

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR MINING INDUSTRY

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack – Mazdoor / Helper

SECTOR: MINING

SUB-SECTOR: Industrial Minerals

OCCUPATION: Ancillary services

REFERENCE ID: MIN/Q 0408

ALIGNED TO: NCO-2004/9311.90

Brief Job Description: Mazdoor or Helpers in mines perform a variety of duties. A mining helper could be doing any of the following on a regular work day - transporting material and equipment within mine, cleaning the area to build temporary roads, loading and unloading, reject handling, spotting, erecting or dismantling scaffolding at a construction site on the mine, bricklaying, clean and maintain the mining premises, assist trained operators in installing, dismantling or dispatch of any machinery. In addition to this a mazdoor must be safety conscious ensuring safety of himself and others around him in all tasks he is asked to perform.

Personal Attributes: This job most often requires the individual to work with their hands. The person occupying the role must therefore have good health and physical stamina and an ability to concentrate on and complete repetitive jobs. He must also be trustworthy and capable of following directions of the supervisor as well as work amicably in a team.

Qualifications Pack Code	MIN/Q 0408		
Job Role	Mazdoor / Helper This job role is applicable in both national and international scenarios		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	Level 1	Version number	1.0
Sector	Mining	Drafted on	27/01/2014
Sub-sector	Industrial Minerals	Last reviewed on	24/03/2014
Occupation	Ancillary services	Next review date	24/03/2015

Job Role	Mazdoor / Helper
Role Description	Helpers in mines perform various duties such as transporting material and equipment within mine, cleaning the area to build temporary roads, loading and unloading, reject handling, spotting, bricklaying, cleaning and maintain the mining premises, assisting trained operators in installing, dismantling or dispatch of any machine.
NVEQF/NVQF level	Level 1
Minimum Educational Qualifications*	None. Basic counting skills and numeracy.
Mandatory Training	<ol style="list-style-type: none"> 1. Technical and gallery training as per first schedule, Mining Vocational Training Rules (MVTR) 1966. 2. Refresher training if absent from mining work for a continuous period of one year or more before re-employment.
Experience	No experience necessary
Applicable National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> 1. MIN/N 0425 (Material handling) 2. MIN/N 0426 (Assisting trained operators, Spotting) 3. MIN/N 0427 (Cleaning) 4. MIN/N 0901 (Health and Safety)
Performance Criteria	As described in the relevant OS units

Qualifications Pack for Mazdoor / Helper

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS , these include communication related skills that are applicable to most job roles.

National Occupational Standard



Overview

This unit is about performing any material handling activities within the mining area.

Unit Code	MIN/N 0425
Unit Title (Task)	Perform material handling activities such as loading, unloading, stacking
Description	This unit is about performing material handling activities in the mining area
Scope	<p>This OS unit/task covers the following:</p> <ol style="list-style-type: none"> 1. Moving material within the mining area 2. Loading and unloading of any material. 3. Reject Handling
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Material movement	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Adhere to time limits given by supervisor</p> <p>PC2. Bail, Line pack and transport material</p> <p>PC3. Follow the traffic rules and area restrictions within the mining area</p>
Loading/unloading	<p>PC4. Perform physically strenuous work such as manual lifting and dumping</p> <p>PC5. Select and use appropriate tools and tackles.</p> <p>PC6. Keep counts and stack material as instructed</p>
Reject handling	<p>PC7. Visually sort, sift and create separate piles from the mineral rejects</p> <p>PC8. Inform supervisor of problems that are beyond scope of his role</p>
Safety, Security and Administrative	<p>PC9. Comply with health and safety regulations adopted by the employer</p> <p>PC10. Follow mining operations procedures with respect to materials handling and accidents</p> <p>PC11. Follow the correct safety steps in case of fire, accident, major failure</p> <p>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.</p>
Knowledge and Understanding (K)	
A. Regulatory context	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Different types of mines and overview of the mine he is working in</p> <p>KA2. Commonly used mining terminology - Benches (width, height etc.), haul roads (width, gradient), stability of slopes, over hang, under cut, danger from high side etc.</p> <p>KA3. Code of practice in specific areas of mine. Significance of fences</p>

