AMERICAN IRON AND STEEL INSTITUTE, for itself and on behalf of its members, Petitioners,

v.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; United States Department of Labor, Respondents,

United Steelworkers of America, AFL-CIO-CLC, Intervenor.

American College of Occupational and Environmental Medicine, Petitioner,

v.

Occupational Safety and Health Administration; et al., Respondents,

American Association of Occupational Health Nurses; American Nurses Association, Intervenors.

Nos. 98-6146, 98-6334.

United States Court of Appeals,

Eleventh Circuit.

Aug. 3, 1999.

Petitions for Review of Final Rulemaking by the Occupational Safety and Health Administration.

Before ANDERSON, Chief Judge, BLACK, Circuit Judge, and FORRESTER*, District Judge.

ANDERSON, Chief Judge:

These consolidated cases seek judicial review of the Occupational Safety and Health Administration's ("OSHA") new standard for respiratory protection in the workplace. The separate challenges are brought by the American Iron and Steel Institute ("Industry") and the American College of Occupational and Environmental Medicine ("Doctors") and relate to different aspects of the new standard. For the reasons that follow, we conclude that OSHA correctly applied the law and that its factual determinations were supported by substantial evidence, and therefore the petitions for review are DENIED.

I. BACKGROUND

The Occupational Safety and Health Act of 1970 ("OSH Act"), 29 U.S.C. §§ 651-678, was enacted

*Honorable J. Owen Forrester, U.S. District Judge for the Northern District of Georgia, sitting by designation.

to ensure safe and healthy working conditions for employees. The OSH Act empowers OSHA to promulgate standards "dealing with toxic materials or harmful physical agents ... which most adequately assure[ ], to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life." 29 U.S.C. § 655(b)(5). One such hazard is caused by harmful dusts, fumes, gases, and the like that contaminate the atmospheres in many workplaces. OSHA began to regulate employee exposure to such contaminants as early as 1971. In January 1998, OSHA issued a new regulatory standard representing a comprehensive revision of those portions of the old standard which addressed the manner and conditions of respirator use ("Standard"). *See* 63 Fed.Reg. 1152 (Jan. 8, 1998) (codified at 29 C.F.R. § 1910.134). It is the Standard that is at issue in this case.

A. *History of Respiratory Regulation*

In 1971, while OSHA was still in its infancy, it promulgated an initial respiratory protection standard pursuant to § 6(a) of the OSH Act, 29 U.S.C. § 655(a). Section 6(a) authorized OSHA to adopt national consensus standards as occupational safety and health standards in a prompt manner, without the lengthy procedures normally incident to administrative rulemaking, during a period of two years from the OSH Act's effective date. Under that framework, OSHA adopted the American National Standards Institute ("ANSI") Standard Z88.2-1969, "Practices for Respiratory Protection." That standard reflected a preference for engineering controls over respirators;[1] in effect, it allowed respirators only "[w]hen effective engineering controls are not feasible, or while they are being instituted." This restriction on the use of respirators, sometimes referred to as the Hierarchy-of-Controls Policy, thus became an ingrained part of OSHA's regulatory framework, and was codified at 29 C.F.R. § 1910.134(a)(1).

The authority that was conferred by § 6(a) to codify national consensus standards as federally

[1]A respirator is "an enclosure that covers the nose and mouth or the entire face or head" with the goal of "prevent[ing] the inhalation of harmful airborne substances or oxygen-deficient air." 63 Fed.Reg. at 1158. Engineering controls, by contrast, are structural methods of arresting harmful contaminants at their source and preventing them from entering the general workplace area—"for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials." 29 C.F.R. § 1910.134(a)(1).

mandated occupational safety and health standards expired in 1973, but the respiratory protection standard remained intact. After 1973, OSHA was bound to follow § 6(b) of the OSH Act, 29 U.S.C. § 655(b), in promulgating, modifying, or revoking standards. Section 6(b) requires the notice and comment procedures typical to administrative rulemaking.[2] Various parts of the old respiratory protection standard were revised and updated over the years pursuant to § 6(b), but the changes were relatively minor. The Standard was limited to issues relating to the manner and conditions of use of respirators, and retained the Hierarchy-of-Controls Policy as reflected in § 1910.134(a)(1).

The issuance of the Standard in 1998 was the culmination of several years of regulatory debate, hearings, and comment from industry, labor, and other interested persons. OSHA first published an advance notice of proposed rulemaking on May 14, 1982. *See* 47 Fed.Reg. 20803. On September 17, 1985, OSHA announced the availability of a preliminary draft of a new respiratory protection standard. On November 4, 1994, OSHA published a proposed version of the new respiratory protection standard, and the hearing required by 29 U.S.C. § 655(b)(3) was held June 6, 1995. Following the hearing, OSHA obtained additional comments from interested parties. The final Standard was published on January 8, 1998 and became effective on April 8, 1998.

B. *Highlights of the Standard*

The Standard retains the Hierarchy-of-Controls Policy, which as a general matter prefers engineering controls over respirators worn by individual employees. 29 C.F.R. § 1910.134(a)(1). However, the employer is required to provide respirators for its employees when respirators are necessary to protect their health. 29 C.F.R. § 1910.134(a)(2). The Standard requires certain employers to develop and implement a written respiratory protection program that includes several mandatory items. 29 C.F.R. § 1910.134(c). Employers are required to select particular types of respirators based on certain criteria, such as the nature of harmful

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[2]OSHA must first publish a proposed rule promulgating, modifying, or revoking an occupational safety or health standard in the *Federal Register* and give interested parties a 30-day comment period. 29 U.S.C. § 655(b)(2). Interested parties have the right to demand a public hearing by filing objections within that time period. 29 U.S.C. § 655(b)(3). The final rule can be issued only upon the expiration of 60 days after the later of the termination of the comment period, or the completion of the public hearing. 29 U.S.C. § 655(b)(4).

