


<b>SKILLS PROGRAMME DOCUMENT</b>						
This SP Doc is applicable to three SPs						
Skills Programme ID Number(s)		Skills Programme Title(s)				
<b>SP-230341</b>		<b>Mining Firefighter-Underground Hardrock Operations</b>				
<b>SP-230342</b>		<b>Mining Firefighter-Underground Coal Operations</b>				
<b>SP-230343</b>		<b>Mining Firefighter-Surface Mining Operations</b>				
NQF Level	2	Credits	24	Duration in days	30 days	
Skills Programme Status	APPROVED			Start Date	End Date	
				25/03/2023	25/03/2028	
Last date for enrolment	25/03/2029	Last date for achievement	25/03/2032			

## SKILLS PROGRAMME DETAILS

1.	<b>Title</b>	<ul style="list-style-type: none"> <li>- Mining Firefighter-Underground Hardrock Operations</li> <li>- Mining Firefighter-Underground Coal Operations</li> <li>- Mining Firefighter-Surface Mining Operations</li> </ul>
2.	<b>Sub Title</b>	831101 Mining Worker
3.	<b>NQF Level</b>	NQF Level 2
4.	<b>Duration</b>	30 days
5.	<b>Credits</b>	24 credits
6.	<b>Quality Assuring Body</b>	Quality Council for Trades and Occupations (QCTO)
7.	<b>Skills Programme Rationale</b>	<p>Fires are an extreme hazard, particularly on mines.</p> <p>Mining legislation prescribes that appointed persons must be qualified, by virtue of their knowledge, training, skills, and experience, to perform the activities contemplated. The competencies required for firefighting training are contained in the Department of Mineral Resources and Energy (DMRE) mandatory Code of Practice on Emergency Preparedness and Response. Learners must be trained, assessed, and found competent, in accordance with recognised training and development programmes, so there is the need for this skills programme.</p> <p>There are three specific unique contexts where firefighting will be conducted - Underground Hardrock, Underground Coal and Surface mining operations. Learners are trained in a specific context.</p> <p>There is no similar skills programme recorded.</p> <p>The majority of the candidates qualifying for this skills programme are likely to be working within the mining industry.</p> <p>The work is done in excavations that do not exist naturally but are created through rock breaking and blasting activities. This unique environment holds many hazards and risks for all personnel, in particular, fires. The skills required to master the work are complex and require dedicated learning, application, and specialised and technical skills.</p> <p>Mining will remain the backbone of the South African economy for many years to come, and with the advance of technology there will, in the coming decades, be opportunities to return to and access the minerals left behind in the older mines. The mining and minerals sector will also be able to access resources that are currently too deep to mine. The development of the occupational competence as set out in this skills</p>

		<p>programme is essential to capitalise on these technological advances.</p> <p>Development of the Skills Programme was in consultation with sector practitioners and providers, and through the Minerals Council South Africa, Trade Unions and the DMRE.</p>	
8.	<b>Related registered qualification/s</b>	Elementary Occupational Certificate: Mining Team Leader	
9.	<b>Purpose</b>	<p>The purpose of this skills programme is to prepare a learner to operate as a Mining Firefighter.</p> <p>A Mining Firefighter completes firefighting operations, effectively and safely, in accordance with statutory, regulatory and organisational procedures, policies, codes of practice, standards and agreements.</p> <p>The curriculum will be contextualised for underground hardrock, underground coal or surface mining operations.</p> <p>A qualified learner will be able to:</p> <ul style="list-style-type: none"> <li>• Perform mine firefighting operations</li> </ul>	
10.	<b>Content</b>	<p><b><u>Knowledge component</u></b></p> <ul style="list-style-type: none"> <li>• 900187-000-00-KM-01, Health, safety, and the environment, for mining operations, NQF Level 2, Credits 4</li> <li>• 900173-000-00-KM-01, Mining operations, NQF Level 2, Credits 8</li> </ul>	<p><b><u>Application component</u></b></p> <p><u>Compulsory module</u></p> <ul style="list-style-type: none"> <li>• 900187-000-00-PM-01, Apply, exercise, and ensure safety, health and environmental measures and procedures for mining operations, NQF Level 2, Credits 4</li> </ul> <p><u>A learner may choose any of the below electives:</u></p> <p><b>Elective Modules:</b> Underground hardrock operations</p> <ul style="list-style-type: none"> <li>• 900187-000-00-PM-01, Complete underground hardrock firefighting operations, NQF Level 2, Credits 8</li> </ul> <p><b>Elective module 2:</b> Underground coal operations</p> <ul style="list-style-type: none"> <li>• 900188-000-00-PM-01, Complete underground coal firefighting operations,</li> </ul>