**MIN/N 0425
Material Handling**

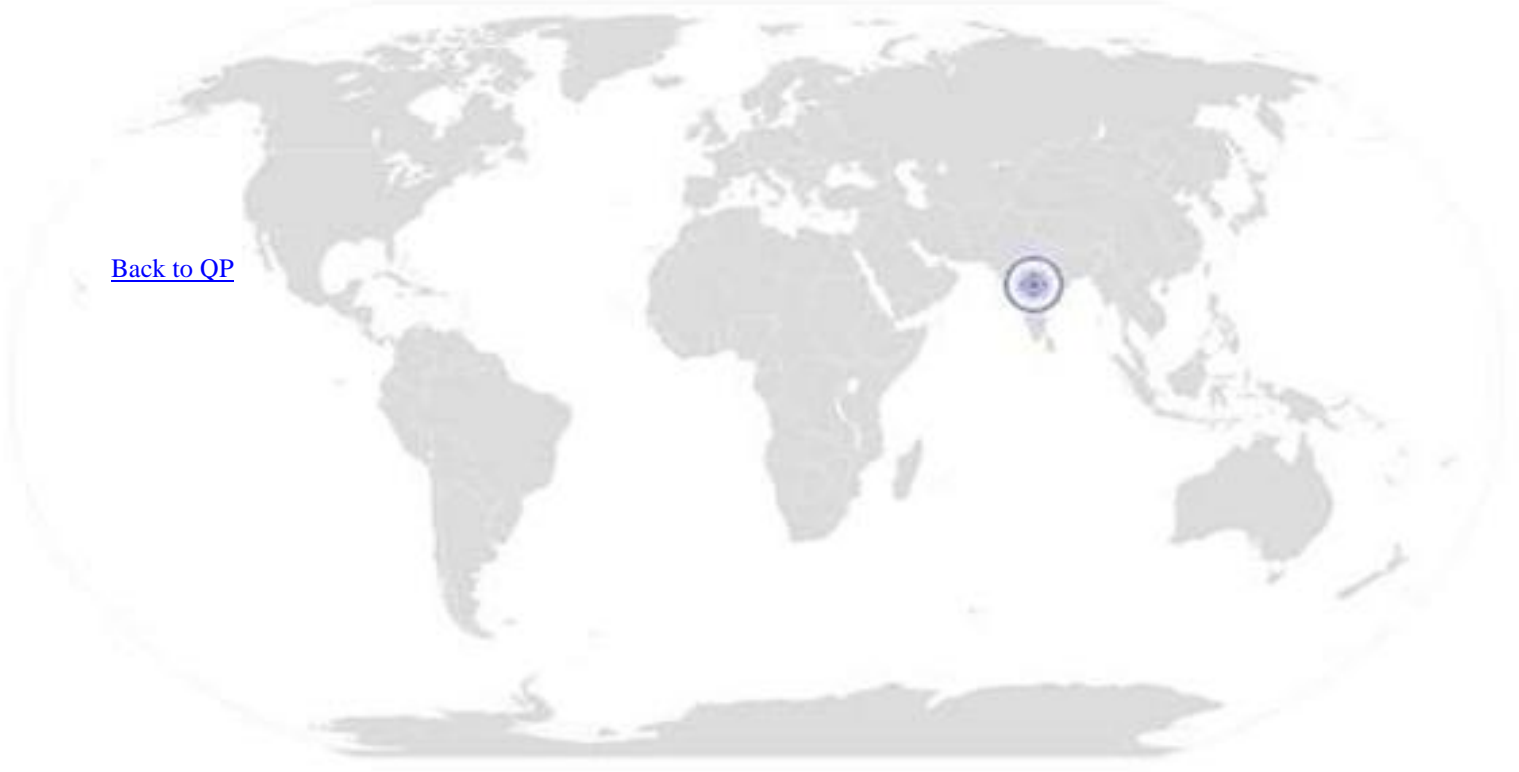
<p>(knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))</p>	<p>KA4. Duties of workmen under Mines act KA5. Outcome of violation of safely law KA6. Provision of leave, wages and working hours under Mines act KA7. Knowledge of mining safety procedures KA8. Locally prepared Emergency Preparedness / Disaster Management Plan. KA9. Environmental impact of mining KA10. Sources of dust, noise and vibration and measures to minimize KA11. Refresher training as per fourth schedule MVTR (1966) within one month of joining duties following absence from duties for a period exceeding one year.</p>
<p>B. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Job specific documents e.g. daily time log and importance of the same KB2. Safety policy of the company KB3. Risk and impact of not following defined procedures/work instructions KB4. Escalation matrix for reporting identified problems KB5. Implications of delays in process to the company KB6. Locally prepared emergency response /disaster management plan</p>
<p>C. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KC1. General safety rules vis-à-vis loading and stocking. KC2. Signage, mining area signs and other safety and emergency signals KC3. Traffic rules to be followed inside the mining yard. Movement of men in open cast mines KC4. Response to emergencies e.g. correct way to use fire extinguisher KC5. Different tools and tackles and their uses.</p>
<p>Skills (S)</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Writing Skills</p>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Fill out daily time log or any other administrative forms</p>
	<p>Reading Skills</p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. Read and comprehend banners /signage</p>