contaminants and workplace and user factors. 29 C.F.R. § 1910.134(d). In this regard, atmospheres in workplaces are classified into two categories: "immediately dangerous to life and health" ("IDLH"), and non-IDLH. Only certain highly effective types of respirators may be used in IDLH atmospheres. 29 C.F.R. § 1910.134(d)(2). With respect to non-IDLH atmospheres, the Standard permits an employer to choose between atmosphere-supplying respirators (i.e., those with a self-equipped oxygen tank) and the less burdensome air-purifying respirators (i.e., those which merely filter the incoming air). 29 C.F.R. § 1910.134(d)(3)(iii). However, air-purifying respirators are usable only if certain specified steps are taken to ensure that the filtering device is working and maintained properly. 29 C.F.R. § 1910.134(d)(3)(iii)(B). The medical evaluation provisions of the Standard require the employer "to provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace." 29 C.F.R. § 1910.134(e)(1). The medical evaluation provisions spell out the procedures in this regard much more specifically than the prior standard. In addition, whereas licensed physicians were responsible for such medical evaluations under the prior standard, the Standard allows non-physician "licensed health care professionals" to perform such evaluations to the extent allowed under state law. 29 C.F.R. § 1910.134(e)(2). The new Standard also contains detailed provisions relating to initial and periodic fit-testing to ensure respirators fit an employee-user's face properly, 29 C.F.R. § 1910.134(f), proper day-to-day use of respirators, 29 C.F.R. § 1910.134(g), maintenance and care of respirators, 29 C.F.R. § 1910.134(h), the required quality of the breathing gases used in conjunction with an air-supplying respirator, 29 C.F.R. § 1910.134(i), proper identification and labeling of filters, cartridges, and canisters, 29 C.F.R. § 1910.134(j), provision of training and information to employees, 29 C.F.R. § 1910.134(k), periodic self-evaluations of an employer's written respiratory protection program to ensure that it continues to work properly, 29 C.F.R. § 1910.134(*l*), and appropriate record-keeping regarding medical evaluations and fit-testing, 29 C.F.R. § 1910.134(m).

C. *Provisions Under Attack and Alignment of the Parties*

The instant petitions for review are brought by the Industry and the Doctors. The Industry challenges

three particular aspects of the Standard. First, it challenges the retention of the Hierarchy-of-Controls Policy in § 1910.134(a)(1), and OSHA's failure even to consider revising or abrogating that policy in light of its revision of the rest of the regulation. Second, it challenges § 1910.134(d)(3)(iii)(B) and the conditions placed upon the use of air-purifying respirators, as opposed to air-supplying respirators. Third, it challenges the requirements in § 1910.134(f)(2) and § 1910.134(k)(5) regarding, respectively, annual fit-testing and annual retraining, contending that less frequent fit-testing and retraining would have sufficed.

The Doctors, on the other hand, challenge only one aspect of the Standard: the provision in § 1910.134(e) enabling non-physician licensed health care professionals (e.g., nurses, physician's assistants, etc.) to perform the medical evaluation services that were previously conducted only by physicians ("Non-Physician Involvement Provision"). They contend that the Non-Physician Involvement Provision is defective because OSHA failed to notify interested parties that it was considering the elimination of mandatory physician involvement, that it is void for vagueness, and that it is not amply supported by the factual evidence.

The United Steelworkers of America ("Steelworkers") have intervened in this litigation; the Steelworkers defend the Standard against the Industry's attack, but adopt the Doctors' argument regarding the Non-Physician Involvement Provision. The American Association of Occupational Health Nurses and the American Nurses Association (collectively, "Nurses") have intervened in defense of the Non-Physician Involvement Provision against the Doctors' attack.

II. DISCUSSION

A. *Standard of Review*

We must uphold OSHA's factual determinations underlying its regulations if they are supported by substantial evidence in the record considered as a whole. 29 U.S.C. § 655(f); *AFL-CIO v. OSHA,* 965 F.2d 962, 969-70 (11th Cir.1992). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *American Textile Mfrs. Inst., Inc. v. Donovan,* 452 U.S. 490, 101 S.Ct. 2478, 2497, 69 L.Ed.2d 185 (1981). "All that need be shown is that OSHA's determination is

supported by substantial evidence presented to or produced by it and does not rest on faulty assumptions or factual foundations." *Color Pigments Mfrs. Ass'n v. OSHA,* 16 F.3d 1157, 1160 (11th Cir.1994). OSHA's policy decisions are entitled to the same deference. *AFL-CIO,* 965 F.2d at 970. Of course, questions of law are reviewed *de novo.*

B. *The Industry's Challenge*

1. Retention of the Hierarchy-of-Controls Policy

The Industry's first challenge to the Standard is addressed to the retention of the Hierarchy-of-Controls Policy from the prior standard.[3] The Hierarchy-of-Controls Policy reflects a general preference for engineering controls, which eliminate or arrest pollution at the source, over respirators in reducing employee exposure to airborne contaminants. Although it comprehensively revised those aspects of the prior standard relating to the manner and conditions of respirator use, OSHA altogether excluded the Hierarchy-of-Controls Policy from the rulemaking proceeding. Consequently, the Hierarchy-of-Controls Policy was not open to comment or scrutiny. In the issuing release for the Standard, OSHA explained its position in the following way:

> By leaving paragraphs (a)(1) and (a)(2) of the final rule unchanged from the corresponding paragraphs of the respiratory protection standard that has been in effect since 1971, OSHA .... continues the protection that employees have relied on, ... retains the language that employers are familiar with, ... [and] allows OSHA and the affected public to continue to rely on OSHA interpretations....
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> The unchanged language of paragraph (a)(1) was included in the language of the proposed rule only to enable interested parties to view the rule as it would ultimately appear in the Code of Federal Regulations in its entirety. Since OSHA neither proposed nor adopted modifications to proposed paragraph (a)(1), the Agency believes that it is not legally required to reconsider this issue at this time. OSHA has the authority to identify which regulatory requirements it is proposing to revise and which issues are to receive regulatory priority. Limiting this rulemaking to issues concerning respirator programs is appropriate because such programs are the exclusive focus of this rulemaking and to collect comments and data on additional issues would divert resources from the

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[3]The Hierarchy-of-Controls Policy provides that the prevention of atmospheric contamination must be "accomplished as far as feasible by accepted engineering control methods (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section." 29 C.F.R. § 1910.134(a)(1).

task at hand.

