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Summary

Developing Housing and Built-In Standards
Dino Zuppa, PhD
CEO, Accessibility Standards Canada

Dr. Dino Zuppa, Chief Executive Officer of Accessibility Standards Canada (ASC), presented a compelling case for transforming air quality research into enforceable accessibility standards. His presentation focused on the relationship between indoor air quality and disability inclusion, especially as it pertains to individuals with Multiple Chemical Sensitivity (MCS). He opened by revisiting a research study funded by ASC and conducted by the Environmental Health Association of Quebec (ASEQ-EHAQ), which compared air quality in 17 scent-free workplaces and 17 non-scent-free workplaces. The study revealed a remarkable 70% reduction in total volatile organic compound (TVOCs) concentrations in environments with well-designed, enforced scent-free policies. Notably, benzene—a known carcinogen—was entirely eliminated in these environments, and other VOCs were reduced by up to 80%.

Dr. Zuppa emphasized that air quality was significantly worse in spaces frequently cleaned with conventional products, such as washrooms and treatment rooms, indicating that the products themselves contribute to unsafe chemical exposure. Importantly, scent-free policies also benefit individuals with other conditions like migraines and chronic fatigue, illustrating their broad utility beyond MCS. These findings underscore the crucial need to treat air as a shared resource in workplaces and to standardize accommodations for people with environmental sensitivities just as we do for other disabilities.

Moving from research to application, Dr. Zuppa addressed the challenges of turning empirical findings into technical standards. He outlined systemic and attitudinal barriers—such as the lack of scent-free environments, policy enforcement, misleading product labelling, and stigma—that must be overcome in the process of standard development. Design criteria such as HVAC

systems, procurement of low-emission materials, and scent-free product use must be transformed into measurable, enforceable components of building codes and accessibility policies.

Dr. Zuppa then introduced the mandate of Accessibility Standards Canada: to develop accessibility standards, fund innovative research, disseminate findings, and support both regulatory and non-regulatory change. He described ASC's inclusive governance model, where over 50% of staff identify as persons with disabilities and nearly 90% belong to equity-deserving groups, many of whom hold intersecting identities. This inclusive leadership structure makes ASC one of the most representative and accessible standards organizations globally.

Highlighting the broader impact of their work, Dr. Zuppa noted that ASC's standards support 92% of the articles outlined in the UN Convention on the Rights of Persons with Disabilities (CRPD) and contribute to 86% of the UN Sustainable Development Goals. He proposed a three-step pathway to transforming research into practice: (1) standardize knowledge using rigorous, peer-reviewed research; (2) address systemic and design-related challenges by converting them into technical requirements; and (3) leverage ASC's standard development processes to produce enforceable frameworks applicable nationally and internationally.

Dr. Zuppa concluded by detailing how requirements for MCS are being incorporated into ASC's standards for accessible housing and the built environment. These standards will apply to a wide range of areas, including heritage buildings, childcare centers, employment, tourism, and program design. His presentation strongly reinforced the view that indoor air quality is a fundamental aspect of accessibility, and that the inclusion of scent-free and low-emission principles in standards will benefit not only people with MCS but society as a whole. Through collaborative, evidence-based efforts, Dr. Zuppa envisions a future where clean air is treated as a human right and accessibility is redefined to include everyone.