	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Communicate with supervisors and peers
	Integrity
	The user/individual on the job needs to know and understand how to: SA4. Maintain integrity with respect to company property and time SA5. Communicate with people in a polite manner adhering to the values of respect for individual
	Reliability
	The user/individual on the job needs to know and understand how to: SA6. Avoid absenteeism SA7. Work in a disciplined manner SA8. Be punctual
	Time Management
	The user/individual on the job needs to know and understand how to: SB1. Prioritize and execute tasks within the scheduled time limits SB2. Identify ways to do his work with improved efficiency SB3. Concentrate on task at hand and complete it without errors
B. Professional Skills	Organizational Skills
	The user/individual on the job needs to know and understand how to: SB4. Be a team player and achieve collective goals

NOS Version Control

NOS Code	MIN/N 0425		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Sector	Mining	Drafted on	01/02/14
Sub-sector	Industrial Minerals	Last reviewed on	24/03/14
Occupation	Ancillary services	Next review date	24/03/15

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National Occupational Standard



Overview

This unit is about providing assistance to a trained operator.

Unit Code	MIN/N 0426
Unit Title (Task)	Assist trained technician
Description	This unit is about assisting a trained operator in a specified task.
Scope	This OS unit/task covers the following: <ol style="list-style-type: none"> 1. Assisting a trained technician in installing, dismantling or dispatching a machine. 2. Spotting activity for any on-going automated process
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Assisting a technician	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> PC1. Work with nuts, bolts and basic clamping procedure PC2. Comprehend and follow instructions given by the operator PC3. Use ropes, slings and tools to lift and align machine parts PC4. Select and use appropriate tools and tackles
Spotting	<ul style="list-style-type: none"> PC5. Observe a designated process maintaining alert look-out for deviations. PC6. Inform supervisor /operator of problems that are beyond his scope.
Safety, Security and Administrative	<ul style="list-style-type: none"> PC7. Comply with health and safety regulations adopted by the employer PC8. Follow mining safety procedures with respect to accidents PC9. Observe general safety when handling hot or moving machine parts. PC10. Follow the correct safety steps in case of fire, accident, major failure 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.
Knowledge and Understanding (K)	
A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Different types of mines and overview of the mine he is working in KA2. Commonly used mining terminology - Benches (width, height etc.), haul roads (width, gradient), stability of slopes, over hang, under cut, danger from high side etc. KA3. Code of practice in specific areas of mine. Significance of fences KA4. Duties of workmen under Mines act

