silica, Chapter VI (OSHA–2010–0034–4247).

[25] For example, see OSHA's Final Regulatory Flexibility Screening Analysis in support of the Hazard Communication rule (77 FR 17574, 17660 (March 26, 2012)).

TABLE 19—AVERAGE EMPLOYMENT AND REVENUES (2023$) PER ESTABLISHMENT BY NAICS

NAICS	Establishments	Average employment per establishment	Average revenue (2023$) per establishment
236 (Construction of Buildings)	251,634	6	$3,825,160
237 (Heavy and Civil Engineering Construction)	38,214	26	9,892,428
238 (Specialty Trade Contractors)	510,803	9	2,078,011
Total Construction	800,651	9	3,347,121

Source: 2022 County Business Patterns (CBP). Available at *https://www.census.gov/data/datasets/2022/econ/cbp/2022-cbp.html.*

D. Regulatory Flexibility Screening Analysis and Certification

In accordance with the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.* (as amended)), OSHA examined the regulatory requirements of this rule to determine whether the requirement would have a significant economic impact on a substantial number of small entities.[26] While the rule simply clarifies an existing requirement, even when OSHA assumes that this rule leads to changes in employer behavior and associated costs, the costs are minimal. Given the number of workers OSHA estimates might be wearing improperly fitting PPE compared to the number of construction establishments covered by this rule, it is statistically unlikely that there will be more than one worker who might be wearing improperly fitting PPE at any given firm. For the following reasons, this rule will not impose significant costs (*i.e.,* costs that amount to more than one percent of revenues) on small employers:

- Replacement PPE costs are less than $52 per employee;
- Establishments will incur less than $36 to complete rule familiarization and PPE research upfront (plus another $15 annually if they have a new hire requiring non-standard PPE); and
- The ongoing marginal cost of non-standard sized PPE is about $7 per employee, on average.

To further illustrate this point, in order for a firm to experience impacts greater than 1 percent of revenues, firm-level revenues would need to be $3,162 or lower.[27] According to the 2017 Statistics of U.S. Businesses (SUSB) dataset (*https://www.census.gov/data/datasets/2017/econ/susb/2017-susb.html*), Specialty Trade Contractors (NAICS code 238) has the lowest revenues per firm for the smallest size category (<5 employees) at $365,018 (inflated to 2023$), which is well above the $3,162 needed for impacts to equal 1 percent of revenues. The agency therefore certifies that this final rule will not have a significant economic impact on a substantial number of small entities.

E. Benefits

Although this rule is a clarification of employers' existing obligations, comments in the record suggest that not all employers are currently meeting their obligation to provide their employees with properly fitting PPE. The agency expects this clarification will improve compliance and thereby produce benefits to workers who were previously not receiving properly fitting PPE. However, due to lack of information about how many injuries, illnesses, and fatalities are caused by improperly fitting PPE, the agency is unable to estimate number of injuries, illnesses, and fatalities that may be averted by this final rule. While OSHA received a number of comments providing anecdotal evidence from individuals' personal experience, no commenter provided studies or data that would allow the agency to estimate the number of fatalities and non-fatal injuries and illnesses caused by improperly fitting PPE across the construction industry. This section discusses the evidence in the record regarding potential benefits, the difficulties in identifying PPE-related injuries in the available data, and potential benefits other than direct health and safety benefits that may result from this final rule. Finally, for informational purposes, OSHA calculates how many fatalities or non-fatal injuries and illnesses would need to be prevented by this rule in order for it to have positive net benefits.[28]

The comments OSHA received revealed two types of benefits likely to result from requiring properly fitting PPE. The first type comes from avoidance of injuries, illnesses, and fatalities. Several commenters reported that they were required to wear incorrectly fitting PPE on the job and that this made accidents more likely for them (Document ID 0079, 0081, 0097). Some reported having been injured due to improperly fitting PPE while others reported near misses. For example, one individual reported that a safety vest that was too big had gotten ''caught on equipment and nearly caused falls'' and that ''[i]mproperly fitting gloves have been caught in equipment'' (Document ID 0079). Another said that oversized gloves caused her hand to be caught in machinery, resulting in a serious and permanently debilitating injury (Document ID 0061). A comment from the United Brotherhood of Carpenters and Joiners of America (UBC) reported stories shared by their members, including two who suffered eye injuries due to improperly fitting safety glasses, one whose oversized fall protection harness got caught on equipment and caused a back injury, and two who suffered injuries to fingers when their oversized gloves were caught in machinery (Document ID 0074). These comments indicate that employees are being injured due to improperly fitting PPE.

