



June 26, 2017

Review of the Workplace Safety and Health Act
c/o Chair, The Advisory Council on Workplace Safety and Health
Workplace Safety and Health
200-401 York Avenue
Winnipeg, MB R3L 2G8

Dear Advisory Council members,

We are the Canadian Welding Association with over 1,000 members in Manitoba and 70,000 in total across Canada. Our organizations history dates back to the early 1920's. We represent members in a multitude of industry sectors that include: Manufacturing, Construction, Transportation, Electronics, Medical, Petrochemicals, and Oil and Gas, and many others. Our members are also welding equipment and consumables manufacturers and end consumers of these products in those industry sectors. The welding industry employs over 300,000 Canadians and contributes over \$5 billion's to our economy on an annual basis.

We actively work with Secondary schools and Colleges in this province to promote welding education and provide scholarships to many worthy students.

We are very grateful for the steps being taken to protect the health and safety of our labour force. However, we continue to be concerned about the recently lowered Threshold Limit Values (TLV) of 0.02 mg/m^3 as respirable manganese for Manganese (Mn) welding fume. The most common welding wire process used today in metal fabrication plants are:

- Gas Metal Arc Welding (GMAW)
- Flux Core Arc Welding (FCAW).
- Shielded Metal Arc Welding (SMAW)

These three process are used in about 90% of all arc welding applications.

Manganese is a key ingredient in manufacturing of steel products and is found in many of our industry products and consumables. The key function of this alloy is to provide critical toughness and strength of steels. Eliminating Manganese from Steels would negatively affect the integrity of crucial structures such as buildings and bridges, along with many other products, and ultimately endanger public safety.

To meet these new lower Manganese fume limits, the industry is doing extensive research in order to find solutions and a number of manufacturers have come up with wires that generate less fumes, however, it remains difficult to meet the 0.02 mg/m^3 limit. The costs associated with determining suitable solutions would be in the hundreds of millions of dollars and will require that government and industry work together to meet this serious industry challenge.



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To be clear, the CWA fully supports the protection of workers including their protection from the negative effects on Mn in welding fume and from other sources. However, we believe the impact of the recent change in the TLV for Mn on industry in Manitoba must be fully investigated. Furthermore, we would like to note that that the ACGIH limits used to set the TLV are not intended by American Conference of Governmental Industrial Hygienists (ACGIH) to be adopted as OEL's without such consideration.

The ACGIH themselves specifically state that the TLV's determined in their studies are not "*designed to be used as standards*" nor should TLV's be assumed by regulatory agencies to be "*economically or technically feasible to meet*". (see <http://www.acgih.org/TLV/PosStmt.htm>)

We would be very pleased to work with Manitoba's Occupational Health Unit Workplace Safety and Health Department of Growth, Enterprise and Trade to find suitable solutions to address welding fume issues in general. Thank you for your consideration.

Sincerely,



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