Assisting trained operator, Spotting

	<p>KA5. Outcome of violation of safely law</p> <p>KA6. Provision of leave, wages and working hours under Mines act</p> <p>KA7. Knowledge of mining safety procedures</p> <p>KA8. Locally prepared Emergency Preparedness / Disaster Management Plan.</p> <p>KA9. Environmental impact of mining</p> <p>KA10. Sources of dust, noise and vibration and measures to minimise</p> <p>KA11. Refresher training as per fourth schedule MVTR (1966) within one month of joining duties following absence from duties for a period exceeding one year.</p>
<p>B. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Job specific documents e.g. daily time log and importance of the same</p> <p>KB2. Safety policy of the company</p> <p>KB3. Risk and impact of not following defined procedures/work instructions</p> <p>KB4. Escalation matrix for reporting identified problems</p> <p>KB5. Implications of delays in process to the company</p>
<p>C. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KC1. General safety rules vis-à-vis working near and with machines</p> <p>KC2. Position of emergency stop switches in the machine and its use.</p> <p>KC3. Signage, mining area signs and other safety and emergency signals</p> <p>KC4. Traffic rules to be followed inside the mining yard. Movement of men in open cast mines</p> <p>KC5. Different tools and tackles and their uses.</p> <p>KC6. Response to emergencies e.g. correct way to use fire extinguisher</p>

Assisting trained operator, Spotting

Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Fill out daily time log or any other administrative forms
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA2. Read and comprehend vernacular language banners /signage
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA3. Communicate with supervisors and peers
	Integrity
	The user/individual on the job needs to know and understand how to: SA4. Maintain integrity with respect to company property and time SA5. Communicate with people in a polite manner adhering to the values of respect for individual
B. Professional Skills	Reliability
	The user/individual on the job needs to know and understand how to: SA6. Avoid absenteeism SA7. Work in a disciplined environment SA8. Be punctual
	Time Management
	The user/individual on the job needs to know and understand how to: SB1. Identify ways to do his work with improved efficiency SB2. Concentrate on task at hand and complete it without errors
	Organizational Skills
The user/individual on the job needs to know and understand how to: SB3. Be a team player and achieve collective goals	

NOS Version Control

NOS Code	MIN/N 0426		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Sector	Mining	Drafted on	01/02/14
Sub-sector	Industrial Minerals	Last reviewed on	24/03/14
Occupation	Ancillary services	Next review date	24/03/15

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National Occupational Standard