However, specific numbers of injuries or fatalities directly attributable to improperly fitting PPE are difficult to identify in the available data. As shown above, improperly fitting PPE can cause a variety of types of injuries (*i.e.,* fractures, abrasions, sprains, cuts and punctures) in a number of ways (*i.e.,* by causing falls, getting caught in

[26] Small entity status is determined by the Small Business Administration's size standards. Construction entities are considered small based on their revenue, with the threshold ranging from less than $19 million to less than $45 million in annual revenue depending on which 6-digit NAICS industry the employer falls under (See *https://www.sba.gov/document/support-table-size-standards*).

[27] Rule familiarization cost per establishment of $10.14, one time PPE needs assessment and research cost of $25.41, annual research cost for new hires of $15.27, and one time PPE replacement cost of $51.24 for one employee, plus ongoing marginal cost of nonstandard sized PPE of $6.68 for one employee annualized at a 2 percent discount rate over 10 years yields a per employer cost of $31.62. For a cost of $31.62 to exceed one percent of revenues, the employer's revenues would need to be less than $3,162 annually ($3,162 * 0.01 = $31.62).

[28] By showing this break-even point, OSHA is not suggesting the agency is required to engage in formal cost-benefit analysis requiring that benefits exceed costs but instead presents it for informational purposes only.

machinery) and to a number of parts of the body. Data available from BLS are parsed by type of injury, cause of injury, or part of the body injured, and injuries that are reported in these categories may include injuries caused by improperly fitting PPE along with injuries resulting from other factors. The data collected do not specify whether PPE was being worn or whether it contributed to an accident or injury. Data from BLS reported that, in 2021, there were more than 37,000 sprains, strains, and tears, more than 18,000 cuts and lacerations, and 1,700 amputations that resulted in days away from work in the construction industry (BLS, 2023). The injuries reported by commenters and discussed above would fall within these categories (if they were reported appropriately). Based on this, it is entirely plausible that there are some injuries in these categories (as well as other categories of injuries not presented here) that are due to improperly fitting PPE and that could be avoided if employees wore properly fitting PPE.

In addition to the specific accounts of injuries detailed above, multiple commenters expressed doubt that the improperly fitting PPE they wear or had worn would keep them safe in the event an accident occurred; some worried that the poor fit of their PPE (*e.g.,* fall protection harness) could lead to a fatal accident (Document ID 0085, 0081, 0084, 0090, 0108). Others reported that they felt they were putting themselves in danger by working while wearing improperly fitting PPE (Document ID 0080). Feeling unsafe at work has negative consequences for workers' mental health. The NSC conducted a survey to evaluate the correlation between workplace safety and negative mental health impacts. NSC reported that:

> Respondents who felt unsafe at work were nearly three times more likely to report also experiencing depressive symptoms within the past two weeks compared to those who felt safe at work. In addition, respondents who felt unsafe at work were more than twice as likely to also report feeling symptoms of anxiety compared to those who felt safe at work.
>
> Individuals with the highest level of concern for their safety at work were the most likely to report feeling depressed or anxious frequently enough to meet one of the criteria for clinical diagnosis of mental illness (NSC, 2022).

Consistent with the findings of the NSC survey, commenters reported feelings of anxiety and stress, loss of sleep, mental fatigue, and concern about discrimination or retaliation; they also worried about loss of income because of, for example, being sent home due to a lack of properly fitting PPE or being laid off because they work slower due to PPE that is too big and makes tasks more difficult (Document ID 0045, 0074, 0087). Accordingly, the fit requirement of this final rule may yield benefits from reduced stress and other negative mental health effects.

The third type of benefit likely to result from this final rule is avoidance of work or production delays that occur when workers are wearing PPE that does not fit. The UBC noted that, among other benefits, ''properly fitting PPE will result in less lost production'' (Document ID 0074) and the ISEA likewise commented that the rule would yield a financial benefit by preventing injuries and fatalities (Document ID 0112). In its comment, NIOSH cited studies finding that workers had difficulty performing job tasks while wearing poorly fitting PPE, including one where study participants ''reported that poorly fitting PPE interfered with work tasks and potentially affected their productivity'' and another where participants reported that ''[b]eing unable to perform some technical tasks while wearing standard issue gloves had a direct negative effect on productivity'' (Document ID 0054). Commenters also reported that improperly fitting PPE made it difficult to do their jobs efficiently (Document ID 0073, 0079). Accordingly, workers who are provided with properly fitting PPE as a result of this final rule may experience increased productivity, which in turn benefits employers because employees can work faster and more efficiently.

