PROSUM11
Supervise mine product clearance

Overview

This standard is about a mine supervisor being able to oversee activities involved in installing, maintaining and operating plant and machinery used for safely transporting mineral, products or waste, from the place of production/extraction/storage in the mine. This involves overseeing the implementation of statutory and company rules relating to product clearance systems for area of responsibility, the limitations of systems, ensuring plant and equipment is inspected and maintained, monitoring environmental conditions to ensure that gases, hazardous substances, dusts etc. do not exceed statutory/company limits and protecting personnel.

This is a **three** element unit:

1 Oversee product clearance operations
2 Monitor environmental conditions during product clearance operations
3 Protect personnel working on or in the vicinity of product clearance systems

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Performance criteria

Oversee product clearance operations

You must be able to:

P1 supervise and co-ordinate the routine installation, repositioning, adjustment or removal of product clearance systems
P2 ensure inspections are carried out to confirm correct installation/operation of plant/equipment
P3 confirm availability and condition of associated safety equipment serving product clearance systems
P4 ensure fire fighting equipment is correctly sited, installed and operational
P5 confirm that safety devices (e.gs emergency stops, indicator lights) are in place and operational
P6 co-ordinate work operations to ensure that each on going activity does not affect the activities, health and safety of others within your sphere of responsibility
P7 check that workers carry out their duties competently and to organisational procedures
P8 initiate procedures to maintain/repair/replace equipment that is damaged or fails to function normally
P9 oversee isolation of plant/equipment for maintenance/repair/adjustment complies with operational procedures
P10 confirm that suitable and sufficient repairs have been carried out safely on damaged/faulty items of the product clearance system
P11 complete records/reports according to legislative requirements and organisational procedures

Monitor environmental conditions during product clearance operations

You must be able to:

P12 check ventilation system is operational within organisational limits
P13 ensure gas/smoke monitoring/detection equipment is correctly positioned and operational
P14 operate and interpret readings from gas detection equipment
P15 check geological conditions are within normal operational parameters
P16 ensure dust levels are within operational limits and dust suppression equipment is operating satisfactorily
P17 communicate environmental problems outside your limits of responsibility to the relevant person/s according to organisational procedures
P18 complete records/reports according to legislative requirements and organisational procedures

Protect personnel working on or in vicinity of product clearance systems

You must be able to:

P19 monitor, record and control the number of persons in your area of responsibility
P20 communicate location of persons working within transport roadway(s) to

staff involved in transporting product.

P21 ensure that staff working within your area of responsibility recognise when a hazardous situation has occurred and know appropriate action to take to inform others without prejudicing safety of self.

P22 carry out checks on competency of persons employed in product clearance operations

P23 direct staff to positions appropriate to prevent contact with moving plant/equipment/machine parts

P24 enforce the use of appropriate personal protective equipment

P25 ensure that manual handling tasks are minimised by the use of mechanical lifting devices. confirm checks on safety devices have been carried out

P26 identify problems (e.g. obstructions, geological movements, mechanical or service failure) and report to appropriate person/s for advice or repair/remedial action

P27 communicate effectively with work colleagues, staff and line managers throughout operations

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Knowledge and understanding

You need to know and understand:

Product clearance systems

K1 statutory requirements and organisational procedures for the installation and operation of product clearance systems
K2 relevant approved codes of practice and guidance for working safely with product clearance systems
K3 statutory requirements and organisational procedures for the inspection and maintenance of product clearance equipment
K4 manufacturers' instructions and operational procedures for the use of plant and equipment in your area of responsibility
K5 an appreciation of the main principles of health and safety and environmental legislation and regulations relevant to mines
K6 industrial standards relevant to area of responsibility
K7 the principal activities involved in product clearance
K8 types, features, advantages and limitations of product clearance systems
K9 the physical operation of product clearance systems
K10 the mine environmental factors that may affect the choice of product clearance systems
K11 the geological conditions that may affect the performance of product clearance systems
K12 regulatory requirements and/or organisational procedures for reporting/recording information
K13 the procedure to be followed to deal with a 'hold-fast' situation (e.g. with conveyor/cutting machine/powered roof support/transport system jammed) giving priority to the safe dissipation of stored energy
K14 organisational procedures in the event of problems/repairs occurring that are not immediately rectifiable
K15 the reporting/recording procedures for inspections carried out on product clearance systems under regulatory requirements or organisational procedures