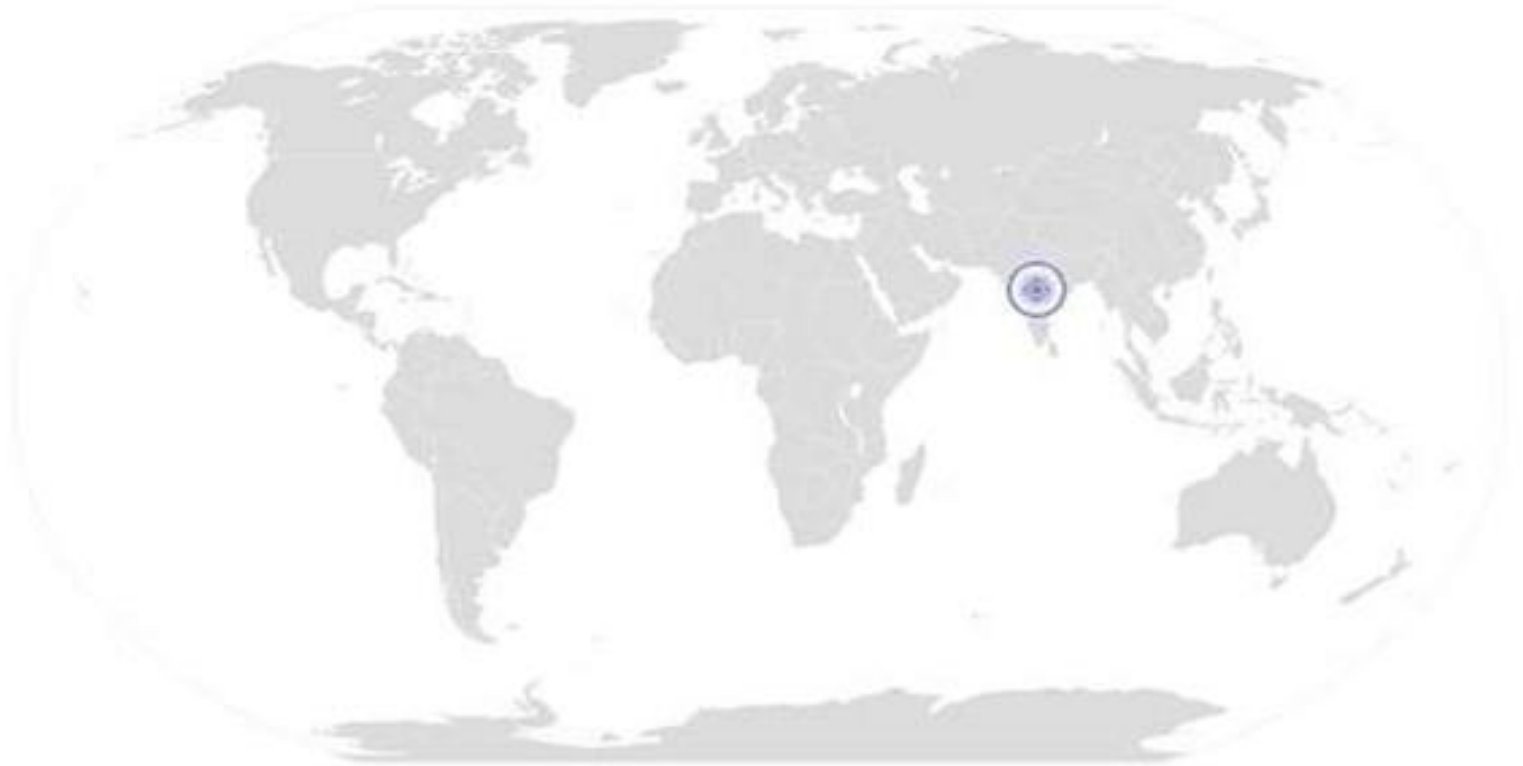
Overview

This unit is about performing cleaning activities.

Unit Code		MIN/N 0427
Unit Title (Task)		Perform cleaning activities
Description	This unit is about performing any cleaning activities in the mining area	
Scope	This OS unit/task covers the following: <ol style="list-style-type: none"> 1. Cleaning of the surface before constructing a temporary road 2. Housekeeping of the mining premises 	
Performance Criteria (PC) w.r.t. the Scope		
Element	Performance Criteria	
Cleaning for road construction	To be competent, the user/individual on the job must be able to: PC1. Adhere to time limits given by supervisor PC2. Ensure that pebbles and rocks are completely cleared from the path. PC3. Loading of collected waste in vehicles PC4. Ballasting of haulage track PC5. Inform supervisor of issues that are beyond scope of his role	
	PC6. General cleaning and housekeeping of mining premises / garden PC7. Ensure that removed waste is disposed in the right place	
Housekeeping	PC8. Comply with health and safety regulations adopted by the employer PC9. Follow the traffic rules and area restrictions within the mining area PC10. Follow mining operations procedures with respect to materials handling and accidents PC11. Follow the correct safety steps in case of fire, accident, major failure 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.	
Safety, Security and Administrative		
Knowledge and Understanding (K)		
A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	The user/individual on the job needs to know and understand: KA1. Different types of mines and overview of the mine he is working in KA2. Commonly used mining terminology - Benches (width, height etc.), haul roads (width, gradient), stability of slopes, over hang, under cut, danger from high side etc. KA3. Code of practice in specific areas of mine. Significance of fences KA4. Duties of workmen under Mines act	