63 Fed.Reg. at 1180. The Industry, for its part, contends that this position is unsupportable because it allows OSHA selectively to insulate favored aspects of a standard from public scrutiny and judicial review. The Industry also contends that since 1971, when the original Hierarchy-of-Controls Policy was adopted, the factual circumstances have changed dramatically and now respirators may be every bit as effective as engineering controls. The Industry also notes that the Hierarchy-of-Controls Policy was originally adopted as part of a § 6(a) standard, which means that it has never been subject to the notice and comment procedures and scrutiny attendant to most rulemakings.

Thus, the legal issue for our consideration is whether OSHA, when it was comprehensively revising those aspects of the Standard relating to the manner and conditions of respirator use, could exclude the Hierarchy-of-Controls Policy from the rulemaking proceeding. Logic dictates that an agency must have some discretion in setting an agenda for rulemaking and excluding some matters categorically. Otherwise rulemaking would be very difficult because an agency would be unable to concentrate its scarce resources on a particular problem. Our decision in *AFL-CIO v. OSHA,* 965 F.2d 962 (11th Cir.1992), is instructive on this issue. In *AFL-CIO,* this Court reviewed OSHA's Air Contaminants Standard, a comprehensive set of permissible exposure limits ("PELs") for 428 toxic substances. The notice of proposed rulemaking for the Air Contaminants Standard proposed to issue new or revised PELs for a number of substances, but "limited the scope of [the] rulemaking to those substances for which [a private standard-setting organization] recommended limits that were either new or more protective than the existing PELs." *Id.* at 969 (citing the notice of proposed rulemaking). After issuance of the Air Contaminants Standard, industry and labor unions attacked it from both sides in this Court.

The unions in *AFL-CIO* argued that by limiting the rulemaking to those substances that either (1) had no existing PEL, or (2) for which the standard-setting organization had recommended a limit more protective than the existing PEL, OSHA had violated the command of the OSH Act that it set standards " 'which most adequately assure[ ] ... that no employee will suffer material impairment of health or functional capacity.'

" *Id.* at 984 (quoting 29 U.S.C. § 655(b)(5) (alterations in original)). The court rejected this argument:

> [W]e [do not] find a requirement that OSHA include *all* possible substances in one rulemaking. OSHA has never claimed that the Air Contaminants Standard constituted the entire universe of substances needing regulation, and it seems reasonable that some limit needed to be set as to what substances could be considered in this rulemaking. The list of [the standard-setting organization's] recommendations is a rational choice as the source for that limitation. [Those] recommendations are well known to industry and the safety and health community. Therefore, we find that the agency's choice to so limit this rulemaking is a valid exercise of OSHA's authority to set priorities for rulemaking.

Id.

The union brought a separate challenge to a decision by OSHA "to defer issuing standards for monitoring and medical surveillance of the new PELs until a later rulemaking." *Id.* at 985. Under § 6(b)(7) of the OSH Act, occupational safety and health standards are required to provide for "monitoring or measuring employee exposure," and to prescribe medical examinations and tests, where appropriate. 29 U.S.C. § 665(b)(7). The union claimed that OSHA violated this requirement by promulgating the Air Contaminants Standard without simultaneously promulgating monitoring and medical surveillance rules with respect to that standard. We also dismissed this argument, holding that this was "purely a matter of regulatory priority" with respect to which the agency had ample discretion. *AFL-CIO,* 965 F.2d at 985. Thus, OSHA was permitted to wait and address monitoring and medical surveillance at another point.

While *AFL-CIO* suggests that the agency's chosen scope of rulemaking is a matter subject to judicial review, it also stands for the proposition that such review is rather limited and deferential in nature. With respect to avoiding consideration of substances for which the private standard-setting organization had not recommended a more protective PEL, we held that it was reasonable for OSHA to confine its rulemaking in that manner. With respect to monitoring and medical surveillance, we allowed OSHA to postpone consideration of those issues until a later date. *AFL-CIO* did not precisely define the standard of review of an agency's choice of scope for a particular rulemaking, and we need not do so today. It is clear, however, that the standard of review is at least as deferential as a reasonableness standard.

We hold that the decision to exclude the Hierarchy-of-Controls Policy from revision was reasonable. The Standard deals with appropriate measures for employers to take with respect to respirator use; for

example, training, maintenance, quality of device, etc., are included within its ambit. These matters are not necessarily factually intertwined with the propriety of implementing engineering controls, if feasible, rather than resorting to respirators. The Industry has presented nothing to this Court to lead us to believe that the alleged technological improvement in respirators substantially alters the comparative benefits of engineering controls versus respirators. To the contrary, it appears that the major rationale for engineering controls is that they make respiratory protection automatic, while respirators are dependent on use and constant attention and are subject to human error. Of course, technological improvement in respirators is not likely to reduce substantially the risk of human error, and in any event no such suggestion has been made in this case. Under these circumstances, it was not unreasonable for OSHA to determine that allowing submission of evidence about the relative merits of engineering controls and respirators would have distracted attention from and clouded the essential issues before it, namely, how respirators should be used *if* they are used.[4] Like the *AFL-CIO* court, we hold that "the agency's choice to so limit this rulemaking" by excluding the Hierarchy-of-Controls Policy from consideration "is a valid exercise of OSHA's authority to set priorities for rulemaking." *AFL-CIO,* 965 F.2d at 984. The Industry has failed to demonstrate that OSHA's decision was unreasonable.

We also conclude that the fact that the original Hierarchy-of-Controls Policy was promulgated pursuant to § 6(a)'s abbreviated procedures, rather than the usual § 6(b) notice-and-comment proceedings, bears no special significance in this analysis. Section 6(a), 29 U.S.C. § 655(a), authorized OSHA for a limited time (through 1973) to adopt existing national consensus standards as occupational safety and health standards without the rigors of notice-and-comment proceedings. The Hierarchy-of-Controls Policy, having been originally adopted pursuant to § 6(a), has thus never undergone public scrutiny, unlike most of the

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[4]We have some concern about one apparent discrepancy in the record. In 1989, OSHA initiated a rulemaking proceeding to consider revisions that would have altered the Hierarchy-of-Controls Policy and liberalized the use of respirators in lieu of engineering controls. When it later withdrew this rulemaking, *see* 59 Fed.Reg. 20650 (Apr. 25, 1994), OSHA's stated explanation was that "any changes to the policy for use of engineering controls must be closely coordinated with revisions in the respiratory protection regulations." *Id.* This explanation seems inconsistent with OSHA's current position that the Hierarchy-of-Controls Policy is a sufficiently different subject matter that it is reasonably separable from the issues dealt with in the Standard. However, we cannot place too much weight on this remark. Even if OSHA at one time thought it would be appropriate to consider the two matters together, that says little with respect to the issue of whether it might also be reasonable to consider the two matters separately.