You must know and understand:

Mine environments

K16 the main principles of health and safety and environmental legislation and regulations relevant to area of responsibility
K17 hazards associated with product clearance operations
K18 the geological conditions that would require investigation/rectification/additional support
K19 regulatory requirements, manufacturers' instructions and organisational procedures for the inspection, use and maintenance of environmental monitoring and control equipment in your area of responsibility
K20 environmental approved codes of practice and guidance for working safely during product clearance operations
K21 the effect that activities in one area can have on the activity, health and

safety of others

K22 how emergency situations can arise during in your area of responsibility

K23 responsibilities of self and others and procedures to follow in event of an emergency situation

K24 the principal regulatory requirements and organisational procedures for ventilation in your area of responsibility

K25 your duty with regard to ventilation system deterioration/failure or gas fast situations

K26 the locations within a specific district where gas accumulations may occur

K27 regulatory requirements and operational policies for the positioning and operational efficiency of ventilation equipment (e.gs. filtration equipment, fans and ducts)

K28 the action to be taken should any shortcomings arise in the ventilation system adversely affecting the quality of air issuing inbye/outbye your area of responsibility

K29 safe operation of portable/fixed environmental monitoring equipment provided at area of responsibility

K30 the statutory duties should 1.25% or 2% general body readings of methane be detected within your area of responsibility (flame safety mines only)

K31 operational policies and procedures for the maintenance of a safe mine environment e.g. dust suppression, degassing

K32 legislative requirements for coal/combustible dust/stone dust ratios (if applicable)

K33 the terms; quantity, flow, pressure, resistance, volume, and cross-sectional area of airways

K34 organisational standards and procedures to maintain an acceptably clean and tidy workplace

K35 regulatory requirements and organisational procedures for reporting and recording shortfalls in the quality of the mine environment

Equipment and tools

You must know and understand:

K36 manufacturers' and organisational instructions relating to the use of equipment and tools provided for product clearance

K37 manufacturers' and organisational instructions relating to the storage, maintenance and servicing of equipment and tools provided for product clearance

K38 manufacturers, instructions and organisational requirements and procedures for use of personal protective equipment (in general and for specific operations)

K39 legislation and approved codes of practice and guidelines for safe use of gas/dust monitoring, fire detection and ventilation equipment

K40 the limitations/maximum capacities of equipment provided for use in

product clearance operations

K41 regulatory requirements and organisational procedures for the safe installation, repositioning, adjustment and removal of product clearance systems and/or ancillary equipment (e.g. conveyors)

K42 regulatory requirements and organisational procedures for the inspection of plant/equipment/tools/support systems/transportation systems

K43 organisational procedures to ensure communication systems are inspected / maintained

K44 organisational procedures to ensure safety devices are inspected and maintained

K45 organisational procedures in relation to equipment that is defective or requiring maintenance/servicing

K46 the types, use and siting of fire fighting equipment

K47 plant/equipment isolation policies and procedures

K48 maintenance procedures for dust suppression systems

K49 lubricants and fuels used in your area of responsibility

Working with others

You must know and understand:

K50 your own responsibilities and the limits of those responsibilities

K51 methods to confirm competence of personnel involved in product clearance operations

K52 the allocation of tasks and duties

K53 the benefits of team working and methods to achieve this

K54 statutory and organisational reporting and recording procedures in your area of responsibility

K55 the importance of effective communications

K56 communications systems/procedures in area of responsibility

K57 the personal responsibilities/duties of others in respect of product clearance

K58 the dangers of working in isolation

K59 organisational requirements for recording/monitoring personnel in your area of responsibility

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