



Model Curriculum

Helper

SECTOR: MINING
**SUB-SECTOR: MINING OPERATION EXPLORATION
AND RESOURCE MANAGEMENT
ENGINEERING SERVICES
EVERY MINING OCCUPATION**
OCCUPATION: HELPER
REF ID: MIN/Q0201
NSQF LEVEL: 1



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

SKILL COUNCIL FOR MINING SECTOR

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Loader Operator' QP No. 'MIN/Q 0208 NSQF Level 4'

Date of Issuance: December 24th, 2015

Valid up to: March 31st, 2017

* Valid up to the next review date of the Qualification Pack

Authorised Signatory
(Skill Council for Mining Sector)



TABLE OF CONTENTS

1. Curriculum	01
2. Trainer Prerequisites	04
3. Annexure: Assessment Criteria	05

Helper

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Helper”, in the “Mining” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Helper		
Qualification Pack Name & Reference ID.	Helper MIN/Q0201		
Version No.	1.0	Version Update Date	12 – 12 – 2015
Pre-requisites to Training	None (Normal literacy of reading, writing and understanding).		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <p>Gain familiarity with the mine site working: General understanding of transporting material within mine, cleaning the area to build temporary roads, loading and unloading.</p> <p>Become well versed with Environment Health & Safety: Well versed with health and safety measures in terms of personal safety and equipment safety relevant to masonry occupation.</p> <p>Identify and use basic tools, equipment & materials: Effectively identify, select & use the specified tools relevant to helper work.</p>		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of “Helper” Qualification Pack issued by “SSC: Skill Council for Mining Sector”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Introduction</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 05:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> Understanding of transporting material within mine Basic understanding of signs in mine area Basic understanding of cleaning area to build temporary roads, loading and unloading. 	bucket loader, front loader, front-end loader, pay-loader, scoop, shovel, skip loader, or wheel loader
2.	<p>Material Handling</p> <p>Theory Duration (hh:mm) 10:00</p> <p>Practical Duration (hh:mm) 45:00</p> <p>Corresponding NOS Code MIN/N 0201</p>	<p>Basic understanding of</p> <ul style="list-style-type: none"> performing material handling activities in the mining area Loading and unloading of material. Perform physically strenuous work such as manual lifting and dumping Signage, mining area signs and other safety and emergency signals General safety Rules Using Personal protective equipment like safety Harness, helmet, gloves, goggles, earplugs, nose mask etc. and their application under different working conditions. <p>Various safety procedures and methods like barricading of work place, signage, safety drills, and evacuation Procedures etc.</p>	Sample Helmet, gloves, harness, earplugs, goggles, nose mask.
3.	<p>Assisting trained operator, spotting</p> <p>Theory Duration (hh:mm) 15:00</p> <p>Practical Duration (hh:mm) 60:00</p> <p>Corresponding NOS Code MIN/N 0202</p>	<ul style="list-style-type: none"> Assisting a trained operator in a specified task. Assisting a trained technician in installing, dismantling or dispatching a machine. Work with nuts, bolts and basic clamping procedure Comprehend and follow instructions given by the operator Use ropes, slings and tools to lift and align machine parts Select and use appropriate tools and tackles Observe a designated process maintaining alert look-out for deviations. Inform supervisor /operator of problems that are beyond his scope. 	brick hammer, drill machine, gloves, Industrial workers helmet, Signage, poster on road traffic, rules & signs in mining, Safety poster on accidents, fire & environmental disasters, Fire extinguishers, Cradle, Paddling , Shovel, Safety jackets, Gloves, Safety shoes, Torch.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
4.	<p>Health & Safety</p> <p>Theory Duration (hh:mm) 15:00</p> <p>Practical Duration (hh:mm) 15:00</p> <p>Corresponding NOS Code MIN/N 0202</p>	<ul style="list-style-type: none"> about performing any cleaning activities in the mining area Cleaning of the surface before constructing a temporary road Housekeeping of the mining premises Signage, mining area signs and other safety and emergency signals Traffic rules followed inside the mining yard. Movement of men in open cast mines Response to emergencies e.g. correct way to use fire extinguisher 	
5.	<p>Cleaning of machine & workplace</p> <p>Theory Duration (hh:mm) 15:00</p> <p>Practical Duration (hh:mm) 15:00</p> <p>Corresponding NOS Code MIN/N 0202</p>	<ul style="list-style-type: none"> This unit is about health and safety measures critical in open-cast mines Health and safety measures critical for personnel working in open-cast mines Comply with occupational health and safety regulations adopted by the employer. Follow mining operations procedures with respect to materials handling and accidents. Adhere to the safety guidelines specified by Directorate General of Mine Safety (DGMS)). 	Gloves, Safety shoes, Safety goggles, Safety helmet, Fire extinguisher, Types of log book, First Aid box
	<p>Total Duration</p> <p>Theory Duration (hh:mm) 60:00</p> <p>Practical Duration (hh:mm) 140:00</p>	<p>Unique Equipment Required: brick hammer, drill machine, gloves, Industrial workers helmet, Signage, poster on road traffic, rules & signs in mining, Safety poster on accidents, fire & environmental disasters, Fire extinguishers, Cradle, Paddling, Shovel, Safety jackets, Gloves, Safety shoes, Torch</p>	