standards that are in effect today. The Industry makes much of the fact that the Hierarchy-of-Controls Policy has eluded comment and scrutiny for 28 years in this manner. Although this situation may be undesirable from a public policy standpoint,[5] it is fully consistent with the language Congress used for § 6(a). The plain language of § 6(a) causes it to operate "[w]ithout regard to ... the other subsections of this section." 29 U.S.C. § 655(a). Further, although OSHA's authority to promulgate standards under § 6(a) expired in 1973, there is no statutory provision causing standards adopted under § 6(a) themselves to expire at any time.[6] Rather, a § 6(a) "start-up" standard continues in effect until it is modified or revoked by a new rulemaking initiated under § 6(b).[7] *See AFL-CIO,* 965 F.2d at 968-69 (referring to the possibility of updating a § 6(a) standard, the court pointed out that the statute provides two mechanisms to revise existing standards, i.e., a § 6(b) proceeding or, in the case of a need for an emergency temporary standard, a § 6(c) proceeding). Because the statute treats § 6(a) standards and § 6(b) standards as having equal force of law once they are promulgated, the fact that the Hierarchy-of-Controls Policy originated under § 6(a) rather than under § 6(b) does not affect our analysis of whether OSHA was bound to reconsider it here.

The Industry also implies that the Hierarchy-of-Controls Policy has outlived its validity under § 6(a)

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[5]On the other hand, the apparent rationale for the abbreviated procedures in § 6(a) was that OSHA was authorized under § 6(a) only to adopt pre-existing "national consensus standards." A "national consensus standard" is defined as "any occupational safety and health standard or modification thereof which (1) has been adopted and promulgated by a nationally recognized standards-producing organization under procedures whereby it can be determined by the Secretary that persons interested and affected by the scope or provisions of the standard have reached substantial agreement on its adoption, (2) was formulated in a manner which afforded an opportunity for diverse views to be considered and (3) has been designated as such a standard by the Secretary, after consultation with other Federal agencies." 29 U.S.C. § 652(8).

[6]Compare § 6(c) of the OSH Act, 29 U.S.C. § 655(c), which provides for "emergency temporary standards" that must be followed by a full-scale § 6(b) rulemaking on the same subject matter within six months, *see* 29 U.S.C. § 655(c)(3). The absence from § 6(a) of a similar provision mandating a follow-up § 6(b) proceeding suggests that § 6(a) proceedings have an indefinite life.

[7]The Industry cites excerpts from legislative history indicating a Congressional view that § 6(a) standards would be merely temporary pending plenary action by OSHA. Assuming *arguendo* that these excerpts genuinely reflect Congress's intent, they do not give us license to disregard the plain language of the OSH Act, which allows § 6(a) standards to continue in effect indefinitely. We cannot judicially supply an expiration date, or an enforceable obligation to reconsider, when Congress has not seen fit to enact any such provision.

because it no longer represents a national consensus standard. This argument is without merit because the Industry has proffered no evidence that the Hierarchy-of-Controls Policy no longer represents the national consensus standard. To the contrary, the most recent national consensus standard, ANSI Standard Z88.2-1992, § 4.2, retains the Hierarchy-of-Controls Policy.[8] Thus, the Industry has failed to demonstrate that OSHA's decision to limit the instant rulemaking to issues relating to the manner and conditions of respirator use was unreasonable.

For the foregoing reasons, we reject the Industry's challenge to the retention of the Hierarchy-of-Controls Policy.

2. Change Schedule Requirement for Air-Purifying Respirators

We turn next to the Industry's challenge to the conditions expressed in 29 C.F.R. § 1910.134(d)(3)(iii)(B) on the use of air-purifying respirators. By way of background, there are two categories of respirators. First, there are atmosphere-supplying respirators ("ASRs"), which "suppl[y] the respirator user with breathing air from a source independent of the ambient atmosphere," e.g., an oxygen tank. 29 C.F.R. § 1910.134(b). Second, there are air-purifying respirators ("APRs"), which use the air from the ambient atmosphere but are equipped with a filter, cartridge, or canister designed to remove air contaminants before they reach the user and are inhaled. *Id.* The main shortcoming associated with APRs is that the filters, cartridges, or canisters generally have a limited lifetime and may cease to function properly without the user's knowledge, thereby exposing the user to toxic contaminants. This situation is sometimes called the "breakthrough problem." Of course, the breakthrough problem "is avoided entirely by the use of [ASRs]. Such respirators do not rely on filter sorbents and instead deliver clean outside air to the wearer's respirator." 63 Fed.Reg. at 1204. The Industry generally prefers APRs because they are cheaper and interfere less with workplace duties.

The Standard provides that in workplace atmospheres that are not immediately dangerous to life and

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[8]If a party showed that the factual underpinning for a particular standard had evaporated, that might be relevant to the reasonableness of OSHA's decision to exclude the standard from a related proceeding; or, on the other hand, that might constitute a basis for the party to petition OSHA to modify or revoke the standard pursuant to § 6(b)(1).

health ("non-IDLH"), an APR may be used only if one of two conditions is met. 29 C.F.R. § 1910.134(d)(3)(iii). First, an APR may be used if it is equipped with an end-of-service-life indicator ("ESLI"); the parties agree that this is very rare because there are only a few certified ESLIs. 29 C.F.R. § 1910.134(d)(3)(iii)(B)(1). Second and alternatively, an APR may be used if "the employer implements a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before their end of service life." *Id.* § 1910.134(d)(3)(iii)(B)(2). The Industry's disagreement with OSHA centers on this latter condition ("Change Schedule Condition"), which it feels is overly stringent and unnecessarily limits the use of APRs.