	<p>KA5. Outcome of violation of safely law</p> <p>KA6. Provision of leave, wages and working hours under Mines act</p> <p>KA7. Knowledge of mining safety procedures</p> <p>KA8. Refresher training as per fourth schedule MVTR (1966) within one month of joining duties following absence from duties for a period exceeding one year.</p>
B. Organizational Context (Knowledge of organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Job specific documents e.g. daily time log and importance of the same</p> <p>KB2. Risk and impact of not following defined procedures/work instructions</p> <p>KB3. Locally prepared emergency response / disaster management plan</p>
C. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KC1. Signage, mining area signs and other safety and emergency signals</p> <p>KC2. Traffic rules followed inside the mining yard. Movement of men in open cast mines</p> <p>KC3. Response to emergencies e.g. correct way to use fire extinguisher</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Fill out daily time log or any other administrative forms</p>
	Reading Skills
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. Read and comprehend banners /signage</p>
	Oral Communication (Listening and Speaking skills)
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. Communicate with supervisors and peers</p>
	Integrity
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. Maintain integrity with respect to company property and time</p> <p>SA5. Communicate with people in a polite manner adhering to the values of respect for individual</p>
	Reliability
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. Avoid absenteeism</p> <p>SA7. Be punctual</p>

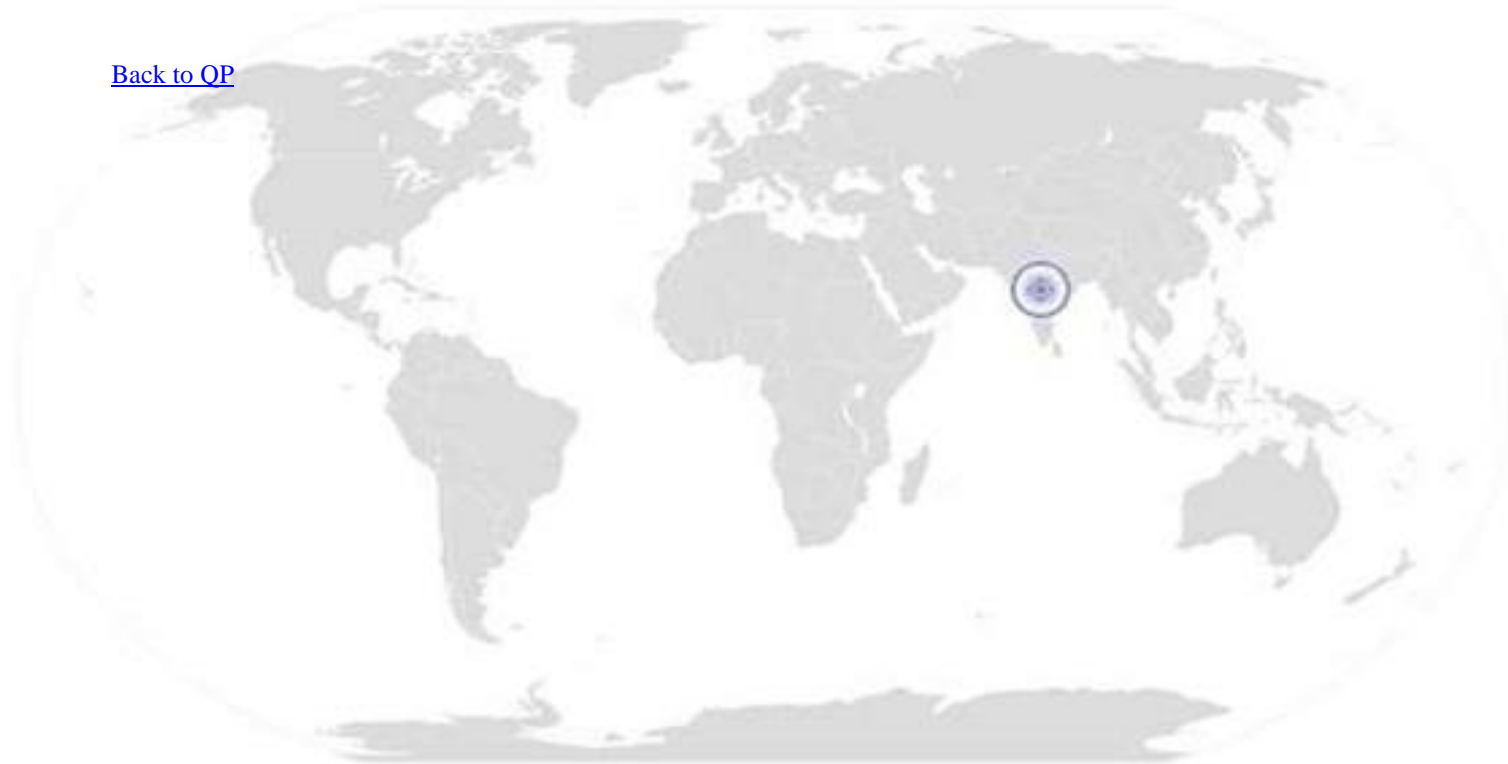
B. Professional Skills	Time Management
	The user/individual on the job needs to know and understand how to:
	SB1. Identify ways to do his work with improved efficiency SB2. Concentrate on task at hand and complete it without errors
	Organizational Skills
	The user/individual on the job needs to know and understand how to:
	SB3. Be a team player and achieve collective goals