Grand Total Course Duration: 200 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by SSC: Skill Council for Mining Sector)

Trainer Prerequisites for Job role: “Helper” mapped to Qualification Pack: “MIN/Q0201”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “MIN/Q0201”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	None. Basic counting skills and numeracy. Technical and gallery training as per first schedule, Mining Vocational Training Rules (MVTR) 1966.
4a	Domain Certification	Certified for Job Role: “Helper” mapped to QP: “MIN/Q0201”. Minimum accepted score for domain certification will be 85%.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted score for platform certification will be 90%.
5	Experience	Heavy Commercial Vehicle Driving License. Technical and gallery training as per first schedule, Mining Vocational Training Rules (MVTR) 1966 suggested but not mandatory.

Annexure: Assessment Criteria

Assessment Criteria for Helper	
Job Role	Helper
Qualification Pack	MIN/Q0201
Sector Skill Council	Mining

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment of the theory/knowledge will be based on written test/viva-voce or both while skill test shall be hands on practical. Behaviour and attitude will be assessed while performing the task.
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5	To pass the Qualification Pack , every trainee should score a minimum of 70% in skills, 30 % in knowledge and 70% in practical including Behaviour separately in each attributes.
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

				Marks Allocation	
Assessment Outcome	Assessment Criteria	Total Mark (100)	Out Of	Theory	Skills Practical
1. MIN/N 0201 (Material handling)	PC1. Adhere to time limits given by supervisor	25	2	0	2
	PC2. Bail, Line pack and transport material		2	0	2
	PC3. Follow the traffic rules and area restrictions within the mining area		2	1	1
	PC4. Perform physically strenuous work such as manual lifting and dumping		3	0	3
	PC5. Select and use appropriate tools and tackles.		2	1	1
	PC6. Keep counts and stack material as instructed		2	1	1
	PC7. Visually sort, sift and create separate piles from the mineral rejects		2	1	1
	PC8. Inform supervisor of problems that are beyond scope of his role		2	1	1
	PC9. Comply with health and safety regulations adopted by the employer		2	1	1
	PC10. Follow mining operations procedures with respect to materials handling and accidents		2	1	1
	PC11. Follow the correct safety steps in case of fire, accident, major failure		2	1	1
	PC12. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk.		2	0	2
	Total		25	7	18
2. MIN/N 0202 (Assisting trained operators, Spotting)	PC1. Work with nuts, bolts and basic clamping procedure	25	3	1	2
	PC2. Comprehend and follow instructions given by the operator		2	0	2
	PC3. Use ropes, slings and tools to lift and align machine parts		3	1	2
	PC4. Select and use appropriate tools and tackles		3	1	2
	PC5. Observe a designated process maintaining alert look-out for deviations.		2	0	2
	PC6. Inform supervisor /operator of problems that are beyond his scope.		2	1	1
	PC7. Comply with health and safety regulations adopted by the employer		2	1	1

				Marks Allocation	
Assessment Outcome	Assessment Criteria	Total Mark (100)	Out Of	Theory	Skills Practical
	PC8. Follow mining safety procedures with respect to accidents		2	1	1
	PC9. Observe general safety when handling hot or moving machine parts.		2	1	1
	PC10. Follow the correct safety steps in case of fire, accident, major failure		2	1	1
	PC11. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk.		2	0	2
	Total		25	8	17
3. MIN/N 0203 (Cleaning)	PC1. Adhere to time limits given by supervisor	25	2	0	2
	PC2. Ensure that pebbles and rocks are completely cleared from the path.		2	0	2
	PC3. Loading of collected waste in vehicles		2	0	2
	PC4. Ballasting of haulage track		2	0	2
	PC5. Inform supervisor of issues that are beyond scope of his role		2	1	1
	PC6. General cleaning and housekeeping of mining premises / garden		2	1	1
	PC7. Ensure that removed waste is disposed in the right place		3	1	2
	PC8. Comply with health and safety regulations adopted by the employer		2	1	1
	PC9. Follow the traffic rules and area restrictions within the mining area		2	1	1
	PC10. Follow mining operations procedures with respect to materials handling and accidents		2	1	1
	PC11. Follow the correct safety steps in case of fire, accident, major failure		2	1	1
	PC12. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk.		2	0	2
Total	25	7	18		
4. MIN/N 0204 (Health and	PC1. Comply with safety regulations and procedures in case of fire hazard.	25	5	3	2

				Marks Allocation	
Assessment Outcome	Assessment Criteria	Total Mark (100)	Out Of	Theory	Skills Practical
Safety)	PC2. Operate various grades of fire extinguishers.		5	2	3
	PC3. Work responsibly and as safe and careful as possible so as not to put the health and safety of self or others at risk.		5	0	5
	PC4. Identify characteristics of post-blast fumes and take necessary precautions.		5	3	2
	PC5. Wears safety gear such as hard hat, respiratory protection, eye protection, ear protection		5	0	5
			Total	25	8
	QP Total		100	30	70



Skill Council for Mining Sector

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