The Change Schedule Condition approach was selected by OSHA to the exclusion of a competing approach, discussed in the proposed standard and drawn from prior informal practice. The prior practice relied on a totally different criterion: whether the substance in question had "adequate warning properties." Adequate warning properties are characteristics, for example gaseous odor or skin irritation, that would alert a user to the fact that the cartridge or canister had reached the end of service life and was no longer working properly. If the user would be alerted to a malfunction, the reasoning went, there would be no risk of contamination because the user could then promptly change the cartridge or canister. The Standard abandons the reliance on adequate warning properties in favor of the more objective criteria of ESLIs and change schedules. 63 Fed.Reg. at 1204-07. As OSHA explains, "there is too much variation between individuals [in perception of sensory thresholds], ... there is no good screening mechanism to identify persons with sensory receptor problems, and ... employees [would] be overexposed to hazardous air contaminants." *Id.* at 1204. The new conditions are admittedly narrow because (1) ESLIs are extremely rare; and (2) the breakthrough test data upon which change schedules are generally based are not available for many hazardous gases and vapors. In the issuing release, OSHA conceded that breakthrough test data are scarce, and implied that to some extent the Standard is "technology-forcing": "[R]espirator manufacturers, chemical manufacturers, and even [the National Institute for Occupational Safety and Health] must provide more information about how long respirator cartridges and canisters can be expected to provide protection for

employees." *Id.* at 1205. The Industry argues that the Change Schedule Condition leads to an overwhelming preference for ASRs that may actually increase the risk of accidents because ASRs tend to be bulky and cumbersome, and employees in some lines of work are accustomed to using APRs. According to the Industry, these problems with ASRs represent an "important aspect of the problem" which OSHA "entirely failed to consider." *See generally Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 42, 103 S.Ct. 2856, 2867, 77 L.Ed.2d 443 (1983).

OSHA responds that the Change Schedule Condition does not automatically favor ASRs. In fact, compared to the adequate-warning-properties approach, the Change Schedule Condition in some ways permits wider use of APRs. Whereas under the prior regime APRs could be used only if the toxic substance carried adequate warning properties, now APRs can be used even if there are no warning properties, provided that a reliable change schedule is in place. Thus, the Change Schedule Condition restricts the use of APRs in some ways but expands the use of them in others. OSHA further contends that the Industry's concerns about weight and mobility problems associated with ASRs are overstated. Finally, OSHA notes that even if breakthrough data are not widely available, employers may rely on other information, for example, change schedule recommendations from respirator manufacturers, as long as that information is reliable. OSHA also calls on the respirator industry to disseminate change schedule information more widely and effectively. 63 Fed.Reg. at 1205.

Because the Industry's challenge to the Change Schedule Condition is exclusively factual in nature, our review is limited to whether OSHA's determinations are "supported by substantial evidence in the record considered as a whole." 29 U.S.C. § 655(f). After reviewing the record, we conclude that OSHA's decision to replace the subjective adequate-warning-properties approach with the Change Schedule Condition is supported by substantial evidence. There was a consensus among commentors that inherent unreliability problems exist with odor and irritation thresholds. *See* 63 Fed.Reg. at 1204-06. Change schedules based on "objective information or data" better promote worker safety by ensuring on a consistent basis that APRs are properly serviced and maintained. Moreover, the record belies the Industry's argument that OSHA entirely

failed to consider the fact that ASRs tend to be bulky and cumbersome. The record reflects that OSHA did consider the uncomfortableness and mobility restrictions caused by APRs and weighed those factors in the balance. 63 Fed.Reg. at 1204 (quoting Associated Builders and Contractors' comment). Thus, the factual determinations and policy choices underlying the Change Schedule Condition are consistent with the OSH Act and supported by substantial evidence.

3. Annual Fit-Test and Retraining Requirements

We turn next to the Industry's challenge to the provisions in the Standard requiring annual fit-testing and retraining of respirator-using employees. *See* 29 C.F.R. § 1910.134(f)(2), (k)(5). With respect to the annual fit-testing requirement, a respirator cannot function properly unless it is properly fitted to the wearer's face. Accordingly, the Standard requires in paragraph (f) that an employee be fit tested with a respirator of the same make, model, style, and size as is proposed to be used, before he actually begins to use one in the course of employment. The Industry does not object to this initial-test requirement, but does object to a requirement in (f)(2) that wearers be tested at least annually following the initial test.

With respect to the annual retraining requirement, the Standard requires in paragraph (k) that "the employer ... provide effective training to employees who are required to use respirators." Training should address the necessity of respirators, fit, usage, maintenance, limitations and capabilities, emergency situations, malfunction, inspection, and storage. *See* 29 C.F.R. § 1910.134(k)(1)(i)-(vii). The Industry does not object to the initial training requirement, but does object to a requirement in (k)(5) that such training be re-administered to employees annually. Like the challenge to the Change Schedule Condition, these challenges are exclusively factual and therefore this Court's review is on the deferential "substantial evidence" standard. 29 U.S.C. § 655(f).

The Industry points out that some evidence indicates that annual fit-testing is unnecessary because only a tiny percentage of employees experience facial changes that necessitate changes in respirator fit, and those who do can easily be detected by physical appearance.[9] OSHA noted that "[c]ommenters generally

[9]In this regard, (f)(3) provides that the employer must conduct a fit test whenever anyone "makes visual observation of ... changes in the employee's physical condition that could affect respirator fit. Such

agreed that some additional fit testing beyond an initial test was necessary, but opinions varied widely on the appropriate intervals at which such tests should be performed." 63 Fed.Reg. at 1223. "[A] large number of rulemaking participants supported OSHA's proposal to require the testing of respirator fit on an annual basis." *Id.* at 1224. We conclude that the annual fit-testing requirement is supported by substantial evidence in the record considered as a whole.