			<p>NQF Level 2, Credits 8</p> <p><b>Elective module 3:</b> Surface mining operations</p> <ul style="list-style-type: none"> <li>900189-000-00-PM-01, Complete surface mining firefighting operations, NQF Level 2, Credits 8</li> </ul>
		Total credits: 12	Total credits: 12
11.	<b>Minimum entry requirements</b>	Open Access	
12.	<b>Exit Level Outcomes (ELO) and Associate Assessment Criteria (AAC)</b>	<p>Exit Level Outcome 1: Carry out and conduct firefighting operations, interpreting, applying, and exercising policies, procedures, performance parameters, controls, and operating standards.</p> <p>Associated Assessment Criteria:</p> <ul style="list-style-type: none"> <li>Operational knowledge and understanding of occupational health, safety and the environmental requirements and firefighting operations is applied.</li> <li>Firefighting operations are performed, in accordance with requirements.</li> </ul>	
13.	<b>Continuous Assessment and Final Integrated Supervised Assessment (FISA)</b>	<p><b>Continuous Assessment</b></p> <p>The SDP must ensure that all learners are enrolled with the QCTO at the start of training (within 5 days) in the format required by the QCTO.</p> <p>Continuous assessments are set by the SDP in accordance with the assessment criteria provided for each module for either underground hard rock, underground coal or surface mining operations</p> <p>This may consist of a variety of methods, e.g., practical, or written assessments, assignments, projects, demonstrations, presentations, or any other form of assessment to assist the learner in the learning process.</p> <p>During training, it is mandatory for formal summative assessments to take place at the end of each module/topic. These results must be formally recorded and be available for monitoring and/or evaluation by the QCTO.</p> <p><b>Final Integrated Supervised Assessment (FISA)</b> All learners gain entrance to the Final Integrated</p>	

