

# CSA Z1007:16 A NEW MANAGEMENT STANDARD FROM THE CANADIAN STANDARDS ASSOCIATION FOR THE MANAGEMENT OF HEARING LOSS PREVENTION PROGRAMS

**Jeffrey M. Goldberg\***, Chair of Subcommittee 5, S304 Noise and Vibration Technical Committee  
**T. Kelsall†** and **A. Behar‡**, Co-Chairs of S304 Noise and Vibration Technical Committee  
**P. Malek^**, Project Manager Canadian Standards Association -

A new 1000 series standard developed for the Canadian Standards Association's series of Noise Management and Hearing Loss Prevention group of standards. Produced under the auspices of CSA's S304 Noise and Vibration Technical Committee

## 1 Introduction

12 years ago (2004), the Canadian Standard Association's Acoustics and Noise Control Committee met at an annual conference of the Canadian Acoustics Association. A paper was presented, at that meeting, on the value of companies implementing a "hearing conservation program". Several of the Committee members were inspired by this presentation and asked to discuss this subject at the Technical Committee (TC) meeting. From that meeting, the Committee suggested that there ought to be a National Standard on occupational hearing conservation. This idea was subsequently put on the back burner, as this subject was not within the scope of the Acoustics and Noise Control Committee.

A couple of years later (2006), the Ontario Ministry of Labour, as part of a review of their noise control and hearing protection regulations, came forward with a recommendation that "hearing conservation" be recognized as an essential part of OHS programs. However there was insufficient support from the other Provinces and the Federal Government (as well as other potential advocates). As a result, CSA could not get this project past the proposal stage.

Moving forward another three years (2009), as a result of a reorganization of a couple of the CSA Standards Program areas it was that we decided to combine the remainder of our Acoustics and Noise Control TC with our Hearing Protection TC – forming the new TC on Occupational Hearing Conservation. This new TC was given a broader mandate, which included occupational hearing loss prevention<sup>1</sup>.

There was still need for National support for such a standard (having failed to get this essential support in 2006). With an increased value proposition, we presented the proposal for development of this management system standard to our Advisory Council (comprised of OHS regulatory authority representatives from all 14 jurisdictions across Canada). Through this Advisory Council, funding was sought from CAALL-OHS (the OHS Committee of the Canadian Association of Administrators of Labour Legislation). A year later (2010), funding was offered for the development of this new standard. CSA decided to designate this new standard "CSA Z1007" as it was to be part of the Z1000 series and it was related to the Z107 noise control and audiology standards.

With this support in place, CSA took the proposed new project back to the Technical Committee. They put together a development plan and struck a new sub-committee (SC5) to draft the standard. I was named as the sub-committee's first Chairperson. Work began on Z1007 in May of 2011. Today I'll present the results!

## 2 Method

### 2.1 The Canadian Regulatory Framework

#### Its present condition

Canada has a fragmented set of norms for Hearing Conservation owing the 14 jurisdictions that establish standards for these programs. CSA Z1007, written with the support of regulators in various parts of Canada, seeks to establish norms, which can be used to manage these programs as hearing loss prevention programs. The difference between loss prevention and conservation is a proactive stance seeking to remove the causes of noise induced hearing loss before permanent hearing damage takes place.

### 2.2 Sources of Information

The committee reviewed standards from New Zealand and Australia<sup>1</sup>, the National Institute of Occupational Safety and Health (NIOSH) in the United States<sup>2</sup> and the European Union. As well, we reviewed the 14 different standards that are currently used in Canada.

## 3 Results

### 3.1 What does the standard include

The standard covers all aspects of hearing loss prevention from detection of potential toxic noise through to proactive measures to determine if the program is being effective. The standard is compatible with and reflective of CSA's other standards in this area

---

<sup>1</sup> 1269.1-2005\_R2016 Occupational Noise Management

<sup>2</sup> Preventing Occupational Hearing Loss – A Practical Guide, DHHS(NIOSH) Pub. No. 96-110; A Practical Guide to Effective Hearing Conservation: Programs in the Workplace, DHHS(NIOSH) Pub. No. 90-120; Criteria for a Recommended Standard – Occupational Noise Exposure, DHHS(NIOSH) Pub. No. 98-126.

---

\* Chairman, S304/SC5 subcommittee, [Jeffrey@protectear.com](mailto:Jeffrey@protectear.com)

† Hatch, [tkelsall@hatch.com](mailto:tkelsall@hatch.com)

‡ Ryerson University, [albehar31@gmail.com](mailto:albehar31@gmail.com)

^ CSA Group Rexdale, ON, [Priya.malik@csagroup.org](mailto:Priya.malik@csagroup.org)

### 3.2 How Does the Standard Enable Hearing Loss Prevention

The Standard addresses

- The fragmented nature hearing loss prevention in Canada, how the standard seeks to address that,
- What proactive measures can and should be taken, and how to determine if the standard is being applied effectively.
- There are several informative annexes addressing parts of the program in greater detail and Best Practices for those who wish to excel in this area.

## 4 Conclusion

The standard was published in March of 2016, and is seeking adoption from the regulators that enabled its creation. It is the first such Standard in North America. “CSA Z1007” is one of the leading standards in our Z1000 series of OHS management standards. In the future, we hope to improve Z1007 further through the development of a 2nd edition.

## Remerciements/Acknowledgments

The authors of the present paper gratefully acknowledge the contributions made by the members of SC5. We completed

this new standard in three and one half years. That is a significantly small amount of time for a new document. That couldn't have been achieved without members of the subcommittee consenting to many conference calls between our semi-annual face-to-face meetings. The members of the subcommittee (SC5) who created Z1007, were selected from a broad range of practitioners, government, corporate, and academia and were as follows: A. Behar (Ryerson University), E. Berger (3M Corporation, Indianapolis IN), S. Bly (Health Canada), B. Borst (3M Canada, London ON), J.M. Cousineau (Ontario Ministry of Labour, Toronto ON) S. Brown (WorkSafeBC, Richmond BC) I. Bhunoo (Workplace Safety and Prevention Services ON) J. Franks (LytleSound), A. Fedee (Via Rail, Toronto, ON), Tim Kelsall (HATCH), S. Lake (Consulting Acoustical Engineer, Colorado Springs, CO), P. Malek. (CSA Group, Rexdale, ON.), M. Russo (Infrastructure Safety Assoc. of Ontario, Toronto ON), T. Schulz (Honeywell Safety Products, College Station TX.), D. Shanahan (CSA Group Mississauga, ON), K. Turner (Protec Hearing Inc., Winnipeg MB), L. Wells (3M Corporation, St. Paul MN) The members of S304/Subcommittee 5 wish to acknowledge the participation of those members of the subcommittee from the United States that worked on this project.

---

Just prior to that time, CSA established a new series of standards on OHS management systems (the CSA Z1000 series). CSA's Strategic Steering Committee was asked to review the new Z1000 standards and suggest other subjects that should be given special focus in under the broad subject of OHS Management. From that review, a couple of our Strategic Steering Committee members suggested that a standard on “Management of Hearing Conservation Programs” be added to this series. CSA staff considered this suggestion and came to the conclusion that the creation of such a management system standard could serve to tie together the diverse standards assigned to the Hearing Conservation TC. We presented this idea to the TC and they accepted it (in principle). The final title of the standard changed to Hearing Loss Prevention Program Management was chosen during the standard's development.