We find that the annual retraining requirement is also supported by substantial evidence. "OSHA's compliance experience [had] demonstrated that inadequate respirator training is a common problem, and is often associated with respirator program deficiencies that could lead to employee exposures to workplace contaminants." 63 Fed.Reg. at 1261-62. OSHA stated that annual retraining is necessary so that "employees know about the respiratory protection program and ... cooperate and actively participate in the program," "so that employees will be confident when using respirators," and to "eliminate complacency on the part of both the employer and employees." *Id.* at 1261. OSHA noted that commenters requesting less frequent or no retraining submitted no data indicating that less frequent training "would be sufficient for respirator users to retain information critical to the successful use of respirators on an individual basis." *Id.* Additionally, OSHA explained that annual retraining is the norm with respect to a number of other, substance-specific OSHA standards that involve respirators. *Id.*

While retraining at some other periodic interval might also be defensible, OSHA was entitled to require annual retraining as a precautionary measure to assure "that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard." 29 U.S.C. § 655(b)(5). Moreover, OSHA could conclude based on the record that annual retraining is reasonably necessary to ensure that employee knowledge about respirators does not fall into obsolescence. Given that conscientiousness among employees is such a critical element in the formula for success of a respirator

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conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight." 29 C.F.R. § 1910.134(f)(3). This provision operates independently of the annual fit-test requirement in (f)(2). The Industry argues that (f)(3) will effectively pick up all cases necessitating a change in fit, leaving the automatic annual fit test called for by (f)(2) duplicative and unnecessary.

program, OSHA could reasonably find that the Industry's suggested alternative of screening employees to determine who needed retesting would not serve its goal of preventing misuse and "ensur[ing] a reasonable amount of recall and performance on the part of the respirator user." 63 Fed.Reg. at 1261. We see no basis for disturbing OSHA's factual conclusions and policy decisions in this regard.

C. *The Doctors' Challenge*

In their petition for review, the Doctors challenge the Non-Physician Involvement Provision in paragraph (e) of the Standard, which for the first time allows non-physician licensed health care professionals, as opposed to only physicians, to perform the required medical evaluations to the extent permitted under state law. The Doctors contend that OSHA gave insufficient notice to interested parties of its intent to adopt this new policy, that the Non-Physician Involvement Provision is void for vagueness, and that the Non-Physician Involvement Provision is not supported by substantial evidence.[10]

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[10]The government argues that the Doctors lack standing to challenge the Standard. We are not troubled by the standing argument. Preliminarily, the Steelworkers, an organization composed of employees who are the beneficiaries of the OSH Act and of the Standard, have intervened and adopted much of the Doctors' argument against the provision allowing non-physician involvement in medical evaluations. No one questions that the Steelworkers have standing. Thus, except to the extent that the Doctors raise points not adopted by the Steelworkers, the standing question is moot. *See Planned Parenthood of the Atlanta Area, Inc. v. Miller,* 934 F.2d 1462, 1465 n. 2 (11th Cir.1991) (when one plaintiff has standing to bring all claims in an action, the court need not inquire into the standing of the others).

> An association has standing to sue on behalf of its members if (1) the members otherwise have standing to sue in their own right, (2) the interests the association seeks to protect are germane to its purpose, and (3) neither the claim asserted nor the relief requested require the participation of individual members. *Hunt v. Washington State Apple Advertising Comm'n,* 432 U.S. 333, 97 S.Ct. 2434, 2441, 53 L.Ed.2d 383 (1977). With respect to the first prong, an individual generally has standing to sue if (1) he has suffered injury in fact traceable to the challenged action and redressable by the courts (constitutional standing), and (2) the interest he seeks to vindicate falls within the zone of interests that the statute was designed to protect (prudential standing). *See, e.g., Northeastern Fla. Chapter, Associated Gen. Contractors of America v. Jacksonville,* 508 U.S. 656, 113 S.Ct. 2297, 2301-02, 124 L.Ed.2d 586 (1993); *Allen v. Wright,* 468 U.S. 737, 104 S.Ct. 3315, 3324, 82 L.Ed.2d 556 (1984). We find that the individual members of the Doctors have suffered injury in fact because of the economic injury, i.e., loss of patients and income, inflicted by the lack of a requirement that medical evaluations be performed only by physicians, and that this injury is redressable through judicial review of the Standard. We can pretermit the more difficult question regarding whether the Doctors' members' interests fall within the zone of interests protected by the OSH Act, *cf. R.T. Vanderbilt Co. v. OSHRC,* 708 F.2d 570, 576-78 (11th Cir.1983) (OSH Act confers prudential standing only on employee interests and employer interests), because prudential standing is flexible and not

1. Medical Evaluations and the Non-Physician Involvement Provision

"Medical evaluation to determine whether an employee is able to use a given respirator ... is necessary to prevent injuries, illnesses, and even, in rare cases, death from the physiological burden imposed by respirator use." 63 Fed.Reg. at 1207. To this end, 29 C.F.R. § 1910.134(e)(1) provides that "[t]he employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace." Paragraph (e) goes on to specify the procedures that should be followed in these medical evaluations. Initially, the employee either completes a medical questionnaire that identifies employees who may need further examination, or undergoes a physical examination that yields the same information. 29 C.F.R. § 1910.134(e)(2). Employees for whom further examination is indicated are then subject to a follow-up medical examination including "any medical tests, consultations, or diagnostic procedures that the [physician or other licensed health care professional] deems necessary to make a final determination." 29 C.F.R. § 1910.134(e)(3).

The Standard does not distinguish between physicians and other licensed health care professionals. Rather, it allows all of the tasks associated with medical evaluations to be performed by any licensed health care professional to the same extent as they may be performed by a physician, to the extent permitted under state law. The Standard uses the term "physician or other licensed health care provider," which is defined as "an individual whose legally permitted scope of practice (*i.e.,* license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by paragraph (e) of this section." 29 C.F.R. § 1910.134(b). Because licensure, registration, and certification of health care professionals is basically a matter of state law, the Standard essentially defers to state law on the question of who may provide the medical evaluation services required

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jurisdictional in nature, *see Steel Co. v. Citizens for a Better Environment,* 523 U.S. 83, 118 S.Ct. 1003, 1013, 140 L.Ed.2d 210 (1998) (suggesting that courts cannot pretermit Article III standing issues, but can pretermit prudential standing issues, in order to resolve cases where the merits are relatively easy). Therefore, we can assume *arguendo* that the Doctors' individual members would have standing to sue in their own right. Moreover, we find that the interests sought to be protected by the organizations here are germane to their purposes, and that participation of individual members is not required.

by paragraph (e). In contrast, the prior standard provided that "[p]ersons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The *local physician* shall determine what health and physical conditions are pertinent." 29 C.F.R. § 1910.134(b)(10) (1997) (emphasis added).

