

# Challenges of junior ventilation and occupational hygiene practitioners -

## *A perspective from a junior MVSSA member*

T.F. Ngobeni, Latona Consulting (Pty) Ltd

### ABSTRACT

Despite the large number of students attempting MEC examinations annually, only a handful are successful in achieving full certification. Discussions and interaction with Junior Environmental Practitioners across the industry have indicated dissatisfaction with the qualification, which lead to the drawing up of perceived problems that may contribute to the training and learning difficulties. These perceptions were later confirmed through a survey and an interactive presentation with junior members. There was no link between the results of the survey and the pass rate. It is recommended that several factors be considered to understand the challenges faced by juniors and to improve the perception of juniors towards a more positive view across the industry.

### 1. INTRODUCTION

Within the mining sector, there are many challenges associated with the development of relevant skills.

Amongst others, a legacy of poor educational opportunities, a complex tertiary education and training landscape and a poor basic education system, have resulted in many employees having few or low levels of skills. The national shortage of skills in all economic sectors exacerbates the challenges associated with the retention of staff, and increases the demands for training and development in the mining sector. The skills-development environment is also complex, with many policy, regulatory and legislative requirements. (Ally, 2016)

With changing technology and increasing legislation requirements, a major concern facing the mining industry, and particularly the ventilation and mine environment departments, is the quality and calibre of their staff members.

Informal discussions and interaction with Junior Environmental Practitioners across the industry, both coal and hard rock mines, has indicated a general dissatisfaction around qualifications as well as training and learning difficulties, including not knowing about the changing qualification programme that is due for implementation in the year 2020.

This then developed an interest to investigate the issues surrounding the general complaints from juniors and to find out if this was being experienced across the industry or it was from only the selected few individuals.

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### 2 BACKGROUND

Presently the highly qualified and experienced ventilation practitioners are being lost to retirement and private consultancy.

These individuals carry vast underground mining experience as working your way up through the ranks was the most common method in South African mines.

Over the years, there has been a decrease in the number of people qualifying in Mine Environmental Control (MEC) and this is shown in Figure 1 (van der Bank, 2017).

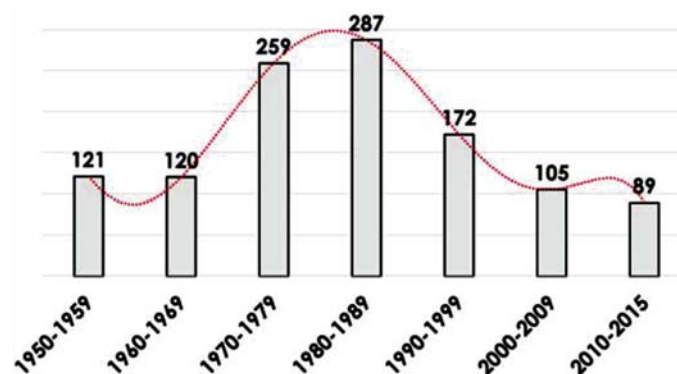


Figure 1. MEC certificate issued from 1950 to 2015 (van der Bank, 2017)

This decrease could be attributed to possibly many factors including the development of new fields that take some of the responsibilities and/or serve a similar purpose as the mine environmental controllers in the mine, sharing the responsibility and decreasing the need for the number of qualified people in present times.

Despite the large number of students attempting the MEC examinations annually, only a handful are successful in achieving full certification with 13 candidates in 2013 and 21 candidates in 2015 receiving their MEC advanced certificates.

Similarly for every examination sitting and examination paper written, only a few manage to pass the examination papers.

The following tables show the statistics of the Chamber of Mines (COM), MEC examination for Paper 1 to Paper 6, May and October 2012, 2014 and 2016 respectively (Cloete, 2017).

From the tables it is seen that there are an increased number of candidates writing the MEC advanced paper from 235 candidates in October 2012 to 336 candidates in May 2016.