Additional benefits that could accrue to employees as a result of this rule include not being denied work (*e.g.,* Document ID 0061, 0114); not being sent home without pay (*e.g.,* Document ID 0087); and not having to pay for their own PPE (*e.g.,* Document ID 0056, 0060, 0067, 0094, 0115). Another commenter suggested that improved safety would help the construction industry ''alleviate [. . .] risk and make working in the industry a good choice for women and other under-represented groups'' which the commenter believed was necessary in order for the industry to meet the need for workers (Document ID 0074).

Based on the above, OSHA believes that this rule will result in health and safety benefits to workers, as well as benefits to employers due to increased worker efficiency and productivity. Although the agency is unable to quantify those benefits due to data limitations, the agency has calculated, for informational purposes, how many injuries and/or fatalities this final rule would have to prevent to yield a net benefit. To do so, OSHA begins with the estimate that this final rule will impose annualized costs of about $889,000 per year using a two percent discount rate and a ten year time frame. Next, OSHA monetizes the potential safety and health benefits of the rule. Monetization allows comparison of the benefits and costs of a rule in the same terms. When OSHA is able to estimate the number of injuries or fatalities prevented by a given rule, the agency monetizes these benefits.

If OSHA were to monetize fatalities potentially avoided by this final rule, the analysis would use the Department of Transportation (DOT) 2023 value-of-a-statistical-life (VSL) estimate of $13.2 million per avoided fatality (DOT, 2024).[29] DOT relied on a selected set of nine recent economic studies that provided usable estimates of VSL for a broad cross-section of the population. Because economic theory and empirical evidence indicate that the value of reducing life-threatening and health-threatening risks (and the corresponding willingness of individuals to pay to reduce these risks) will increase as real per capita income increases, DOT adjusted its VSL estimate to reflect changes in real income over time, using an income elasticity of VSL of 1.0 (the percentage change in VSL in response to a 1% increase in real income). For its estimate of real gross domestic product (GDP) growth over the ten-year period for which OSHA estimates benefits, the agency uses a recent Congressional Budget Office (CBO) forecast of 1.7 percent per year (CBO, 2022).[30] Accounting for real GDP growth over a ten-year period, on an annualized basis using a 2 percent discount rate, OSHA's adjusted VSL is $14.2 million.[31] Although OSHA is unable to estimate the number of fatalities that will be prevented by this final rule, the agency can demonstrate based on this adjusted VSL, that this final rule will have positive net benefits if it prevents one

[29] The analysis is using 2023 as its reference dollar year for comparing costs and benefits, although given that the unit costs for PPE are using the latest available information from 2024, the costs might be slightly overstated for 2023.

[30] See Table 2–1 in *https://www.cbo.gov/publication/58147* (CBO, 2022).

[31] Beginning with a baseline ($2023) VSL of $13.2 million, OSHA applied an annual income growth rate of 1.7% (Year 0 = 100.0%, Year 1 = 101.7%, Year 2 = 103.4%, Year 3 = 105.2%, Year 4 = 107.0%, Year 5 = 108.8%, Year 6 = 110.6%, Year 7 = 112.5%, Year 8 = 114.4%, Year 9 = 116.4%) and a discount rate of 2% to derive a present value income growth rate of 107.7%. Multiplying the baseline VSL times the present value income growth rate ($13.2 × 107.7%) yields an adjusted VSL value of $14,217,770, or after rounding, $14.2 million.

fatality about every 14 years ($14,200,000/$1,045,955 = 13.6) based on avoided fatalities alone regardless of avoided non-fatal injuries.

Similarly, OSHA typically monetizes the benefits of avoided nonfatal injuries and illnesses based on the value of a statistical injury (VSI) and, if monetizing benefits for this final rule, would use the midpoint of the range of the values cited in Viscusi and Gentry (2015) converted to 2023 dollars using the GDP deflator, or $116,588 per injury. Based on this VSI, if this rule prevented about 9 ($1,045,955/$116,588 = 8.97) nonfatal injuries or illnesses a year, it would have positive net benefits regardless of avoided fatalities.

