INTRODUCTION

The Occupational Safety and Health Standards Board (Board) received a petition on March 16, 2012, from Don Austin, Subsidiary EHS Manager, representing Basalite Concrete Products, LLC, (Petitioner). The Petitioner requests the Board to amend Title 8, California Code of Regulations, Group 15, Article 105, Appendix F of the General Industry Safety Orders (GISO), concerning application of age correction values to audiograms, as referenced in Section 5097(d)(9).

SUMMARY

GISO Section 5097, Hearing Conservation Program, in relevant part, requires employers to make audiometric testing available to all employees whose exposures equal or exceed the action level of an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A-scale (slow response) or, equivalently, a dose of fifty percent. Each employee's annual audiogram is compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift (STS) has occurred.

Section 5097(d)(9) provides that, in determining whether a STS has occurred, allowance may be made for the contribution of aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Appendix F, Determination and Application of Age Correction to Audiograms.

The Petitioner states that age correction values have not been updated since the inception of the hearing standard in the early 1980's, when employees were retiring between the ages of 55 and 60. Since that time, not only has the retirement age been raised to the upper 67-68 range, but older workers are working longer due to the severe impact of the economy over the last five years, and people are living longer in general. It is no longer uncommon to see employees
working into their seventies or re-entering the workforce. He noted that although the hearing standard correction value ends at age 60, hearing continues to degenerate after that.

The Petitioner opined that the age correction values should be updated and the values increased to age 75. To leave them unchanged is unfair to businesses that are required to accept OSHA recordable threshold hearing shifts for older workers because of an antiquated standard where correction values stop and do not reflect the current and future workforce.

The Petitioner therefore proposed that the age correction values in Appendix F be updated and the values increased to age 75; however he did not offer or propose any extended age correction values or alternate age correction methods.

DIVISION’S EVALUATION

The Division’s evaluation states that GISO Section 5097 is currently at least as effective as federal OSHA’s hearing conservation program, and the state Table F age correction values are identical to those of federal OSHA. The Division notes that age correction of annual audiograms is permissible, but not mandated by either Cal/OSHA or federal OSHA.

The Division stated that it is important to distinguish between an STS and a recordable hearing loss. The state’s hearing conservation program requirements are aimed at preventing occupational hearing loss and the early identification of an STS to intervene before it becomes recordable. Title 8, Section 14300.10 provides that, if an employee's audiogram reveals that the employee has experienced a work-related STS in hearing in one or both ears, and the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS, then the case must be recorded on the Cal/OSHA Form 300.

The Division’s evaluation also stated that the National Institute for Occupational Safety and Health (NIOSH) currently advises against using the existing table because it has aggregate data that is not statistically supportable. NIOSH indicated to the Division it is making a significant effort to revise the table based on National Health and Nutrition Examination Survey (NHANES) data.

The Division’s opinion is that, if the range of Table F age correction values were to be increased, the time required for a significant threshold shift to be noted would be further prolonged and would render Section 5097 less protective than 29 CFR 1910.95, and therefore, California might not be at least as effective as the OSHA standards.

The Division concluded that the petition to increase the upper age correction values in Table F is problematic for several reasons. There is no recognized consensus method for age-correcting individual audiograms. NIOSH and the American Academy of Audiology have recommended against using the OSHA methods with the existing tables. Furthermore, the Petitioner did not propose any revised age correction values or age correction methods. Lastly, extending the table
by increasing age correction values would further prolong the time required for a significant threshold shift to be noted and would render Cal/OSHA's noise standard to be less effective than the equivalent federal standard. Consequently, the Division recommended that the petition be denied.

STAFF’S EVALUATION

As previously noted, Section 5097(d)(9) permits, but does not require, the use of age correction factors in determining whether a STS has occurred. Board staff has been unable to locate nationally recognized standard age correction factors beyond the age of 60. ANSI S3.44-1996 methods of predicting age-related hearing loss do not go beyond the age of 60. Therefore, Board staff’s opinion that the most significant obstacle to granting this petition for consideration by an advisory committee is the lack of any nationally recognized age correction factors beyond the age of 60.

The Division has learned that NIOSH is making a significant effort to revise the age correction table based on NHANES data. Board staff also notes that the American Academy of Audiology has recommended against using the OSHA methods with the existing tables. If NIOSH is, in fact, attempting to revise the age correction table and perhaps extend it beyond the age of 60, such an effort would certainly be appropriate due to the aging workforce and economic factors that are keeping persons in the workforce longer. Board staff believes that, rather than for the state to attempt to extrapolate age-related corrections with no nationally recognized standards, it would be more appropriate to allow time for NIOSH or federal OSHA to address this matter.

CONCLUSION AND ORDER

The Board has considered the Petition and the recommendations of the Division and Board staff. For reasons stated in the preceding discussion, the petition is hereby DENIED.