PROSUM09
Supervise the transportation system/s in the mine

Overview

This standard is about a mine supervisor being able to oversee activities involved in safely transporting personnel and/or materials and or equipment and/or minerals in the mine, or in that part of the mine for which he/she is responsible. This involves the implementation of statutory and company transport rules for the area of responsibility, monitoring environmental conditions to ensure that

for example gases, hazardous substances, dusts etc. do not exceed statutory/company limits, operating transport equipment efficiently but within limitations, planning the transportation of personnel/material/equipment/mineral, dealing with breakdowns and protecting staff.

This standard is a **four** element standard

1 plan transportation/transfer/handling in the mine
2 monitor transportation/transfer/handling in the mine
3 monitor transportation environmental conditions
4 protect personnel in transport roadways

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Performance criteria

Plan transportation/transfer/handling in the mine

You must be able to:

P1 carry out inspections of transportation/transfer/handling systems and equipment to regulatory requirements and organisational procedures, and confirm as fit for purpose
P2 anticipate requirements for transport
P3 organise deliveries into or out of the mine based on priority
P4 carry out manual handling assessments, organise mechanical lifting devices where required, and ensure correct techniques are applied
P5 assess load and determine if procedures for abnormal loads are required
P6 traverse and inspect route/s for abnormal loads
P7 carry out test runs using e.g. templates to confirm route/s are appropriate (if applicable)
P8 instruct personnel in loading procedure and techniques required
P9 supervise the loading operation is safe and the load secure before moving
P10 complete records/reports according to legislative requirements and organisational procedures
P11 communicate effectively with personnel involved

Monitor transportation/transfer/handling in the mine

You must be able to:

P12 check to confirm systems/equipment is operating to operational requirements safely and efficiently
P13 authorise commencement of operations when conditions are suitable
P14 monitor transportation/handling personnel conforms to operational procedures
P15 ensure deliveries are made to correct location
P16 supervise the unloading/storage of material giving consideration to clearances, safe stacking, and to facilitate priority of use and stock level monitoring
P17 complete records/reports according to legislative requirements and organisational procedures
P18 communicate effectively with personnel involved

Monitor transportation environmental conditions

You must be able to:

P19 check ventilation system is operational within organisational limits
P20 ensure ventilation equipment (e.g. fans and ducts) are positioned meeting regulatory and organisational requirements
P21 operate and interpret readings from environmental monitoring equipment
P22 check geological conditions are within normal operational parameters
P23 ensure environmental conditions are within operational limits
P24 communicate problems outside your limits of responsibility to the

relevant person/s according to organisational procedures

P25 complete records/reports according to legislative requirements and organisational procedures

Protect personnel in transport roadways

You must be able to:

P26 monitor, record and control the number of persons in your area of responsibility

P27 communicate location of persons working within transport roadway/s to staff involved in transporting loads

P28 enforce the use of appropriate personal protective equipment

P29 ensure non-transport personnel working in roadways post appropriate warning devices

P30 confirm checks on safety devices have been carried out

P31 identify problems (e.g. obstructions, geological movements, mechanical or service failure) and report to appropriate person/s for advice or repair/remedial action

P32 check and confirm repair/remedial action has been effective

P33 carry out checks on competency of persons assigned to transport/handle types of loads

P34 take appropriate action where problems/repairs cannot be rectified immediately

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Knowledge and understanding

You need to know and understand:

Personnel/Equipment/Materials/Minerals handling, transportation and transfer

K1 statutory and organisational rules for the inspection and operation of handling/transfer/transportation equipment
K2 the principal activities involved in materials/equipment/minerals handling
K3 the physical operation of handling systems
K4 the general types of transport systems which may be used in mines
K5 the advantages/limitations of the various methods of transport used at the mine
K6 the mine environmental factors that may influence the choice of transport system used
K7 the geological conditions that could affect the performance of transport systems, and what the affects might be
K8 the circumstances in which transportation/handling may be unsafe (due to mine or load conditions) and the corresponding relevant organisational procedures
K9 for handling/transport systems used in the mine, the components of the system/s, the operational speed and the maximum loading capacity for each method of conveyance
K10 the logistics control system/s in the mine
K11 the procedures/systems for reporting/recording logistical movements in the mine
K12 the time required to arrange and carry out transportation to the various locations in the mine
K13 your own responsibility relating to the safe operation of systems
K14 the responsibilities of drivers/workers/management in relation to the safe operation of relevant approved codes of practice and guidance for working safely with systems
K15 the reporting/recording procedure for inspections carried out on systems
K16 the systems for safe storage/stacking of equipment/materials
K17 statutory requirements and operational procedures and methods for the safe transportation and handling of loads which may be abnormal (heavy/awkward/unusual/fragile/hazardous/large)
K18 the procedure to be followed to deal with a ‘hold-fast’ situation (load or transport system jammed) giving priority to the safe dissipation of stored energy.

Mine environments

You need to know and understand:

K19 the main principles of health and safety and environmental legislation and regulations relevant to area of responsibility
K20 industrial standards relevant to area of responsibility
K21 hazards associated with transportation/transfer/materials handling

K22 environmental approved codes of practice and guidance for working safely when transportation/transfer/materials handling in mines
K23 how emergency situations can arise during transportation/transfer/materials handling in your area of responsibility
K24 responsibilities of self and others and procedures to follow in event of an emergency situation
K25 your duty with regard to ventilation system failure, which may include gas fast situations
K26 the locations within a specific district where gas accumulations may occur
K27 the indications of excessive movement or deterioration in the roadway/location profile
K28 the physical signs that would indicate the need for additional support
K29 how to check the positioning and operation of ventilation equipment (e.g. fans, ducts, filters)
K30 legislative/organisational procedures for reporting poor ventilation
K31 policies and procedures in the event of poor ventilation adversely affecting areas inbye/outbye
K32 safe operation of portable/fixed environmental monitoring equipment provided at area of responsibility
K33 the statutory duties should 1.25% or 2% general body readings of methane be detected within your area of responsibility (flame safety mines only)
K34 operational policies and procedures for the maintenance of a safe mine environment e.g. dust suppression, degassing
K35 legislative requirements for coal dust/stone dust ratios (if applicable)
K36 the terms; quantity, flow, pressure, resistance, volume, and cross-sectional area of airways
K37 organisational requirements and procedures for use of personal protective equipment (in general and for specific operations)

Equipment and tools

You must know and understand:

K38 manufacturers' and organisational instructions relating to the use of equipment and/or tools provided for transportation and/or handling
K39 manufacturers and organisational instructions relating to the use of personal protective equipment
K40 legislation and approved codes of practice and guidelines for safe use of gas/dust monitoring, fire detection and ventilation equipment
K41 the limitations of equipment provided for use in a materials handling system
K42 procedures to ensure communication systems are inspected / maintained
K43 procedures to ensure safety devices are inspected and maintained
K44 organisational procedures in relation to equipment that is defective or

requiring maintenance/servicing

K45 methods and procedures to confirm that equipment to be used is fit for purpose and within test date

K46 isolation procedures for dealing with defective plant/equipment

K47 organisational procedures in the event of problems/repairs occurring that are not immediately rectifiable

Working with others

You must know and understand:

K48 your own responsibilities

K49 methods to confirm competence of personnel involved in transportation/handling

K50 the allocation of tasks and duties

K51 the benefits of team working and methods to achieve this

K52 statutory and organisational reporting and recording procedures in your area of responsibility

K53 the importance of effective communications

K54 communications systems/procedures in area of responsibility

K55 the personal responsibilities/duties of others in respect of transportation/transfer/material handling

K56 the dangers of working in isolation

K57 organisational requirements for recording/monitoring personnel in your area of responsibility

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Developed by	Proskills
Version number	1
Date approved	30/04/2009
Indicative review date	30/04/2013
Validity	Current
Status	Original
Originating organisation	Proskills
Original URN	SUM09
Relevant occupations	8122- Coal Mining Operatives 1123 Managers in Mining,8123 quarry workers and related operatives
Suite	Supervision of Underground Mining Operations
Key words	mines, supervision, underground, rock, mineral, plant, equipment, extraction, ventilation, transport, emergency