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VI. Technological Feasibility

This final rule amends § 1926.95(c) to make explicit construction employers' existing obligation to ensure PPE worn by employees properly fits each employee. In the NPRM, OSHA explained that this revision would improve clarity for the construction sector and would ensure consistency between the construction PPE standards and existing OSHA standards for general industry and shipyards. OSHA further stated that because the requirement for properly fitting PPE already exists in the construction industry, the agency believed that providing properly fitting PPE is already common practice among construction employers. Therefore, OSHA preliminarily concluded that the proposed rule would be technologically feasible.[32]

In response to the NPRM, no commenter identified any technological barriers to providing construction employees with properly fitting PPE. Instead, as one commenter stated, ''PPE is readily available for the wide range of worker anthropometrics'' (Document ID 0108). According to another, ''PPE is available in different sizes. In addition, most PPE is adjustable, and available in a range of sizes, meaning the wearer can achieve a proper fit'' (Document ID 0112). General industry and shipyard employers have been able to comply with the comparable requirements in 29 CFR 1910.132(d)(1)(iii) and 1915.152(b)(3), providing further evidence of technological feasibility, especially given that no commenter identified any PPE that is unique to construction work (see Document ID 0078). OSHA has also identified industry resources that demonstrate the availability of PPE designed for many different body types, such as the list of PPE for all genders and sizes compiled by CPWR (see Document ID 0117) and ISEA's List of Female PPE Manufacturers (Document ID 0014).

Although some commenters did indicate they had difficulty obtaining properly fitting PPE in the past (Document ID 0031, 0046), these comments do not demonstrate a technological feasibility issue, but rather a market supply issue. As one commenter noted, ''[s]maller sizes exist for many types of PPE, but only larger sizes are stocked by sellers'' (Document ID 0046). These same commenters also expressed hope that this final rule would increase availability by spurring demand (Document ID 0031, 0046). As one commenter stated, ''[t]here could be experiences of longer lead times for certain PPE items; however, as employers increase the demand for manufacturers to produce more size variations, this problem should be alleviated'' (Document ID 0098). After reviewing the comments received and the evidence in the record, OSHA finds that this final rule is technologically feasible.

VII. Paperwork Reduction Act

This final rule contains no information collection requirements subject to OMB approval under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*) and its implementing regulations at 5 CFR part 1320. The PRA defines a collection of information as ''the obtaining, causing to be obtained, soliciting, or requiring the disclosure to third parties or the public, of facts or opinions by or for an agency, regardless of form or format.'' (44 U.S.C. 3502(3)(A)).

VIII. Federalism

OSHA reviewed this final rule in accordance with Executive Order 13132 (64 FR 43255 (Aug. 10, 1999)), which, among other things, is intended to ''ensure that the principles of federalism established by the Framers guide the executive departments and agencies in the formulation and implementation of policies.'' The E.O. provides for preemption of State law where there is clear evidence that Congress intended preemption of State law, or where the exercise of State authority conflicts with the exercise of Federal authority under the Federal statute. The E.O. directs agencies to limit any such preemption to the extent possible. The E.O. also

[32] As explained in the NPRM, because the revision in this final rule is simply a clarification of an existing requirement, the agency is not required to perform a new technological feasibility analysis for this rulemaking. Nonetheless, OSHA is including a discussion of technological feasibility for informational purposes.

requires that agencies consult with states on rules that have ''federalism implications,'' which are those that 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.''

This final rule complies with E.O. 13132. The hazards addressed by this final rule and its goal of protecting construction workers are national in scope and the final rule does not include ''federalism implications'' as defined in the E.O. Under section 18 of the OSH Act, 29 U.S.C. 651 *et seq.,* Congress expressly provides that States may adopt, with Federal approval, a plan for the development and enforcement of occupational safety and health standards (29 U.S.C. 667); OSHA refers to these OSHA-approved, State-administered occupational safety and health programs as ''State Plans.'' Occupational safety and health standards developed by State Plans must be at least as effective in providing safe and healthful employment and places of employment as the Federal standards (29 U.S.C. 667). Subject to these requirements, State Plans are free to develop and enforce under State law their own requirements for occupational safety and health standards. The choice to become a State Plan is part of the statutory scheme and is not mandatory, so there are no federalism implications for States that choose to adopt a State Plan. The effect of this final rule on States and territories with OSHA-approved occupational safety and health State Plans is discussed in Section IX, State Plans.

