

W1018

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RE: PROPOSED CHANGES TO WCB REGULATIONS PART 5

Prepared by Joseph F Pyringer

trisafety@yahoo.com

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Introduction:

The following report identifies facts with regards to past failures of Part 5 of the WCB regulations, and also how the proposed changes of adopting the ACGIH (American Conference of Governmental Industrial Hygienists) model would only further alienate regulations with respect to training, monitoring, accountability and enforcement. To make myself clear, I am aware that there are certain companies, such as BC Hydro and others, that go above and beyond the current regulations concerning controlled products in the workplace. Unfortunately, this is not the case in the construction industry. Over the past 16 years that I have worked in the glazing industry, I have worked with many controlled products; unfortunately, I have only recently been made aware of the true underlying hazards that may affect my health in the future. An Occupational Health and Safety course, which I have recently completed at BCIT, has enlightened me to some of these issues.

Facts:

- No employer has ever tested an atmosphere that I have worked in to prove that it is below the recommended PPM (Parts Per Million) or mg/m³ (Milligrams Per Cubic Metre) as required even though I have worked with products such as MEK (Methyl Ethyl Ketone), Xylene Isomers, Hexane, Toluene, Acetone, Ethyl Benzene, Methyl Alcohol, Amorphous Fumed Silica and many others. There have been many occasions that I worked with some of these hazardous products on a daily basis for the entire workday, and sometimes even into overtime hours.
- When I was finally provided a half mask respirator in the latter part of my glazing career, it was only because I insisted on using one. I heard excuses and comments from supervisors such as, "That stuff won't hurt you! I've used it without gloves or a respirator for years!"
- Not once was I ever given a proper fit-test for a respirator, or was I ever made aware of the need to change the organic vapour cartridges on a regular daily basis. Even though I was using products with a "skin" designation (meaning that the vapours of hazardous product can easily enter the skin and mucus membranes, such as the eyes) for long periods of time. I was never given, or have I ever seen a full-face respirator on any jobsite, which would prevent the toxins from entering through my eyes.
- The hierarchy of engineering controls, administrative controls and finally PPE (Personal Protective equipment), is also a complete failure. When I was given a respirator, not only was the atmosphere not tested, but also, there was no consideration given to ventilation or job rotation beforehand.

Recommendations:

- If the proposed changes go through and the ACGIH model is adopted, I would insist on attention being directed to the “Special Note to User” portion of the TLV (Threshold Limit Values) and BEI (Biological Exposure Indices) booklet which states in part “The values listed in this book are intended for use in practice of industrial hygiene as guidelines of recommendations to assist the control of potential workplace health hazards and for no other use. These values are *not* fine lines between safe and dangerous concentrations and should not be used by anyone untrained in discipline of industrial hygiene.” Due to the fact that most employers are not trained as occupational hygienists, and the subsequent poor history of effectively protecting their workforce, I believe that employers must be mandated to initiate the following recommendations.
 - An audit conducted every three years to correspond with the updating of MSDS’s (Material Safety Data Sheets) for all controlled products in the workplace (also immediately when a new controlled product is introduced to the workplace) by a trained certified Occupational Hygienist (such as educated by the 2-year OH+S Diploma program at BCIT) The Occupational Hygienist would serve as a “referee” whose job would include (but not limited to) workplace monitoring of the exposure levels in the *most extreme* working conditions for each controlled product that could be encountered by workers in each particular workplace.
 - Documentation signed by the Occupational Hygienist indicating all results of the monitoring and testing of each controlled product in the workplace before and after engineering controls are initiated. These results would be given to each worker in the workplace.
 - A new “individualized” WHMIS (Workplace Hazardous Materials Information System) that is tailored to each particular workplace and also to how each controlled product is used in each workplace. A trained Occupational Health and Safety person (such as educated by the 1-year OH+S Certificate program at BCIT) should conduct this training to the employees using the results from the Occupational Hygienist’s audit of the workplace atmosphere. This training should also be conducted every three years or when a new controlled product or employee is introduced. If respirators are needed then the OH+S person could also conduct a proper fit-test. The fit-test are done annually as stated by the current regulations. (OH+S persons should also be able to recommend other OH+S issues while conducting training and audits at the workplace)

- If the ACGIH model is introduced, then it should be introduced in its entirety with the “Adopted Biological Exposure Determinants” which would include mandatory urine, blood and/or lung testing when an employee uses certain types of controlled products. This would ensure that workers are properly protected from workplace exposure. If this part of the model is not adopted, then at the very least workers should be informed before working with a BEI regulated substance, and also be informed that they have the right to be tested by a toxicologist at the recommended intervals.

Conclusion:

I believe that whether the regulations in Part 5 are changed to the American model or not, greater due diligence must be introduced to controlled products in the workplace, especially concerning construction. Provisions must be put in place for both employers and employees to get clarification on controlled products and chemicals that are not in the “Adopted Values” lists. The TLV’s should be posted online and an updated hardcopy made available to each worker on an annual basis.

Past indicators should tell us to be cautious, asbestos and its related diseases are still the number one killer of construction workers to this day, killing people that were exposed 20-30 years ago. Painter’s syndrome with the effects of Xylene and other solvents has proven to be very detrimental to workers over the years. Recently, new guidelines have been put in place for drywall workers to use particulate respirators while sanding because of the detrimental effects drywall dust has on the lungs. Many of the new caulking, primers and solvents have only been in use for 10-20 years, and many have introduced new chemicals into the workplace. These chemicals can cause health effects that include irritation and redness to eyes and mucus membranes. To the skin it can cause sensitization, reddening, discomfort, irritation and may cause dermatitis. Inhalation can cause headaches, dizziness, nausea, central nervous system damage, liver and kidney damage, depression, sensitization, tremors, impaired memory, irritability, drowsiness, weakness, nervous irritation, vertigo, anorexia, flatulence, reproductive effects, irritation to the respiratory system and allergic reactions including wheezing, coughing, difficulty breathing and angina. Some of these symptoms may be passed off as other illnesses or conditions and the employer or worker may not be aware that it is due to chemical exposure. Some chemicals are accumulative and build up in the body, while others may not show their chronic effects to the liver, kidney or CNS (Central Nervous System) until 20-30 years after exposure. We do not know what the synergistic effects (combined effects of using different controlled products in the same atmosphere) of most of these chemicals might be to the human body.

Therefore I believe that only persons with OH+S knowledge and training should be the ones to administer the OH+S testing and training. Lack of proper training and proper PPE has time and time again resulted in unnecessary injuries and deaths over the years. A recent example of this would be the confined space incident that happened in New Westminster on the barge. It is an undeniable fact that having and utilizing proper training and the required PPE would have prevented the unfortunate loss of life and injuries that resulted from this incident and many similar ones like it.

I believe that initiating the outlined recommendations will result in a happier, healthier, and a more educated workforce. This in turn would result in a workforce that has a better moral, is more productive, and would result in lower compensation costs to the employer. These steps would also result in lower health care costs to the Province of BC and also lower human and social costs related to the effects of the symptoms resulting from the toxins.

Please reply to this report by the e-mail listed on page 1.

Thank you,

Joseph F. Pyringer