## NHCA Urges EPA Action on NRR

The recommendations

of the NHCA Task Force on Hearing Protector Effectiveness, which had been formally approved by the NHCA's Executive Council in March, 1995, were published in the previous issue of the Spectrum (Vol. 12, No. 2, pages 1 and 6-13). Since then, the Council has sent the Task Force's report along with an accompanying letter, to the EPA as a formal recommendation endorsed by the Association. The letter appears to the right, along with a reprint of the Task Force's proposed primary and secondary labels.

Honorable Carol Browner Administrator, U. S. EPA Washington, DC 20460 August 1, 1995

Dear Administrator:

On behalf of the National Hearing Conservation Association (NHCA) we are writing to petition you to review and revise the current EPA regulation concerning the labeling of hearing protection devices¹ (HPDs). This regulation, promulgated in 1979, has substantial impact on the marketability and sale of HPDs, with negative consequences for many users, as we will detail below. An attachment to this letter discusses the recommendations of a Task Force on Hearing Protector Effectiveness which was established by the NHCA. It is those recommendations which form the technical basis for this petition.

The National Hearing Conservation Association (NHCA) is an organization of professionals who share a common goal — the prevention of noise-induced hearing loss. The Association is composed of nearly 600 audiologists, physicians, industrial hygienists, safety specialists, engineers and scientists, occupational health nurses, equipment manufacturers, and others, all of whom are active in hearing conservation. The Association's vital concern is the prevention of noise-induced hearing loss in the American workforce, as well as in the general population. As such, its interests extend to all situations in which hazardous noise exists, whether occupational settings in industry and the armed forces, or non-occupational applications in the consumer and recreational sectors.

There are a number of substantial issues that concern the professional community with respect to the current EPA labeling requirements for hearing protection devices. They include the following:

- The test method called for in the present regulation results in fitting HPDs in ways that seldom, if ever, occur in the workplace. This results in Noise Reduction Ratings (NRRs) being computed from data which overestimate actual workplace protection from 140 to almost 2000%, depending upon the hearing protector. As a consequence, HPD specifiers and users may exaggerate the protection that they are likely to obtain, and lose their hearing from noises against which they should have been effectively protected. Furthermore, the high NRRs lull users into a false sense of security so that they may fail to consider the many aspects besides hearing protector selection that make up an effective hearing conservation effort.
- In addition to the inability to predict absolute levels of protection from the labeled values as detailed in the preceding item, summary data from numerous studies indicate that the labeled values are also poor predictors of the relative performance of one HPD vs. another.²
- The information on the combined primary and secondary labels can be misleading because it focuses so much attention on the noise reduction of the products, to the exclusion of numerous other factors that must be

considered when selecting or assigning HPDs. The result is that purchasers are led to a "bigger-is-better" mentality, commonly resulting in selection based solely on high NRRs.

- There is no provision in the current regulation for retesting of HPDs on a recurring basis. Without an expiration date, the situation has arisen where NRRs on products sold today are in some instances based on tests that are as much as 15 years old.
- The lack of a requirement for some type of quality assessment or accreditation of the test laboratories that provide the data, calls into question the validity and repeatability of the results.

The consequence of these deficiencies in the hearing protector labeling regulation is that workers are often fit with hearing protectors that provide inadequate protection in practice, or are inappropriate for the job conditions. Many workers are therefore at increased risk of noise-induced hearing loss despite the best efforts of safety and health professionals. Although scant data are available regarding consumer application of HPDs in recreational settings, it is likely that the labeling deficiencies lead to less-than-desirable hearing protector selection for those applications as well. And, although the EPA's efforts are primarily directed at consumers, it must be recognized that the labeling regulation has had a much larger impact on the roughly 9.5 million workers exposed to hazardous industrial noise on a daily basis, since the NRR has been incorporated by OSHA in the Hearing Conservation Amendment for general industry.<sup>3</sup>

The NHCA, as are numerous other professional organizations, is dedicated to rectifying the aforementioned problems in the EPA hearing protector labeling regulation in order to provide a more useful, protective, and effective rating and labeling system for HPDs. We urge you to immediately act on this information due to the seriousness of this matter, and would be pleased to work with the Agency to expedite the process.

Sincerely,

Barbara R. B. Garrett, M.S., CCCA President, NHCA Larry H. Royster, Ph.D. Chair, NHCA Task Force

## Recommendations of the NHCA Task Force on Hearing Protector Effectiveness March, 1995

The Recommendations consist of a proposal to revise the primary and secondary labels for hearing protector packaging, as currently defined by the EPA Hearing Protector Labeling Regulation, as well as the following two administrative issues.

- Testing of hearing protector attenuation shall be conducted only in laboratories accredited by the Department of Commerce's National Voluntary Laboratory Accreditation Program (NVLAP).
- Mandatory product retesting should occur at least every 10 years, but not more often than every 5 years.

The proposed primary label, including the new single number rating designated the Noise Reduction Rating (Subject Fit) appears below and the secondary label appears on the following two pages.

## PRIMARY LABEL

## Noise Reduction Rating (SF)

16 DECIBELS

When worn as directed, most users (84%) can obtain at least this much protection. Range of NRR(SF)s for existing products is about 0 to 25 (Higher numbers denote greater protection.)

XYZ Corporation Anytown, USA		Model EXP 579
Federal law prohibits removal of this label prior to purchase.	EPA	LABEL REQUIRED BY U.S. EPA REG. 40CFF PART 211 Subpart B

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<sup>&</sup>lt;sup>1</sup>EPA (1979). "Noise Labeling Requirements for Hearing Protectors," Fed. Regist. 44(190), 40CFR Part 211, 56130-56147.

<sup>&</sup>lt;sup>2</sup>Berger, EH, Franks, JR, and Lindgren, F (1994). "Field Attenuation of Hearing Protectors — An International Comparison, with an Update on the Noise Reduction Rating (NRR)," Am. Ind. Hyg. Conf., Anaheim, CA, paper 70.

<sup>&</sup>lt;sup>3</sup>OSHA (1983), "Occupational Noise Exposure; Hearing Conservation Amendment; Final Rule" 29CFR1910.95 Fed. Regist. 48(46), 9738-9785.