In States without OSHA-approved State Plans, the States are not employers under the OSH Act and the final rule would therefore not have a substantial direct effect on them (29 U.S.C. 652(5)).

IX. State Plans

When Federal OSHA promulgates a new standard or a more stringent amendment to an existing standard, States with their own OSHA-approved occupational safety and health plans (''State Plans'') must either amend their standards to be identical to, or ''at least as effective as,'' the new standard or amendment, or show that an existing State Plan standard covering this issue is ''at least as effective'' as the new Federal standard or amendment (29 CFR 1953.5(a)). State Plans' adoption must be completed within six months of the promulgation date of the final Federal rule.

OSHA has determined that by including in 29 CFR 1926.95 an explicit requirement that PPE must fit properly, this final rule will increase protection afforded to employees in the construction industry by clarifying employers' obligations under the standard. Accordingly, within six months of the rule's final promulgation date, State Plans are required to review their standards and adopt amendments to those standards that are identical to, or ''at least as effective'' as, this rule, unless they demonstrate that such amendments are not necessary because their existing standards are already ''at least as effective'' in protecting workers. To avoid delays in worker protection, the effective date of the State standard and any of its delayed provisions must be the date of State promulgation or the Federal effective date, whichever is later. The Assistant Secretary may permit a longer time period if the State timely demonstrates that good cause exists for extending the time limitation (29 CFR 1953.5(a)).

Of the 29 States and Territories with OSHA-approved State Plans, 22 cover public and private-sector employees: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, and Wyoming. The remaining seven States and Territories cover only State and local government employees: Connecticut, Illinois, Maine, Massachusetts, New Jersey, New York, and the Virgin Islands.

X. Unfunded Mandates Reform Act

OSHA reviewed this final rule according to the Unfunded Mandates Reform Act of 1995 (''UMRA''; 2 U.S.C. 1501 *et seq.*) and Executive Order 12875 (58 FR 58093 (Oct. 28, 1993)). Section 202 of the UMRA, 2 U.S.C. 1532, requires agencies to assess the anticipated costs and benefits of a rule that includes a Federal mandate ''that may result in expenditures in any one year by state, local, and tribal governments, in the aggregate, or by the private sector,'' of at least $100 million, adjusted annually for inflation. This provision does not generally apply to a duty arising from participation in a voluntary Federal program (2 U.S.C. 658(5)).

As discussed above in Section V. Final Economic Analysis and Regulatory Flexibility Act Certification, the agency has preliminarily determined that compliance with this final rule will require expenditures of less than $100 million (adjusted annually for inflation, which would now amount to more than $180 million) per year by all affected entities. Accordingly, this proposal is not a significant regulatory action within the meaning of the UMRA.

This rule does not place a mandate on State or local government for purposes of the UMRA. As explained above in Section IX. State Plans, those States with OSHA-approved State Plans voluntarily choose to adopt, with Federal approval, a plan for the development and enforcement of occupational safety and health standards. Thus, to the extent they are required to comply with OSHA standards, it is the result of their voluntary decision, not a Federal mandate. In States without OSHA-approved State Plans, the States and their political subdivisions are not employers under the OSH Act (29 U.S.C. 652(5)). Thus, the final rule does not impose costs on them.

The OSH Act does not cover Tribal governments in the performance of traditional governmental functions, but it does cover Tribal governments when they engage in activities of a commercial or service character (see *Menominee Tribal Enterprises* v. *Solis,* 601 F.3d 669 (7th Cir. 2010); *Reich* v. *Mashantucket Sand & Gravel,* 95 F.3d 174 (2d Cir. 1996)). However, the cost of the revisions in this final rule for these covered activities by a Tribal government would not meet the threshold established in UMRA. OSHA certifies that this rule would not mandate that State, local, or Tribal governments adopt new, unfunded regulatory obligations of, or increase expenditures by the private sector by, more than $100 million in any year, as documented in the Final Economic Analysis.

XI. Consultation and Coordination With Indian Tribal Governments

OSHA reviewed this final rule in accordance with Executive Order 13175 (65 FR 67249 (Nov. 9, 2000)) and determined that it would not have ''tribal implications'' as defined in that order. The clarification to 29 CFR 1926.95 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.

