



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
4330 EAST WEST HIGHWAY  
BETHESDA, MD 20814

March 2, 2020

Karim Nazarali  
CSA Group  
Vice President, Standards Development  
178 Rexdale Boulevard  
Toronto, ON M9W 1R3

RE: *Additive Manufacturing/3D Printing of Consumer Products*

Dear Mr. Nazarali,

On October 30, 2019, Mr. Richard McCallion, and other U.S. Consumer Product Safety Commission (CPSC) staff, briefed the Commission on Additive Manufacturing/3D Printing and potential associated hazards. The slide presentation from the briefing is attached for your review and consideration. As part of the briefing, staff<sup>1</sup> outlined a number of hazard areas with 3D printing technology in which voluntary standards development could help reduce potential hazards and risks.

Staff is concerned by hazards posed by both the 3D printing process and 3D printed consumer products. There are potential fire, electrical, chemical, and mechanical hazards associated with both the 3D printer and printed products. Also, staff is particularly interested in potential hazards associated with children, a vulnerable population, including children using 3D printers and 3D printed consumer products intended for children.

Standards developing organizations, such as CSA, are well-positioned to lead the development of consensus standards to help guide the range of stakeholders (including manufacturers, importers, material suppliers, and intellectual property holders) on the best way to ensure the safety of these products when used by consumers. In particular, these standards should address the 3D printer itself and the lifecycle of the 3D printed products over a full range of potential exposures by implementing a good risk-management strategy.

Staff understands that while CSA does not have currently any active standards development projects for 3D printers, you have had internal discussions on some of these issues. Staff would

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<sup>1</sup> This letter and the attached slides were written by CPSC staff and have not been reviewed or approved by the Commission, and therefore may not necessarily reflect the views of the Commission.

like to encourage you to consider developing consensus standards for 3D printers from a consumer standpoint.

Staff welcomes the chance to meet with you and others at CSA, and we can arrange a briefing to outline CPSC staff's concerns and recommendations to explore other approaches in the support of consumer safety regarding 3D printing. If this is of interest to CSA, please contact me by email at: [pedwards@cpsc.gov](mailto:pedwards@cpsc.gov), or by telephone at: 301-987-2224. We appreciate the opportunity to work with you on this very important consumer safety issue.

Sincerely,

Patricia Edwards  
Voluntary Standards Coordinator

Cc: Richard McCallion, Program Area Risk Manager, Mechanical, Recreational, Sports and Seniors

Treye Thomas, Ph.D., Program Area Risk Manager, Chemical, Nano, and Emerging Materials

Scott Ayers, Voluntary Standards Specialist