NOS Version Control

NOS Code	MIN/N 0427		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Sector	Mining	Drafted on	01/02/14
Sub-sector	Industrial Minerals	Last reviewed on	24/03/14
Occupation	Ancillary services	Next review date	24/03/15

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National Occupation Standards



Overview

This unit is about health and safety measures critical in open-cast mines

Unit Code	MIN/N 0901
Unit Title	Health and Safety
Description	This unit is about health and safety measures critical in open-cast mines
Scope	This OS unit/task covers the following: <ol style="list-style-type: none"> 1. Health and safety measures critical for all personnel in open-cast mines
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Safety, Security and Administrative	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Comply with safety regulations and procedures in case of fire hazard.</p> <p>PC2. Operate various grades of fire extinguishers.</p> <p>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.</p> <p>PC4. Identify characteristics of post-blast fumes and take necessary precautions.</p> <p>PC5. Wears safety gear such as hard hat, respiratory protection, eye protection, ear protection</p>
Knowledge and Understanding (K)	
A. Regulatory context (knowledge of safety guidelines specified by Director General of Mine Safety (DGMS))	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Benching in quarries, Dressing of overhangs, Undercuts, Fencing</p> <p>KA2. First aid and Hygiene</p> <p>KA3. Code of traffic in specific areas of mine. Significance of fences</p> <p>KA4. Standing orders in force at the mine. Safety in the vicinity of machinery</p> <p>KA5. Shot-firing and Safety regulations. How and where to take shelter</p> <p>KA6. Knowledge of mining safety procedures</p> <p>KA7. Outcome of violation of safety procedures</p> <p>KA8. Locally prepared Emergency Preparedness / Disaster Management Plan.</p> <p>KA9. Environmental impact of mining</p> <p>KA10. Sources of dust, noise and vibration and measures to minimise</p>