XII. Protecting Children From Environmental Health and Safety Risks

Executive Order 13045, Protecting Children from Environmental Health and Safety Risks (62 FR 19885 (April 23, 1997)), as amended by Executive Orders 13229 and 13296, requires that Federal agencies provide additional evaluation

of economically significant regulatory actions that concern an environmental health risk or safety risk that an agency has reason to believe may disproportionately affect children. As explained elsewhere in this preamble, OSHA has determined that this final rule is not an economically significant regulatory action. In addition, this rule is intended to protect workers of all ages, and OSHA has no information that children comprise a disproportion share of the affected workforce. To the extent older children are employed in the construction industry, this final rule will have a protective effect on these older children by ensuring that they are provided properly fitting PPE. OSHA has therefore determined that this rule will not disproportionately affect children or have any adverse impact on children. Accordingly, Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, requires no further agency action or analysis.

XIII. Environmental Impacts

OSHA has reviewed the final rule according to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*), the regulations of the Council on Environmental Quality (40 CFR part 1500 *et seq.*), and the Department of Labor's NEPA procedures (29 CFR part 11).

Pursuant to 29 CFR 11.10 and consistent with CEQ regulations, the promulgation, modification, or revocation of any safety standard is categorically excluded from the requirement to prepare an environmental assessment under NEPA absent extraordinary circumstances indicating the need for such an assessment. OSHA finds that this final rule presents no such extraordinary circumstances.

List of Subjects in 29 CFR Part 1926

Construction, Personal protective equipment, Occupational safety and health.

Authority and Signature

Douglas L. Parker, Assistant Secretary of Labor for Occupational Safety and Health, authorized the preparation of this document under the authority granted by sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657), 5 U.S.C. 553, Secretary of Labor's Order No. 8–2020 (85 FR 58393), and 29 CFR part 1911.

Signed at Washington, DC.

Douglas L. Parker,

Assistant Secretary of Labor for Occupational Safety and Health.

Final Regulatory Text

Amendments to Standards

For the reasons stated in the preamble, OSHA amends 29 CFR part 1926 to read as follows:

PART 1926—OCCUPATIONAL SAFETY AND HEALTH STANDARDS

Subpart E—Personal Protective and Life Saving Equipment

■ 1. The authority citation for subpart E is revised to read as follows:

Authority: 40 U.S.C. 3701 *et seq.;* 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 5–2002 (67 FR 65008), 5–2007 (72 FR 31160), 4–2010 (75 FR 55355), 1–2012 (77 FR 3912), or 8–2020 (85 FR 58393), as applicable; and 29 CFR part 1911.

■ 2. Amend § 1926.95 by revising paragraph (c) to read as follows:

§ 1926.95 Criteria for personal protective equipment.

* * * * *

(c) *Design and selection.* Employers must ensure that all personal protective equipment:

(1) Is of safe design and construction for the work to be performed; and

(2) Is selected to ensure that it properly fits each affected employee.

* * * * *

[FR Doc. 2024–29220 Filed 12–11–24; 8:45 am]

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DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG–2024–1055]

RIN 1625–AA00

Safety Zone, Lower Mississippi River, Natchez, MS

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a temporary safety zone for navigable waters on the Lower Mississippi River from mile marker 364.4 to mile marker 365.5. The safety zone is needed to protect personnel, vessels, and the marine environment from potential hazards created by waterborne fireworks display with a fallout zone of approximately 350 feet around the barge. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port, Sector Lower Mississippi River.

DATES: This rule is effective December 31, 2024, from 6 p.m. through 7 p.m.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to *https://www.regulations.gov,* type USCG–2024–1055 in the search box and click ''Search.'' Next, in the Document Type column, select ''Supporting & Related Material.''

FOR FURTHER INFORMATION CONTACT: If you have questions about this rule, call or email MST1 Peter Buczakowski, U.S. Coast Guard; telephone 901–208–0311, email *Peter.L.Buczakowski@uscg.mil.*

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
§ Section
U.S.C. United States Code

II. Background Information and Regulatory History

The Coast Guard is issuing this temporary rule under the authority in 5 U.S.C. 553(b)(B). This statutory provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are ''impracticable, unnecessary, or contrary to the public interest.'' The Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because it is impracticable. The NPRM process would delay the establishment of the safety zone until after the date of the event and compromise public safety. We must establish this temporary safety zone by December 31, 2024, and lack sufficient time to provide a reasonable comment period and then consider those comments before issuing the rule.

Also, under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making this rule effective less than 30 days after publication in the **Federal Register**. Delaying the effective date of this rule would be contrary to the public interest because action is needed to respond to the potential safety hazards associated with the waterborne fireworks displays on December 31, 2024.