2. Whether OSHA Gave Sufficient Notice

The Doctors' first challenge to the Non-Physician Involvement Provision is that OSHA failed to satisfy the statutory notice requirements of the OSH Act. *See* 29 U.S.C. § 655(b)(2) ("The Secretary shall publish a proposed rule promulgating, modifying, or revoking an occupational safety or health standard in the Federal Register and shall afford interested persons a period of thirty days after publication to submit written data or comments."). The thrust of this argument is that prior to issuance of the Standard, OSHA's proposed rule failed to give notice that OSHA was contemplating the *total* elimination of federally mandated physician involvement. Rather, the Doctors argue, OSHA had suggested merely that its revisions to the respiratory protection standard might allow non-physician health care professionals to function under the supervision of a physician, or to perform some but not all medical evaluation tasks. The Doctors argue that they were blindsided by an outcome that went further than any of the proposed alternatives.

The D.C. Circuit provided guidance on an analogous question in *National Mining Ass'n v. Mine Safety & Health Admin.,* 116 F.3d 520, 531 (D.C.Cir.1997). In *National Mining Association,* the regulation at issue abandoned the Mine Safety & Health Administration's ("MSHA") longstanding policy of requiring pre-shift examinations to determine methane and oxygen levels in a coal mine three hours before shifts begin, in favor of a new policy requiring examinations at fixed intervals. The abandonment of the old three-hour policy occurred suddenly in the final rule, whereas the proposed rule ("1994 Draft") had adhered to the three-hour policy and thus no comment had been submitted to MSHA on that matter. The petitioner protested that had it known MSHA was reconsidering the three-hour policy, it would have submitted comment pointing out that state law already required frequent examinations, making such a change unnecessary.

The D.C. Circuit, recognizing that "[a]gencies are not limited to adopting final rules identical to

proposed rules" and that "[n]o further notice and comment is required if a regulation is a 'logical outgrowth' of the proposed rule," identified the controlling legal principle as "whether the purposes of notice and comment have been adequately served." *National Mining Association,* 116 F.3d at 531 (internal quotation marks omitted). Specifically, notice is inadequate if "the interested parties could not reasonably have anticipated the final rulemaking from the draft rule." *Id.* (internal quotation marks omitted). Applying this test, the D.C. Circuit held that the fixed-interval examination regulation was not a "logical outgrowth" of the 1994 Draft. "The discussion accompanying the proposed rule dealt with preshift examinations in some detail, but the agency did not mention any problems with the timing of the examinations, and it did not express any interest in changing that aspect of the rule." *Id.* Since "[n]one of this would have alerted a reasonable interested party that the final rule might alter the provisions about when preshift examinations must be conducted," the notice was defective. *Id.*

In the instant proposed rulemaking, OSHA opened its discussion of medical evaluation procedures by noting that "there appears to be considerable difference of opinion as to what circumstances should trigger a physical examination, what the physical examination should consist of, *who is to administer such an examination,* and what the specific criteria should be for passing or failing." 59 Fed.Reg. 58884, 58907 (Nov. 15, 1994) (emphasis added). Further and more specifically, OSHA said that "[c]ommenters questioned the preproposal draft requirement that the medical evaluation be performed by a licensed physician. .... OSHA requests comments on this issue and on the extent of the role that should be given to [non-physician] health professionals." *Id.* at 58910. The extent of non-physicians' appropriate role was also thoroughly explored at the public hearings on the Standard, as is demonstrated by the transcripts of those hearings.

Under these circumstances, interested parties were adequately put on notice that the Standard might establish an expanded role for non-physician health care professionals and, concomitantly, a diminished mandatory role for physicians. The Doctors could reasonably have anticipated that the final Standard might eliminate a mandatory role for physicians. *See Alabama Power Co. v. OSHA,* 89 F.3d 740, 744 n. 2 (11th Cir.1996) (notices of proposed rulemaking and hearing sufficiently put petitioners on notice that OSHA was

proposing to regulate not only synthetic, but also natural, fabrics, because the notices requested comments pertaining to the flammability of fabrics generally); *United Steelworkers of America v. Schuylkill Metals Corp.,* 828 F.2d 314, 317-18 (5th Cir.1987) (notice of proposed rulemaking regarding anti-retaliation regulations that solicited comment as to "the appropriate scope of protection" for employees removed from dangerous workplaces gave adequate notice that production bonuses might be included as protected employment privileges in the final standard). This is so even though language in the draft standards did not go so far as to eliminate any federally mandated role for physicians. The Non-Physician Involvement Provision was a "logical outgrowth" of the notice-and-comment process.

3. Void-for-Vagueness

The Physicians' second argument is that the Non-Physician Involvement Provision is "so vague, indefinite and incapable of consistent and uniform enforcement that it contravenes the OSH Act and the constitutional guarantee of due process." According to the Physicians, the definition of "physician or other licensed health care provider" in § 1910.134(b) is inherently circular and ambiguous and employers cannot be certain whether they are in compliance with the standard. We reject this argument as wholly without merit. First, we apply the void-for-vagueness doctrine outside of the First Amendment context only rarely. A rule that does not reach constitutionally protected conduct is not void for vagueness unless it is "impermissibly vague in all of its applications." *Hoffman Estates v. Flipside, Hoffman Estates, Inc.,* 455 U.S. 489, 499, 102 S.Ct. 1186, 1193, 71 L.Ed.2d 362 (1982); *see also Exxon Corp. v. Busbee,* 644 F.2d 1030, 1033 (5th Cir. May 11, 1981) (appropriate test is whether statute is "substantially incomprehensible"), *cert. denied,* 454 U.S. 932, 102 S.Ct. 430, 70 L.Ed.2d 239 (1981). Under § 1910.134(e), an employer must arrange for medical evaluations performed on respirator-using employees by "an individual whose legally permitted scope of practice ... allows him or her to independently provide, or be delegated the responsibility to provide," the service of administering a medical evaluation. 29 C.F.R. § 1910.134(b). This language is neither impermissibly vague in all its applications nor substantially incomprehensible. Employers may consult state law to determine to what extent, if any, a non-physician health care professional may be used to satisfy the

Standard.

Second, the thrust of the Non-Physician Involvement Provision is permissive rather than prohibitory. It expands an employer's range of options, permitting him to retain a non-physician licensed health care professional to perform medical evaluations in lieu of a physician, to the extent permitted by state law. The void-for-vagueness doctrine typically applies where a statute *prohibits* conduct without clearly defining that conduct. *City of Mesquite v. Aladdin's Castle, Inc.,* 455 U.S. 283, 289, 102 S.Ct. 1070, 1075, 71 L.Ed.2d 152 (1982). The Non-Physician Involvement Provision, in contrast, does not prohibit employers from doing anything. The Physicians cite no case law extending the void-for-vagueness doctrine to invalidate a clause whose sole effect is to give a regulated person an additional, optional means of compliance with a statute or regulation.