		<p>Supervised Assessment by successfully completing all formal summative assessments conducted by the SDP.</p> <p>Format of FISA: A practical assessment integrating the relevant Exit Level outcomes, with simultaneous verbal assessment of embedded knowledge by the assessor before, during or after the FISA.</p> <p>All FISAs must be supervised, and virtual FISAs must be recorded throughout the assessment.</p> <p>All Exit Level Outcomes must be covered in the FISA. In the FISA, the learner must demonstrate applied knowledge and skills for either underground hard rock, underground coal or surface mining operations to prove that the competencies of the Skills Programme have been achieved.</p> <p>The FISA may not contain any assessments used in the "Continuous Assessment" process (thus no re-assessment).</p> <p>Special considerations should be made for candidates with special learning needs.</p> <p><b>Standards for Final Integrated Supervised Assessment (FISA):</b></p> <p>The learner should be provided with a brief/job card/task to demonstrate what the learner should show, know, or produce in a product, relevant to the Exit Level Outcomes and the purpose of the Skills Programme. This is the section where the learner must show applied competency (what the learner must be able to do, and to what expected standard)</p> <p>The FISA INSTRUMENT (Written case study, scenario, or brief/task [similar to a job card]) must be developed and moderated by the SDP and conducted in a supervised environment. It is assessed by means of a RUBRIC developed by the SDP for this purpose:</p> <p>A Competent Candidate must be able to carry out and conduct directional drilling operations, interpreting, applying, and exercising policies, procedures, performance parameters, controls, and operating standards.</p> <p>Given a simulated or actual Underground Hardrock, Underground Coal, or Surface mining context, the candidate must be able to:</p> <ul style="list-style-type: none"> <li>• Deal with ground and strata conditions, in accordance with operating requirements</li> <li>• Perform fire fighting activities</li> </ul> <p>effectively and safely in accordance with statutory,</p>
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		<p>regulatory, and organizational procedures, policies, codes of practice, standards and agreements.</p> <p>This Practical assessment should be a maximum of 2 hours.</p> <p>Whilst conducting the above practical, strategic, well-timed questions should be asked of the learner to assess embedded knowledge gained during the skills programme, as well as critical thinking and problem-solving skills: for e.g.</p> <ul style="list-style-type: none"> <li>• "Why.....?"</li> <li>• "What would happen if ...?"</li> <li>• "When ..... is done, what would the result be?"</li> <li>• "How would you deal with .....?"</li> <li>• Etc.</li> </ul> <p>The marking rubric/compliance checklist used to assess these competencies must include a section for the assessor/facilitator used in this session to make a note of competencies shown, (or not shown), as well as the questions that were asked, and a summary of the learner's answers, and state whether these are of the acceptable standard or not.</p> <p>The marking rubric/compliance checklist compiled should contain specific areas marked with an asterisk (*) as compulsory sections in order for the learner to be declared C (Competent). Compulsory sections are when the safety of the candidate or others would be affected if incorrectly completed.</p> <p>Learners who complete this skills programme will accumulate credits towards the relevant full or part qualification. The Credit Accumulation and Transfer (CAT) Policy may apply to these learners.</p> <p><b>Submission of final results</b></p> <p>Final results must be submitted to the QCTO in the required format, within 21 days of the date of the FISA, together with the following:</p> <ul style="list-style-type: none"> <li>○ Completed QA Verification Report on the FISA (QCTO template: relevant sections).</li> <li>○ A copy of the final Assessment Instrument used, as well as the marking guideline/rubric.</li> </ul>
14.	<b>Recognition of Prior Learning (RPL)</b>	<ul style="list-style-type: none"> <li>• Learners will gain access to the skills programme through RPL as provided for in the QCTO RPL Policy. RPL for access is conducted by accredited institution, skills development provider or workplace accredited to offer that specific skills programme.</li> </ul>

		<ul style="list-style-type: none"> <li>• Learners who have acquired competencies in skills programme will be credited for such topics through RPL.</li> <li>• RPL for access to the Final Supervised Assessment: Accredited providers and approved workplaces must apply the internal assessment criteria specified in the skills programme document to establish and confirm prior learning and achievement of required competencies for the skills programme.</li> </ul>
15.	<b>Work Opportunities and further learning</b>	<p>This skills programme will enable qualifying learners to access Mining Worker occupations in the Mining and Minerals Sector.</p> <p>A typical learning pathway in mining production operations would be Mining Worker at NQF Level 2, then Machine Operator, Blasting Assistant or Team Leader at NQF Level 2, Miner at NQF Level 3, Shift Supervisor at NQF Level 4, Mine Overseer at NQF Level 5 and Mine Manager at NQF Level 7.</p>
16.	<b>Skills Development Provider Accreditation Requirements</b>	<p>Skills Development Providers will be ISO9000:2015, Quality Management, Certified.</p> <p><i>Physical Requirements:</i></p> <ul style="list-style-type: none"> <li>• Training/facilitation resources, including fully equipped classroom and simulated firefighting facilities, which comply with mining occupational health, safety, and environmental standards.</li> <li>• Assessment tools/instruments.</li> <li>• Relevant learning material.</li> </ul> <p><i>Human Resource Requirements:</i></p> <ul style="list-style-type: none"> <li>• Experienced Facilitators/trainers with a minimum NQF Level 3 ETDP qualification</li> <li>• A minimum of 1-year experience in fire fighting operations appointed in accordance with the organisation's Quality Management system</li> </ul> <p><i>Legal Requirements:</i></p> <ul style="list-style-type: none"> <li>• Registered Skills Development Providers (SDP) will comply with the requirements of the following, including all amendments, regulations, and directives, as applicable: <ul style="list-style-type: none"> <li>○ Occupational Health and Safety Act 85 of 1993</li> <li>○ Mine Health and Safety Act 29 of 1996</li> <li>○ Labour Relations Act 66 of 1995</li> <li>○ The Basic Conditions of Employment Act 75 of 1997</li> </ul> </li> </ul>