



Coal Workers' Pneumoconiosis Select Committee Submission

Introduction

In Australia & New Zealand, Kenelec Scientific represents TSI, a United States based manufacturer of environmental and personal protection monitoring equipment. Kenelec Scientific is a wholly Australian owned business founded in 1962 and the relationship with TSI is approximately 50 years strong.

TSI** is a global leader in their markets; headquartered in the United States with regional offices throughout Europe & Asia supported by a network of representatives and distributors across the globe, such as Kenelec Scientific in Australia & New Zealand.

Background

The re-emergence of pneumoconiosis (or Coal Workers' Pneumoconiosis, CWP) or black lung disease is causing great concern throughout Australia's coal mining industry. As one of the larger coal exporters and miners in the world, the Australian mining industry, in particular in Queensland, is looking for ways to monitor the coal dust being potentially respired by coal workers when working both underground and aboveground.

The safety hazards of inhaling respirable coal dust are significant and the industry is searching for a way to monitor the respirable coal dust in a coal mine workers respirable zone.

Further to this, other dust particles, whether they be coal, smoke, diesel particulate or silica have potential health hazards at particle sizes which are respirable. A monitoring system which can alert workers to elevated exposure to such dust particles, in real-time, is currently being sought.



Objective

The objective for Kenelec Scientific to make a proposal to the CWPSC is simple.

Kenelec Scientific has a product, TSI's AM520, which is capable of providing the real-time monitoring of respirable dust in a worker's breathing zone. This product can provide alarms to advise a worker when they are being exposed to levels of respirable dust that exceed pre-set limits. Furthermore, the AM520 can be calibrated to monitor different particles including silica dust, diesel particulates and coal dust. Currently, the AM520 is being, and has been used, by mining companies as well as researchers within prominent Queensland organisations such as DNRM and SIMTARS with outstanding feedback and overwhelming market acceptance.

The one problem we are currently facing is the process of certification for intrinsic safety. The AM520 product has a version, called AM520i, which is intended to be an intrinsically safe version and this product is currently being evaluated by CSA in Canada (with TSI's follow-up). Kenelec Scientific is also looking for ways to have the product evaluated through SIMTARS (paperwork is currently with TSI as the manufacturer); as well as going through the process with the Advance Queensland Challenge for "Real-Time, Personal Monitoring of Dust at Queensland Underground Coal Mines", as issued by DNRM by on 14 August 2017.

Our main objective is to find a way to fast track the approval process so that the product can be granted its appropriate certification, or the necessary modifications or re-designs can be conducted so that the intrinsic safety certification can be awarded.

Proposal

At Kenelec Scientific, we are keen to have the process of intrinsic safety certification for the AM520i expedited for the betterment of the safety practices and workplace health throughout the Australian mining industry. The success-to-date of the AM520 in terms of functionality and market acceptance suggest that the AM520i is going to be the product of choice for the mining industry, fit for use, and capable of overcoming the shortfalls currently experienced in the marketplace in terms of safety alarms; real-time monitoring; and ease of use for workers.

We therefore seek an audience with the CWPSC, or an appointed representative, in order to introduce our organisation, TSI (as manufacturer of the AM520 & AM520i) and consequently discuss how any assistance for expedition through SIMTARS or CSA could be provided by CWPSC.