

QUALIFICATIONS IN RELATION TO THE MINE ENVIRONMENTAL CONTROL CERTIFICATE AND THE DEVELOPMENT THEREOF



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AGENDA

- Current Qualification
- End date of the current qualifications
- Reasons for change to new qualifications
- What does the new qualifications look like?
- Qualification process Level 4 & Level 6
- Way forward and time line



CURRENT QUALIFICATION

- 1917....First regulations that called for compulsory dust inspectors
- First Fatal due to heatstroke in 1923
- Soon other occupational environmental issues also started posing problems:
 - Noise
 - Illumination
 - Thermal Environment (Hot or Cold Stress)
 - Airborne pollutants (Dust, chemical pollutants, vapour etc.)
 - Radiation (Radon Gas, alpha, beta & gamma)
 - Flammable gas
 - Designing and managing fire prevention, detection and fire fighting strategies
- Enshrined in Legislation Section 12 and regulations

To cost effectively engineer an Occupational Environment which is conducive to good health, safety and productivity. Through the anticipation, recognition, evaluation and control of environmental conditions/factors that may cause adverse health effects and/or dangerous situations .



CURRENT QUALIFICATION

Intermediate (NQF 4)

- Practical – use of instruments
- Paper 1
- Paper2

Certificate in Mine Environmental Control (NQF 6-7)

- Paper 1 - Fluid Flow Dynamics
- Paper 2 - Thermal Engineering
- Paper 3 - Planning, Applied Economics, Technical Literature and Information Management
- Paper 4 - Risk Management, Fire and Explosions, Gases, Statistics
- Paper 5 - Occupational Hygiene
- Paper 6 - Legislation



END DATE OF CURRENT QUALIFICATION

- The last registration new entries will be October 2016 **(2018)** and registered Learners have until October 2018 **(2020)** to obtain their Intermediate Mine Environmental Control Certificate.
- All candidates currently busy with Certificate in Mine Environmental Control will also have until October 2018 **(2020)** to complete their qualification.



REASON FOR CHANGE

- COM no longer wants to issue qualifications certificates
- Alignment to the National Qualification Framework
- South Africa is moving away from Unit Standard based qualifications to occupational qualifications (QCTO)
- DOL and Department of Education report (2000)
 - NQF is not meeting the skills needs
 - Too many bodies
 - Qualifications duplicated
 - 'One size fits all' approach does not work
 - Different types of learning are required
 - Assessment practices are inconsistent



WHERE ARE WE NOW?

- Two qualifications have been registered
 - Mine Ventilation Observer (NQF 3) - Aimed pilot Group to start in October 2017
 - Mine Ventilation Officer (NQF 4) - Dependent on numbers aimed to be ready in October 2018
- AQP (Assessment Quality Partner) has been established
 - Memorandum of Agreement was signed-off
 - 5 member's. 2 MVSSA, 2 MQA and 1 DMR
- Learner Guides have been completed
- First SDP (Skill Development Provider) is in the process of being registered
- MVSSA have signed an agreement with Wits University for the development of an NQF 6 qualification to replace CMEC. (Aimed completion first half 2018)
- Have submitted the Mine Environmental Control Supervisor NQF 7 qualification for registration through the QCTO (2-3yr)



QUALIFICATION PROCESS – (NQF 3&4)

Knowledge and theory



That which is taught in the classroom

Min 20%

Practical



Simulated or controlled environment

Min 20%

Experience



In the workplace

Min 20%

Balance can be allocated in a proportion appropriate to the need

Internal Assessment



External Assessment

Metalliferous
& Coal

WHERE ARE WE NOW — NQF 6

- Lecturers and Examiners/Moderators have been appointed for the 7 Modules.
- Literature for the qualification will be the MVSSA Workbooks & Textbooks except for the math's module.
- Reviewing of the current workbooks will be done by the lecturers
- Lecturing material is being developed by the elected Lecturers and is planned for completion by end of 2017
- Aiming at for 1st class in first half of 2018



QUALIFICATION PROCESS (NQF 6)

- 7 x 1 week Modules at WITS University
- Examination 2 weeks after last day of lectures
- Submission of an assignment report 2 weeks after examination
 - Module 1 - Fluid Flow Dynamics
 - Module 2 - Thermal Engineering
 - Module 3 - Planning, Applied Economics, Technical Literature and Information Management
 - Module 4 - Risk Management, Fire and Explosions, Gases, Statistics
 - **Module 5 - Occupational Hygiene –**
 - Module 6 – Legislation
 - **Module 7 - Math's**
- QCTO Qualification for distance learner's



WAY FORWARD

- Complete work so that the NQF 3 & 4 qualification can be implemented
 - Mine Ventilation Observer (NQF 3) - Aimed pilot Group to start in October 2017
 - Mine Ventilation Officer (NQF 4)- Dependent on numbers aimed to be ready in October 2018
- Reviewing of the current workbooks and drafting and vetting of lecturing material by end of 2017
- Aiming at for 1st class in first half of 2018

Must ensure that the quality of qualification is maintained or enhanced through this process.



QUESTIONS?

Acknowledgement
MVSSA - Education committee