4. Whether Supported by Substantial Evidence

Finally, we turn to the question whether OSHA's decision to allow non-physician licensed health care professionals to provide medical evaluation services to the same extent as physicians is supported by substantial evidence in the record as a whole. OSHA's statement in the notice of proposed rulemaking that it was considering diminishing the role of physicians in the medical evaluation process provoked a wide range of comment from multiple perspectives. As OSHA explains in the preamble to the Standard, some commenters recommended that non-physicians be permitted to administer questionnaires under the supervision of a physician. 63 Fed.Reg. at 1211. Some commenters recommended that only physicians be involved in medical evaluation programs. *Id.* Some commenters recommended that only health care professionals with certain degrees of specialization in occupational medicine be involved, without regard to whether they were physicians or not. *Id.* OSHA decided to allow non-physician licensed health care providers to perform medical evaluations to the extent allowed under state licensure laws. OSHA cited record evidence that non-physician health care professionals generally are qualified to assess an employee's ability to use a respirator based on uniform, accepted medical questionnaires, that they have in fact done so safely and effectively on many occasions, and that permitting their involvement would contribute to an "efficient

and effective allocation [of] health care resources." *Id.* at 1212. Moreover, OSHA concluded that non-physician health care professionals are capable of identifying cases that need to be referred to physicians, and would so refer cases when necessary or appropriate. OSHA noted the absence of any record support for continuing the mandatory, exclusive role of physicians. *Id.*

We have reviewed the record and find OSHA's decision to be supported by substantial evidence.[11] While the comments were extremely varied, a common thread running through many of the comments was that registered nurses, physician's assistants, and other such health care providers are well-equipped to perform basic medical functions, such as assessing responses to medical questionnaires, provided that appropriate measures are in place for referring non-routine cases to a physician. There also was evidence from several commenters to the effect that they had safely and efficaciously used non-physician licensed health care professionals in the past for medical evaluations involving respirators. 63 Fed.Reg. at 1212. Moreover, the Non-Physician Involvement Provision does not automatically allow non-physician individuals

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[11]One point made by the Doctors warrants special attention. The Doctors call our attention to a statement in the issuing release that "an insufficient number (slightly more than 2,000 nationally) of [physicians with training and experience in occupational medicine] are available for [the purpose of conducting medical evaluations]." 63 Fed.Reg. at 1211. According to the Doctors, this statement is flatly erroneous and there actually are as many as 127,946 physicians with training in occupational medicine. (The 2,000 number appears to represent the number of *board-certified* occupational physicians.) One of OSHA's rationales for expanding the role of non-physician licensed health care professionals was that there is a shortage of physicians available to do this type of work. If OSHA actually relied on the number 2,000 in making its decision, the factual support for the Non-Physician Involvement Provision would be subject to serious doubt.

> Nevertheless, after reading the number 2,000 in the overall context of OSHA's issuing release, we are not troubled. During the evolution of the Standard into its final form, OSHA did not have before it a simple, dichotomous choice between mandatory physician involvement and the Non-Physician Involvement Provision. Rather, it was faced with a plethora of alternatives and suggestions from all angles. One of those suggestions was that the medical evaluation provision should rely on *board-certified* occupational physicians, as opposed to other types of physicians. The reference to the 2,000 number should be read in the context of OSHA's rebuttal of this particular argument, not as a statement that involvement of non-physicians is necessary because only 2,000 physicians in the United States can perform these services. Although it would have been ideal for OSHA to clarify how exactly the 2,000 number fit into its position on the final Standard, OSHA's shortcoming in this regard does not shake our conclusion that the Non-Physician Involvement Provision is supported by substantial evidence in the record as a whole. We note that when OSHA summarized its factual grounds for the Non-Physician Involvement Provision, it did not mention the 2,000 number. *See* 63 Fed.Reg. at 1212.

to perform medical evaluation services; rather, it merely defers to state law on the extent of permissible involvement. State licensure laws can be trusted, as they are relied upon in similar contexts, to ensure that individuals performing medical evaluations under the Standard have the requisite competence, and such laws in fact typically provide for physician oversight over other health care professionals. *See, e.g.,* Ala.Code § 34-24-292; Fla. Stat. § 458.347; O.C.G.A. § 43-34-26.1.

The Doctors also make some arguments that are more closely akin to legal challenges than factual challenges. First, they claim that the Non-Physician Involvement Provision's deference to state law on who may perform medical evaluations abdicates OSHA's responsibility to promote the OSH Act's policy of uniform national standards. We reject this challenge. While the goal of the OSH Act is indeed to create uniform national standards for worker safety, the Doctors cite no case law saying that OSHA is statutorily bound to override state law on matters of general applicability, e.g., the licensure of health care professionals, to the extent that those matters happen to intersect with an occupational safety or health standard. Moreover, the Doctors have not demonstrated that the challenged deference to state law is likely to result in nonuniformity in the quality of the evaluation workers receive or in actual worker safety and health. Second, the Doctors suggest that the decision to allow non-physician licensed health care professionals to perform medical evaluations may have been improperly motivated by economic considerations, i.e., that it would be too costly to require employers always to use physicians. We also reject this challenge. The record in this case makes it clear that economic considerations were not considered improperly. Rather, the record demonstrates that the decision to allow non-physician licensed health care professionals to perform the necessary evaluations was influenced by factual evidence to the effect that such persons are generally qualified to perform such services, and that state law provides an effective and sufficient way to gauge such qualification. OSHA did not conduct a cost-benefit analysis. Indeed, contrary to the Doctors' argument, the record suggests that economic considerations exercised little or no influence on OSHA's decision in this regard. *Cf.* 63 Fed.Reg. at 1173 (explaining that OSHA's final economic analysis "did not attempt to factor in the offsetting value of cost savings from ... allowing employers to use licensed health care providers in

addition to physicians to perform medical evaluations"). For all of these reasons, we uphold the Non-Physician Involvement Provision.

III. CONCLUSION

For the foregoing reasons, the petitions for review are

DENIED.