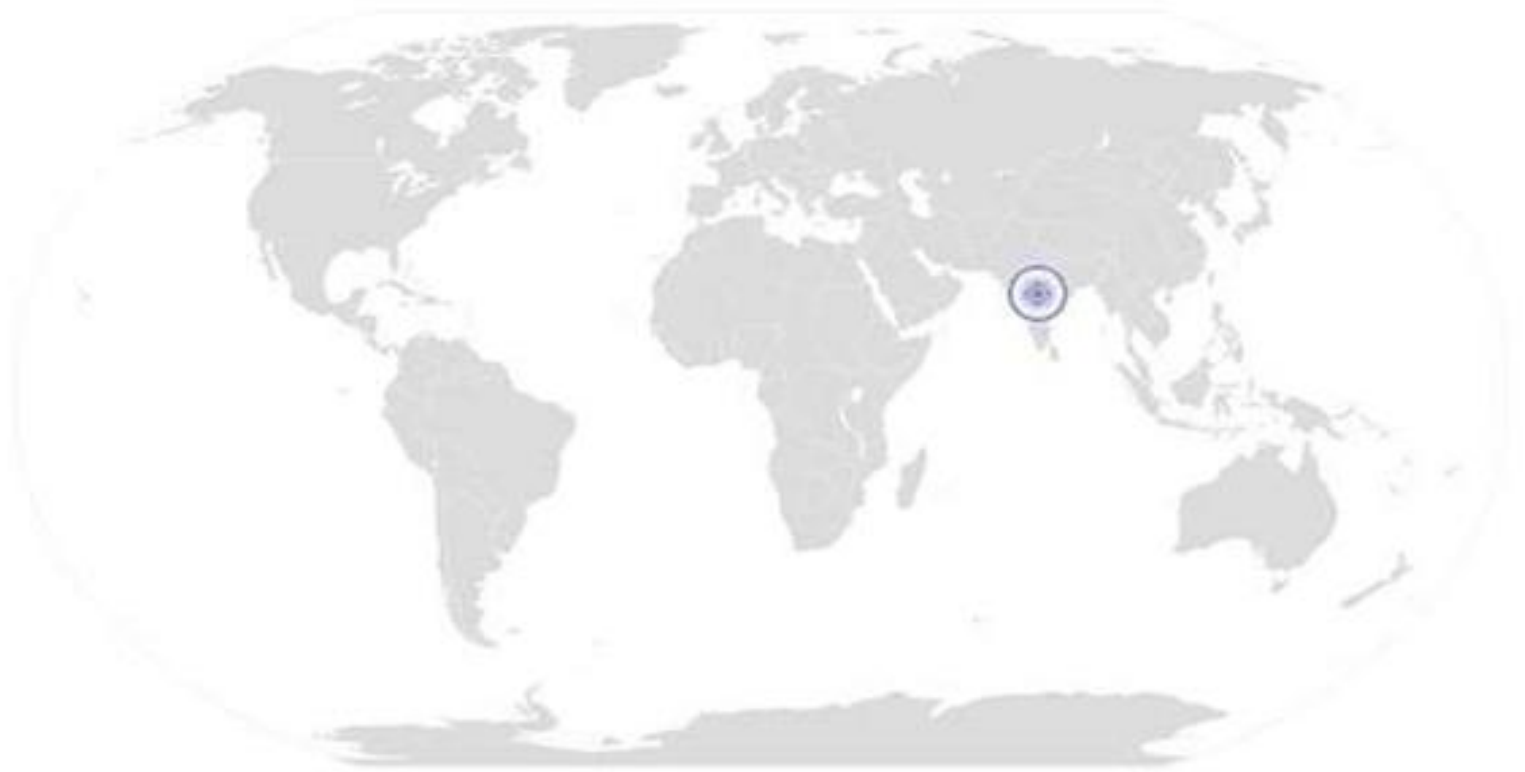
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| | <p>KA11. Hazardous material safety and security rules and regulations as prescribed by DGMS</p> <p>KA12. Refresher training as per fourth schedule MVTR (1966) within one month of joining duties following absence from duties for a period exceeding one year.</p> |
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NOS Version Control

NOS Code	MIN/N 0901		
Credits(NVEQF/NVQF/NSQF)	TBD	Version number	1.0
Sector	Mining	Drafted on	01/02/14
Sub-sector	Industrial Minerals	Last reviewed on	24/03/2014
Occupation	Ancillary services	Next review date	24/03/2015

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List of Abbreviations

Term	Description
NOS	National occupation standards
QP	Qualification pack
NVEQF	National vocational education qualifications framework
NSQF	National skills qualifications framework
HEMM	Heavy earth moving machinery
NCVT	National council for vocational training
DGMS	Directorate general of mines safety
PC	Performance Criteria
FIMI	Federation of Indian mineral industries

